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ORIGINAL SUBMISSION

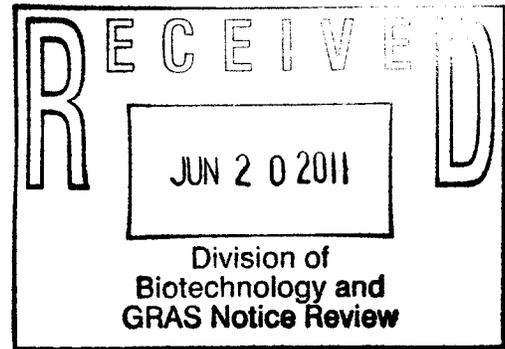
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Specializing in FDA Regulatory Matters

June 17, 2011

Office of Food Additive Safety (HFS-255)
Center for Food Safety and Applied Nutrition
Food and Drug Administration
5100 Paint Branch Parkway
College Park, MD 20740-3835



RE: Notification of GRAS Determination for Esterified and Nonesterified Plant Sterols

Dear Sir/Madam:

In accordance with proposed 21 CFR § 170.36 (Notice of a claim for exemption based on a GRAS determination) published in the Federal Register (62 FR 18939-18964), I am submitting in triplicate, as the agent to the notifier, Cognis Corporation, a GRAS Notification for esterified and nonesterified plant sterols.

Esterified and nonesterified sterols and stanols (collectively, phytosterols) products derived from plant origin are intended for use as a food ingredient in Baked Goods and Baking Mixes; Beverages and Beverage Bases; Breakfast Cereals; Cheeses; Coffee and Tea (Specialty coffee drinks and ready-to-drink tea beverages); Dairy Product Analogs; Fats and Oils; Frozen Dairy; Desserts; Grain Products and Pastas; Gravies and Sauces; Milk, Whole and Skim; Milk Products, including yogurt (including cultured yoghurts and cultured yoghurt-type products) as well as cultured dairy drinks; Plant Protein Products; Processed Fruits and Fruit Juices; Processed Vegetables and Vegetable Juices; Snack Foods; Soft Candy; and Soups and Soup Mixes.

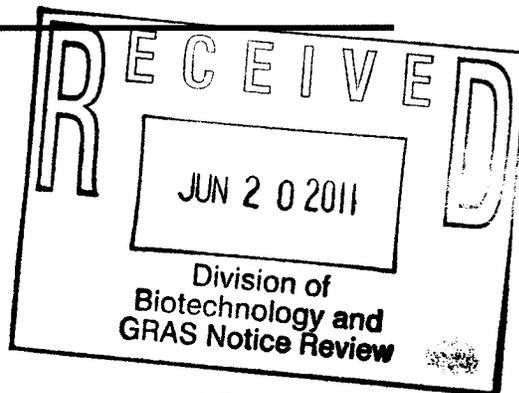
Please let me know if you have any questions.

Sincerely,

(b) (6) [Redacted signature]

Edward A. Steele
President

Enclosures



GRAS NOTIFICATION

I. Claim of GRAS Status

A. Claim of Exemption from the Requirement for Premarket Approval Requirements Pursuant to Proposed 21 CFR § 170.36(c)(1)

Cognis Corporation (the notifier) has determined that its esterified and nonesterified plant sterols and stanols (collectively, phytosterols) are Generally Recognized As Safe, consistent with Section 201(s) of the *Federal Food, Drug, and Cosmetic Act*. This determination is based on scientific procedures as described in the following sections, under the conditions of its intended use in food. Therefore, the use of phytosterols and phytosterol esters is exempt from the requirement of premarket approval.

Signed,

(b) (6)


Date 6/17/11

Edward A. Steele
President

Agent for:

Cognis Corporation, Nutrition and Health
5325 S. 9th Ave.
La Grange, IL 60525

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B. Name and Address of Notifier:

Christina Ehrhardt
Global Research Manager
Cognis Corporation, Nutrition and Health
5325 S. 9th Ave.
La Grange, IL 60525
Phone: 1-708-579-6238
E-mail: christina.ehrhardt@cognis.com

C. Common or usual name of the notified substance:

Phytosterols and phytosterol esters
Trade name: Vegapure®

D. Conditions of use:

Esterified and nonesterified sterols and stanols (collectively, phytosterols¹) products derived from plant origin are intended for use as a food ingredient in Baked Goods and Baking Mixes; Beverages and Beverage Bases; Breakfast Cereals; Cheeses; Coffee and Tea (Specialty coffee drinks and ready-to-drink tea beverages); Dairy Product Analogs; Fats and Oils; Frozen Dairy; Desserts; Grain Products and Pastas; Gravies and Sauces; Milk, Whole and Skim; Milk Products, including yogurt (including cultured yoghurts and cultured yoghurt-type products) as well as cultured dairy drinks; Plant Protein Products; Processed Fruits and Fruit Juices; Processed Vegetables and Vegetable Juices; Snack Foods; Soft Candy; and Soups and Soup Mixes. All these food categories (except Tea) are similar to those covered in various FDA GRAS notifications for phytosterols. The proposed ready-to-drink tea beverages are similar to “health drinks” containing phytosterols, which have previously been notified to the FDA. Cognis intends to use phytosterols or phytosterol esters in the majority of these food categories such that the recommended and declared serving size of food will result in intake of 0.5 g phytosterol per serving. Food exceptions where higher levels will be used include milk, yogurt, cultured dairy drinks, fruit juice and vegetable juice. For yogurt (including cultured yoghurts and cultured yoghurt-type products) and cultured dairy drinks, Cognis intends to use phytosterol at levels of 2 g per labeled serving, while for milk, fruit juice and vegetable juice the use levels will be 1 g/labeled serving.

One-shot cultured dairy drinks and spoonable yoghurts containing functional food ingredients have been shown to be well accepted and convenient delivery matrices for consumers. In multiple clinical studies, it has been demonstrated that consumption of a one-shot yoghurt or cultured dairy drink containing phytosterols or phytosterol esters significantly reduces total and LDL cholesterol levels. In a recent Federal Register notice (FDA, 2010), FDA indicated that it is proposing to amend 21 CFR 101.83. The proposed rule includes the following significant changes to 21 C.F.R. 101.83:

¹ The term “phytosterols” is used as a collective term for plant sterols and their hydrogenated stanol forms, whether used in the free form or esterified with fatty acids.

- A broadening of the substances eligible for the health claim for conventional foods to include any mixtures of esterified and nonesterified phytosterols (defined as inclusive of both sterols and stanols) derived from vegetable oils and tall oil.
- Removal of the restrictions on types of conventional foods eligible for the claim.
- Setting the daily dietary intake of phytosterols necessary to justify the claim for risk reduction at 2 g phytosterols per day.
- A requirement that food eligible for the claim contains 500 mg phytosterols per serving (provided that the phytosterols are GRAS at this use level).
- A requirement that the phytosterol-containing product must be consumed with meals or snacks.
- A limitation of the exception from the disqualifying fat level (13 g of fat per serving size or per 50 g of food) to vegetable oil spreads that resemble margarine, and inclusion of liquid vegetable oil in the short list of exceptions.
- The addition of liquid vegetable oils to the products exempt from the “minimum nutrient requirement” (i.e., foods eligible for a health claim must contain no less than 10% of the Reference Daily Intake or Daily Reference Value for vitamin A, C, iron, calcium, protein or fiber per reference amount without nutrient addition). Vegetable oil spreads resembling margarine may meet the minimum nutrient requirement by addition of vitamin A.

FDA is proposing to amend § 101.83(c)(2)(i)(H) to require that the health claim specify that phytosterol-enriched foods should be consumed “with meals or snacks.” The “with meals or snacks” specification will replace the current requirement that the claim specify the daily dietary phytosterol intake should “be consumed in two servings eaten at different times of the day with other foods.”

Intake of phytosterols from the Cognis proposed food-uses and use-levels in conjunction with food consumption data included in the National Center for Health Statistics’ (NCHS) National Health and Nutrition Examination Surveys (NHANES) (CDC, 2006, 2009; USDA, 2009) were determined. The intended use of phytosterol by Cognis in the above mentioned food categories is estimated to result for “users only” at mean and 90th percentile intakes of 4.0 g/person [77 mg/kg body weight (bw)/day] and 6.8 g/person (159 mg/kg bw/day), respectively. Based on available information from different GRAS notices, the estimates of dietary exposure for all proposed uses ranged from 5.5 to 7.3 g/person/day at the mean and 10.6 to 12.9 g/person/day at the 90th percentile.

E. Basis for GRAS Determination:

In accordance with 21CFR 170.30, the intended use of phytosterol and phytosterol esters has been determined to be generally recognized as safe (GRAS) based on scientific procedures. A comprehensive search of the scientific and regulatory literature was also conducted for this review. There is sufficient qualitative and quantitative scientific evidence, including human and animal data, to determine safety-in-use for phytosterol and phytosterol esters. The safety determination of phytosterol and phytosterol esters is based on the totality of available scientific evidence.

F. Availability of Information:

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The data and information that forms the basis for this GRAS determination will be provided to the Food and Drug Administration upon request and are located at the offices of: Edward A. Steele, EAS Consulting Group, LLC, 1940 Duke Street, Suite 200, Alexandria, VA 22314; Phone: (703) 684-4408; Fax: (703) 684-4428; E-mail: esteele@easconsultinggroup.com

The primary toxicologist, Dr. Madhusudan G. Soni, responsible for the preparation of this GRAS monograph and who is also a member of the expert panel can also be contacted for the data and information that forms the basis for this GRAS determination at the following address: Madhusudan G. Soni, Ph.D., FACN, Soni & Associates Inc., 749 46th Square, Vero Beach FL, 32968; Phone: (772) 299-0746; Fax: (772) 299-5381; E-mail: sonim@bellsouth.net.

II. Detailed Information About the Identity of the Notified Substance:

A. Chemical name

The Vegapure® products that Cognis intends to market consist of a mixture of plant sterols and plant stanols. The chemical names of the sterols and stanols that form the principal constituents of Vegapure® products are presented in Table 1.

Table 1. Chemical Names for Plant Sterols and Stanols in Vegapure Products

Plant Sterol and Stanol	Chemical Name
Sitosterol	(3 β)-Stigmast-5-en-3-ol
Sitostanol	(3 β , 5 α)-Stigmastan-3-ol
Campesterol	(3 β)-Ergost-5-en-3-ol
Campestanol	(3 β , 5 α)-Ergostan-3-ol
Stigmasterol	(3 β)-Stigmasta-5,22-dien-3-ol
Brassicasterol	(3 β)-Ergosta-5,22-dien-3-ol

B. Common Name and Description:

The subject of this notification is a range of products of free phytosterols or phytosterol esters which will be marketed as under the Vegapure® trademark. The products that Cognis intend to market as food ingredients are as follows:

1. **Vegapure® FS and FS-M:** A finely ground powder of phytosterols derived from plant origin (mainly from genetically modified [GM] soybean; also 5 to 30% from rapeseed). As discussed further in specification and composition section, these two products (FS and FS-M) are substantially similar.
2. **Vegapure® F 90 ME:** Plant sterols and skimmed milk spray-dried into a water-dispersible powder form (non-GM plant source). The phytosterols used to manufacture Vegapure® F90 ME are from the combination of tall oil phytosterols and phytosterols derived from rapeseed oil.
3. **Vegapure® F 40 WDP E:** Plant sterols and gum arabic spray-dried into a water dispersible powder form. The phytosterols used to manufacture Vegapure® F 40 WDP E are derived from non-GM plant sources.

4. **Vegapure® 867 G:** A finely ground white powder of plant sterol from pine tree origin.
5. **Vegapure® 95 FF, 95 E, 95 R and 95 ER:** Plant sterol esters are obtained by esterification of free plant sterols with food-grade fatty acids from vegetable oil. The plant sterols are derived either from deodorizer distillate or tall oil. The fatty acids are either derived from non-GM sunflower or non-GM rapeseed oil. Phytosterols of Vegapure® 95 FF and R are mainly derived from a GM soybean, whereas phytosterols of 95E and 95ER are mainly derived from the combination of non-GM plant sources, such as tall oil and rapeseeds. They are a yellow viscous oily paste at room temperature. For the purposes of this report, only information on Vegapure® 95 FF is provided.
6. **Vegapure® 67 WDP and WDP E:** Plant sterol esters spray dried into a water dispersible powder. The esters are obtained by esterification of free plant sterols with fatty acids from vegetable oil (food grade sunflower oil). The phytosterol esters used to manufacture Vegapure® 67 WDP are from Vegapure® 95 FF. The phytosterol esters used to manufacture Vegapure® WDP E are from Vegapure® 95 E. For the purposes of this report, only information on Vegapure® 67 WDP is provided.

The GM soybeans used in the production of Cognis' phytosterol ingredients are Roundup Ready soybeans, which are permitted for use in the United States.

C. Chemical Abstract Registry Number:

The CAS numbers for the main plant sterols and stanols contained in Cognis' Vegapure products are presented in Table 2.

Table 2. CAS Numbers for Plant Sterols and Stanols in Vegapure Products

Plant Sterol and Stanol	CAS Number
Sitosterol	83-46-5
Sitostanol	83-45-4
Campesterol	474-62-4
Campestanol	474-60-2
Stigmasterol	83-48-7
Brassicasterol	474-67-9

D. Empirical Formula and Molecular Weight:

The empirical formula and molecular weights of some of the main plant sterols and stanols contained in the Vegapure products are presented in Table 3. The structural formula for sitosterol, sitostanol, campesterol, and campestanol are presented in Figure 1.

Table 3. Empirical Formula and Molecular Weight of Plant Sterols and Stanols in Vegapure Products

Plant Sterol and Stanol	Empirical Formula	Molecular Weight
Sitosterol	C ₂₉ H ₅₀ O	414.72
Sitostanol	C ₂₉ H ₅₂ O	416.73
Campesterol	C ₂₈ H ₄₈ O	400.69
Campestanol	C ₂₈ H ₅₀ O	402.70
Stigmasterol	C ₂₉ H ₄₈ O	412.67
Brassicasterol	C ₂₈ H ₄₆ O	398.67

E. Structure:

The structural formula for sitosterol, sitostanol, campesterol, and campestanol, the main components of phytosterol and phytosterol ester products are presented in Figure 1.

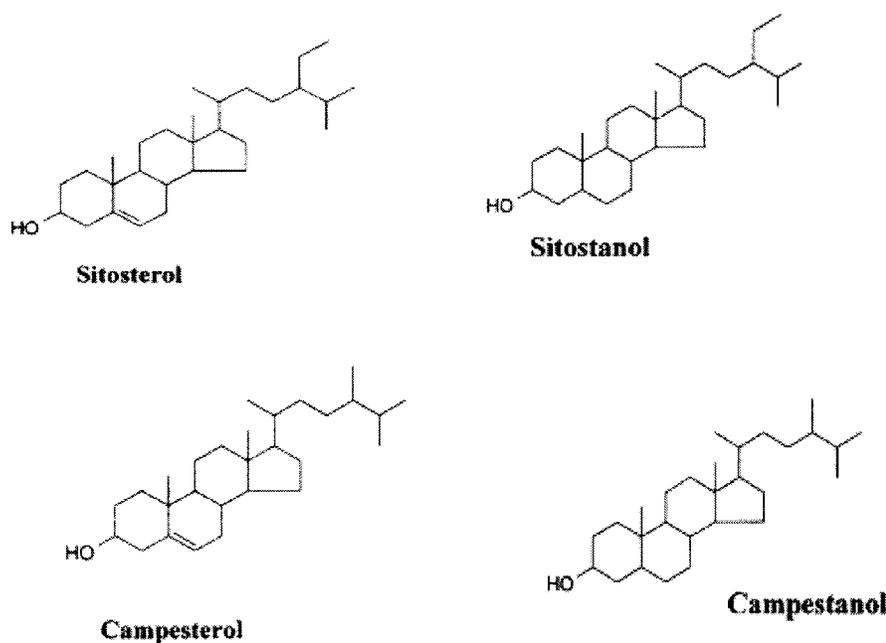


Figure 1. Structural Formula for 4 of the common plant sterols and stanols present in Vegapure® products.

F. Specifications and Composition

The chemical and microbiological specifications for Vegapure® FS, Vegapure® F 90 ME, Vegapure® F 40 WDP E, Vegapure® 867 G, Vegapure® 95 FF, Vegapure® 67 WDP are presented in Tables 4, 5, 6, 7, 8 and 9, respectively. The specification of Vegapure® FS and FS-M are substantially equivalent except for the particle size; FS is somewhat finer ->FS: 90% thru 200 Mesh FS-M: max. 25% thru 200 Mesh. All Vegapure® products meet the purity specifications proposed for phytosterols, phytostanols and their esters that requires purities of at least 95% on a total free sterol/stanol basis for free sterols and 55% for sterol esters on a sterol/stanol basis (JECFA, 2008). Summaries of the analytical data for representative batches of Vegapure® FS, Vegapure® F 90 ME, Vegapure® F 40 WDP E, Vegapure® 867 G, Vegapure® 95 FF, and Vegapure® 67 WDP manufactured as described below and demonstrating compliance with specifications, are provided in Appendix I.

1. Chemical and Microbiological Specifications for Vegapure® FS and FS-M

The chemical and microbiological specifications for Vegapure® FS are summarized in Table 4. Given the similarity between Vegapure® FS and FS-M, only specifications for FS are provided. The product analysis of 5 manufacturing lots of Vegapure® FS is provided Appendix I.A and demonstrates that the manufacturing process produces a consistent product that meets the established specifications.

Table 4. Chemical and Microbiological Specifications for Vegapure® FS

Parameter	Specification	Method of Analysis
Physical Parameters		
Appearance	White powder	Cognis Method H13
Odor	Bland	Cognis Method H04
Flavor	Bland	Cognis Method H05
Purity		
Total Sterol Content %	Min 98	Cognis Method HB16
Water Content %	Max 1.5	Karl Fischer
Lead (mg/kg)	<0.1	ICP-MS
Hexane (mg/kg)	< 10	GC
Methanol (mg/kg)	< 10	GC
Sterol Composition		
Cholesterol Content % (area)	0.0 – 2.0	Cognis Method HB16
Brassicasterol Content % (area)	2.0 - 6.0	Cognis Method HB16
Campesterol Content % (area)	20.0 – 29.0	Cognis Method HB16
Campestanol Content % (area)	0.0 – 6.0	Cognis Method HB16
Stigmasterol Content % (area)	12.0 – 23.0	Cognis Method HB16
<i>beta</i> -Sitosterol Content % (area)	42.0 – 55.0	Cognis Method HB16
<i>beta</i> -Sitostanol Content % (area)	0.0 – 2.5	Cognis Method HB16
D5 Avenasterol Content % (area)	0.0 – 4.0	Cognis Method HB16
D7 Stigmasterol Content % (area)	0.0 - 2.0	Cognis Method HB16
D7 Avenastanol Content % (area)	0.0 – 2.0	Cognis Method HB16
Other sterols % (area)	0.0 – 5.0	Cognis Method HB16
Microbiological Parameters		
Standard aerobic Plate Count, CFU/g	<100	USP <61>
<i>Salmonella</i>	Negative in 25 g	USP <61>
Coliforms, CFU/g	<10	FDA BAM
Coagulase positive <i>Staphylococcus</i>	Negative in 10 g	USP <61>
<i>Bacillus cereus</i> , CFU/g	<10	AOAC 980.31

Abbreviations: AOAC = Association of Analytical Communities; CFU = colony forming units; *E. coli* = *Escherichia coli*; FDA BAM = U.S. Food and Drug Administration Bacteriological Analytical Manual; GC = gas chromatography; ICP-MS = inductively coupled plasma mass spectrometry; Min = minimum; Max = maximum; NA = not applicable; USP = United States Pharmacopeia

2. Chemical and Microbiological Specifications for Vegapure® F 90 ME

The chemical and microbiological specifications for Vegapure® F 90 ME are summarized in Table 5. The product analysis of 3 manufacturing lots of Vegapure® F 90 ME is provided in Appendix I.B and demonstrates that the manufacturing process produces a consistent product that meets the established specifications.

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Table 5. Chemical and Microbiological Specifications for Vegapure® F 90 ME

Parameter	Specification	Method of Analysis
Physical Parameters		
Appearance	Cream powder	Cognis Method AX-001001
Odor	Bland	Cognis Method AX-001002
Flavor	Bland	Cognis Method CP-004195
Bulk Density	200 to 500 g/L	Cognis Method H06
Purity		
Total Sterol Content	85 to 92%	Cognis Method IA-001014
Water Content %	Max 5%	Karl Fischer
Microbiological Parameters		
Standard aerobic Plate Count, CFU/g	Max 5,000	Cognis Method MB-2035
<i>Salmonella</i>	Negative/25g	Cognis Method MB-1053
Yeast and Moulds CFU/g	Max 300	Cognis Method MB-2039
<i>E. coli</i> CFU/g	Negative	Cognis Method MB-1032

Abbreviations: CFU = colony forming units; *E. coli* = *Escherichia coli*; Max = maximum

3. Chemical and Microbiological Specifications for Vegapure® F 40 WDP E

The chemical and microbiological specifications for Vegapure® F 40 WDP E are summarized in Table 6. The product analysis of 5 manufacturing lots of Vegapure® F 40 WDP E is provided in Appendix I.C and demonstrates that the manufacturing process produces a consistent product that meets the established specifications.

Table 6. Chemical and Microbiological Specifications for Vegapure® 40 WDP E

Parameter	Specification	Method of Analysis
Physical Parameters		
Appearance	Cream powder	Cognis Method AX-001001
Sensorik	Neutral	Cognis Method CP-002195
Density, g/L	200-600	Cognis Method CP-001051
Purity		
Sterol, free	37-42%	Cognis Method IA-001021
Water Content	< 7.0%	Karl Fischer, Cognis CP-001045
Heavy metals as lead	Max 10 ppm	EX-001010
Microbiological Parameters		
Bacterial Count aerobic, mesophil, CFU/g	< 3,000	Cognis Method MB-2035
<i>Salmonella</i>	Negative/25g	Cognis Method MB-2053
Coliforms /g	Negative	Cognis Method MB-2038
Yeast and Moulds CFU/g	< 300	Cognis Method MB-2039

Table 6. Chemical and Microbiological Specifications for Vegapure® 40 WDP E

Parameter	Specification	Method of Analysis
<i>E. coli</i> /g	Negative	Cognis Method MB-2032

4. Chemical and Microbiological Specifications for Vegapure® 867 G

The chemical and microbiological specifications for Vegapure® 867 G are summarized in Table 7. The product analysis of 5 manufacturing lots of Vegapure® 867 G is provided in Appendix I.D and demonstrates that the manufacturing process produces a consistent product that meets the established specifications.

Table 7. Chemical and Microbiological Specifications for Vegapure® 867G

Parameter	Specification	Method of Analysis
Physical Parameters		
Appearance	White powder	Cognis Method AX-001001
Odor	Neutral	Cognis Method AX-001002
Purity		
Total Sterols % (area)	Min 99.0	Cognis Method AX-001028
Water Content %	Max. 2	Karl Fischer, Cognis AX-001036
Sterol Composition		
Brassicasterol Content % (area)	Max. 3	Cognis Method AX-001034
Campesterol Content % (area)	Max. 40	Cognis Method AX-001031
Campestanol Content % (area)	Max. 5	Cognis Method AX001032
Stigmasterol Content % (area)	Max. 30	Cognis Method AX-001035
<i>beta</i> -Sitosterol Content % (area)	Max. 80	Cognis Method AX-001029
<i>beta</i> -Sitostanol Content % (area)	Max. 15	Cognis Method AX-001030
Other sterols % (area)	Max. 3%	Cognis Method AX-001041
Microbiological Parameters		
Total Plate Count, CFU/g	Max. 1000	Cognis Method AX-001043
Yeast and Moulds CFU/g	Max. 100	Cognis Method AX-001049
<i>Bacillus cereus</i> CFU/g	Max. 10	Cognis Method AX-001048

5. Chemical and Microbiological Specifications for Vegapure® 95 FF

The chemical and microbiological specifications for Vegapure® 95FF are summarized in Table 8. The product analysis of 5 manufacturing lots of Vegapure® 95 FF is provided Appendix I E and demonstrates that the manufacturing process produces a consistent product that meets the established specifications.

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Table 8. Chemical and Microbiological Specifications for Vegapure® 95 FF

Parameter	Specification	Method of Analysis
Physical Parameters		
Appearance	Yellowish oil or paste	Cognis Method AX-001001
Lovibond color yellow 1"	<10	Cognis Method CP-006012
Lovibond color red 1"	<2	Cognis Method CP-007012
Purity		
Free Sterols + Sterol Esters % (area)	Min 97	Cognis Method IA-002024
Total Sterol Esters (% area)	Min 91	Cognis Method IA-002024
Free Sterols (% area)	Max 6	Cognis Method IA-001024
Total Sterol Content (% weight)	Min 59	Cognis Method IA-001014
Water Content %	<0.1	Karl Fischer
Acid Value, mg KOH/g	Max 0.5	Cognis Method CP-001002
Peroxide Value, meq O ₂ /kg	Max 1.0	Cognis Method CP-001009
Lead, mg/kg	<0.1	AAS
Sterol Composition		
Cholesterol Content % (area)	0.0- 2.0	Cognis Method IA-002014
Brassicasterol Content % (area)	0.0 – 6.0	Cognis Method IA-003014
Campesterol Content % (area)	20.0 – 29.0	Cognis Method IA-004014
Campestanol Content % (area)	0.0 – 6.0	Cognis Method IA-005014
Stigmasterol Content % (area)	12.0 – 23.0	Cognis Method IA-006014
<i>beta</i> -Sitosterol Content % (area)	42.0 – 55.0	Cognis Method IA-007014
<i>beta</i> -Sitostanol Content % (area)	0.0 – 2.5	Cognis Method IA-008014
D5 Avenasterol Content % (area)	0.0 – 4.0	Cognis Method IA-009014
D7 Stigmastenol Content % (area)	0.0 – 2.0	Cognis Method IA-012014
D7 Avenasterol Content % (area)	0.0 – 2.0	Cognis Method IA-013014
Other sterols % (area)	0.0 – 6.0	Cognis Method IA-017014
Microbiological Parameters		
Total Plate Count, CFU/g	< 1000	Cognis Method MB-2035
<i>Salmonella</i>	Absent / 25g	Cognis Method MB-1053
Coliforms, CFU/g	< 10	Cognis Method MB-40383
Yeast and Moulds CFU/g	< 10	Cognis Method MB-2039
<i>Bacillus cereus</i> CFU/g	Absent / 10g	Cognis Method MB-1045
<i>E. coli</i> , CFU/g	< 10	Cognis Method MB-4032
Spore formers, aerobic, CFU/g	< 100	Cognis Method MB-2040

Abbreviations: CFU = colony forming units; *E. coli* = *Escherichia coli*; AAS = Atomic absorption spectrometry; KOH = potassium hydroxide; Min = minimum; Max = maximum; NA = not applicable

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6. Chemical and Microbiological Specifications for Vegapure® 67 WDP

The chemical and microbiological specifications for Vegapure® 67 WDP are summarized in the following Table 9. The product analysis of 5 manufacturing lots of Vegapure® 67 WDP is provided Appendix I.F and demonstrates that the manufacturing process produces a consistent product that meets the established specifications.

Table 9. Chemical and Microbiological Specifications for Vegapure® 67 WDP

Parameter	Specification	Method of Analysis
Physical Parameters		
Appearance	Cream like powder	Cognis Method AX-001001
Odor	Mild, neutral to slightly fat-like	Cognis Method AX-001002
Flavor	Slightly sweet, slightly fat-like	Cognis Method CP-004195
Bulk Density	300 - 400	Cognis Method H06
Purity		
Total Sterol Content %	Min 40	Cognis Method IA-001014
Water Content %	< 5.0%	Karl Fischer
Microbiological Parameters		
Total Plate Count, CFU/g	< 5,000	Cognis Method MB-2035
<i>Salmonella</i>	Negative/25g	Cognis Method MB-1053
Coliforms /g	Negative	Cognis Method MB-1038
Yeast and Moulds CFU/g	< 300	Cognis Method MB-2039
<i>Bacillus cereus</i> CFU/g	< 100	Cognis Method MB-2045
<i>E. coli</i> /g	Negative	Cognis Method MB-1032

Abbreviations: CFU = colony forming units; *E. coli* = *Escherichia coli*; Min = minimum; Max = maximum; NA = not applicable

G. Raw Materials, Processing Aids and Manufacturing process

1. Raw Materials and Processing Aids

The raw materials and processing aids used in the production of the Vegapure® phytosterols are described below. The phytosterol ester products Vegapure® 95 FF, Vegapure® 95 R and the spray-dried phytosterol ester product Vegapure® 67 WDP are produced using plant sterols mainly from genetically modified [GM] soybean, as well as ingredients and processing aids that are permitted for use in food. Non-GM plant sources such as wood sterols and rapeseed sterols are used in the production of Vegapure® 867 G (free sterols), Vegapure® F 90 ME (a spray-dried free phytosterol product), Vegapure® 67 WDP E, Vegapure® 95 E, and Vegapure® 95 ER (phytosterol esters). The ingredients and processing aids used in the manufacture of wood sterols, rapeseed sterols, and Vegapure® F 90 ME are permitted for use in food. These products are prepared using starting materials and processing materials that meet appropriate food grade specifications as well as specifications established in the Food Chemicals Codex (5th Edition). All equipment and materials used in

the production process have a history of use in food processing. Phytosterols and phytosterol esters are manufactured in accordance with current good manufacturing practices (cGMP).

1.1. Raw Materials

Vegetable oil distillate

Vegetable oil distillate (VOD) is used to produce the free phytosterol products. It is the by-product of the vegetable oil refining process. The main source of VOD is derived from soybean oil during the deodorization step in the refining process. Up to 30% VOD is derived from rapeseed oil (Canola oil). VOD derived from soybean oil is used as source for Vegapure® FS, 67 WDP, 95 FF and 95 R.

Besides triglycerides, VODs contain up to 10% natural tocopherols and up to 20% plant sterols.

For Vegapure® F 90 ME, 867G, 95E, and 95ER, the plant sterol sources are non GM sources such as tall oil (pine) and rapeseed oil.

1.2. Processing Aids

Sodium hydroxide

Sodium hydroxide is used to hydrolyze triglycerides into glycerol and fatty acids and the sterol esters into free sterols and fatty acids. It is permitted as a GRAS substance (21 CFR 184.1763) for use as a pH control agent and processing aid in foods at levels not to exceed cGMP.

Water

Water is mixed with the VOD in the first processing step, and also is used to wash the free sterols that are produced.

Sulphuric acid

The sulphuric acid (14 to 76% H₂SO₄) used in the manufacturing process neutralizes the fatty acid soaps back into free fatty acids. It is permitted for use (21 CFR 184.1763) as a pH control agent [170.3(o)(23)] and processing aid [170.3(o)(24)].

Methanol

The free sterols crystallize following cooling, and the addition of methanol to the organic solution containing the free sterols and free tocopherols. As per 21 CFR 173.250 methanol residues are permitted from its use as solvent as secondary direct food additive in certain food for human consumption. Methanol used in the production of the plant sterols is of high purity (99.9%).

Hexane

Hexane is used in the purification step where the sterol crystals are washed with hexane to a minimum concentration of 98% free sterols. As per 21 CFR 173.250, hexane residues are permitted from its use as solvent as secondary direct food additive in certain food for human consumption. Hexane used in the production of the plant sterols is of high purity (>99%).

Diatomaceous Earth

000014

Diatomaceous earth is used after the esterification process in the manufacture of phytosterol esters to facilitate filtration. The diatomaceous earth used in the processing of plant sterols is food grade and of high purity (99%). The Select Committee on GRAS Substances (SCOGS, 1979) determined that diatomaceous earth is unlikely to cause hazard to the public when used as a filter aid in food processing.

Aluminum Calcium Silicate

Aluminum calcium silicate (70% SiO₂) is used after the esterification process in the manufacture of phytosterol esters to facilitate filtration. As per 21 CFR 182.2122, aluminum calcium silicate is permitted for use as an anti-caking agent in salt (tolerance 2%).

2. Potential Environmental Contaminants

All products described in this GRAS notification have been analyzed for lead and comply with the specification of a maximum of 0.1 mg lead/kg wet weight of product, as is described in Appendix II.A. In addition, the Vegapure® product line has been analyzed and found to comply with the maximum residual level for benzo(a)pyrene of 2.0 µg/kg wet weight of product, as is described in Appendix II.B. Finally, the Vegapure® product line was analyzed for contamination with pesticide using the DFG-multiresidue method S19. There were no pesticide residues found within the detection limits used, as described in Appendix II.C.

3. Manufacturing Process

3.1. Phytosterols

Phytosterols, or plant sterols, are isolated from deodorizer distillate (a by-product of edible oil production), or tall oil (a by-product of wood pulp manufacture). They are purified by distillation, extraction, crystallization and washing resulting in products of high purity. Dependent on the origin of the sterol, different solvent mixtures are used as part of the crystallization process. The phytosterols, or plant sterols that are the subject of this safety assessment meet the specification prepared at the 69th JECFA (2008) and published in FAO JECFA Monographs 5 (2008)².

3.1.1. Vegapure® FS and FS-M

Vegapure® FS as well as FS-M is a finely ground powder of plant sterols isolated from deodorizer distillate. The product is ground at a temperature below 15°C to yield a very fine powder with a particle size of approximately 30 µm. The product is packaged in 25 kg (net weight) paper drums with a food grade polyethylene inliner.

3.1.2. Vegapure® 867 G

Vegapure® 867 G is a finely ground powder of plant sterols derived from tall oil of pine trees plant. The product is ground at a temperature below 15°C to yield a very fine powder. The product is packaged in 20 kg (net weight) cardboard boxes with a food grade polyethylene inliner.

3.1.3. Vegapure® F 90 ME

² Available at: <http://www.fao.org/ag/agn/jecfa-additives/specs/monograph5/additive-509-m5.pdf>

Vegapure® F 90 ME is a mixture of free plant sterol and skimmed milk spray dried into a water-dispersible powder. No processing aids or additives are added during the manufacturing process.

First, the skimmed milk is dispersed in water at a specific temperature. The free sterols are then introduced and the solution is fine milled. This is followed by spray-drying of the solution.

The plant sterols are derived from tall oil of pine trees plant. All material used in the manufacture of Vegapure® F 90 ME are from non-GM sources.

3.1.4. Vegapure® F 40 WDP E

Vegapure® F 40 WDP E is a blend of ground plant sterols (Vegapure 867 G) and gum arabic spray dried into a water dispersible powder. No processing aids or additives are added during the manufacturing process.

First, the gum arabic is dispersed in water at a specific temperature. The free ground sterols are then introduced and emulsified. This is followed by spray-drying of the solution.

All material used in the manufacture of Vegapure® F 40 WDP E are from non-GM sources.

3.2. Phytosterols Esters

3.2.1. Vegapure® 95 FF, Vegapure® 95E, Vegapure® 95R and Vegapure® 95ER

Vegapure® 95 FF, 95E, 95R and 95ER plant sterol esters are produced by direct esterification of free plant sterols, either isolated from deodorizer distillate or tall oil, with food-grade fatty acids, derived either from sunflower oil or rapeseed oil. The fatty acid is heated under nitrogen in a reaction vessel. The free sterols are added and the mixture is slowly heated under vacuum. After the esterification process a filtration occurs.

The raw sterol ester is treated *via* molecular distillation under a vacuum. In order to achieve a product with a neutral smell and taste, the product is deodorized. The final product is analyzed and packed under nitrogen in 25 kg, 180 kg drums with food grade inliner or 900 kg food grade totes.

Additional ingredients, such as mixed tocopherol and ascorbyl palmitate may be added. The ingredients added to the product are either GRAS or food additives permitted for use as food ingredients.

3.2.2. Vegapure® 67 WDP and Vegapure® 67 WDP E

The phytosterol esters used to manufacture Vegapure® 67 WDP (spray dried product) are from Vegapure® 95 FF, the phytosterol esters used to manufacture Vegapure® 67 WDP E are from Vegapure® 95 E. A carrier system (*i.e.*, sodium caseinate + glucose) is added to the phytosterol esters, and the mixture undergoes emulsification. This is followed by spray drying. Additional ingredients, such as glucose syrup, sodium caseinate, mixed tocopherol, ascorbyl palmitate, sodium ascorbate and silicon dioxide may be added. The ingredients added to the product are either GRAS or food additives permitted for use as food ingredients.

III. Summary of the Basis for the Notifier's Determination that Phytosterols and Phytosterol esters are GRAS

An independent panel of recognized experts, qualified by their scientific training and relevant national and international experience to evaluate the safety of food and food ingredients, was requested by Cognis to determine the Generally Recognized As Safe (GRAS) status of phytosterol and phytosterol esters intended for use as a food ingredient. A comprehensive search of the scientific literature, including regulatory assessments, was also conducted to identify relevant safety studies for this assessment.

Based on a critical evaluation of the pertinent data and information summarized herein, the Expert Panel members have individually and collectively determined by scientific procedures that the addition of phytosterol and phytosterol esters to Baked Goods and Baking Mixes; Beverages and Beverage Bases; Breakfast Cereals; Cheeses; Coffee and Tea (specialty coffee drinks and ready-to-drink tea beverages); Dairy Product Analogs; Fats and Oils; Frozen Dairy; Desserts; Grain Products and Pastas; Gravies and Sauces; Milk, Whole and Skim; Milk Products, including yogurt (including cultured yoghurts and cultured yoghurt-type products) as well as cultured dairy drinks; Plant Protein Products; Processed Fruits and Fruit Juices; Processed Vegetables and Vegetable Juices; Snack Foods; Soft Candy; and Soups and Soup Mixes, meeting the specifications cited above and manufactured according to current Good Manufacturing Practice, is Generally Recognized As Safe (GRAS) under the conditions of intended use in foods, as specified herein.

In coming to its decision that phytosterol and phytosterol esters are GRAS, the Expert Panel reviewed published regulatory and scientific information as well as other relevant corroborating information relating to the safety of the product and concluded that neither phytosterol and phytosterol esters nor any of their degradation products pose any toxicological hazards or safety concerns at the intended use levels. It is also their opinion that other qualified and competent scientists, reviewing the same publicly available toxicological and safety information, would reach the same conclusion.

IV. Basis for a Conclusion that Phytosterol and Phytosterol Esters are GRAS for its Intended Use.

EXPERT PANEL STATEMENT

DETERMINATION OF THE GENERALLY RECOGNIZED AS SAFE (GRAS) STATUS OF PHYSTEROLS AND PHYSTEROL ESTERS AS FOOD INGREDIENTS

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DETERMINATION OF THE GENERALLY RECOGNIZED AS SAFE (GRAS) STATUS OF PHYSTEROLS AND PHYSTEROL ESTERS AS FOOD INGREDIENTS

1. INTRODUCTION

The undersigned, an independent panel of recognized experts (hereinafter referred to as the Expert Panel)³, qualified by their scientific training and relevant national and international experience to evaluate the safety of food and food ingredients, was convened by EAS Consulting Group, LLC, at the request of Cognis Corporation to determine the Generally Recognized As Safe (GRAS) status of phytosterols and phytosterol esters as food ingredients in Baked Goods and Baking Mixes; Beverages and Beverage Bases; Breakfast Cereals; Cheeses; Coffee and Tea (specialty coffee drinks and ready-to-drink tea beverages); Dairy Product Analogs; Fats and Oils; Frozen Dairy; Desserts; Grain Products and Pastas; Gravies and Sauces; Milk, Whole and Skim; Milk Products; Plant Protein Products; Processed Fruits and Fruit Juices; Processed Vegetables and Vegetable Juices; Snack Foods; Soft Candy; and Soups and Soup Mixes at use level of 0.5 g phytosterol/labeled serving, except for yogurt (including cultured yoghurts and cultured yoghurt-type products) as well as cultured dairy drinks (2 g/ labeled serving), and milk, fruit juice and vegetable juice (all at 1 g/labeled serving). A comprehensive search of the scientific literature for safety and toxicity information on phytosterols and phytosterol esters, including regulatory assessments of these ingredients was conducted through February 2011 and made available to the Expert Panel. Cognis assures that all unpublished information in its possession and relevant to the subject of this determination has been provided for this assessment and has been summarized in this GRAS monograph. Cognis accepts responsibility for the GRAS determination that has been made for esterified and non-esterified phytosterols as described in this dossier. The Expert Panel independently and critically evaluated materials submitted by Cognis and other information deemed appropriate or necessary. Following an independent, critical evaluation, the Expert Panel conferred and unanimously agreed to the decision described herein.

1.1. Background

Plant sterols, also commonly referred as phytosterols, are found in all plants and in foods containing plant-based raw materials. In general, vegetable oils are rich in free phytosterols and their fatty acid esters. Dietary vegetable oils and products derived from them are generally also acknowledged to be the richest sources of phytosterols. Because of their cholesterol-reducing properties, these products are of considerable interest. The principal plant sterols are reported as: β -sitosterol that comprises 45-95% of the total sterols present in plant oils, campesterol which may total 30% of the total sterols in seed oils and stigmasterol which may account for as much as 25% of the total sterols of seed oils (Kritchevsky, 1997). Given their cholesterol lowering properties, Cognis intends to market well-characterized extracts of esterified and nonesterified plant sterols and stanols (collectively, phytosterols), under the name Vegapure®, as a food ingredient that would contribute to the management of elevated cholesterol levels. Additionally,

³Modeled after that described in section 201(s) of the Federal Food, Drug, and Cosmetic Act, As Amended. See also attachments (curriculum vitae) documenting the expertise of the Panel members.

the physico-chemical characteristics of the phytosterols allow for its incorporation into a wide variety of food products without substantially affecting their taste or texture.

1.2. Description, Specifications and Manufacturing Process

Vegapure® is a range of products of free phytosterols or phytosterol ester concentrate. These products are of plant origin such as soybean, rapeseed, and tall oil. The plant sterol esters are obtained by esterification of free plant sterols with fatty acids from vegetable oils. As described earlier (Section II. F.), Vegapure® products are either white-cream colored powder, yellowish oil or paste. The phytosterols are isolated from deodorizer distillate (a by-product of edible oil production), or tall oil (a by-product of wood pulp manufacture). They are purified by distillation, extraction, crystallization and washing resulting in products of high purity. Food grade specifications of Vegapure® manufactured by Cognis are summarized in Tables 4 through 9 (Section II. F). Analytical results of five independently produced, representative batches (Appendix I) demonstrate that the Vegapure® consistently meets the specifications. Analysis for potential external contaminants of Vegapure® products, including pesticides, lead, benzo(a)pyrene and microbes revealed either the absence of these contaminants or their presence at very low levels that are considered as safe. Additionally, multiple formulation constituents such as sodium caseinate, glucose syrup, gum arabic, silicon dioxide, sodium ascorbate, mixed tocopherol, and ascorbyl palmitate are used to prepare the final product and these ingredients are considered safe at the level used.

1.2.1. Regulatory Status of Formulation Components

A review of the regulatory status of these formulation constituents, as described below, suggests that each of these constituents is approved for direct addition to foods and the amounts used are not either in excess to that approved by regulation or above that necessary to achieve the intended physical or technical effect as an antioxidant, anticaking agent, etc.

Sodium Caseinate: Sodium caseinate is considered a multipurpose GRAS food substance that may be safely used under 21 CFR §182.1748 at GMP levels in food. It is commonly used as a binder or thickening agent.

Glucose Syrup: Corn syrup, commonly called "glucose sirup" or "glucose syrup," is obtained by partial hydrolysis of cornstarch with safe and suitable acids or enzymes. It may also occur in the dehydrated form (dried glucose sirup). Depending on the degree of hydrolysis, corn syrup may contain, in addition to glucose, maltose and higher saccharides. (b) The ingredient meets the specifications as defined and determined in §168.120(b) or §168.121 (a) of this chapter, as appropriate. It is used as a sweetener.

Gum Arabic (Acacia): Gum Arabic is permitted for direct addition to food for human consumption under 21 CFR §172.780 and is also affirmed as GRAS 21 CFR §184.1330.

Silicon Dioxide: Silicon dioxide is covered by a number of U.S. food regulations including 21 CFR §172.480 as an anticaking agent. Its use in foods as an anticaking agent is stated to be in an amount not to exceed 2 percent by weight of the food. It is also permitted for use as an adsorbent for dl- α -tocopheryl acetate and pantothenyl alcohol in tableted foods for special dietary uses in an amount not greater than required to accomplish the intended physical or technical effect. It also is permitted as an inert ingredient in many drugs.

Sodium Ascorbate: Sodium ascorbate is listed under §182.3731 as a generally recognized as safe food substance when used in accordance with GMPs. It is used in the formulation as an antioxidant or chemical preservative.

Mixed Tocopherols: Mixed tocopherols are listed under §182.3890 as a generally recognized as safe food substance when used in accordance with GMPs. It is used in the formulation as an antioxidant or chemical preservative.

Ascorbyl Palmitate: Ascorbyl palmitate is listed under §182.3149 as a generally recognized as safe food substance when used in accordance with GMPs. It is used in the formulation as an antioxidant or chemical preservative.

1.3. Stability Studies

As enrichment of various foods with phytosterols has become increasingly popular in several countries, the stability of phytosterols and their esters has been assessed in numerous published studies. The observations from these studies indicate that phytosterol oxidation does not occur to a significant extent in food applications. Although the stability of Cognis' phytosterol products has not been as extensively studied as that of their phytosterol ester products, results from published studies in which phytosterol and phytosterol ester products were compared indicate that generally, phytosterols are at least as stable as phytosterol esters. Soupas et al. (2007) reported similar low levels of oxidized phytosterols in rapeseed oil enriched with 8% free phytosterols compared to oils enriched with the same amount of phytosterol esters and exposed to temperatures of 160 to 200°C. In another study reported by Soupas et al. (2005), phytosterol esters heated to 100°C oxidized to a greater degree than free phytosterols, *i.e.*, after 48 hours of heating, phytosterol oxides in the phytosterol ester samples reached 16 to 17% (expressed as a percentage of the total quantified oxides from the original unoxidised phytosterol) compared to only 1.2 to 1.3% in free phytosterols. At 180°C, free phytosterols oxidized more than their esters, but the observed differences were small. Based on the similarities in stability between phytosterols and phytosterol esters, data from studies conducted using Cognis' phytosterol ester products may also be used to support the stability of their free phytosterol products.

In a series of studies, Cognis investigated the bulk stability of Vegapure® F90 ME and Vegapure® 95 FF (sterol ester) with respect to sterol content, physical parameters, and organoleptic parameters. In addition to bulk stability, Vegapure® 95 FF, Vegapure® sterol ester 67 WDP and Vegapure® F 40 WDP (free plant sterols ingredient) were tested for stability in representative food matrixes. Results from stability studies show that the Vegapure® phytosterol and phytosterol ester products are stable with respect to phytosterol content, oxidative parameters, and/or organoleptic properties over their intended shelf-life when stored under the recommended conditions of storage. Additionally, phytosterol and phytosterol ester products are stable when incorporated into various food matrices that represent their intended food uses. Numerous food and beverage products containing Cognis' phytosterol and phytosterol ester products are already marketed in several countries.

1.4. Intake from Natural Presence in Food

Phytosterols and phytostanols are not produced endogenously in humans. However, they are synthesized naturally in plants. Phytosterols and their saturated forms, phytostanols, are particularly abundant in vegetable oils, while appreciable amounts have been detected in whole

grain cereal products and vegetables (Connor, 1968; Salen et al., 1970; Cerqueira et al., 1979; Piironen and Lampi, 2004; Rozner and Garti, 2006). The source of phytosterol in human serum is obtained from the consumption and absorption of phytosterol-containing food products (Salen et al., 1970; Bhattacharyya et al., 1983). The estimated daily dietary intake of phytosterols in a typical western diet ranges between 150 and 400 mg/day (SCF, 2002), which results in circulating serum phytosterol levels ranging from 1 to 42 $\mu\text{mol/L}$ (Connor, 1968; Salen et al., 1970; Cerqueira et al., 1979; EFSA, 2008). The consumption of phytosterol-containing food products is estimated to be greater in vegetarians, increasing their daily dietary intake to approximately 500 mg/day (Ling and Jones, 1995). Vegetable oils such as corn, canola, soybean, and sunflower oils and food products based on them are generally recognized as the richest dietary sources of phytosterols (Ling and Jones, 1995; Piironen and Lampi, 2004). The total phytosterols content of selected refined vegetable oils are summarized in Table 10. Growing conditions as well as the various processes involved in vegetable oil refining contribute to the variation observed in phytosterols content of the vegetable oils (Piironen and Lampi, 2004).

Table 10. Levels of Total Phytosterols in Refined Vegetable Oils

Source	Total Phytosterols (g/kg)
Corn	6.86 to 9.52
Olive, extra virgin	1.44 to 1.62
Olive, cold pressed	1.56 to 1.93
Palm	0.60 to 0.68
Peanut	1.67 to 2.29
Canola	2.50 to 7.67
Soybean	2.03 to 3.28
Sunflower	2.63 to 3.76

Adapted from Piironen and Lampi (2004)

Levels of total phytosterols typically encountered in cereal and cereal products, vegetable, fruits, and berries are presented in Table 11. The consumption of these foods contribute to the background dietary intake of phytosterols although, the significance of different foods or categories as dietary sources of phytosterols is dependent upon dietary patterns (Piironen and Lampi, 2004). As an example, nuts contain substantial amounts of phytosterols but are generally consumed in low quantities; however, nuts may contribute significantly to the dietary phytosterol consumption of some individuals or population groups. In contrast, foods with low levels of phytosterols but consumed as a major food item may be significant dietary sources of phytosterols (*e.g.*, a vegetarian diet).

Table 11. Levels of Total Phytosterols in Cereal and Cereal Products, Vegetables, Fruits and Berries, and Other Foods

Source	Total Phytosterols (mg/kg fresh weight)	Source	Total Phytosterols (mg/kg fresh weight)
<i>Cereal and Cereal Products</i>		<i>Fruits and Berries</i>	
Barley	720 to 801	Apple	120 to 183
Buckwheat	963 to 1,980	Avocado	752
Corn	662 to 1,780	Banana	116 to 161
Millet	770	Grapes	40 to 200
Oats	350 to 611	Orange	228 to 240
Rice	723	Black currant	88
Rye	707 to 1,134	Raspberry	274
Wheat	447 to 830	Strawberry	100 to 120
<i>Vegetables</i>		<i>Other Foods</i>	
Broccoli	367 to 390	Peanuts, raw with shells	600 to 1,608
Brussels sprouts	240 to 430	Peanuts, raw without shells	551 to 1,269
Carrot	120 to 160	Peanuts, dry-roasted	607 to 1,135
Cauliflower	180 to 400	Peanuts, oil-roasted	614 to 1,038
Lettuce	85 to 174	Almonds	1,384 to 1,430
Onion	84 to 150	Nuts, various	220 to 1,580
Potato	38 to 73		
Sweet pepper	220		
Tomato	47 to 74		
White cabbage	110 to 148		

Adapted from Piironen and Lampi (2004)

1.5. Intended Use Levels and Food Categories

Cognis intends to use esterified and non-esterified phytosterols (Vegapure®) as a food ingredient in Baked Goods and Baking Mixes; Beverages and Beverage Bases; Breakfast Cereals; Cheeses; Coffee and Tea (specialty coffee drinks and ready-to-drink tea beverages); Dairy Product Analogs; Fats and Oils; Frozen Dairy; Desserts; Grain Products and Pastas; Gravies and Sauces; Milk, Whole and Skim; Milk Products, including yogurt (incl. cultured yoghurts and cultured yoghurt-type products) as well as cultured dairy drinks; Plant Protein Products; Processed Fruits and Fruit Juices; Processed Vegetables and Vegetable Juices; Snack Foods; Soft Candy; and Soups and Soup Mixes at a use level of 0.5 g phytosterol/labeled serving, except for yogurt and cultured dairy drinks (2 g/labeled serving), and milk, fruit juice and vegetable juice (all at 1 g/labeled serving). The proposed food categories and the intended use levels are summarized in Table 12. In some cases such as for yoghurts and cultured dairy drinks, the level of use may differ from the one listed in Table 12 because of variation in available and commonly found serving sizes on the market. However, the intake analysis was performed using the maximum serving size for these two products. As discussed below, estimates of possible

mean and 90th percentile daily intake from the maximum intended use levels of Vegapure® have been determined using the CSFII 2003-06 database of the food product.

Table 12: Summary of the Individual Proposed Food-Uses and Use-Levels for Phytosterols (2003-2006 NHANES Data)

Food Category	Proposed Food-Uses	Use-Level (mg/Serving Size)	Serving Size (g or mL) ¹	Use-Level (%)
Baked Goods and Baking Mixes	Bagels and English Muffins	500	55	0.91
	Bread	500	50	1.0
	Cookies	500	30 (cookies) 40 (brownies)	1.25 to 1.67
	Crackers	500	15	3.33
	Muffins, Quick Breads, and Sweet Rolls	500	55	0.91
	Pizza Crust	500	55	0.91
Beverages and Beverage Bases	Meal Replacement Drinks (ready-to-drink; non-milk-based)	500	240	0.21
Breakfast Cereals	Instant and Regular Hot Cereals	500	240 (prepared)	0.21
	Ready-to-Eat Breakfast Cereals	500	15 (Puffed) 30 (Regular) 55 (Biscuit-Type)	3.33 / 1.67 / 0.91
Cheeses	Cottage Cheese	500	110	0.45
	Grated Cheese (such as parmesan or romano)	500	5	10
	Natural and Processed Cheese (including cream cheese and spreads)	500	30	1.67
Coffee and Tea	Ready-to-Drink Tea Beverages ²	500	240	0.21
	Specialty Coffee Drinks (e.g. lattes, cappuccinos)	500	240	0.21
Dairy Product Analogs	Soy Beverages and Soy-Based Drinks	1,000	240	0.42
Fats and Oils	Margarine	500	15	3.33
	Salad Dressing	500	30	1.67
	Vegetable Oil	500	15	3.33
Frozen Dairy Desserts and Mixes	Ice Cream	500	120	0.42
Grain Products and Pastas	Cereal and Granola Bars	500	40	1.25
	Energy, Meal Replacement, and Fortified Bars	500	40	1.25
	Pasta and Noodles (as served)	500	140	0.21
Gravies and Sauces	Major Main Entrée Sauce (spaghetti, tomato)	500	125	0.4
	Minor Main Entrée Sauce (gravy, pesto, white, cheese, salsa, cocktail)	500	60	0.83

	Sauces for Dipping (barbecue, hollandaise, tartar, mustard, sweet and sour)	500	30	1.67
Milk, Whole and Skim	Fluid Milk and Powdered Milk	1,000	240	0.42
Milk Products	Cocoa and Chocolate Beverages	500	240	0.21
	Cream	500	15	3.33
	Cultured Dairy Drinks ³	2,000	variable ⁶	0.83 – 2.5 ⁶
	Meal Replacement Drinks (ready-to-drink; milk-based)	500	240	0.21
	Milk-Based Drinks and Flavored Milk	1,000	240	0.42
	Yogurt (including cultured yogurt and cultured yogurt type products)	2,000	variable ⁶	0.89- 2.7 ⁶
Plant Protein Products	Meat Analogs	500	55	0.91
Processed Fruits and Fruit Juices	Fruit Juices and Smoothies	1,000	240	0.42
	Powdered Fruit-Flavored Beverages ⁴	500	16	3.125
Processed Vegetables and Vegetable Juices	Vegetable Juices	1,000	240	0.42
Snack Foods	Low Fat Salty Snacks	500	30	1.67
Soft Candy	Chocolate	500	40	1.25
Soups and Soup Mixes	Processed Soups ⁵	500	245	0.20

¹ Serving sizes based on the US FDA Reference amounts customarily consumed per eating occasion (RACCs), April 1, 2010, 21 CFR §101.12 (CFR, 2010b). When a range of values is reported for a proposed food-use, particular foods within that food-use may differ with respect to their RACC; for some products such as yogurts and cultured dairy drinks the serving sizes may vary in the market.

² As ready-to-drink tea beverages were not consumed in the NHANES 2003-2006 database, use-levels were applied to iced-tea and herbal tea drinks as an appropriate alternative

³ No food codes were identified for yogurt drinks (cultured dairy drinks) in the NHANES 2003-2006 database; therefore, surrogate codes of dairy-based fruit smoothie drinks were used to represent the food codes in this category. In addition, it should be noted that the serving size specified for cultured dairy drinks is a reference amount and that the serving sizes may vary in the market.

⁴ Dry beverages mixes include only those intended to be made up with water, excluding chocolate and/or cocoa based drinks, coffee and tea-based drinks and meal-replacement drinks

⁵ Processed soups includes all soups, *i.e.* ready-to-eat, canned and soups made from dehydrated packet mixes

⁶ The serving sizes for the products available and commonly found in the market for those 2 categories varies greatly. Today, commonly found Cultured Dairy Drinks can vary from 80 mL to 240 mL serving size, while Yogurts and Yogurt type products can vary from 75 g to 225 g serving sizes, thus resulting in a level of use that may vary.

1.5.1 Estimated Daily Intake from the Intended Uses

Estimates for the intake of phytosterols were based on the proposed food-uses and use-levels in conjunction with food consumption data included in the National Center for Health Statistics' (NCHS) National Health and Nutrition Examination Surveys (NHANES) (CDC, 2006, 2009; USDA, 2009). As indicated earlier, the serving sizes of some food products such as cultured dairy drinks and yogurt varies greatly (80 mL to 240 mL and 75 g to 225 g, respectively) resulting in a level of use that may vary from 0.83 to 2.5% for cultured dairy drinks and from 0.89 to 2.7% for yoghurt and yoghurt type products. In the present intake analysis, the maximum serving size of these products is used. It is likely that for these products the serving size may be lower and will affect the estimated daily intake of these products. However, the

consumers of these products will know from the labeling that they are consuming 2 g phytosterol and are unlikely to consume additional servings. The data from the 2003-2004 and 2005-2006 cycles of the NHANES survey were combined to provide a larger population from which to estimate phytosterols consumption. Based on the exposure estimates using the CSFII 2003-06 database, approximately 97% of the total U.S. population were identified as consumers of Vegapure® (16,230 actual users identified). While infants are included in the intake determinations, Vegapure® is not intended to be used in products such as baby foods or infant formula that are specifically marketed for use by infants. A summary of the estimated daily intake of Vegapure® from the intended food categories is presented in Table 13. Consumption of types of food categories intended for addition of Vegapure® by the total U.S. population resulted in estimated mean all-person and all-user intakes of phytosterols of 3.9 g/person/day (77 mg/kg bw/day) and 4.0 g/person/day (77 mg/kg bw/day), respectively. The 90th percentile all-person and all-user intakes of phytosterols from all intended food-uses by the total population were 6.8 g/person/day (159 mg/kg bw/day) and 6.8 g/person/day (159 mg/kg body weight/day), respectively. For details of the consumption analysis, please see Appendix III. The FDA commonly uses the estimated daily intake for the 90th percentile consumer of a food additive as a measure of high chronic dietary intake. Hence, for the safety determinations, the resulting 90th percentile intake of phytosterols (6.8 g/person/day) from its intended uses in the above described food categories is considered.

Table 13. Intake of phytosterols (g/person/day) based on USDA data*

Population Group	Age Group (Years)	% Users	Actual # of Users	All-Person Consumption (g)		All-Users Consumption (g)	
				Mean	90 th Percentile	Mean	90 th Percentile
Infants**	0 to 2	76.4	1,461	3.2	6.3	3.9	6.4
Children	3 to 11	100.0	2,733	4.3	6.8	4.3	6.8
Female Teenagers	12 to 19	99.9	1,985	3.8	6.6	3.8	6.6
Male Teenagers	12 to 19	99.8	1,937	4.6	8.1	4.6	8.1
Female Adults	20 and Up	99.9	4,278	3.5	5.9	3.5	5.9
Male Adults	20 and Up	99.9	3,836	4.3	7.6	4.3	7.6
Total Population	All Ages	97.2	16,230	3.9	6.8	4.0	6.8

*Detailed analysis and additional explanation is provided in Appendix III; **While infants are included in these estimates, Vegapure® is not intended for inclusion in infant formula or baby foods.

2. SAFETY OF PHYTOSTEROLS AND PHYSTOSTEROL ESTERS

In a series of comprehensive safety evaluations, the phytosterols and phytosterol esters have been extensively reviewed and demonstrated to be safe for use as ingredients in food and dietary supplements. In over 50 randomized clinical trials the efficacy of phytosterols incorporated into conventional foods to lower serum cholesterol and reduce LDL-cholesterol has been demonstrated. Some of these studies lasted for up to one year. The majority of these studies are described in the recent proposed rule on labeling of phytosterol- containing foods (FDA,

2010). As described below, the phytosterols and phytosterol esters have also been the topic of several GRAS Notices submitted to the FDA for use as ingredients in a variety of foods that are used as a part of a low fat diet to reduce serum cholesterol. FDA has replied to each of these submissions with recognition of their request and a statement that they had no questions regarding the conclusions that the phytosterols and/or phytosterol esters are GRAS for the intended applications.

In addition to the GRAS notifications, FDA (2003) agreed to exercise enforcement discretion for two separate Health Claim Petitions on commercially available food products containing phytosterols and their esters, permitting a specific health claim related to lowering serum cholesterol and reducing the risk of coronary heart disease (CHD). In 2003, FDA issued a letter regarding enforcement discretion with respect to expanded use of the health claims to all the forms and sources of phytosterols (FDA 2003).

Recently, on December 8, 2010, FDA has proposed to amend the regulation authorizing a health claim on the relationship between plant sterol esters and plant stanol esters and reduced risk of CHD (FDA, 2010). The proposed rule includes the following significant changes to 21 C.F.R. 101.83:

- A broadening of the substances eligible for the health claim for conventional foods to include any mixtures of esterified and nonesterified phytosterols (defined as inclusive of both sterols and stanols) derived from vegetable oils and tall oil.
- Removal of the restrictions on types of conventional foods eligible for the claim.
- Setting the daily dietary intake of phytosterols necessary to justify the claim for risk reduction at 2 g phytosterols per day.
- A requirement that food eligible for the claim contains 500 mg phytosterols per serving (provided that the phytosterols are GRAS at this use level).
- A requirement that the phytosterol-containing product must be consumed with meals or snacks.
- A limitation of the exception from the disqualifying fat level (13 g of fat per serving size or per 50 g of food) to vegetable oil spreads that resemble margarine, and inclusion of liquid vegetable oil in the short list of exceptions.
- The addition of liquid vegetable oils to the products exempt from the “minimum nutrient requirement” (i.e., foods eligible for a health claim must contain no less than 10% of the Reference Daily Intake or Daily Reference Value for vitamin A, C, iron, calcium, protein or fiber per reference amount without nutrient addition). Vegetable oil spreads resembling margarine may meet the minimum nutrient requirement by addition of vitamin A.

FDA is proposing to amend § 101.83(c)(2)(i)(H) to require that the health claim specify that phytosterol-enriched foods should be consumed “with meals or snacks.” The “with meals or snacks” specification will replace the current requirement that the claim specify the daily dietary phytosterol intake should “be consumed in two servings eaten at different times of the day with other foods.”

Based on information from FDA's GRAS Notice Inventory⁴ website as of April 4, 2011, the agency received 11 notices on esterified and/or non-esterified phytosterols and responded to all of them with a formal "no questions" letter relative to their determination of GRAS for specified uses. The most recent notice was submitted in May 2010 for pine tree phytosterols (GRN, 335). A summary of these notices is presented in Table 14. In these 11 GRAS notices to the FDA, biological data, metabolism, and safety of phytosterols and its esters have been extensively presented and discussed. The most recent review and response from the FDA occurred in 2010. Given the similarity between the FDA notices and the present GRAS determination, it is instructive to review the FDA's responses to these notices and the information presented in these notices on phytosterol esters from a safety perspective. The discussion presented below suggests that the agency is comfortable with the GRAS determination of phytosterol esters at its use levels in selected foods.

In addition to the FDA, recently Food Standards Australia New Zealand (FSANZ, 2010a; 2010b) has also extensively and critically evaluated the safety of phytosterols. Based on the collective reviews of FDA submitted GRAS notices for phytosterols, the agency's Health Claim Rulemaking based on FDA's recognition of phytosterols assisting in reducing blood cholesterol levels and thus the risk of coronary heart disease, as well as EFSA and FSANZ's evaluation as described below, the consumption of phytosterol esters as an ingredient in conventional foods resulting in maximum daily intake of up to 6.8 g/person/day of phytosterol is safe. No recent studies raising any new safety concerns have appeared in the published literature subsequent to these recent evaluations by different national and international agencies. A summary of the findings from the FDA GRAS notices, Health Claim Petition and recent Proposed Rulemaking, EFSA, and FSANZ evaluations are described below.

2.1. GRAS Notices on Phytosterols

2.1.1. GRN 000250- Pine tree phytosterols

The subject of this notice was plant sterols and stanols from pine trees (GRN, 2009). The notifier incorporated by reference previous GRAS notices regarding phytosterol and phytosterol esters (GRNs 000039, 000048, 000053, 000061, 000112, 000176, 000177, 000181, and 000206) and stated that they intend pine tree phytosterols to be used in accordance with the uses described in the incorporated GRAS notices. Based on its review of the EDI presented in previous GRAS notices, the notifier determined that the EDI of phytosterols, from all uses, is 7.3 and 12.9 g/person/day at the mean and 90th percentile, respectively. The notifier summarized and compared the dietary intakes, sources, and metabolism of cholesterol and phytosterols and stated that a review of the published literature supports their conclusion that there is no difference between vegetable and other plant derived phytosterols and those derived from pine tree oil in terms of safety. The GRAS determination was supported by the conclusions of the nine previous GRAS notices, and associated GRAS panel reports, where the use of phytosterols, phytostanols, and phytosterol esters were determined to be safe for the intended uses in foods. The notifier stated that it reviewed the recent published literature on the safety of phytosterols in food and concluded that the literature continues to support the safety of the specified uses of phytosterols in foods.

⁴ Accessible at : <http://www.accessdata.fda.gov/scripts/fcn/fcnNavigation.cfm?rpt=grasListing&displayAll=true>

2.1.2. GRN 000181- Plant phytosterols

As part of this GRAS notice (GRN, 2006b), the Expert Panel evaluated previously submitted GRAS notices GRN 000039, 000048, 000053, 000061, 000112, Food Master Files 000625 and 000626, estimates of dietary exposure, methods of manufacture, specifications for the ingredient, and published and unpublished studies on phytosterols and phytostanols derived from vegetable oils or tall oil. The notifier provided a cumulative estimate of intake for phytosterols in the diet from the intended use described in this notice in addition to the phytosterol intake that may occur from other foods that have been the subject of previous submissions. It was noted that the intended use in egg products is unlikely to add significantly to the overall intake of phytosterols in food.

2.1.3. GRN 000176- Tall oil phytosterols

The notifier informed the FDA that phytosterols are GRAS (GRN, 2006a), through scientific procedures, for use as an ingredient in margarines and vegetable oil spreads, dressings for salads, beverages, snack bars, dairy analogs (including soy milk, ice cream and cream substitutes), cheese and cream, baked foods, ready-to-eat breakfast cereals, mayonnaise, pasta and noodles, sauces, salty snacks, processed soups, puddings, yogurt, confections, and vegetarian meat analogs at a level up to 0.4 g sterol equivalents/serving; in fruit/vegetable juices at a level up to 1 g sterol equivalents/serving. In edible vegetable oils, including diacylglycerol oil, the use level could be up to 4 g/100 g sterol equivalents/serving. In a response letter to the notifier, the FDA did not question the conclusion that the ingredient phytosterols are GRAS under the intended conditions of use.

2.1.4. GRN 0000112- Phytosterol

In this GRAS notification (GRN, 2003), the notifier described the products containing phytosterols as vegetable fat mixtures with phytosterols, vegetable oil mixtures with phytosterols, or anhydrous milk fat mixtures with phytosterols, depending on the fat used to produce the sterol-enriched ingredient. The subject phytosterols were obtained either from vegetable oils (soybean, cottonseed, corn, sunflower seed, canola, or peanut) or tall oil extracted from pine trees. The notifier considered that the proposed vegetable oil phytosterols were the subject of a previous GRAS notice (GRN, 2001). The tall oil phytosterols in this notification were comparable in their composition with that of the tall oil phytosterols, the subject of the previous GRAS notice (GRN, 2000b). The notifier estimated that per capita mean and 90th percentile intake of phytosterols from the intended uses of phytosterol in fatty mixtures would be 1.6 and 3.6 g/person/day, respectively. Several published studies addressing the safety of acute, subchronic, and chronic intakes of phytosterols and the potential for genotoxic, reproductive, or developmental effects of phytosterols were discussed. Additionally, several published studies addressing the metabolism of plant sterols in animals, the effect of phytosterols on sex hormones in animals and humans, the effect of phytosterols on fat-soluble vitamins and carotenoids, and the safety of the cumulative intake of plant sterols were discussed. The notifier concluded that its ingredients containing either vegetable or tall oil phytosterols are safe for their intended use.

2.1.5. GRN 000061- Plant sterols/plant sterol esters

The notifier for this GRAS submission considered that the ingredients plant sterols and plant sterol esters, the subject of their GRAS (GRN, 2001) are similar to the ingredient vegetable

oil sterol esters that were previously reviewed and evaluated by the FDA for use in vegetable oil based spreads as discussed above. The notifier claimed that the earlier GRAS notice (GRN, 2000b) presents a thorough evaluation of the available literature that was evaluated by the Expert Panel qualified by scientific training and experience to evaluate the safety of substances added to food. Subsequent to the earlier GRAS notice, several relevant studies that were not publicly available at the time of submission were published. As the publicly available information includes both sterol esters and free sterols, the notifier concluded that this literature supports the safety of both of its ingredients.

In the previous notice (GRN, 2000b), an acceptable daily intake (ADI) for vegetable oil sterol esters of 130 mg/kg/day (as the free phytosterol), equivalent to 9.1 g/day for a 70 kg person was established. The notifier discussed the rationale utilized by the GRAS panel of the previous notice to set this ADI and noted that its own estimated daily intake (i.e., 10.6 g/day at the 90th percentile level) exceeds the ADI set in the previous notification by 16%. The notifier discussed the rationale for its own conclusion that dietary exposure to plant sterols and plant sterol esters from the intended uses remains within a safe range. To a large extent, the notifier relied on consumers' previous exposure during the 1950s to 1980s to a drug product (i.e., Cytellin- primarily containing β -sitosterol) marketed for treatment of hypercholesterolemia. Over 1800 individuals participated in clinical studies conducted with Cytellin to assess the effects on blood cholesterol levels, with no reported adverse effects. Individuals who used the marketed drug typically consumed dosages ranging from 9 to 30 g/day. More recently, plant sterols in their ester forms have been the subject of additional studies. For all of these reasons, the notifier considered that the ADI set in the previous notice was a conservative number. Following a review of this notice, the FDA did not question the conclusion that the ingredients plant sterols and plant sterol esters are GRAS under the intended conditions of use.

2.1.6. GRN 000039- Tall oil phytosterols

In this GRAS notification (GRN, 2000a), the Expert Panel compared the composition of tall oil phytosterols, level of use, and intended use of tall oil phytosterols with that of the related substances (i.e., vegetable oil sterol esters and plant stanol esters) and concluded that the intended use of tall oil phytosterols did not raise any safety questions. The Panel also noted that any potential adverse nutritional effects (i.e. uptake on fat soluble vitamins) have been addressed and adequately resolved in the course of the determinations that vegetable oil sterol esters and plant stanol esters are GRAS. The Panel concluded that tall oil phytosterols are GRAS when used in vegetable oil-based spreads to help maintain a healthy cholesterol level, provided that the phytosterols as an ingredient meet the specifications cited in the GRAS notification, are used in accordance with GMP's in an amount not to exceed 12% phytosterol plus phytostanol in the finished product. The FDA reviewed the notice and in a response letter stated that based on the information provided in the notification, as well as other information available to the FDA, the agency stated that it has no questions at this time regarding the conclusion that tall oil phytosterols are GRAS under the intended conditions of use.

2.2. GRAS Notices on Phytosterol esters

2.2.1. GRN 000335- Pine phytosterol esters

The subject of this notice is pine tree phytosterol esters and the intended conditions of use, including the food categories and use levels for this submission described were the same as those

described in GRN 000250. The notifier stated that pine tree phytosterol esters are a creamy white semi-solid material containing 90% phytosterol esters and 6% free phytosterols. The dietary exposure for all proposed uses of phytosterol esters was similar to that described in GRN 000250 for phytosterol. The estimated daily intake of phytosterol esters from all uses was reported as 7.3 and 12.9 g/person/day at the mean and 90th percentile, respectively. The notifier discussed the safety of pine tree phytosterols by reviewing previous GRAS notices for phytosterols and phytosterol esters (GRNs 000039, 000048, 000053, 000061, 000112, 000176, 000177, 000181, 000206) as well as discussing approvals for phytosterol and phytosterol esters around the world. For discussion of the published scientific literature on metabolism and safety of phytosterol and phytosterol esters, the notifier referred to the previous GRAS notification (GRN 000250) along with discussion of the similarity in safety and metabolism between vegetable or plant oil derived phytosterols and phytosterols derived from pine.

2.2.2. GRN 000206- Phytosterol esters and diglycerides resulting from transesterification of vegetable oils/fats with phytosterols (PSEDGV)

The subject of this GRAS notice PSEDGV was described as a family of structurally related edible oils containing between 20 and 60% phytosterol esters and lesser amounts of diglycerides (5 - 20%), prepared by transesterification of phytosterols with commercial vegetable oils or solid vegetable fats (the fatty acid sources) (GRN, 2006c). The intended uses were provided for regular-grade PSEDGV at a level of 2.6 g per reference amount customarily consumed (RACC) and the high-grade PSEDGV at a level of 1.1 g per RACC. The intended use of either grade of PSEDGV was estimated to result in a level of 0.65 g phytosterol ester per RACC. The notifier discussed published studies for phytosterols and diglycerides. These studies for phytosterols included: absorption, distribution, metabolism, and elimination (ADME); subchronic and chronic animal; developmental and reproductive toxicity; genotoxicity; estrogenic potential; and clinical studies. For diglycerides the studies included: ADME, subchronic and chronic animal, genotoxicity, and clinical trials. Additionally the notifier also described two unpublished studies with PSEDGV, a 10-week gavage feeding study in mice (regular-grade, canola oil-based PSEDGV) and a 4-week clinical study (regular-grade, olive oil-based PSEDGV). All these studies supported the safety of PSEDGV at the intended use levels.

2.2.3. GRN 000177- Plant sterol esters

This notification (GRN, 2005) related to the use of plant sterol esters as an ingredient in ground roasted coffee that, when brewed according to package directions, will yield 1 g plant sterol esters per 8 fl oz serving. In estimating the consumption of plant sterol esters from its intended uses in brewed coffee, the notifier indicated that 1 g plant sterol esters is equivalent to 0.6 g plant sterols. Based on this assumption, the use of plant sterol esters was estimated to result in the mean and 90th percentile phytosterol consumption of 1.4 and 2.5 g/day, respectively. Based on the information provided in the notification, as well as other information available to the FDA, the agency did not question the conclusion that plant sterol esters are GRAS under the intended conditions of use.

2.2.4. GRN 000053- Phytosterol esters

The subject of this GRAS notice (GRN, 2000c) 'vegetable oil sterol esters', was similar to the previously evaluated notices by the agency. The GRAS Expert Panel for this notice (GRN, 2000c) concluded that the composition of the ingredient described in the notice that would be

added to vegetable oil is equivalent to the ingredient “vegetable sterol esters” that is similar to the previous notice (GRN, 2000b). The panel also considered additional phytosterol intake from consumption of the proposed vegetable oil product compared to the consumption of phytosterol esters -contained in currently available spreads and assessed stability during typical home cooking conditions. The FDA's response to this notice stated that, based on the information provided in the submission, as well as other information available to the FDA, the agency has no questions at this time regarding the conclusion that phytosterol esters are GRAS under the intended conditions of use.

2.2.5. GRN 000048- Vegetable oil phytosterol esters

In this GRAS notification (GRN, 2000b) a series of published studies conducted with free phytosterols, vegetable oil sterol esters, or plant stanol esters were described. The Expert Panel relied on the similarity of vegetable oil phytosterol esters to the ingredient used in the published studies to determine that these studies established the safety of vegetable oil phytosterol esters. The GRAS panel also determined that the composition of vegetable oil phytosterol esters is equivalent to that of another marketed ingredient (i.e. vegetable oil sterol esters, also known as plant sterol esters), which was the subject of the above described submission (GRN, 2000a). For the previous notice, the FDA evaluated both plant stanol esters and tall oil phytosterols as ingredients in spreads. The estimated consumption in the previous notice was determined as 3 g plant sterols or plant stanols/person/day (equivalent to approximately 5 g plant sterol esters or plant stanol esters/person/day). In the previous notice, the cumulative dietary intake from uses in dressings for salads, bars and yogurt, was not considered. The FDA acknowledged receipt and consideration of the information regarding the use of plant sterol esters and plant stanol esters in a broader array of food categories than spreads and concluded that the petitioners had met the burden to demonstrate to the FDA's satisfaction that the use of plant sterol esters and plant stanol esters in this broader array of food categories was safe and lawful. In a response letter, the FDA stated that based on the information provided by the notifier, as well as other information available to the FDA, the agency did not question the conclusion that vegetable oil phytosterol esters are GRAS under the intended conditions of use.

Table 14. Summary of FDA GRAS notices on phytosterols esters and phytosterol

GRN No.	Subject	Manufacturing	Use	Levels
Phytosterols				
GRN-250 (GRN, 2009)*	Pine tree phytosterols	Phytosterols from tall oil	Margarine and vegetable-based spreads; yogurt and yogurt-like products; milk-based juice beverages; ice cream and non- standardized ice cream products; cream cheese and cream cheese-like products; snack bars; salad dressing; standardized and non-standardized bread products; baked foods; beverages; dairy analogs; cheese and cream; breakfast cereal; mayonnaise; pasta and noodles; sauces; salty snacks; processed soups; puddings; confections; vegetarian meat analogs; fruit/vegetable juice; vegetable oils; egg products, including egg whites and substitute egg products	EDI up to 7.3 g/person/day at mean, 12.9 g/person/day at 90 th percentile
GRN-181 (GRN, 2006)	Plant phytosterols	Phytosterols from vegetable oil and tall oils (< 5%)	Egg products, including egg whites and egg substitutes	Up to 20 mg plant sterol/g egg product; 1100 mg phytosterols/serving
GRN-176 (GRN, 2006)	Plant sterols and plant sterol esters	Phytosterols from vegetable oils and tall oil	In margarines and vegetable oil spreads; salad dressing; beverages; snack bars; dairy analogs; cheese and cream; baked foods; breakfast cereal; mayonnaise; pasta and noodles; sauces; salty snacks; processed soups; puddings; yogurt; confections; vegetarian meat analogs; fruit/vegetable juice; vegetable oils	EDI 3.9 g/person/day at 90 th percentile
GRN-112 (GRN, 2003)*	Phytosterols	Phytosterols, vegetable fat mixture, vegetable oil mixture, or anhydrous milk fat mixture Phytosterols from vegetable oils or tall oil	In margarine and vegetable-based spreads; yogurt and yogurt-like products; milk-based juice beverages; ice cream and non- standardized ice cream products; cream cheese and cream cheese-like products; snack bars; salad dressing; standardized and non-standardized bread products	EDI 1.6 g/person/day at mean, 3.6 g/person/day at 90 th percentile
GRN-61 (GRN, 2001)	Plant sterols and plant sterol esters	Phytosterols from vegetable oils are esterified with vegetable oil fatty acids	In vegetable oil spreads; salad dressing; health drinks; health bars; yogurt-type products	EDI 5.5 g/person/day at mean, 10.6 g/person/day at 90 th percentile
GRN-39 (GRN, 2000)	Tall oil phytosterols	Tall oil soap; byproduct of paper pulpung process; organic solvent extraction;	In vegetable oil spread	Up to 1.5 g/person/day free phytosterols

000034

GRN No.	Subject	Manufacturing	Use	Levels
		crystallized from alcohol		
Phytosterol esters				
GRN-335 (GRN, 2010)	Pine tree phytosterol esters	Phytosterols esters	Ingredient in multiple food categories including margarine and vegetable-based spreads, yogurt and yogurt-like products, milk-based juice beverages, ice cream and non-standardized ice cream products, cream cheese and cream cheese-like products, snack bars, salad dressing, standardized and non-standardized bread products, baked goods, beverages, dairy analogs, cheese and cream, breakfast cereal, mayonnaise, pasta and noodles, sauces, salty snacks, processed soups, puddings, confections, vegetarian meat analogs, fruit/vegetable juice, vegetable oils, egg products, including egg whites and substitute egg products	The estimates of dietary exposure for all proposed uses from the GRN submissions were 5.5 to 7.3g/p/d at the mean and 10.6 to 12.9 g/p/d at the 90th percentile.
GRN-206 (GRN, 2006)	Phytosterol esters and diglycerides	Enzymatic and chemical transesterification of vegetable fats/oils with vegetable phytosterols	In baked goods and baking mixes; fats and oils; frozen dairy desserts and mixes; gelatins, puddings, and fillings; grain products and pastas; gravies and sauces; hard candy; milk; milk products; soft candy; soups and soup mixes; and snack foods at a level of 0.65 g/esters/RACC	7.3 g/person/day at mean, 12.9 g/person/day at 90 th percentile
GRN-177 (GRN, 2005)	Plant sterol esters	ADM	In ground roast coffee	1 g plant sterol esters/8 fl oz. serving 1.4 g/person/day mean, 2.5 g /person/day 90 th percentile
GRN-53 (GRN, 2000)	Phytosterol esters	Cargill	In vegetable oil at a level up to 13.3% for home use, and salad dressings	Additional consumption of 0.75 g/person/day to 2.1 g/person/day at 90 th percentile
GRN-48 (GRN, 2000)	Vegetable oil phytosterol esters	Soy sterols are esterified with vegetable oil fatty acids from soy, canola, sunflower, or other vegetable oils	In vegetable oil spreads; salad dressings; bars; yogurt	3 g plant sterol or stanols, or 5 g plant sterol or stanol esters/person/day

*For these notices, GRAS Expert Panel was not convened; for all other notices the Panel was convened to reach a consensus.

2.3. Interim Health Claim Rulemaking

As indicated earlier, the FDA issued an interim final rule (FDA, 2000) allowing the use of health claims on the association between plant sterol/stanol esters and the reduced risk of CHD on September 8, 2000. To be eligible for the health claim, a food product must contain at least 0.65 g of plant sterol esters per RACC in spreads and salad dressing, or at least 1.7 g of plant stanol esters per RACC in spreads, salad dressings, snack bars, and dietary supplements in softgel form. Subsequently, on February 14, 2003, the FDA issued a letter regarding enforcement discretion with respect to expanded use of the health claims to all the forms and sources of phytosterols (FDA, 2003). This letter expands the health claims to free forms of phytosterols from several sources and allows a wider range of uses. For these expanded uses of health claims, Cargill provided new scientific evidence and comments to the FDA and requested that the FDA exercise enforcement discretion until such time that a final rule is issued that extends the authorized health claim to all forms and sources of phytosterols, and product forms that may effectively reduce blood cholesterol levels. In its submission, Cargill claimed that the scientific literature supports expanding the health claim to free forms of plant sterols and stanols; and to a wider range of products, including low-fat products. In its submission, Cargill stated that current science shows that the lowest effective daily intake of free phytosterols is 800 mg/day with the minimum addition of 400 mg free phytosterols/serving, and that the phytosterol substance should consist of at least 80% sitosterol, campesterol, stigmasterol, sitostanol, and campestanol (combined weight).

In its response, the FDA (2003) stated that it intends to consider the exercise of enforcement discretion, pending publication of the final rule, with respect to certain requirements of the health claim. The agency mentioned that it will consider exercising enforcement discretion with regard to the use of a claim about reduced risk of CHD in the labeling of a phytosterol-containing food, including foods other than those specified in §101.83(c)(2)(iii)(A), if: (1) the food contains at least 400 mg/RACC of phytosterols; (2) mixtures of phytosterol substances (i.e., mixtures of sterols and stanols) contain at least 80% β -sitosterol, campesterol, stigmasterol, sitostanol, and campestanol (combined weight); (3) the food meets the requirements of §101.83(c)(2)(iii)(B)-(D); (4) products containing phytosterols, including mixtures of sterols and stanols or free forms, use a collective term in lieu of the terms required by §101.83(c)(2)(i)(D) in the health claim to describe the substance (e.g., “plant sterols” or “phytosterol”); (5) the claim specifies that the daily dietary intake of phytosterols that may reduce the risk of CHD is 800 milligrams (mg) or more per day, expressed as the weight of free phytosterol; (6) vegetable oils for home use that exceed the total fat disqualifying level bear the health claim along with a disclosure statement that complies with §101.13(h); and (7) the use of the claim otherwise complies with §101.83. The FDA stated that it was developing a final rule on this health claim and intended to publish it as expeditiously as possible. The FDA’s consideration to exercising enforcement discretion with regard to the use of a claim about the reduced risk of CHD in the labeling of a phytosterol-containing food supports the safety of phytosterol.

On December 8, 2010, FDA published a proposed rule to amend the regulation authorizing a health claim on the relationship between phytosterols and reduced risk of CHD (FDA, 2010). The agency said it is taking this action based on evidence previously considered and its review of subsequent data on esterified and nonesterified plant sterols and stanols (collectively, phytosterols). The proposed rule will amend the authorized use of the claim by modifying the nature of the substances that may be the subject of the claim for conventional

foods to include nonesterified, or free, phytosterols, by expanding the types of foods that may bear the claim to include a broader range of foods, by modifying the daily dietary intake of the substance specified in the claim as necessary for the claimed benefit, by adjusting the minimum amount of the substance required for a food to bear the claim, and by making other minor changes.

With respect to the safety of phytosterols, in the proposed rule making, FDA stated that although the agency has not made its own determination that phytosterols are GRAS, the agency is not aware of any scientific evidence that phytosterols, whether free or esterified, would be harmful (FDA, 2010). Additionally, the agency stated that for those conventional foods that have been the subject of a GRAS notification reviewed by FDA with conditions of use that meet the eligibility criteria for the use of the health claim, and for which the agency had no questions, FDA concluded that the preliminary requirement under 21 CFR 101.14(b) that phytosterols be safe and lawful has been met for use in such conventional foods (FDA, 2010).

2.4. JECFA Evaluation

In 2009, the JECFA evaluated toxicological and clinical studies conducted with a range of phytosterols, phytostanols and their esters, and concluded that there was no evidence for genotoxicity and no indication of potential for carcinogenicity. Following its evaluation, JECFA determined an ADI of 0-40 mg/kg bw, expressed as the sum of phytosterols and phytostanols in their free form. JECFA concluded that dietary exposure to phytosterols and phytostanols would typically be within the ADI, based on available data and information.

2.5. European Union Evaluation

The Scientific Panel of the European Food Safety Authority (EFSA) reviewed the safety of phytosterols for its uses in selected food. Based on the evaluation in 2000 by the Scientific Committee on Food (SCF, 2000) and in 2004 by EFSA, the European Commission (EC, 2004) authorized the use of phytosterols and phytosterol esters in a number of foods and food ingredients. Additionally, as regards the labeling of foods and food ingredients with added phytosterols, phytosterol esters, phytostanols and/or phytostanol esters, the Commission adopted the regulation that consumers receive the information that intake of more than 3.0 g per day of additional phytosterols should be avoided. Consumers also have to be informed that a food or food ingredient contains additional phytosterols and that patients taking cholesterol-lowering medication should consume food and food ingredients with additional phytosterols under medical supervision. In subsequent opinions concerning foods with added phytosterols, EFSA came to the conclusion that the addition of phytosterols was safe, provided that management measures were undertaken to avoid excessive intake of phytosterols (EFSA, 2007).

2.6. FSANZ Evaluation

The Food Standards Australia and New Zealand (FSANZ, 2009, 2010a) reevaluated the safety of phytosterol-fortified foods on the basis of the ADI determined by JECFA and determined that there was no justification for establishing an ADI. On February 19, 2010, FSANZ also issued a report on the equivalence of plant stanols, sterols, and their fatty acid esters (FSANZ, 2010b). The agency was requested to assess the substantial equivalence of all types of phytosterols (phytosterols, phytostanols, and their fatty acid esters) from all sources (including plant and tall oil sources) meeting JECFA specifications. FSANZ concluded that from safety perspective all the phytosterols are equivalent and the existing estimates of dietary intake are unlikely to change. The agency stated that less than 5% of dietary plant phytosterols entered the

circulation. Compared to this, approximately 80% of structurally related cholesterol in the diet enters the circulation. The majority of ingested phytosterol in humans is excreted unchanged in the feces. The absorbed phytosterols are metabolized in the liver and excreted through the bile (FSANZ, 2009).

3. SUMMARY

Cognis intends to market phytosterol and phytosterol ester products as ingredients for use in food and beverages. The products that Cognis intend to market as food ingredients under the trade name Vegapure® are: Vegapure® FS and FS-M; Vegapure® F 90 ME; Vegapure® F 40 WDP E; Vegapure® 867 G; Vegapure® 95 FF, 95 E, 95 R and 95 ER; and Vegapure® 67 WDP and WDP E. These products are proposed for use in foods and beverages because phytosterols and phytosterol esters have been scientifically demonstrated to lower LDL cholesterol levels. The manufacture of Vegapure® phytosterol products involves mixing of vegetable oil distillate with sodium hydroxide and water and heating, resulting in the production of free sterols. The sterols are purified through multiple purification steps. Vegapure® plant sterol esters are produced by direct esterification of free plant sterols with food-grade fatty acids from sunflower oil, followed by purification of the raw sterol ester. Additional ingredients, all of which are permitted for use as food ingredients, may be added to the phytosterol or phytosterol ester products.

Stability tests conducted on Vegapure® products demonstrate that these products are stable with respect to phytosterol content, oxidative parameters, and/or organoleptic properties under bulk storage conditions as well as in representative food matrices for their intended shelf-life when stored under the recommended conditions of storage. Vegapure® products are intended for use in at levels providing 500 mg phytosterols per serving in various foods, including Baked Goods and Baking Mixes; Beverages and Beverage Bases; Breakfast Cereals; Cheeses; Coffee and Tea (specialty coffee drinks and ready-to-drink tea beverages); Dairy Product Analogs; Fats and Oils; Frozen Dairy; Desserts; Grain Products and Pastas; Gravies and Sauces; Milk, Whole and Skim; Milk Products, including yogurt (including cultured yoghurts and cultured yoghurt-type products) and cultured dairy drinks; Plant Protein Products; Processed Fruits and Fruit Juices; Processed Vegetables and Vegetable Juices; Snack Foods; Soft Candy; and Soups and Soup Mixes. Cognis intends to use phytosterols or phytosterol esters such that the labeled serving size of above food will result in intake of 0.5 g phytosterol, except for milk, yogurt, fruit juice and vegetable juice. For yogurt and cultured dairy drinks, Cognis intends to use phytosterol at levels of 2 g per labeled serving, while for milk, fruit juice and vegetable juice the use levels will be 1 g/labeled serving. Under the conditions of intended use of Vegapure® products, the estimated mean and 90th percentile all-user phytosterol intakes were 4.0 and 6.8 g/person/day, respectively (77 and 159 mg/kg bw/day, respectively). Cognis believes that its products will provide an additional source of free and esterified phytosterol esters for the existing uses listed in earlier GRAS submissions and will not change the cumulative dietary intake of phytosterols.

The safety of Vegapure® products is supported by the results of numerous pre-clinical toxicity studies, reproductive and developmental toxicity studies, and genotoxicity studies conducted using phytosterols, phytosterol esters, and phytostanols. These studies are summarized at length in the FDA GRAS notifications reviewed in this dossier, FDA Health Claim Rulemaking, and in assessments by JECFA, EFSA, and FSANZ. In these studies, no adverse effects attributable to the test compounds were reported at doses higher than the estimated 90th

percentile intake of phytosterols from the proposed food uses. The safety of phytosterols is also supported by clinical studies in which subjects consumed up to 9 g phytosterols/day. In these studies, consumption of phytosterols did not result in reports of adverse events, serum chemistry, hematology, and urinalysis measurements. Moreover, phytosterol intake did not significantly decrease circulating levels of fat-soluble vitamins. There also were no significant reductions in circulating carotenoid concentrations in the majority of identified studies, and no adverse biological or physiological effects were observed in studies in which decreases in plasma carotenoid levels or bioavailability were reported.

On the basis of scientific procedures⁵ and common knowledge of exposure from natural sources, the consumption of esterified and non-esterified phytosterols as added food ingredients are considered safe at levels up to 6.8 g/day. The intended uses are compatible with current regulations, *i.e.*, Vegapure® products will be used in Baked Goods and Baking Mixes; Beverages and Beverage Bases; Breakfast Cereals; Cheeses; Coffee and Tea (specialty coffee drinks and ready-to-drink tea beverages); Dairy Product Analogs; Fats and Oils; Frozen Dairy; Desserts; Grain Products and Pastas; Gravies and Sauces; Milk, Whole and Skim; Milk Products, including yogurt (cultured yoghurt and cultured yoghurt-type products) and cultured dairy drinks; Plant Protein Products; Processed Fruits and Fruit Juices; Processed Vegetables and Vegetable Juices; Snack Foods; Soft Candy; and Soups and Soup Mixes at use levels of 0.5 g/labeled serving, except milk, yogurt, cultured dairy drinks, fruit juice and vegetable juice. For yogurt and cultured dairy drinks, the levels of phytosterol will be 2 g per labeled serving, while for milk, fruit juice and vegetable juice will be 1 g/labeled serving. Phytosterol and phytosterol ester used in these applications is produced according to current good manufacturing practices (cGMP).

⁵ 21 CFR §170.3 Definitions. (h) Scientific procedures include those human, animal, analytical, and other scientific studies, whether published or unpublished, appropriate to establish the safety of a substance.

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4. CONCLUSION

Based on a critical evaluation of the publicly available data summarized above, the Expert Panel members whose signatures appear below, have individually and collectively concluded that phytosterols and phytosterol esters, meeting the specifications cited above, and when used as food ingredients in selected food products [Baking Mixes; Beverages and Beverage Bases; Breakfast Cereals; Cheeses; Coffee and Tea (specialty coffee drinks and ready-to-drink tea beverages); Dairy Product Analogs; Fats and Oils; Frozen Dairy; Desserts; Grain Products and Pastas; Gravies and Sauces; Milk, Whole and Skim; Milk Products, including yogurts (incl. cultured yoghurts and cultured yoghurt-type products) and cultured dairy drinks; Plant Protein Products; Processed Fruits and Fruit Juices; Processed Vegetables and Vegetable Juices; Snack Foods; Soft Candy; and Soups and Soup Mixes] at levels of 0.5 to 2.0 g phytosterol/labeled serving when not otherwise precluded by a Standard of Identity as described in this dossier and resulting in the 90th percentile all-user estimated intake of 6.8 g phytosterol/person/day is Generally Recognized As Safe (GRAS).

It is also our opinion that other qualified and competent scientists reviewing the same publicly available toxicological and safety information would reach the same conclusion. Therefore, we have also concluded that phytosterols and phytosterol esters, when used as described, is GRAS based on scientific procedures.

Signatures

(b) (6)

Stanley T. Omaye, Ph.D., D.A.T.S.

24 May 2011
Date

(b) (6)

Stanley M. Tarka, Ph.D.

20 May 2011
Date

(b) (6)

Madhusudan G. Soni, Ph.D., F.A.C.N.

25 May 2011
Date

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6. APPENDIX I
Appendix I.A.

Product Analysis for Vegapure® FS

Product Analyses for 5 Non-Consecutive Lots of Vegapure® FS

Specification Parameter*	Specification	Lot				
		UI8H080003	UI8J160002	UI8J230005	UI8L020001	UI8J270007
Physical Parameters						
Appearance	White powder	Conforms	Conforms	Conforms	Conforms	Conforms
Odor	Bland	Conforms	Conforms	Conforms	Conforms	Conforms
Flavor	Bland	Conforms	Conforms	Conforms	Conforms	Conforms
Purity						
Total Sterol Content %	Min 98	98.72	98.60	98.56	98.61	98.68
Water Content %	Max 1.5	1.12	0.37	0.27	0.18	0.74
Lead (mg/kg)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexane (mg/kg)	<10	Conforms	Conforms	Conforms	Conforms	Conforms
Methanol (mg/kg)	<10	Conforms	Conforms	Conforms	Conforms	Conforms
Sterol Composition						
Cholesterol Content % (area)	0.0 – 2.0	0.37	0.37	0.38	0.43	0.35
Brassicasterol Content % (area)	2.0 -6.0	3.91	3.79	3.89	3.53	3.69
Campesterol Content % (area)	20.0 – 29.0	27.37	26.81	26.84	25.83	28.49
Campestanol Content % (area)	0.0 – 6.0	0.53	0.55	0.55	0.55	0.43
Stigmasterol Content % (area)	12.0 – 23.0	14.70	15.52	15.47	13.84	13.38
<i>beta</i> -Sitosterol Content % (area)	42.0 – 55.0	45.97	45.06	44.89	46.73	46.68
<i>beta</i> -Sitostanol Content % (area)	0.0 – 2.5	0.73	0.74	0.74	0.79	0.67
D5 Avenasterol Content % (area)	0.0 – 4.0	1.60	1.91	1.92	2.39	1.52
D7 Stigmastenol Content % (area)	0.0 -2.0	0.43	0.50	0.51	0.54	0.57
D7 Avenastanol Content % (area)	0.0 – 2.0	0.21	0.25	0.25	0.30	0.26

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Product Analyses for 5 Non-Consecutive Lots of Vegapure® FS

Specification Parameter*	Specification	Lot				
		U18H080003	U18J160002	U18J230005	U18L020001	U18J270007
Other sterols % (area)	0.0 – 5.0	2.90	3.12	3.12	3.68	2.64
Microbiological Parameters						
Standard Aerobic Plate Count, CFU/g	<100	<100	<100	<100	<100	<100
<i>Salmonella</i> spp. (/25 g)	Negative	Negative	Negative	Negative	Negative	Negative
Coliforms (37°C), CFU/g	<10	<10	<10	<10	<10	<10
Coagulase positive <i>Staphylococcus</i> (/10 g)	Negative	Negative	Negative	Negative	Negative	Negative
<i>Bacillus cereus</i> , CFU/g	<10	<10	<10	<10	<10	<10

Appendix I.B.

Product Analysis for Manufactured Lots of Vegapure® F 90 ME

Product Analyses for 3 Non-Consecutive Lots of Vegapure® F 90 ME

Specification Parameter*	Specification	Lot		
		GR71081200	GR71401200	GR81841200
Physical Parameters				
Appearance	Cream powder	Pass	Pass	Pass
Odor	Bland	Pass	Pass	Pass
Taste	Bland	Pass	Pass	Pass
Bulk Density g/L	200 to 500 g/L	400	400	400
Purity				
Total Sterol Content %	85 to 92%	85	87	87
Water Content %	Max 5%	1	0.9	1.6
Microbiological Parameters				
Standard Aerobic Plate Count, CFU/g	Max 5,000 CFU/g	230	210	40
<i>Salmonella</i> spp.	Negative/25 g	Negative	Negative	Negative
<i>E. coli</i>	Negative/g	Negative	Negative	Negative
Yeast + moulds	Max 300 CFU/g	<10	<10	<10

Other Chemical Characterization for 3 Non-Consecutive Lots of Vegapure® F 90 ME

Specification Parameter*	Lot		
	GR71081200	GR71401200	GR81841200
Brassicasterol Content % (area)	2	2	2
Campesterol Content % (area)	12	12	13
Campestanol Content % (area)	1	1	1
Stigmasterol Content % (area)	1	1	1
<i>beta</i> -Sitosterol Content % (area)	73	73	72
<i>beta</i> -Sitostanol Content % (area)	8	8	9
Other sterols % (area)	3	2	2

Appendix I.C.

Product Analysis for Manufactured Lots of Vegapure® F 40 WDP E

Product Analyses for 5 Non-Consecutive Lots of Vegapure® 40 WDP E

Specification Parameter*	Specification	Lot				
		GR10680015	GR03406091	GR02980016	GR02577423	GR01812717
Physical Parameters						
Appearance	White powder	Pass	Pass	Pass	Pass	Pass
Sensory	Neutral	Pass	Pass	Pass	Pass	Pass
Purity						
Free Sterols % (area)	37-42	41.5	40.3	41.2	42.0	42.0
Water content %	<7.0	3.2	3.6	3.7	4.3	5.5
Microbiological Parameters						
Standard Aerobic Plate Count, CFU/g	< 3,000	77	40	97	245	247
<i>Salmonella</i> spp.	Negative/25 g	Pass	Pass	Pass	Pass	Pass
Coliforms, CFU/g (37°C)	Negative	Pass	Pass	Pass	Pass	Pass
Yeasts and Moulds CFU/g	< 300	10	10	10	10	10
<i>E. coli</i> (CFU/g)	Negative	Pass	Pass	Pass	Pass	Pass

Other Chemical Characterization for 5 Non-Consecutive Lots of Vegapure® 40 WDP E

Specification Parameter*	Lot				
	GR10680015	GR03406091	GR02980016	GR02577423	GR1812717
Brassicasterol Content % (area)	0	0	1	1	3
Campesterol Content % (area)	7	7	8	9	15
Campestanol Content % (area)	1	1	1	1	1
Stigmasterol Content % (area)	1	1	1	1	0
<i>beta</i> -Sitosterol Content % (area)	79	79	76	75	69
<i>beta</i> -Sitosterol Content % (area)	11	11	11	10	8
Other sterols % (area)	2	2	1	3	3

Appendix I.D.

Product Analysis for Manufactured Lots of Vegapure® 867 G

Product Analyses for 5 Non-Consecutive Lots of Vegapure® 867G

Specification Parameter*	Specification	Lot				
		WD1B10142G	WD0J07114G	WD0L16126G	WD0F30081G	WD9L03016G
Physical Parameters						
Appearance	White powder	Pass	Pass	Pass	Pass	Pass
Odor	Neutral	Pass	Pass	Pass	Pass	Pass
Purity						
Total sterols % (area)	Min.99	99	99	99	99	99
Water content %	Max. 2	1	0	0	1	1
Microbiological Parameters						
Total Plate Count, CFU/g	Max. 1000	10	10	10	10	10
Yeasts and Moulds CFU/g	Max. 100	0	10	10	10	10
<i>Bacillus cereus</i> , CFU/g	Max. 10	0	<10	<10	<10	<10

Other Chemical Characterization for 5 Non-Consecutive Lots of Vegapure® 867G						
Specification Parameter*	Lot					
	WD1B10142G	WD0J07114G	WD0L16126G	WD0F30081G	WD9L03016G	
Brassicasterol Content % (area)	0	0	0	0	0	
Campesterol Content % (area)	7	7	7	7	7	
Campestanol Content % (area)	1	1	1	1	1	
Stigmasterol Content % (area)	1	1	1	1	1	
<i>beta</i> -Sitosterol Content % (area)	78	78	78	77	77	
<i>beta</i> -Sitostanol Content % (area)	10	10	10	11	11	
Other sterols % (area)	2	2	2	2	2	

Appendix I.E.

Product Analysis of Manufactured Lots of Vegapure® 95 FF

The analysis of several manufactured Lots of Vegapure® 95 FF are summarized below.

Product Analyses for 5 Non-Consecutive Lots of Vegapure® 95 FF

Specification Parameter*	Specification	Lot				
		GR826670001	GR82223332	GR82057001	GR81003332	GR80723332
Physical Parameters						
Appearance	Yellowish oil or paste	Conforms	Conforms	Conforms	Conforms	Conforms
Lovibond color yellow 1”	<10	1	2	1	1	1
Lovibond color red 1”	<2	0.0	0.0	0.0	0.0	0.0
Purity						
Free Sterols + Sterol Esters % (area)	Min 97	99.0	99.0	98.9	99.9	98.8
Free Sterols% (area)	Max 6	4.3	3.3	4.1	3.6	3.1
Total Sterol Content %	Min 59	61.9	61.4	61.8	62.6	61.3
Water content %	<1.0	0.0	0.0	0.0	0.0	0.0
Acid Value, mg KOH/g	Max 0.5	0.2	0.3	0.2	0.3	0.3
Peroxide Value, meq O ₂ /kg	Max 1.0	0.0	0.0	0.0	0.0	0.0
Lead, mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Sterol Composition						
Cholesterol Content % (area)	0.0- 2.0	0.4	0.4	0.4	0.4	0.4
Brassicasterol Content % (area)	0.0 – 6.0	2.6	3.1	3.0	2.6	1.7
Campesterol Content % (area)	20.0 – 29.0	27.2	27.2	26.8	27.2	26.4
Campestanol Content % (area)	0.0 – 6.0	0.6	0.6	0.7	0.5	0.7
Stigmasterol Content % (area)	12.0 – 23.0	17.7	16.6	15.7	19.8	19.5
<i>beta</i> -Sitosterol Content % (area)	42.0 – 55.0	45.7	46.2	47.3	44.6	46.2

Product Analyses for 5 Non-Consecutive Lots of Vegapure® 95 FF

Specification Parameter*	Specification	Lot				
		GR826670001	GR82223332	GR82057001	GR81003332	GR80723332
<i>beta</i> -Sitostanol Content % (area)	0.0 – 2.5	1.1	1.1	1.1	0.8	1.0
D5 Avenasterol Content % (area)	0.0 – 4.0	1.5	1.5	1.6	1.1	1.2
D7 Stigmastenol Content % (area)	0.0 – 2.0	0.3	0.4	0.4	0.2	0.3
D7 Avenastanol Content % (area)	0.0 – 2.0	0.2	0.2	0.2	0.1	0.2
Other sterols % (area)	0.0 – 6.0	2.7	2.7	2.7	2.6	2.4

Microbiological Analyses for 4 Non-Consecutive Lots of Vegapure® 95 FF

Parameters	Specification	Lot			
		GR71983121	GR72843331	GR80983332	GR82233331
Standard aerobic plate count, CFU/g	< 1000	<10	<10	<10	<10
<i>Salmonella</i>	Absent / 25g	Negative	Negative	Negative	Negative
Coliforms, CFU/g	< 10	<10	<10	<10	<10
Yeast and Moulds, CFU/g	< 10	<10	<10	<10	<10
<i>Bacillus cereus</i>	Absent / 10 g	Negative	Negative	Negative	Negative
<i>E. coli</i>	< 10	<10	<10	<10	<10
Spore formers, aerobic	0 - 100	Negative	Negative	Negative	Negative

Appendix I.F.

Product Analysis of Manufactured Lots of Vegapure® 67 WDP

Product analysis of several manufactured lots of Vegapure® 67 WDP is summarized below.

Product Analyses for 5 Non-Consecutive Lots of Vegapure® 67 WDP

Specification Parameter*	Specification	Lot				
		GR72261250	GR81181200	GR81541200	GR82401200	GR82801200
Physical Parameters						
Appearance	White powder	Pass	Pass	Pass	Pass	Pass
Odor	Mild, neutral to slightly fat-like	Pass	Pass	Pass	Pass	Pass
Taste	Slightly sweet, slightly fat-like	Pass	Pass	Pass	Pass	Pass
Purity						
Free Sterols + Sterol Esters, % (area)	Min 65	72	69	71	66	70
Water content %	<5.0	2	2	1	2	2
Microbiological Parameters						
Standard Aerobic Plate Count, CFU/g	< 5,000	23	57	63	39	83
<i>Salmonella</i> spp.	Negative/25 g	Negative	Negative	Negative	Negative	Negative
Coliforms, CFU/g (37°C)	Negative	Negative	Negative	Negative	Negative	Negative
Yeasts and Moulds CFU/g	< 300	21	0	0	9	0
<i>E. coli</i> (CFU/g)	Negative	Negative	Negative	Negative	Negative	Negative
<i>Bacillus cereus</i> , CFU/g	< 100	0	3	7	1	7

Other Chemical Characterization for 5 Non-Consecutive Lots of Vegapure® 67 WDP					
Specification Parameter*	Lot				
	GR72261250	GR81181200	GR81541200	GR82401200	GR82801200
Cholesterol Content % (area)	0	0	0	0	0
Brassicasterol Content % (area)	3	2	3	3	3
Campesterol Content % (area)	27	26	27	27	27
Campestanol Content % (area)	1	1	1	1	1
Stigmasterol Content % (area)	16	19	16	18	17
<i>beta</i> -Sitosterol Content % (area)	47	46	48	47	47
Sitostanol % (area)	1.1	1.3	1.3	1.2	1.2
D5 Avenasterol Content % (area)	1	1	1	1	2
D7 Stigmastenol Content % (area)	0	0	0	0	0
D7 Avenastanol Content % (area)	0	0	0	0	0
Other sterols % (area)	2	2	2	2	3

Appendix II
Information on Residual Contaminants

Heavy Metals Information Statement

Vegapure Product Line

Name and address of consignor: Cognis Deutschland GmbH & Co. KG
Location Illertissen
Robert-Hansen-Str. 1
89257 Illertissen
Germany

Cognis Vegapure products consist of plant sterol esters and further defined ingredients. The exact product composition is detailed on the corresponding product data sheets.

The Vegapure product line is specified to comply with the applicable requirements of the Commission Regulation (EC) No 466/2001 of 8 March 2001 setting maximum levels for certain contaminants in foodstuffs
(Fats and oils and products derived thereof: Pb max. 0.1 mg/kg wet weight).

18th July 2005
Illertissen, Germany
(b) (6)

i.V.

Dr. Herbert Roth,
QDM Manager
Cognis Deutschland GmbH & Co. KG
Location Illertissen

18th July 2005
Illertissen, Germany

i.V.

Wolfgang Albiez,
Global Product Manager
Cognis Deutschland GmbH & Co. KG
Location Illertissen

PAH Information Statement

(Polycyclic Aromatic Hydrocarbon)

Vegapure® Product Line

Name and address of consignor: Cognis GmbH
Location Illertissen
Robert-Hansen-Str. 1
89257 Illertissen
Germany

Cognis Vegapure products consist of plant sterol esters and further defined ingredients. The exact product composition is detailed on the corresponding product data sheets.

Maximum residual levels for benzo(a)pyrene (BaP) for certain food categories are regulated in Commission Regulation (EC) 1881/2006 of 19 December 2006 setting maximum levels for certain contaminants in foodstuffs. No maximum levels are set for food supplements as such and no maximum levels are set for PAHs in general or other PAHs than BaP.

However, the Vegapure product group has been analysed and found to comply with the limit set for oils and fats intended for direct human consumption or use as an ingredient in foods.

(maximum level benzo(a)pyrene in oils and fats 2.0 µg/kg wet weight).

07th August 2007
Illertissen, Germany

(b) (6)

Dr. Herbert Roth,
QDM Manager
Cognis GmbH, Location Illertissen

07th August 2007
Illertissen, Germany

(b) (6)

Wolfgang Albiez,
Global Product Line Manager
Cognis GmbH, Location Illertissen

Pesticide Information Statement

Vegapure[®] Product Line

Name and address of consignor: Cognis Deutschland GmbH & Co. KG
Location Illertissen
Robert-Hansen-Str. 1
89257 Illertissen
Germany

Vegapure products consist of plant sterol esters and further defined ingredients. The exact product composition is detailed on the corresponding product data sheets.

Contamination with pesticides in foods and foodstuffs of plant origin is regulated in Council Directive 90/642/EEC of 27 March 1990 on the fixing of maximum levels for pesticide residues in and on certain products of plant origin, as amended. No maximum levels are set for ingredients in food supplements, such as sterol esters.

The Vegapure product group has been analysed using the DFG-multiresidue method S19, an acknowledged standard method published in the *Manual of Pesticide Residue Analysis of the Deutsche Forschungsgemeinschaft* (method S19) and the *Amtliche Sammlung von Untersuchungsverfahren nach § 35 LMBG* (method L 00.00-34).

No pesticide residues were found with the detection limits applied.

25th July 2005
Illertissen, Germany

(b) (6)

Dr. Herbert Roth ,
QDM Manager
Cognis Deutschland GmbH & Co. KG

25th July 2005
Illertissen, Germany

(b) (6)

Wolfgang Albiez,
Global Product Manager
Cognis Deutschland GmbH & Co. KG

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8. Appendix III

**ESTIMATED DAILY INTAKE OF PHYTOSTEROLS BY THE
U.S. POPULATION FROM PROPOSED FOOD-USES**

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Estimated Daily Intake of Phytosterols by the U.S. Population Resulting from Proposed Food-Uses

Prepared for: Cognis Corporation
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L5N 2X7

May 5, 2011

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Estimated Daily Intake of Phytosterols by the U.S. Population Resulting from Proposed Food-Uses

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Estimated Daily Intake of Phytosterols by the U.S. Population Resulting from Proposed Food-Uses

1.0 INTRODUCTION

Cantox Health Sciences International, an Intertek Company, has completed an assessment for Cognis Corporation (Cognis) of the consumption of phytosterols by the United States (U.S.) population in various foods and beverages. The United States Food and Drug Administration has tentatively concluded in a draft amendment to the existing plant sterol health claim that the minimum level of phytosterols necessary for a food to contain, in order to be eligible to bear a health claim, is 0.5 g per RACC¹, expressed as the weight of free sterol equivalents and the daily value of up to 2 g can be administered in one serving. Cognis proposes to market phytosterols as food ingredients at 0.5 to 2.0 g/labeled serving for use in the following categories: baked goods and baking mixes; beverages and beverage bases; breakfast cereals; cheeses; coffee and tea; dairy product analogs; fats and oils; frozen dairy desserts and mixes; grain products and pastas; gravies and sauces; milk, whole and skim; milk products; plant protein products; processed fruits and fruit juices; processed vegetables and vegetable juices; snack foods; soft candy; and soups and soup mixes.

Estimates for the intake of phytosterols were based on the proposed food-uses and use-levels in conjunction with food consumption data included in the National Center for Health Statistics' (NCHS) National Health and Nutrition Examination Surveys (NHANES) (CDC, 2006, 2009; USDA, 2009). The data from the 2003-2004 and 2005-2006 cycles of the NHANES survey were combined to provide a larger population from which to estimate phytosterols consumption. Calculations for the mean and 90th percentile all-person and all-user intakes, and percent consuming were performed for each of the individual proposed food-uses of phytosterols. Similar calculations were used to determine the estimated total intake of phytosterols resulting from all proposed food-uses of phytosterols combined. In both cases, the per person and per kilogram body weight intakes were reported for the following population groups:

- infants, ages 0 to 2;
- children, ages 3 to 11;
- female teenagers, ages 12 to 19;
- male teenagers, ages 12 to 19;
- female adults, ages 20 and up;
- male adults, ages 20 and up; and
- total population (all age and gender groups combined).

¹ RACC – Reference Amounts Customarily Consumed Per Eating Occasion (21 CFR §101.12)

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2.0 FOOD CONSUMPTION SURVEY DATA

2.1 Survey Description

NHANES for the years 2003-2004 and 2005-2006 are available for public use. NHANES are conducted as a continuous, annual survey, and are released in 2-year cycles. Each year about 7,000 people from 15 different locations across the U.S. are interviewed, and approximately 5,000 complete the health examination component of the survey. Any combination of consecutive years of data collection is a nationally representative sample of the U.S. population. It is well established that the length of a dietary survey affects the estimated consumption of individual users and that short-term surveys, such as the typical 1-day dietary survey, overestimate consumption over longer time periods (Anderson, 1988). Because two 24-hour dietary recalls administered on 2 non-consecutive days (Day 1 and Day 2) are available from the NHANES 2003-2004, 2005-2006 survey, these data were used to generate estimates for the current intake analysis.

NHANES 2003-2004, 2005-2006 survey data were collected from individuals and households via 24-hour dietary recalls administered on 2 non-consecutive days (Day 1 and Day 2) throughout all 4 seasons of the year. Day 1 data were collected in-person, and Day 2 data were collected by telephone in the following 3 to 10 days, on different days of the week, to achieve the desired degree of statistical independence. The data were collected by first selecting Primary Sampling Units (PSUs), which were counties throughout the U.S., of which 15 PSUs are visited per year. Small counties were combined to attain a minimum population size. These PSUs were segmented and households were chosen within each segment. One or more participants within a household were interviewed. For NHANES 2003-2004 12,761 individuals were selected for the sample, 10,122 were interviewed (79.3%), and 9,643 were sampled (75.6%). For NHANES 2005-2006 12,862 individuals were selected for the sample, 10,348 were interviewed (80.4%), and 9,950 were sampled (77.4%).

In addition to collecting information on the types and quantities of foods being consumed, NHANES 2003-2004 and 2005-2006 collected socioeconomic, physiological and demographic information from individual participants in the survey, such as sex, age, height and weight, and other variables useful in characterizing consumption. The inclusion of this information allows for further assessment of food intake based on consumption by specific population groups of interest within the total population. Sample weights were incorporated with NHANES 2003-2004 and 2005-2006 data to compensate for the potential under-representation of intakes from specific population groups as a result of sample variability due to survey design, differential non-response rates, or other factors, such as deficiencies in the sampling frame (CDC, 2006, 2009; USDA, 2009).

2.2 Statistical Methods

Consumption data from individual dietary records, detailing food items ingested by each survey participant, were collated by computer and used to generate estimates for the intake of phytosterols by the U.S. population. Estimates for the daily intake of phytosterols represent projected 2-day averages for each individual from Day 1 and Day 2 of NHANES 2003-2004 and 2005-2006 data; these average amounts comprised the distribution from which mean and percentile intake estimates were generated. Mean and percentile estimates were generated incorporating survey weights in order to provide representative intakes for the entire U.S. population. All-person intake refers to the estimated intake of phytosterols averaged over all individuals surveyed, regardless of whether they potentially consumed food products containing phytosterols, and therefore includes “zero” consumers (those who reported no intake of food products containing phytosterols during the 2 survey days). All-user intake refers to the estimated intake of phytosterols by those individuals potentially consuming food products containing phytosterols hence the “all-user” designation. Individuals were considered users if they consumed 1 or more food products containing phytosterols on either Day 1 or Day 2 of the survey.

2.3 Statistical Reliability

Mean or percentile intake estimates based on small sample sizes or with high variability relative to the mean [assessed using the coefficient of variation (CV)] may be less statistically reliable than estimates based on adequate sample sizes or low variability relative to the mean (LSRO, 1995). Data presented herein for the estimated daily intake of phytosterols follow the guidelines proposed by the Human Nutrition Information Service/ National Center for Health Statistics Analytic Working Group for evaluating the reliability of statistical estimates adopted in the “Third Report on Nutrition Monitoring in the United States”, whereby an estimated mean may be unreliable if the CV is equal to or greater than 30% (LSRO, 1995). The CV is the ratio of the estimated standard error of the mean to the estimated mean, expressed as a percentage (LSRO, 1995). Therefore, for the estimated intakes of phytosterols presented herein, values were considered statistically unreliable if the CV was equal to or greater than 30% or the sample size is less than 30 respondents. These values were not considered when assessing the relative contribution of specific food-uses to total phytosterols consumption and are marked with an asterisk.

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3.0 FOOD USAGE DATA

The individual proposed food-uses and use-levels for phytosterols employed in the current intake analysis are summarized in Table 3-1. Food codes representative of each proposed food-use were chosen from the NHANES 2003-2006 (CDC, 2006, 2009; USDA, 2009). Food codes were grouped in food-use categories according to Title 21, Section §170.3 of the Code of Federal Regulations (CFR, 2010a). Product-specific adjustment factors were developed based on data provided in the standard recipe file for the Continuing Survey of Food Intakes by Individuals (CSFII) 1994-1996, 1998 survey (USDA, 2000). All food codes included in the current intake assessment are listed in Appendix C.

Food Category	Proposed Food-Uses	Use-Level (mg/Serving Size)	Serving Size (g or mL)¹	Use-Level (%)
Baked Goods and Baking Mixes	Bagels and English Muffins	500	55	0.91
	Bread	500	50	1.0
	Cookies	500	30 (cookies) 40 (brownies)	1.25 to 1.67
	Crackers	500	15	3.33
	Muffins, Quick Breads, and Sweet Rolls	500	55	0.91
	Pizza Crust	500	55	0.91
Beverages and Beverage Bases	Meal Replacement Drinks (ready-to-drink; non-milk-based)	500	240	0.21
Breakfast Cereals	Instant and Regular Hot Cereals	500	240 (prepared)	0.21
	Ready-to-Eat Breakfast Cereals	500	15 (Puffed) 30 (Regular) 55 (Biscuit-Type)	3.33 / 1.67 / 0.91
Cheeses	Cottage Cheese	500	110	0.45
	Grated Cheese (such as parmesan or romano)	500	5	10
	Natural and Processed Cheese (including cream cheese and spreads)	500	30	1.67
Coffee and Tea	Ready-to-Drink Tea Beverages ²	500	240	0.21
	Specialty Coffee Drinks (e.g. lattes, cappuccinos)	500	240	0.21
Dairy Product Analogs	Soy Beverages and Soy-Based Drinks	1,000	240	0.42
Fats and Oils	Margarine	500	15	3.33
	Salad Dressing	500	30	1.67
	Vegetable Oil	500	15	3.33
Frozen Dairy Desserts and Mixes	Ice Cream	500	120	0.42
Grain Products and	Cereal and Granola Bars	500	40	1.25

Table 1 Summary of the Individual Proposed Food-Uses and Use-Levels for Phytosterols (2003-2006 NHANES Data)				
Food Category	Proposed Food-Uses	Use-Level (mg/Serving Size)	Serving Size (g or mL)¹	Use-Level (%)
Pastas	Energy, Meal Replacement, and Fortified Bars	500	40	1.25
	Pasta and Noodles (as served)	500	140	0.21
Gravies and Sauces	Major Main Entrée Sauce (spaghetti, tomato)	500	125	0.4
	Minor Main Entrée Sauce (gravy, pesto, white, cheese, salsa, cocktail)	500	60	0.83
	Sauces for Dipping (barbecue, hollandaise, tartar, mustard, sweet and sour)	500	30	1.67
Milk, Whole and Skim	Fluid Milk and Powdered Milk	1,000	240	0.42
Milk Products	Cocoa and Chocolate Beverages	500	240	0.21
	Cream	500	15	3.33
	Cultured Dairy Drinks ³	2,000	240	0.83
	Meal Replacement Drinks (ready-to-drink; milk-based)	500	240	0.21
	Milk-Based Drinks and Flavored Milk	1,000	240	0.42
	Yogurt (including cultured yogurt and cultured yogurt type products)	2,000	225	0.89
Plant Protein Products	Meat Analogs	500	55	0.91
Processed Fruits and Fruit Juices	Fruit Juices and Smoothies	1,000	240	0.42
	Powdered Fruit-Flavored Beverages ⁴	500	16	3.125
Processed Vegetables and Vegetable Juices	Vegetable Juices	1,000	240	0.42
Snack Foods	Low Fat Salty Snacks	500	30	1.67
Soft Candy	Chocolate	500	40	1.25
Soups and Soup Mixes	Processed Soups ⁵	500	245	0.20

¹ Serving sizes based on the US FDA Reference amounts customarily consumed per eating occasion (RACCs), April 1, 2010, 21 CFR §101.12 (CFR, 2010b). When a range of values is reported for a proposed food-use, particular foods within that food-use may differ with respect to their RACC; for some products such as yogurts and cultured dairy drinks the serving sizes may vary in the market.

² As ready-to-drink tea beverages were not consumed in the NHANES 2003-2006 database, use-levels were applied to iced-tea and herbal tea drinks as an appropriate alternative

³ No food codes were identified for yogurt drinks (cultured dairy drinks) in the NHANES 2003-2006 database; therefore, surrogate codes of dairy-based fruit smoothie drinks were used to represent the food codes in this category. In addition, it should be noted that the serving size specified for cultured dairy drinks is a reference amount and that the serving sizes may vary in the market.

⁴ Dry beverage mixes include only those intended to be made up with water, excluding chocolate and/or cocoa based drinks, coffee and tea-based drinks and meal-replacement drinks

⁵ Processed soups includes all soups, *i.e.* ready-to-eat, canned and soups made from dehydrated packet mixes

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4.0 FOOD SURVEY RESULTS

4.1 Estimated Daily Intake of Phytosterols from Proposed Food-Uses in the U.S.

The estimated total intake of phytosterols from proposed food-uses in the U.S. by population group is summarized in Tables 4.1-1. Table 4.1-2 presents these data on a per kilogram body weight basis.

Approximately 97.2% of the total U.S. population were identified as potential consumers of phytosterols from proposed food-uses (16,230 actual users identified). A high percentage of users were identified in each of the individual population groups (99.8 to 100.0%), with the exception of the infant population group (76.4% users). As a result of the high percentage of users identified within all population groups, except for the infant population group, the intake estimates for the all-person and all-user categories were similar; therefore, only the all-user results are discussed in detail. Consumption of proposed food-uses by the total U.S. population resulted in an estimated mean all-user intake of phytosterols of 4.0 g/person/day (77 mg/kg body weight/day). The 90th percentile all-user intake of phytosterols from proposed food-uses by the total population was 6.8 g/person/day (159 mg/kg body weight/day).

On an individual population basis, the greatest mean all-user intake of phytosterols on an absolute basis was determined to occur in male teenagers at 4.6 g/person/day (73 mg/kg body weight/day). Female adults displayed the lowest mean all-user intake of phytosterols on an absolute basis with a value of 3.5 g/person/day (50 mg/kg body weight/day). On a body weight basis, the mean all-user intake of phytosterols was highest in infants with an intake of 321 mg/kg body weight/day. The lowest all-user mean intake on a per kilogram body weight basis was observed to occur in female adults with a value of 50 mg/kg body weight/day.

Table 4.1-1 Summary of the Estimated Daily Intake of Phytosterols from Proposed Food-Uses in the U.S. by Population Group (2003-2004, 2005-2006 NHANES Data)

Population Group	Age (Years)	Percent Users	Actual # of Users	All Person (g)		All User (g)	
				Mean	90 th Percentile	Mean	90 th Percentile
Infants	0 to 2	76.4	1,461	3.2	6.3	3.9	6.4
Children	3 to 11	100.0	2,733	4.3	6.8	4.3	6.8
Female Teenagers	12 to 19	99.9	1,985	3.8	6.6	3.8	6.6
Male Teenagers	12 to 19	99.8	1,937	4.6	8.1	4.6	8.1
Female Adults	20 and up	99.9	4,278	3.5	5.9	3.5	5.9
Male Adults	20 and up	99.9	3,836	4.3	7.6	4.3	7.6
Total Population	All Ages	97.2	16,230	3.9	6.8	4.0	6.8

When heavy consumers (90th percentile) were assessed, the estimate for the all-user intake of phytosterols from proposed food-uses also was determined to be greatest in male teenagers at 8.1 g/person/day (131 mg/kg body weight/day). The lowest 90th percentile all-user intake estimate was observed to occur in female adults with a value of 5.9 g/person/day (88 mg/kg body weight/day), on an absolute basis. On a body weight basis, infants also were determined to have the greatest all-user 90th percentile intake of phytosterols with a value of 545 mg/kg body weight/day. The lowest all-user 90th percentile intake of phytosterols on a body weight basis was observed to occur in female adults at 88 mg/kg body weight/day.

Population Group	Age (Years)	Percent Users	Actual # of Users	All Person (mg/kg bw)		All User (mg/kg bw)	
				Mean	90 th Percentile	Mean	90 th Percentile
Infants	0 to 2	76.4	1,461	265	514	321	545
Children	3 to 11	100.0	2,733	172	300	172	300
Female Teenagers	12 to 19	99.9	1,985	66	119	66	119
Male Teenagers	12 to 19	99.8	1,937	73	131	73	131
Female Adults	20 and up	99.9	4,278	49	88	50	88
Male Adults	20 and up	99.9	3,836	51	90	51	90
Total Population	All Ages	97.2	16,230	77	159	77	159

4.2 Estimated Daily Intake of Phytosterols from Individual Proposed Food-Uses in the U.S.

4.2.1 All-Person Intakes for Phytosterols from Individual Food-Uses

Estimates for the mean and 90th percentile daily intakes of phytosterols from each individual proposed food-use are summarized in Tables A-1 to A-7 and B-1 to B-7 on a mg/day and mg/kg body weight/day basis, respectively. Tables A-7 and B-7 summarize the estimates for the mean all-person intakes of phytosterols by the total population (all ages) from each of the individual proposed food-uses on a mg/person/day and mg/kg body weight/day basis, respectively. The total U.S. population was identified as being significant consumers of fluid milk and powdered milk (80.7%), followed by margarine (64.0%), and natural and processed cheese (63.0%).

The consumption of fluid milk and powdered milk provided the largest mean and 90th percentile all-person intakes of phytosterols at 817 mg/person/day and 2,173 mg/person/day, respectively. High mean and 90th percentile all-person intakes of phytosterols resulted from the consumption of fruit juices and smoothies (369 and 1,187 mg/person/day, respectively) and natural and processed cheese (325 and 839 mg/person/day, respectively). On a body weight basis, the highest mean and 90th percentile all-person intake estimates also resulted from the consumption

of fluid milk and powdered milk at 19.2 and 47.1 mg/kg body weight/day, respectively. In addition, high mean and 90th percentile all-person intakes of phytosterols also resulted from the consumption of fruit juices and smoothies (8.5 and 23.4 mg/kg body weight/day, respectively), and natural and processed cheese (5.7 and 14.6 mg/kg body weight/day, respectively).

The consumption of fluid milk and powdered milk resulted in the highest individual mean and 90th percentile all-person intakes of phytosterols in each individual population group (Tables A-1 to A-6 and Tables B-1 to B-6). The largest individual mean and 90th percentile all-person estimates for the consumption of phytosterols were observed to occur in infants consuming fluid milk and powdered milk with intakes of 1,306 and 3,331 mg/person/day, respectively. On a body weight basis, the consumption of fluid milk and powdered milk by infants resulted in the highest mean and 90th percentile all-person intakes of phytosterols at 109.4 and 283.3 mg/kg body weight/day, respectively.

4.2.2 All-User Intakes for Phytosterols from Individual Food-Uses

Tables A-7 and B-7 also summarize the estimates for the mean all-user intakes of phytosterols by the total population (all ages) from each of the individual food-uses on a mg/person/day and mg/kg body weight/day basis, respectively. For all-user intakes, the contribution of each food-use to the overall intake is a function of both the estimated intake of phytosterols resulting from the consumption of the food, as well as the percentage of users identified as consumers of the food. For example, within the total population the consumption of cultured daily drinks resulted in an estimated mean all-user phytosterol intake of 1,787 mg/person/day; however, only 164 users (1.0% of the total population) of cultured daily drinks were identified and therefore, the contribution of this food-use to the mean all-user intake of phytosterols was not as important as the consumption of fluid milk and powdered milk with an intake of 1,007 mg/person/day in 13,475 identified users (80.7% of the total population).

Within the total U.S. population, consumers of fluid milk and powdered milk made the greatest contribution to the mean and 90th percentile all-user intakes of phytosterols at 1,007 and 2,411 mg/person/day, respectively (23.7 and 56.0 mg/kg body weight/day, respectively). Of the remaining food-uses, the consumption of fruit juices and smoothies and natural and processed cheese also made notable contributions to the estimate for the mean all-user intakes of phytosterols at 971 and 488 mg/person/day, respectively, and likewise, for the 90th percentile all-user intakes of phytosterols at 1,894 and 1,021 mg/person/day, respectively.

The most significant contribution to the mean and 90th percentile all-user intakes of phytosterols were determined to result from the consumption of fluid milk and powdered milk for each individual population group (Tables A-1 to A-6 and Tables B-1 to B-6). Children consuming fluid milk and powdered milk made the largest individual contribution to the mean all-user intake of phytosterols with an intake estimate of 1,328 mg/person/day. Male teenagers consuming fluid milk and powdered milk made the largest individual contribution to the 90th percentile all-user

intake of phytosterols at a value of 3,208 mg/person/day. On a per kilogram body weight basis, the consumption of fluid milk and powdered milk by infants resulted with the highest mean and 90th percentile all-user intakes of phytosterols at 152 and 325 mg/kg body weight/day, respectively.

The estimated intakes of phytosterols were considered statistically unreliable if the CV was equal to or greater than 30% or the sample size was less than 30 individuals. The consumption of powdered fruit-flavored beverages was determined to be statistically unreliable in all population groups as zero users were identified in the infants, children, female and male teenager groups, and a low number of users were identified in the female and male adult population groups. Less than 30 respondents were identified for soy beverages and soy-based drinks, energy, meal replacement, and fortified bars, cultured dairy drinks, meal replacement drinks (ready-to-drink; milk-based), and vegetable juices among infants, children, and female and male teenagers. The consumption of cottage cheese and cream were determined to be statistically unreliable in the infant population group. Less than 30 respondents were identified for meal replacement drinks (ready-to-drink; non-milk-based) among infants, children, female and male teenagers, and female adults. The consumption of specialty coffee drinks (e.g., lattes, cappuccinos) was determined to be statistically unreliable in infants and children, and the consumption of vegetable meat analogs was determined to be statistically unreliable in infants and male teenagers, as less than 30 respondents were identified among the respective population groups.

5.0 CONCLUSIONS

Consumption data and information pertaining to the individual proposed food-uses of phytosterols were used to estimate the all-person and all-user intakes of phytosterols for specific demographic groups and for the total U.S. population. This type of intake methodology is generally considered to be 'worst case' as a result of several conservative assumptions made in the consumption estimates. For example, it is often assumed that all food products within a food category contain the ingredient at the maximum specified level of use. In addition, it is well established that the length of a dietary survey affects the estimated consumption of individual users. Short-term surveys, such as the typical 2- or 3-day dietary surveys, overestimate the consumption of food products that are consumed relatively infrequently.

In summary, on an all-user basis, the mean intake of phytosterols by the total U.S. population from proposed food-uses was estimated to be 4.0 g/person/day (77 mg/kg body weight/day). The heavy consumer (90th percentile) all-user intake of phytosterols by the total U.S. population from proposed food-uses of phytosterols was estimated to be 6.8 g/person/day (159 mg/kg body weight/day). On an individual population basis, the greatest mean and 90th percentile all-user intakes of phytosterols on an absolute basis were determined to occur in male teenagers at 4.6 and 8.1 g/person/day (73 and 131 mg/kg body weight/day, respectively), respectively.

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APPENDIX A

**Estimated Daily Intake of Phytosterols from Individual Proposed Food-Uses by
Different Population Groups Within the United States**

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Table A-1 Estimated Daily Intake of Phytosterols from Individual Proposed Food-Uses by Infants (Aged 0 to 2 Years) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg)	90 th Percentile (mg)	Mean (mg)	90 th Percentile (mg)
<u>Baked Goods and Baking Mixes</u>						
Bagels and English Muffins	2.0	39	10	na	232	478
Bread	36.3	694	99	303	209	417
Cookies	30.1	576	73	267	212	409
Crackers	37.6	720	242	699	494	1,032
Muffins, Quick Breads, and Sweet Rolls	6.0	115	16	na	260	514
Pizza Crust	12.1	232	24	82	179	360
<u>Beverages and Beverage Bases</u>						
Meal Replacement Drinks (ready-to-drink; non-milk-based)	0.2	3	1*	na	330*	463*
<u>Breakfast Cereals</u>						
Instant and Regular Hot Cereals	12.0	229	25	77	220	388
Ready-to-Eat Breakfast Cereals	41.9	802	125	376	242	468
<u>Cheeses</u>						
Cottage Cheese	1.4	27	3*	na	155*	315*
Grated Cheese (such as parmesan or romano)	14.4	276	38	110	211	458
Natural and Processed Cheese (including cream cheese and spreads)	43.0	823	174	552	330	699
<u>Coffee and Tea</u>						
Ready-to-Drink Tea Beverages	3.3	63	5	na	178	466
Specialty Coffee Drinks (e.g. lattes, cappuccinos)	0.1	2	<1*	na	62*	65*
<u>Dairy Product Analogs</u>						
Soy Beverages and Soy-Based Drinks	1.0	20	22*	na	1,435*	3,277*
<u>Fats and Oils</u>						
Margarine	47.0	900	51	157	100	227
Salad Dressing	7.3	140	11	na	110	245
Vegetable Oil	7.6	146	6	na	64	125
<u>Frozen Dairy Desserts and Mixes</u>						
Ice Cream	13.9	266	22	87	128	277
<u>Grain Products and Pastas</u>						
Cereal and Granola Bars	2.6	49	10	na	260	463
Energy, Meal Replacement, and Fortified Bars	0.1	2	<1*	na	58*	72*
Pasta and Noodles (as served)	30.9	591	34	122	86	178
<u>Gravies and Sauces</u>						

Table A-1 Estimated Daily Intake of Phytosterols from Individual Proposed Food-Uses by Infants (Aged 0 to 2 Years) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg)	90 th Percentile (mg)	Mean (mg)	90 th Percentile (mg)
Major Main Entrée Sauce (spaghetti, tomato)	15.3	293	17	49	100	241
Minor Main Entrée Sauce (gravy, pesto, white, cheese, salsa, cocktail)	8.4	160	10	na	98	301
Sauces for Dipping (barbecue, hollandaise, tartar, mustards, sweet and sour)	2.7	51	3	na	116	276
<u>Milk, Whole, and Skim</u>						
Fluid Milk and Powdered Milk	63.1	1,208	1,306	3,331	1,816	3,591
<u>Milk Products</u>						
Cocoa and Chocolate Beverages	7.8	150	34	na	391	837
Cream	0.9	17	4*	na	285*	1,007*
Cultured Dairy Drinks	0.6	12	10*	na	1,264*	3,150*
Meal Replacement Drinks (ready-to-drink; milk-based)	0.1	2	<1*	na	140*	258*
Milk-Based Drinks and Flavored Milk	4.9	94	27	na	422	1,048
Yogurt (including cultured yogurt and cultured yogurt type products)	14.6	280	139	545	682	1,227
<u>Plant Protein Products</u>						
Meat Analogs	0.8	15	4*	na	243*	601*
<u>Processed Fruits and Fruit Juices</u>						
Fruit Juices and Smoothies	49.1	940	553	1,562	1,020	2,083
Powdered Fruit-Flavored Beverages	0	0	na	na	na	na
<u>Processed Vegetables and Vegetable Juices</u>						
Vegetable Juices	1.0	19	2*	na	159*	412*
<u>Snack Foods</u>						
Low Fat Salty Snacks	7.5	143	21	42	171	351
<u>Soft Candy</u>						
Chocolate	7.6	146	12	na	129	263
<u>Soups and Soup Mixes</u>						
Processed Soups	25.9	496	49	182	224	488

na = not available

*Indicates an intake estimate that may not be statistically reliable, as the CV of the mean is equal to or greater than 30% or the sample size is less than 30 individuals (see Section 2.3).

Table A-2 Estimated Daily Intake of Phytosterols from Individual Proposed Food-Uses by Children (Aged 3 to 11 Years) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg)	90 th Percentile (mg)	Mean (mg)	90 th Percentile (mg)
<u>Baked Goods and Baking Mixes</u>						
Bagels and English Muffins	5.0	136	31	na	404	660
Bread	63.4	1,732	239	585	366	694
Cookies	47.6	1,301	175	518	350	701
Crackers	32.3	882	214	749	573	1,190
Muffins, Quick Breads, and Sweet Rolls	11.6	316	37	na	381	631
Pizza Crust	32.9	900	121	417	372	797
<u>Beverages and Beverage Bases</u>						
Meal Replacement Drinks (ready-to-drink; non-milk-based)	0.1	4	<1*	na	295*	331*
<u>Breakfast Cereals</u>						
Instant and Regular Hot Cereals	10.5	286	24	na	263	445
Ready-to-Eat Breakfast Cereals	67.6	1,848	336	800	493	908
<u>Cheeses</u>						
Cottage Cheese	2.2	60	7	na	224	588
Grated Cheese (such as parmesan or romano)	37.0	1,010	121	412	318	628
Natural and Processed Cheese (including cream cheese and spreads)	68.6	1,875	284	733	414	836
<u>Coffee and Tea</u>						
Ready-to-Drink Tea Beverages	6.5	178	27	na	379	653
Specialty Coffee Drinks (e.g. lattes, cappuccinos)	0.4	12	1*	na	255*	521*
<u>Dairy Product Analogs</u>						
Soy Beverages and Soy-Based Drinks	1.0	26	14*	na	912*	2,058*
<u>Fats and Oils</u>						
Margarine	66.2	1,810	94	243	145	318
Salad Dressing	22.4	613	57	182	230	534
Vegetable Oil	13.0	354	13	23	107	231
<u>Frozen Dairy Desserts and Mixes</u>						
Ice Cream	33.4	912	104	367	273	529
<u>Grain Products and Pastas</u>						
Cereal and Granola Bars	4.9	135	21	na	261	451
Energy, Meal Replacement, and Fortified Bars	0.2	5	1*	na	346*	406*
Pasta and Noodles (as served)	41.2	1,125	61	189	139	294
<u>Gravies and Sauces</u>						

Table A-2 Estimated Daily Intake of Phytosterols from Individual Proposed Food-Uses by Children (Aged 3 to 11 Years) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg)	90 th Percentile (mg)	Mean (mg)	90 th Percentile (mg)
Major Main Entrée Sauce (spaghetti, tomato)	23.5	643	45	161	214	430
Minor Main Entrée Sauce (gravy, pesto, white, cheese, salsa, cocktail)	19.9	543	39	121	207	501
Sauces for Dipping (barbecue, hollandaise, tartar, mustards, sweet and sour)	7.7	210	14	na	208	522
<u>Milk, Whole, and Skim</u>						
Fluid Milk and Powdered Milk	93.9	2,565	1,247	2,711	1,328	2,743
<u>Milk Products</u>						
Cocoa and Chocolate Beverages	14.8	404	55	213	364	673
Cream	2.6	70	16	na	500	1,981
Cultured Dairy Drinks	0.8	23	7*	na	935*	1,205*
Meal Replacement Drinks (ready-to-drink; milk-based)	0.4	10	1*	na	412*	867*
Milk-Based Drinks and Flavored Milk	27.1	740	116	432	417	722
Yogurt (including cultured yogurt and cultured yogurt type products)	13.2	361	119	517	806	1,514
<u>Plant Protein Products</u>						
Meat Analogs	1.2	33	3	na	248	578
<u>Processed Fruits and Fruit Juices</u>						
Fruit Juices and Smoothies	62.9	1,720	511	1,384	864	1,725
Powdered Fruit-Flavored Beverages	0	0	na	na	na	na
<u>Processed Vegetables and Vegetable Juices</u>						
Vegetable Juices	0.8	23	2*	na	214*	667*
<u>Snack Foods</u>						
Low Fat Salty Snacks	11.9	324	58	139	393	960
<u>Soft Candy</u>						
Chocolate	18.7	510	49	192	237	488
<u>Soups and Soup Mixes</u>						
Processed Soups	29.4	803	82	336	330	646

na = not available

*Indicates an intake estimate that may not be statistically reliable, as the CV of the mean is equal to or greater than 30% or the sample size is less than 30 individuals (see Section 2.3).

Table A-3 Estimated Daily Intake of Phytosterols from Individual Proposed Food-Uses by Female Teenagers (Aged 12 to 19 Years) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg)	90 th Percentile (mg)	Mean (mg)	90 th Percentile (mg)
<u>Baked Goods and Baking Mixes</u>						
Bagels and English Muffins	9.0	178	64	264	488	956
Bread	50.3	999	248	720	447	850
Cookies	36.9	733	129	401	334	668
Crackers	19.0	377	144	539	640	1,299
Muffins, Quick Breads, and Sweet Rolls	12.5	248	45	145	402	701
Pizza Crust	30.3	603	148	522	485	936
<u>Beverages and Beverage Bases</u>						
Meal Replacement Drinks (ready-to-drink; non-milk-based)	0.1	2	<1*	na	144*	397*
<u>Breakfast Cereals</u>						
Instant and Regular Hot Cereals	4.7	93	14	na	322	703
Ready-to-Eat Breakfast Cereals	42.3	840	257	695	565	996
<u>Cheeses</u>						
Cottage Cheese	1.9	38	5	na	234	627
Grated Cheese (such as parmesan or romano)	35.0	696	152	491	422	874
Natural and Processed Cheese (including cream cheese and spreads)	68.1	1,353	330	862	482	969
<u>Coffee and Tea</u>						
Ready-to-Drink Tea Beverages	13.3	264	66	249	515	901
Specialty Coffee Drinks (e.g. lattes, cappuccinos)	2.9	58	19	na	449	951
<u>Dairy Product Analogs</u>						
Soy Beverages and Soy-Based Drinks	0.7	14	11*	na	1,384*	2,540*
<u>Fats and Oils</u>						
Margarine	51.6	1,026	83	238	163	335
Salad Dressing	28.9	575	135	491	408	981
Vegetable Oil	13.8	274	17	41	132	270
<u>Frozen Dairy Desserts and Mixes</u>						
Ice Cream	26.5	527	82	279	283	559
<u>Grain Products and Pastas</u>						
Cereal and Granola Bars	6.1	122	24	na	260	463
Energy, Meal Replacement, and Fortified Bars	0.6	11	4*	na	332*	425*
Pasta and Noodles (as served)	33.9	673	61	220	160	322
<u>Gravies and Sauces</u>						

Table A-3 Estimated Daily Intake of Phytosterols from Individual Proposed Food-Uses by Female Teenagers (Aged 12 to 19 Years) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg)	90 th Percentile (mg)	Mean (mg)	90 th Percentile (mg)
Major Main Entrée Sauce (spaghetti, tomato)	21.4	425	56	227	262	573
Minor Main Entrée Sauce (gravy, pesto, white, cheese, salsa, cocktail)	28.2	560	59	194	252	581
Sauces for Dipping (barbecue, hollandaise, tartar, mustards, sweet and sour)	8.2	163	19	na	245	652
<u>Milk, Whole, and Skim</u>						
Fluid Milk and Powdered Milk	80.3	1,596	858	2,146	1,052	2,416
<u>Milk Products</u>						
Cocoa and Chocolate Beverages	7.0	140	24	na	353	558
Cream	3.7	74	25	na	538	1,501
Cultured Dairy Drinks	1.2	23	18*	na	1,725*	3,039*
Meal Replacement Drinks (ready-to-drink; milk-based)	0.7	13	7*	na	667*	578*
Milk-Based Drinks and Flavored Milk	11.4	227	33	na	377	722
Yogurt (including cultured yogurt and cultured yogurt type products)	6.5	129	69	na	1,016	1,767
<u>Plant Protein Products</u>						
Meat Analogs	2.1	42	9*	na	395*	2,095*
<u>Processed Fruits and Fruit Juices</u>						
Fruit Juices and Smoothies	44.3	881	386	1,305	985	1,903
Powdered Fruit-Flavored Beverages	0	0	na	na	na	na
<u>Processed Vegetables and Vegetable Juices</u>						
Vegetable Juices	0.7	14	3*	na	385*	1,308*
<u>Snack Foods</u>						
Low Fat Salty Snacks	9.7	192	47	117	364	960
<u>Soft Candy</u>						
Chocolate	20.6	409	61	250	302	638
<u>Soups and Soup Mixes</u>						
Processed Soups	25.0	496	79	320	355	652

na = not available

*Indicates an intake estimate that may not be statistically reliable, as the CV of the mean is equal to or greater than 30% or the sample size is less than 30 individuals (see Section 2.3).

Table A-4 Estimated Daily Intake of Phytosterols from Individual Proposed Food-Uses by Male Teenagers (Aged 12 to 19 Years) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg)	90 th Percentile (mg)	Mean (mg)	90 th Percentile (mg)
<u>Baked Goods and Baking Mixes</u>						
Bagels and English Muffins	6.4	124	59	239	562	956
Bread	53.4	1,036	243	650	428	780
Cookies	36.0	699	161	513	452	877
Crackers	14.0	271	125	400	861	1,632
Muffins, Quick Breads, and Sweet Rolls	11.2	218	49	na	516	1,028
Pizza Crust	38.4	745	314	960	788	1,578
<u>Beverages and Beverage Bases</u>						
Meal Replacement Drinks (ready-to-drink; non-milk-based)	0.1	2	<1*	na	166*	579*
<u>Breakfast Cereals</u>						
Instant and Regular Hot Cereals	4.4	86	10	na	300	506
Ready-to-Eat Breakfast Cereals	44.5	864	332	1,049	764	1,470
<u>Cheeses</u>						
Cottage Cheese	2.3	45	10	na	274	591
Grated Cheese (such as parmesan or romano)	41.6	808	255	833	583	1,164
Natural and Processed Cheese (including cream cheese and spreads)	68.9	1,336	398	977	569	1,148
<u>Coffee and Tea</u>						
Ready-to-Drink Tea Beverages	12.6	245	98	373	708	1,274
Specialty Coffee Drinks (e.g. lattes, cappuccinos)	1.7	33	5	na	359	558
<u>Dairy Product Analogs</u>						
Soy Beverages and Soy-Based Drinks	0.5	9	3*	na	864*	1,323*
<u>Fats and Oils</u>						
Margarine	47.7	925	92	271	189	402
Salad Dressing	21.8	423	93	286	425	981
Vegetable Oil	14.3	278	20	47	155	374
<u>Frozen Dairy Desserts and Mixes</u>						
Ice Cream	23.6	458	99	374	355	611
<u>Grain Products and Pastas</u>						
Cereal and Granola Bars	4.2	82	19	na	331	538
Energy, Meal Replacement, and Fortified Bars	0.6	11	3*	na	373*	406*
Pasta and Noodles (as served)	30.5	591	63	223	194	407
<u>Gravies and Sauces</u>						

Table A-4 Estimated Daily Intake of Phytosterols from Individual Proposed Food-Uses by Male Teenagers (Aged 12 to 19 Years) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg)	90 th Percentile (mg)	Mean (mg)	90 th Percentile (mg)
Major Main Entrée Sauce (spaghetti, tomato)	19.3	374	59	172	300	775
Minor Main Entrée Sauce (gravy, pesto, white, cheese, salsa, cocktail)	27.4	532	66	207	281	594
Sauces for Dipping (barbecue, hollandaise, tartar, mustards, sweet and sour)	9.0	174	30	11	285	668
Milk, Whole, and Skim						
Fluid Milk and Powdered Milk	81.3	1,578	1,135	2,797	1,407	3,208
Milk Products						
Cocoa and Chocolate Beverages	5.9	114	37	na	591	1,383
Cream	2.6	51	19	na	570	1,249
Cultured Dairy Drinks	0.7	14	20*	na	2,005*	2,599*
Meal Replacement Drinks (ready-to-drink; milk-based)	0.6	11	2*	na	520*	1,074*
Milk-Based Drinks and Flavored Milk	14.9	290	68	263	502	960
Yogurt (including cultured yogurt and cultured yogurt type products)	3.7	72	67	na	1,209	2,249
Plant Protein Products						
Meat Analogs	1.4	28	6*	na	329*	637*
Processed Fruits and Fruit Juices						
Fruit Juices and Smoothies	44.9	872	470	1,558	1,233	2,478
Powdered Fruit-Flavored Beverages	0	0	na	na	na	na
Processed Vegetables and Vegetable Juices						
Vegetable Juices	0.8	16	11*	na	1,677*	2,001*
Snack Foods						
Low Fat Salty Snacks	8.8	171	60	150	509	1,194
Soft Candy						
Chocolate	18.0	349	60	281	322	588
Soups and Soup Mixes						
Processed Soups	21.6	420	86	370	402	841

na = not available

*Indicates an intake estimate that may not be statistically reliable, as the CV of the mean is equal to or greater than 30% or the sample size is less than 30 individuals (see Section 2.3).

Table A-5 Estimated Daily Intake of Phytosterols from Individual Proposed Food-Uses by Female Adults (Aged 20 Years and Over) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg)	90 th Percentile (mg)	Mean (mg)	90 th Percentile (mg)
<u>Baked Goods and Baking Mixes</u>						
Bagels and English Muffins	9.9	423	47	239	411	635
Bread	65.3	2,797	246	600	373	723
Cookies	36.1	1,547	122	396	342	701
Crackers	27.3	1,169	156	500	546	1,060
Muffins, Quick Breads, and Sweet Rolls	13.6	583	56	178	461	846
Pizza Crust	15.9	682	79	344	456	835
<u>Beverages and Beverage Bases</u>						
Meal Replacement Drinks (ready-to-drink; non-milk-based)	0.6	26	2*	na	398*	662*
<u>Breakfast Cereals</u>						
Instant and Regular Hot Cereals	16.8	720	43	180	311	550
Ready-to-Eat Breakfast Cereals	34.1	1,460	156	548	468	857
<u>Cheeses</u>						
Cottage Cheese	6.8	289	18	na	252	509
Grated Cheese (such as parmesan or romano)	22.4	960	97	337	389	776
Natural and Processed Cheese (including cream cheese and spreads)	64.4	2,757	292	726	441	931
<u>Coffee and Tea</u>						
Ready-to-Drink Tea Beverages	17.1	732	137	497	782	1,576
Specialty Coffee Drinks (e.g. lattes, cappuccinos)	3.5	149	24	na	509	925
<u>Dairy Product Analogs</u>						
Soy Beverages and Soy-Based Drinks	2.7	115	25	na	789	1,848
<u>Fats and Oils</u>						
Margarine	75.6	3,235	151	382	205	442
Salad Dressing	39.1	1,674	157	511	357	745
Vegetable Oil	20.2	865	28	80	141	300
<u>Frozen Dairy Desserts and Mixes</u>						
Ice Cream	25.3	1,083	75	279	278	555
<u>Grain Products and Pastas</u>						
Cereal and Granola Bars	4.8	205	18	na	307	532
Energy, Meal Replacement, and Fortified Bars	1.4	58	6	na	386	813
Pasta and Noodles (as served)	30.4	1,301	45	156	135	277
<u>Gravies and Sauces</u>						

Table A-5 Estimated Daily Intake of Phytosterols from Individual Proposed Food-Uses by Female Adults (Aged 20 Years and Over) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg)	90 th Percentile (mg)	Mean (mg)	90 th Percentile (mg)
Major Main Entrée Sauce (spaghetti, tomato)	21.3	912	43	135	214	500
Minor Main Entrée Sauce (gravy, pesto, white, cheese, salsa, cocktail)	27.1	1,161	69	257	269	646
Sauces for Dipping (barbecue, hollandaise, tartar, mustards, sweet and sour)	6.0	256	12	na	189	480
<u>Milk, Whole, and Skim</u>						
Fluid Milk and Powdered Milk	80.4	3,444	586	1,620	743	1,780
<u>Milk Products</u>						
Cocoa and Chocolate Beverages	5.7	246	27	na	449	726
Cream	12.4	530	107	252	796	1,981
Cultured Dairy Drinks	1.3	57	21	na	1,421	2,515
Meal Replacement Drinks (ready-to-drink; milk-based)	2.3	97	18	na	672	1,313
Milk-Based Drinks and Flavored Milk	3.0	130	16	na	566	960
Yogurt (including cultured yogurt and cultured yogurt type products)	10.8	463	108	505	936	1,567
<u>Plant Protein Products</u>						
Meat Analogs	3.7	160	15	na	291	681
<u>Processed Fruits and Fruit Juices</u>						
Fruit Juices and Smoothies	39.3	1,682	289	1,042	856	1,634
Powdered Fruit-Flavored Beverages	0.1	5	<1*	na	201*	500*
<u>Processed Vegetables and Vegetable Juices</u>						
Vegetable Juices	3.5	150	22	na	620	1,215
<u>Snack Foods</u>						
Low Fat Salty Snacks	8.4	360	38	33	361	919
<u>Soft Candy</u>						
Chocolate	18.8	806	55	213	239	519
<u>Soups and Soup Mixes</u>						
Processed Soups	29.4	1,257	84	344	313	623

na = not available

*Indicates an intake estimate that may not be statistically reliable, as the CV of the mean is equal to or greater than 30% or the sample size is less than 30 individuals (see Section 2.3).

Table A-6 Estimated Daily Intake of Phytosterols from Individual Proposed Food-Uses by Male Adults (Aged 20 Years and Over) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg)	90 th Percentile (mg)	Mean (mg)	90 th Percentile (mg)
<u>Baked Goods and Baking Mixes</u>						
Bagels and English Muffins	7.9	305	50	na	519	956
Bread	66.6	2,558	347	806	521	1,000
Cookies	35.3	1,354	158	526	451	919
Crackers	22.5	863	156	599	696	1,399
Muffins, Quick Breads, and Sweet Rolls	13.0	501	58	177	532	1,028
Pizza Crust	16.0	615	152	568	779	1,479
<u>Beverages and Beverage Bases</u>						
Meal Replacement Drinks (ready-to-drink; non-milk-based)	0.9	35	4	na	555	1,191
<u>Breakfast Cereals</u>						
Instant and Regular Hot Cereals	13.0	499	40	95	388	756
Ready-to-Eat Breakfast Cereals	30.7	1,178	207	720	648	1,219
<u>Cheeses</u>						
Cottage Cheese	4.6	178	13	na	276	509
Grated Cheese (such as parmesan or romano)	21.0	806	154	539	594	1,250
Natural and Processed Cheese (including cream cheese and spreads)	61.8	2,375	383	1,002	570	1,190
<u>Coffee and Tea</u>						
Ready-to-Drink Tea Beverages	15.1	579	155	544	1,026	2,129
Specialty Coffee Drinks (e.g. lattes, cappuccinos)	2.6	99	17	na	522	925
<u>Dairy Product Analogs</u>						
Soy Beverages and Soy-Based Drinks	1.6	61	17	na	875	1,897
<u>Fats and Oils</u>						
Margarine	72.7	2,793	183	443	254	544
Salad Dressing	32.8	1,258	146	511	398	940
Vegetable Oil	20.4	785	33	115	160	346
<u>Frozen Dairy Desserts and Mixes</u>						
Ice Cream	23.8	913	87	367	351	628
<u>Grain Products and Pastas</u>						
Cereal and Granola Bars	4.0	152	19	na	318	538
Energy, Meal Replacement, and Fortified Bars	1.0	38	7	na	421	813
Pasta and Noodles (as served)	26.7	1,026	57	202	186	387
<u>Gravies and Sauces</u>						

Table A-6 Estimated Daily Intake of Phytosterols from Individual Proposed Food-Uses by Male Adults (Aged 20 Years and Over) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg)	90 th Percentile (mg)	Mean (mg)	90 th Percentile (mg)
Major Main Entrée Sauce (spaghetti, tomato)	21.8	836	63	213	273	654
Minor Main Entrée Sauce (gravy, pesto, white, cheese, salsa, cocktail)	30.6	1,176	97	346	331	778
Sauces for Dipping (barbecue, hollandaise, tartar, mustards, sweet and sour)	7.0	269	27	na	307	668
<u>Milk, Whole, and Skim</u>						
Fluid Milk and Powdered Milk	80.3	3,084	793	2,146	989	2,396
<u>Milk Products</u>						
Cocoa and Chocolate Beverages	4.1	159	18	na	472	984
Cream	12.1	465	136	252	966	2,015
Cultured Dairy Drinks	0.9	35	27	na	2,615	5,880
Meal Replacement Drinks (ready-to-drink; milk-based)	1.7	64	17	na	934	2,090
Milk-Based Drinks and Flavored Milk	3.0	116	20	na	631	1,080
Yogurt (including cultured yogurt and cultured yogurt type products)	5.1	197	61	na	1,015	1,847
<u>Plant Protein Products</u>						
Meat Analogs	3.0	114	15	na	452	1,092
<u>Processed Fruits and Fruit Juices</u>						
Fruit Juices and Smoothies	35.7	1,373	361	1,185	1,108	2,083
Powdered Fruit-Flavored Beverages	<0.1	1	<1*	na	65*	65*
<u>Processed Vegetables and Vegetable Juices</u>						
Vegetable Juices	3.4	129	23	na	633	1,403
<u>Snack Foods</u>						
Low Fat Salty Snacks	6.7	259	47	na	546	1,194
<u>Soft Candy</u>						
Chocolate	16.9	651	64	263	348	706
<u>Soups and Soup Mixes</u>						
Processed Soups	26.5	1,018	96	362	367	808

na = not available

*Indicates an intake estimate that may not be statistically reliable, as the CV of the mean is equal to or greater than 30% or the sample size is less than 30 individuals (see Section 2.3).

Table A-7 Estimated Daily Intake of Phytosterols from Individual Proposed Food-Uses by the Total Population (All Ages) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg)	90 th Percentile (mg)	Mean (mg)	90 th Percentile (mg)
<u>Baked Goods and Baking Mixes</u>						
Bagels and English Muffins	7.2	1,205	46	66	457	956
Bread	58.8	9,816	273	700	426	780
Cookies	37.2	6,210	141	462	379	777
Crackers	25.6	4,282	164	566	603	1,262
Muffins, Quick Breads, and Sweet Rolls	11.9	1,981	51	137	471	901
Pizza Crust	22.6	3,777	124	448	569	1,162
<u>Beverages and Beverage Bases</u>						
Meal Replacement Drinks (ready-to-drink; non-milk-based)	0.4	72	2	na	475	1,075
<u>Breakfast Cereals</u>						
Instant and Regular Hot Cereals	11.5	1,913	35	101	327	590
Ready-to-Eat Breakfast Cereals	41.9	6,992	210	668	536	1,018
<u>Cheeses</u>						
Cottage Cheese	3.8	637	13	na	256	510
Grated Cheese (such as parmesan or romano)	27.3	4,556	129	452	456	997
Natural and Processed Cheese (including cream cheese and spreads)	63.0	10,519	325	839	488	1,021
<u>Coffee and Tea</u>						
Ready-to-Drink Tea Beverages	12.3	2,061	117	373	821	1,632
Specialty Coffee Drinks (e.g. lattes, cappuccinos)	2.1	353	16	na	501	925
<u>Dairy Product Analogs</u>						
Soy Beverages and Soy-Based Drinks	1.5	245	19	na	859	2,026
<u>Fats and Oils</u>						
Margarine	64.0	10,689	143	368	210	447
Salad Dressing	28.1	4,683	129	491	363	782
Vegetable Oil	16.2	2,702	26	77	144	311
<u>Frozen Dairy Desserts and Mixes</u>						
Ice Cream	24.9	4,159	82	297	300	576
<u>Grain Products and Pastas</u>						
Cereal and Granola Bars	4.5	745	19	na	299	538
Energy, Meal Replacement, and Fortified Bars	0.7	125	5	na	395	813
Pasta and Noodles (as served)	31.8	5,307	53	179	154	322
<u>Gravies and Sauces</u>						

Table A-7 Estimated Daily Intake of Phytosterols from Individual Proposed Food-Uses by the Total Population (All Ages) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg)	90 th Percentile (mg)	Mean (mg)	90 th Percentile (mg)
Major Main Entrée Sauce (spaghetti, tomato)	20.9	3,483	51	160	239	543
Minor Main Entrée Sauce (gravy, pesto, white, cheese, salsa, cocktail)	24.7	4,132	72	249	285	663
Sauces for Dipping (barbecue, hollandaise, tartar, mustards, sweet and sour)	6.7	1,123	19	na	248	522
<u>Milk, Whole, and Skim</u>						
Fluid Milk and Powdered Milk	80.7	13,475	817	2,173	1,007	2,411
<u>Milk Products</u>						
Cocoa and Chocolate Beverages	7.3	1,213	28	na	429	788
Cream	7.2	1,207	91	84	848	1,998
Cultured Dairy Drinks	1.0	164	20	na	1,787	3,150
Meal Replacement Drinks (ready-to-drink; milk-based)	1.2	197	13	na	758	1,432
Milk-Based Drinks and Flavored Milk	9.6	1,597	34	na	479	935
Yogurt (including cultured yogurt and cultured yogurt type products)	9.0	1,502	90	na	918	1,642
<u>Plant Protein Products</u>						
Meat Analogs	2.3	392	12	na	345	936
<u>Processed Fruits and Fruit Juices</u>						
Fruit Juices and Smoothies	44.7	7,468	369	1,187	971	1,894
Powdered Fruit-Flavored Beverages	<0.1	6	<1*	na	176*	500*
<u>Processed Vegetables and Vegetable Juices</u>						
Vegetable Juices	2.1	351	17	na	614	1,301
<u>Snack Foods</u>						
Low Fat Salty Snacks	8.7	1,449	44	42	417	960
<u>Soft Candy</u>						
Chocolate	17.2	2,871	56	225	279	595
<u>Soups and Soup Mixes</u>						
Processed Soups	26.9	4,490	86	340	337	721

na = not available

*Indicates an intake estimate that may not be statistically reliable, as the CV of the mean is equal to or greater than 30% or the sample size is less than 30 individuals (see Section 2.3).

APPENDIX B

**Estimated Daily per Kilogram Body Weight Intake of Phytosterols from Individual
Proposed Food-Uses by Different Population Groups Within the United States**

Table B-1 Estimated Daily per Kilogram Body Weight Intake of Phytosterols from Individual Proposed Food-Uses by Infants (Aged 0 to 2 Years) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg/kg)	90 th Percentile (mg/kg)	Mean (mg/kg)	90 th Percentile (mg/kg)
<u>Baked Goods and Baking Mixes</u>						
Bagels and English Muffins	2.0	39	0.8	na	19.2	40.3
Bread	36.3	694	8.1	25.3	17.1	34.6
Cookies	30.1	576	6.2	21.8	17.9	37.9
Crackers	37.6	720	20.7	60.1	42.3	85.8
Muffins, Quick Breads, and Sweet Rolls	6.0	115	1.2	na	20.3	37.3
Pizza Crust	12.1	232	1.9	6.7	14.0	26.6
<u>Beverages and Beverage Bases</u>						
Meal Replacement Drinks (ready-to-drink; non-milk-based)	0.2	3	0.1*	na	24.5*	38.9*
<u>Breakfast Cereals</u>						
Instant and Regular Hot Cereals	12.0	229	2.1	5.8	19.1	36.4
Ready-to-Eat Breakfast Cereals	41.9	802	10.3	30.7	19.8	39.1
<u>Cheeses</u>						
Cottage Cheese	1.4	27	0.3*	na	13.7*	35.4*
Grated Cheese (such as parmesan or romano)	14.4	276	3.0	9.0	16.8	38.2
Natural and Processed Cheese (including cream cheese and spreads)	43.0	823	14.1	42.0	26.7	61.1
<u>Coffee and Tea</u>						
Ready-to-Drink Tea Beverages	3.3	63	0.5	na	14.8	36.3
Specialty Coffee Drinks (e.g. lattes, cappuccinos)	0.1	2	<0.1*	na	3.9*	4.1*
<u>Dairy Product Analogs</u>						
Soy Beverages and Soy-Based Drinks	1.0	20	1.9*	na	122.1*	304.2*
<u>Fats and Oils</u>						
Margarine	47.0	900	4.2	12.5	8.4	18.3
Salad Dressing	7.3	140	0.8	na	8.2	18.5
Vegetable Oil	7.6	146	0.5	na	5.1	9.5
<u>Frozen Dairy Desserts and Mixes</u>						
Ice Cream	13.9	266	1.8	7.3	10.6	21.8
<u>Grain Products and Pastas</u>						
Cereal and Granola Bars	2.6	49	0.9	na	21.6	42.0
Energy, Meal Replacement, and Fortified Bars	0.1	2	<0.1*	na	4.9*	5.9*
Pasta and Noodles (as served)	30.9	591	2.8	9.8	7.0	14.4
<u>Gravies and Sauces</u>						

Table B-1 Estimated Daily per Kilogram Body Weight Intake of Phytosterols from Individual Proposed Food-Uses by Infants (Aged 0 to 2 Years) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg/kg)	90 th Percentile (mg/kg)	Mean (mg/kg)	90 th Percentile (mg/kg)
Major Main Entrée Sauce (spaghetti, tomato)	15.3	293	1.4	4.2	7.9	19.0
Minor Main Entrée Sauce (gravy, pesto, white, cheese, salsa, cocktail)	8.4	160	0.8	na	8.2	28.3
Sauces for Dipping (barbecue, hollandaise, tartar, mustards, sweet and sour)	2.7	51	0.3	na	9.0	25.8
<u>Milk, Whole, and Skim</u>						
Fluid Milk and Powdered Milk	63.1	1,208	109.4	283.3	152.0	325.0
<u>Milk Products</u>						
Cocoa and Chocolate Beverages	7.8	150	2.5	na	29.1	57.7
Cream	0.9	17	0.3*	na	27.7*	106.0*
Cultured Dairy Drinks	0.6	12	0.9*	na	105.8*	286.4*
Meal Replacement Drinks (ready-to-drink; milk-based)	0.1	2	<0.1*	na	11.0*	21.3*
Milk-Based Drinks and Flavored Milk	4.9	94	2.2	na	34.5	90.6
Yogurt (including cultured yogurt and cultured yogurt type products)	14.6	280	12.0	48.1	58.7	101.6
<u>Plant Protein Products</u>						
Meat Analogs	0.8	15	0.3*	na	20.4*	66.0*
<u>Processed Fruits and Fruit Juices</u>						
Fruit Juices and Smoothies	49.1	940	45.6	132.9	84.1	179.6
Powdered Fruit-Flavored Beverages	0	0	na	na	na	na
<u>Processed Vegetables and Vegetable Juices</u>						
Vegetable Juices	1.0	19	0.2*	na	14.6*	55.0*
<u>Snack Foods</u>						
Low Fat Salty Snacks	7.5	143	1.7	3.5	14.0	32.8
<u>Soft Candy</u>						
Chocolate	7.6	146	0.9	na	9.8	18.6
<u>Soups and Soup Mixes</u>						
Processed Soups	25.9	496	4.2	15.7	19.3	43.1

na = not available

*Indicates an intake estimate that may not be statistically reliable, as the CV of the mean is equal to or greater than 30% or the sample size is less than 30 individuals (see Section 2.3).

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Table B-2 Estimated Daily per Kilogram Body Weight Intake of Phytosterols from Individual Proposed Food-Uses by Children (Aged 3 to 11 Years) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg/kg)	90 th Percentile (mg/kg)	Mean (mg/kg)	90 th Percentile (mg/kg)
<u>Baked Goods and Baking Mixes</u>						
Bagels and English Muffins	5.0	136	1.1	na	13.9	23.4
Bread	63.4	1,732	9.1	23.0	13.9	27.3
Cookies	47.6	1,301	6.9	20.0	13.7	27.4
Crackers	32.3	882	9.1	31.2	24.4	52.8
Muffins, Quick Breads, and Sweet Rolls	11.6	316	1.4	na	14.4	27.7
Pizza Crust	32.9	900	4.4	14.9	13.5	28.7
<u>Beverages and Beverage Bases</u>						
Meal Replacement Drinks (ready-to-drink; non-milk-based)	0.1	4	<0.1*	na	21.2*	27.6*
<u>Breakfast Cereals</u>						
Instant and Regular Hot Cereals	10.5	286	1.0	na	10.9	19.0
Ready-to-Eat Breakfast Cereals	67.6	1,848	13.1	31.8	19.3	36.8
<u>Cheeses</u>						
Cottage Cheese	2.2	60	0.3	na	10.4	30.2
Grated Cheese (such as parmesan or romano)	37.0	1,010	4.5	14.1	11.9	23.1
Natural and Processed Cheese (including cream cheese and spreads)	68.6	1,875	10.7	27.8	15.7	32.5
<u>Coffee and Tea</u>						
Ready-to-Drink Tea Beverages	6.5	178	0.9	na	12.5	19.9
Specialty Coffee Drinks (e.g. lattes, cappuccinos)	0.4	12	<0.1*	na	6.7*	12.3*
<u>Dairy Product Analogs</u>						
Soy Beverages and Soy-Based Drinks	1.0	26	0.6*	na	39.5*	83.0*
<u>Fats and Oils</u>						
Margarine	66.2	1,810	3.5	9.2	5.5	11.5
Salad Dressing	22.4	613	2.1	6.9	8.6	20.2
Vegetable Oil	13.0	354	0.5	0.7	3.9	9.7
<u>Frozen Dairy Desserts and Mixes</u>						
Ice Cream	33.4	912	3.9	13.0	10.1	21.2
<u>Grain Products and Pastas</u>						
Cereal and Granola Bars	4.9	135	0.8	na	10.5	19.2
Energy, Meal Replacement, and Fortified Bars	0.2	5	<0.1*	na	12.1*	16.1*
Pasta and Noodles (as served)	41.2	1,125	2.5	7.6	5.6	11.6
<u>Gravies and Sauces</u>						

Table B-2 Estimated Daily per Kilogram Body Weight Intake of Phytosterols from Individual Proposed Food-Uses by Children (Aged 3 to 11 Years) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg/kg)	90 th Percentile (mg/kg)	Mean (mg/kg)	90 th Percentile (mg/kg)
Major Main Entrée Sauce (spaghetti, tomato)	23.5	643	1.7	6.3	8.0	17.6
Minor Main Entrée Sauce (gravy, pesto, white, cheese, salsa, cocktail)	19.9	543	1.4	3.8	7.6	17.3
Sauces for Dipping (barbecue, hollandaise, tartar, mustards, sweet and sour)	7.7	210	0.5	na	6.9	17.6
<u>Milk, Whole, and Skim</u>						
Fluid Milk and Powdered Milk	93.9	2,565	50.0	111.8	53.2	114.4
<u>Milk Products</u>						
Cocoa and Chocolate Beverages	14.8	404	2.3	8.4	15.1	28.0
Cream	2.6	70	0.6	na	17.4	52.0
Cultured Dairy Drinks	0.8	23	0.2*	na	33.0*	43.2*
Meal Replacement Drinks (ready-to-drink; milk-based)	0.4	10	0.1*	na	15.4*	41.1*
Milk-Based Drinks and Flavored Milk	27.1	740	4.2	14.7	15.4	28.8
Yogurt (including cultured yogurt and cultured yogurt type products)	13.2	361	5.2	19.4	35.4	62.9
<u>Plant Protein Products</u>						
Meat Analogs	1.2	33	0.2	na	11.0	20.7
<u>Processed Fruits and Fruit Juices</u>						
Fruit Juices and Smoothies	62.9	1,720	22.4	61.6	37.8	80.0
Powdered Fruit-Flavored Beverages	0	0	na	na	na	na
<u>Processed Vegetables and Vegetable Juices</u>						
Vegetable Juices	0.8	23	0.1*	na	10.5*	36.0*
<u>Snack Foods</u>						
Low Fat Salty Snacks	11.9	324	2.2	5.4	15.0	34.7
<u>Soft Candy</u>						
Chocolate	18.7	510	1.7	6.2	8.3	16.6
<u>Soups and Soup Mixes</u>						
Processed Soups	29.4	803	3.2	13.1	12.8	27.0

na = not available

*Indicates an intake estimate that may not be statistically reliable, as the CV of the mean is equal to or greater than 30% or the sample size is less than 30 individuals (see Section 2.3).

Table B-3 Estimated Daily per Kilogram Body Weight Intake of Phytosterols from Individual Proposed Food-Uses by Female Teenagers (Aged 12 to 19 Years) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg/kg)	90 th Percentile (mg/kg)	Mean (mg/kg)	90 th Percentile (mg/kg)
<u>Baked Goods and Baking Mixes</u>						
Bagels and English Muffins	9.0	178	1.1	4.7	8.4	14.0
Bread	50.3	999	4.3	12.0	7.7	15.4
Cookies	36.9	733	2.3	7.2	6.0	12.8
Crackers	19.0	377	2.5	9.7	11.1	23.1
Muffins, Quick Breads, and Sweet Rolls	12.5	248	0.8	2.7	7.4	13.2
Pizza Crust	30.3	603	2.5	8.6	8.2	16.0
<u>Beverages and Beverage Bases</u>						
Meal Replacement Drinks (ready-to-drink; non-milk-based)	0.1	2	<0.1*	na	2.6*	7.2*
<u>Breakfast Cereals</u>						
Instant and Regular Hot Cereals	4.7	93	0.2	na	5.3	11.2
Ready-to-Eat Breakfast Cereals	42.3	840	4.6	12.9	10.1	19.0
<u>Cheeses</u>						
Cottage Cheese	1.9	38	0.1	na	4.0	11.5
Grated Cheese (such as parmesan or romano)	35.0	696	2.6	7.9	7.1	15.5
Natural and Processed Cheese (including cream cheese and spreads)	68.1	1,353	5.6	14.4	8.1	15.7
<u>Coffee and Tea</u>						
Ready-to-Drink Tea Beverages	13.3	264	1.1	4.3	8.6	17.1
Specialty Coffee Drinks (e.g. lattes, cappuccinos)	2.9	58	0.3	na	7.7	15.8
<u>Dairy Product Analogs</u>						
Soy Beverages and Soy-Based Drinks	0.7	14	0.2*	na	24.4*	40.3*
<u>Fats and Oils</u>						
Margarine	51.6	1,026	1.5	3.8	2.9	5.8
Salad Dressing	28.9	575	2.2	8.1	6.8	14.2
Vegetable Oil	13.8	274	0.3	0.7	2.2	5.0
<u>Frozen Dairy Desserts and Mixes</u>						
Ice Cream	26.5	527	1.4	5.1	5.0	10.2
<u>Grain Products and Pastas</u>						
Cereal and Granola Bars	6.1	122	0.4	na	4.5	8.6
Energy, Meal Replacement, and Fortified Bars	0.6	11	0.1*	na	4.5*	6.3*
Pasta and Noodles (as served)	33.9	673	1.0	3.4	2.7	5.8
<u>Gravies and Sauces</u>						

Table B-3 Estimated Daily per Kilogram Body Weight Intake of Phytosterols from Individual Proposed Food-Uses by Female Teenagers (Aged 12 to 19 Years) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg/kg)	90 th Percentile (mg/kg)	Mean (mg/kg)	90 th Percentile (mg/kg)
Major Main Entrée Sauce (spaghetti, tomato)	21.4	425	0.9	3.5	4.3	10.2
Minor Main Entrée Sauce (gravy, pesto, white, cheese, salsa, cocktail)	28.2	560	1.1	3.5	4.5	12.8
Sauces for Dipping (barbecue, hollandaise, tartar, mustards, sweet and sour)	8.2	163	0.3	na	4.1	9.3
<u>Milk, Whole, and Skim</u>						
Fluid Milk and Powdered Milk	80.3	1,596	15.2	40.2	18.7	44.9
<u>Milk Products</u>						
Cocoa and Chocolate Beverages	7.0	140	0.5	na	6.7	10.3
Cream	3.7	74	0.4	na	9.3	20.3
Cultured Dairy Drinks	1.2	23	0.3*	na	29.8*	50.5*
Meal Replacement Drinks (ready-to-drink; milk-based)	0.7	13	0.1*	na	11.4*	11.8*
Milk-Based Drinks and Flavored Milk	11.4	227	0.6	na	6.7	14.1
Yogurt (including cultured yogurt and cultured yogurt type products)	6.5	129	1.2	na	17.3	32.6
<u>Plant Protein Products</u>						
Meat Analogs	2.1	42	0.1*	na	5.8*	27.8*
<u>Processed Fruits and Fruit Juices</u>						
Fruit Juices and Smoothies	44.3	881	6.6	22.9	16.8	32.5
Powdered Fruit-Flavored Beverages	0	0	na	na	na	na
<u>Processed Vegetables and Vegetable Juices</u>						
Vegetable Juices	0.7	14	0.1*	na	7.5*	26.0*
<u>Snack Foods</u>						
Low Fat Salty Snacks	9.7	192	0.8	2.0	6.4	14.5
<u>Soft Candy</u>						
Chocolate	20.6	409	1.1	3.8	5.3	11.8
<u>Soups and Soup Mixes</u>						
Processed Soups	25.0	496	1.4	5.7	6.4	12.5

na = not available

*Indicates an intake estimate that may not be statistically reliable, as the CV of the mean is equal to or greater than 30% or the sample size is less than 30 individuals (see Section 2.3).

Table B-4 Estimated Daily per Kilogram Body Weight Intake of Phytosterols from Individual Proposed Food-Uses by Male Teenagers (Aged 12 to 19 Years) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg/kg)	90 th Percentile (mg/kg)	Mean (mg/kg)	90 th Percentile (mg/kg)
Baked Goods and Baking Mixes						
Bagels and English Muffins	6.4	124	0.9	3.2	8.7	14.4
Bread	53.4	1,036	3.8	9.7	6.6	12.2
Cookies	36.0	699	2.6	7.7	7.1	15.2
Crackers	14.0	271	2.2	6.8	14.9	28.9
Muffins, Quick Breads, and Sweet Rolls	11.2	218	0.8	na	8.8	14.5
Pizza Crust	38.4	745	4.8	15.2	12.0	24.0
Beverages and Beverage Bases						
Meal Replacement Drinks (ready-to-drink; non-milk-based)	0.1	2	<0.1*	na	3.3*	8.3*
Breakfast Cereals						
Instant and Regular Hot Cereals	4.4	86	0.2	na	5.2	9.8
Ready-to-Eat Breakfast Cereals	44.5	864	5.5	17.1	12.6	24.6
Cheeses						
Cottage Cheese	2.3	45	0.1	na	3.7	9.1
Grated Cheese (such as parmesan or romano)	41.6	808	4.0	12.4	9.1	19.4
Natural and Processed Cheese (including cream cheese and spreads)	68.9	1,336	6.0	14.7	8.6	18.3
Coffee and Tea						
Ready-to-Drink Tea Beverages	12.6	245	1.5	6.2	10.7	18.9
Specialty Coffee Drinks (e.g. lattes, cappuccinos)	1.7	33	0.1	na	5.6	8.5
Dairy Product Analogs						
Soy Beverages and Soy-Based Drinks	0.5	9	<0.1*	na	14.2*	21.8*
Fats and Oils						
Margarine	47.7	925	1.4	4.5	2.9	6.6
Salad Dressing	21.8	423	1.3	4.2	6.1	15.4
Vegetable Oil	14.3	278	0.3	0.7	2.3	5.8
Frozen Dairy Desserts and Mixes						
Ice Cream	23.6	458	1.6	6.1	5.7	10.6
Grain Products and Pastas						
Cereal and Granola Bars	4.2	82	0.3	na	6.1	11.9
Energy, Meal Replacement, and Fortified Bars	0.6	11	<0.1*	na	5.9*	7.7*
Pasta and Noodles (as served)	30.5	591	1.0	3.4	3.1	7.6
Gravies and Sauces						

Table B-4 Estimated Daily per Kilogram Body Weight Intake of Phytosterols from Individual Proposed Food-Uses by Male Teenagers (Aged 12 to 19 Years) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg/kg)	90 th Percentile (mg/kg)	Mean (mg/kg)	90 th Percentile (mg/kg)
Major Main Entrée Sauce (spaghetti, tomato)	19.3	374	0.9	2.8	4.7	12.3
Minor Main Entrée Sauce (gravy, pesto, white, cheese, salsa, cocktail)	27.4	532	1.0	3.3	4.5	10.7
Sauces for Dipping (barbecue, hollandaise, tartar, mustards, sweet and sour)	9.0	174	0.5	0.2	4.7	9.8
<u>Milk, Whole, and Skim</u>						
Fluid Milk and Powdered Milk	81.3	1,578	17.9	46.6	22.1	51.1
<u>Milk Products</u>						
Cocoa and Chocolate Beverages	5.9	114	0.6	na	10.0	21.6
Cream	2.6	51	0.3	na	8.6	19.4
Cultured Dairy Drinks	0.7	14	0.3*	na	32.8*	55.3*
Meal Replacement Drinks (ready-to-drink; milk-based)	0.6	11	<0.1*	na	8.8*	10.4*
Milk-Based Drinks and Flavored Milk	14.9	290	1.2	4.2	8.7	16.6
Yogurt (including cultured yogurt and cultured yogurt type products)	3.7	72	1.2	na	21.7	38.1
<u>Plant Protein Products</u>						
Meat Analogs	1.4	28	0.1*	na	4.9*	9.9*
<u>Processed Fruits and Fruit Juices</u>						
Fruit Juices and Smoothies	44.9	872	7.1	24.0	18.5	36.7
Powdered Fruit-Flavored Beverages	0	0	na	na	na	na
<u>Processed Vegetables and Vegetable Juices</u>						
Vegetable Juices	0.8	16	0.1*	na	22.7*	31.6*
<u>Snack Foods</u>						
Low Fat Salty Snacks	8.8	171	1.0	2.3	8.3	19.9
<u>Soft Candy</u>						
Chocolate	18.0	349	1.0	4.0	5.2	10.3
<u>Soups and Soup Mixes</u>						
Processed Soups	21.6	420	1.4	6.3	6.5	13.4

na = not available

*Indicates an intake estimate that may not be statistically reliable, as the CV of the mean is equal to or greater than 30% or the sample size is less than 30 individuals (see Section 2.3).

Table B-5 Estimated Daily per Kilogram Body Weight Intake of Phytosterols from Individual Proposed Food-Uses by Female Adults (Aged 20 Years and Over) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg/kg)	90 th Percentile (mg/kg)	Mean (mg/kg)	90 th Percentile (mg/kg)
<u>Baked Goods and Baking Mixes</u>						
Bagels and English Muffins	9.9	423	0.7	2.6	5.9	9.7
Bread	65.3	2,797	3.5	8.6	5.3	10.3
Cookies	36.1	1,547	1.8	5.4	4.9	10.6
Crackers	27.3	1,169	2.3	7.3	7.9	17.0
Muffins, Quick Breads, and Sweet Rolls	13.6	583	0.8	2.6	6.4	11.6
Pizza Crust	15.9	682	1.1	4.7	6.3	11.4
<u>Beverages and Beverage Bases</u>						
Meal Replacement Drinks (ready-to-drink; non-milk-based)	0.6	26	<0.1*	na	6.0*	11.7*
<u>Breakfast Cereals</u>						
Instant and Regular Hot Cereals	16.8	720	0.6	2.4	4.4	8.3
Ready-to-Eat Breakfast Cereals	34.1	1,460	2.2	7.7	6.6	12.4
<u>Cheeses</u>						
Cottage Cheese	6.8	289	0.2	na	3.4	7.5
Grated Cheese (such as parmesan or romano)	22.4	960	1.4	4.8	5.5	10.9
Natural and Processed Cheese (including cream cheese and spreads)	64.4	2,757	4.1	10.5	6.2	12.5
<u>Coffee and Tea</u>						
Ready-to-Drink Tea Beverages	17.1	732	1.8	6.5	10.5	20.3
Specialty Coffee Drinks (e.g. lattes, cappuccinos)	3.5	149	0.3	na	7.2	12.6
<u>Dairy Product Analogs</u>						
Soy Beverages and Soy-Based Drinks	2.7	115	0.4	na	12.3	26.3
<u>Fats and Oils</u>						
Margarine	75.6	3,235	2.1	5.4	2.9	6.3
Salad Dressing	39.1	1,674	2.2	7.1	5.1	10.8
Vegetable Oil	20.2	865	0.4	1.2	2.0	4.3
<u>Frozen Dairy Desserts and Mixes</u>						
Ice Cream	25.3	1,083	1.1	3.8	3.9	7.8
<u>Grain Products and Pastas</u>						
Cereal and Granola Bars	4.8	205	0.2	na	4.2	7.2
Energy, Meal Replacement, and Fortified Bars	1.4	58	0.1	na	5.7	13.9
Pasta and Noodles (as served)	30.4	1,301	0.6	2.2	1.9	4.0
<u>Gravies and Sauces</u>						

Table B-5 Estimated Daily per Kilogram Body Weight Intake of Phytosterols from Individual Proposed Food-Uses by Female Adults (Aged 20 Years and Over) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg/kg)	90 th Percentile (mg/kg)	Mean (mg/kg)	90 th Percentile (mg/kg)
Major Main Entrée Sauce (spaghetti, tomato)	21.3	912	0.6	1.9	3.1	7.0
Minor Main Entrée Sauce (gravy, pesto, white, cheese, salsa, cocktail)	27.1	1,161	1.0	3.4	3.8	8.8
Sauces for Dipping (barbecue, hollandaise, tartar, mustards, sweet and sour)	6.0	256	0.2	na	2.6	5.2
<u>Milk, Whole, and Skim</u>						
Fluid Milk and Powdered Milk	80.4	3,444	8.3	23.1	10.5	26.1
<u>Milk Products</u>						
Cocoa and Chocolate Beverages	5.7	246	0.4	na	6.6	10.4
Cream	12.4	530	1.5	3.7	11.4	22.6
Cultured Dairy Drinks	1.3	57	0.3	na	20.7	40.5
Meal Replacement Drinks (ready-to-drink; milk-based)	2.3	97	0.3	na	9.5	16.4
Milk-Based Drinks and Flavored Milk	3.0	130	0.2	na	8.0	16.4
Yogurt (including cultured yogurt and cultured yogurt type products)	10.8	463	1.5	5.9	13.4	24.0
<u>Plant Protein Products</u>						
Meat Analogs	3.7	160	0.2	na	4.6	11.1
<u>Processed Fruits and Fruit Juices</u>						
Fruit Juices and Smoothies	39.3	1,682	<0.1	14.1	12.0	25.4
Powdered Fruit-Flavored Beverages	0.1	5	<0.1*	na	2.1*	6.4*
<u>Processed Vegetables and Vegetable Juices</u>						
Vegetable Juices	3.5	150	0.3	na	8.6	16.0
<u>Snack Foods</u>						
Low Fat Salty Snacks	8.4	360	0.5	0.5	5.2	12.7
<u>Soft Candy</u>						
Chocolate	18.8	806	0.8	2.8	3.4	7.8
<u>Soups and Soup Mixes</u>						
Processed Soups	29.4	1,257	1.2	4.9	4.6	9.8

na = not available

*Indicates an intake estimate that may not be statistically reliable, as the CV of the mean is equal to or greater than 30% or the sample size is less than 30 individuals (see Section 2.3).

Table B-6 Estimated Daily per Kilogram Body Weight Intake of Phytosterols from Individual Proposed Food-Uses by Male Adults (Aged 20 Years and Over) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg/kg)	90 th Percentile (mg/kg)	Mean (mg/kg)	90 th Percentile (mg/kg)
<u>Baked Goods and Baking Mixes</u>						
Bagels and English Muffins	7.9	305	0.6	na	5.8	10.3
Bread	66.6	2,558	4.1	9.9	6.2	11.8
Cookies	35.3	1,354	1.9	6.1	5.4	11.4
Crackers	22.5	863	1.8	6.6	8.2	16.9
Muffins, Quick Breads, and Sweet Rolls	13.0	501	0.7	1.9	6.4	12.4
Pizza Crust	16.0	615	1.8	6.8	9.1	17.1
<u>Beverages and Beverage Bases</u>						
Meal Replacement Drinks (ready-to-drink; non-milk-based)	0.9	35	<0.1	na	7.5	12.7
<u>Breakfast Cereals</u>						
Instant and Regular Hot Cereals	13.0	499	0.5	0.9	4.6	9.3
Ready-to-Eat Breakfast Cereals	30.7	1,178	2.5	8.4	7.7	14.5
<u>Cheeses</u>						
Cottage Cheese	4.6	178	0.2	na	3.2	7.3
Grated Cheese (such as parmesan or romano)	21.0	806	1.8	6.2	6.9	14.6
Natural and Processed Cheese (including cream cheese and spreads)	61.8	2,375	4.5	11.3	6.6	14.1
<u>Coffee and Tea</u>						
Ready-to-Drink Tea Beverages	15.1	579	1.7	6.1	11.4	23.0
Specialty Coffee Drinks (e.g. lattes, cappuccinos)	2.6	99	0.2	na	6.1	10.5
<u>Dairy Product Analogs</u>						
Soy Beverages and Soy-Based Drinks	1.6	61	0.2	na	11.2	21.8
<u>Fats and Oils</u>						
Margarine	72.7	2,793	2.2	5.4	3.0	6.4
Salad Dressing	32.8	1,258	1.7	6.1	4.5	9.6
Vegetable Oil	20.4	785	0.4	1.3	1.9	4.1
<u>Frozen Dairy Desserts and Mixes</u>						
Ice Cream	23.8	913	1.0	4.0	4.2	7.7
<u>Grain Products and Pastas</u>						
Cereal and Granola Bars	4.0	152	0.2	na	3.7	7.0
Energy, Meal Replacement, and Fortified Bars	1.0	38	0.1	na	5.2	11.9
Pasta and Noodles (as served)	26.7	1,026	0.7	2.3	2.2	4.5
<u>Gravies and Sauces</u>						

Table B-6 Estimated Daily per Kilogram Body Weight Intake of Phytosterols from Individual Proposed Food-Uses by Male Adults (Aged 20 Years and Over) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg/kg)	90 th Percentile (mg/kg)	Mean (mg/kg)	90 th Percentile (mg/kg)
Major Main Entrée Sauce (spaghetti, tomato)	21.8	836	0.7	2.5	3.2	7.4
Minor Main Entrée Sauce (gravy, pesto, white, cheese, salsa, cocktail)	30.6	1,176	1.1	4.0	3.9	9.3
Sauces for Dipping (barbecue, hollandaise, tartar, mustards, sweet and sour)	7.0	269	0.3	na	3.6	8.2
<u>Milk, Whole, and Skim</u>						
Fluid Milk and Powdered Milk	80.3	3,084	9.4	25.4	11.7	28.9
<u>Milk Products</u>						
Cocoa and Chocolate Beverages	4.1	159	0.2	na	5.5	12.2
Cream	12.1	465	1.6	3.3	11.5	27.4
Cultured Dairy Drinks	0.9	35	0.3	na	33.1	78.6
Meal Replacement Drinks (ready-to-drink; milk-based)	1.7	64	0.2	na	11.4	29.9
Milk-Based Drinks and Flavored Milk	3.0	116	0.2	na	7.2	13.6
Yogurt (including cultured yogurt and cultured yogurt type products)	5.1	197	0.7	na	11.9	22.6
<u>Plant Protein Products</u>						
Meat Analogs	3.0	114	0.2	na	5.2	11.8
<u>Processed Fruits and Fruit Juices</u>						
Fruit Juices and Smoothies	35.7	1,373	4.3	14.5	13.3	25.8
Powdered Fruit-Flavored Beverages	<0.1	1	<0.1*	na	0.8*	0.8*
<u>Processed Vegetables and Vegetable Juices</u>						
Vegetable Juices	3.4	129	0.3	na	8.0	17.4
<u>Snack Foods</u>						
Low Fat Salty Snacks	6.7	259	0.5	na	6.4	14.5
<u>Soft Candy</u>						
Chocolate	16.9	651	0.7	2.9	4.0	8.0
<u>Soups and Soup Mixes</u>						
Processed Soups	26.5	1,018	1.2	4.1	4.5	10.1

na = not available

*Indicates an intake estimate that may not be statistically reliable, as the CV of the mean is equal to or greater than 30% or the sample size is less than 30 individuals (see Section 2.3).

Table B-7 Estimated Daily per Kilogram Body Weight Intake of Phytosterols from Individual Proposed Food-Uses by the Total Population (All Ages) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg/kg)	90 th Percentile (mg/kg)	Mean (mg/kg)	90 th Percentile (mg/kg)
<u>Baked Goods and Baking Mixes</u>						
Bagels and English Muffins	7.2	1,205	0.7	1.2	7.2	13.2
Bread	58.8	9,816	4.6	11.7	7.3	14.7
Cookies	37.2	6,210	2.7	8.3	7.2	16.1
Crackers	25.6	4,282	3.8	10.7	13.8	31.7
Muffins, Quick Breads, and Sweet Rolls	11.9	1,981	0.9	1.9	7.8	15.0
Pizza Crust	22.6	3,777	2.1	7.4	9.4	18.7
<u>Beverages and Beverage Bases</u>						
Meal Replacement Drinks (ready-to-drink; non-milk-based)	0.4	72	<0.1	na	7.7	13.8
<u>Breakfast Cereals</u>						
Instant and Regular Hot Cereals	11.5	1,913	0.6	1.5	5.9	11.5
Ready-to-Eat Breakfast Cereals	41.9	6,992	4.3	13.4	11.0	23.6
<u>Cheeses</u>						
Cottage Cheese	3.8	637	0.2	na	4.1	8.8
Grated Cheese (such as parmesan or romano)	27.3	4,556	2.2	7.1	7.8	16.3
Natural and Processed Cheese (including cream cheese and spreads)	63.0	10,519	5.7	14.6	8.5	18.6
<u>Coffee and Tea</u>						
Ready-to-Drink Tea Beverages	12.3	2,061	1.6	5.6	10.9	20.7
Specialty Coffee Drinks (e.g. lattes, cappuccinos)	2.1	353	0.2	na	6.8	12.4
<u>Dairy Product Analogs</u>						
Soy Beverages and Soy-Based Drinks	1.5	245	0.4	na	18.0	33.1
<u>Fats and Oils</u>						
Margarine	64.0	10,689	2.3	6.0	3.4	7.5
Salad Dressing	28.1	4,683	1.9	6.6	5.3	11.3
Vegetable Oil	16.2	2,702	0.4	1.1	2.2	4.8
<u>Frozen Dairy Desserts and Mixes</u>						
Ice Cream	24.9	4,159	1.5	5.1	5.4	11.4
<u>Grain Products and Pastas</u>						
Cereal and Granola Bars	4.5	745	0.4	na	5.6	10.5
Energy, Meal Replacement, and Fortified Bars	0.7	125	0.1	na	5.6	13.2
Pasta and Noodles (as served)	31.8	5,307	1.0	3.2	3.0	6.4
<u>Gravies and Sauces</u>						

Table B-7 Estimated Daily per Kilogram Body Weight Intake of Phytosterols from Individual Proposed Food-Uses by the Total Population (All Ages) Within the United States (2003-2004, 2005-2006 NHANES Data)

Food-Use Category	% Users	Actual # of Total Users	All-Person Consumption		All-User Consumption	
			Mean (mg/kg)	90 th Percentile (mg/kg)	Mean (mg/kg)	90 th Percentile (mg/kg)
Major Main Entrée Sauce (spaghetti, tomato)	20.9	3,483	0.9	2.6	4.1	9.5
Minor Main Entrée Sauce (gravy, pesto, white, cheese, salsa, cocktail)	24.7	4,132	1.1	3.6	4.3	10.3
Sauces for Dipping (barbecue, hollandaise, tartar, mustards, sweet and sour)	6.7	1,123	0.3	na	3.8	8.4
<u>Milk, Whole, and Skim</u>						
Fluid Milk and Powdered Milk	80.7	13,475	19.2	47.1	23.7	56.0
<u>Milk Products</u>						
Cocoa and Chocolate Beverages	7.3	1,213	0.7	na	10.3	21.8
Cream	7.2	1,207	1.3	1.1	11.6	26.6
Cultured Dairy Drinks	1.0	164	0.3	na	29.2	53.8
Meal Replacement Drinks (ready-to-drink; milk-based)	1.2	197	0.2	na	10.4	24.2
Milk-Based Drinks and Flavored Milk	9.6	1,597	0.9	na	12.4	25.5
Yogurt (including cultured yogurt and cultured yogurt type products)	9.0	1,502	2.1	na	21.7	42.8
<u>Plant Protein Products</u>						
Meat Analogs	2.3	392	0.2	na	5.5	14.2
<u>Processed Fruits and Fruit Juices</u>						
Fruit Juices and Smoothies	44.7	7,468	8.5	23.4	22.5	48.6
Powdered Fruit-Flavored Beverages	<0.1	6	<0.1*	na	1.9*	6.4*
<u>Processed Vegetables and Vegetable Juices</u>						
Vegetable Juices	2.1	351	0.2	na	8.7	17.4
<u>Snack Foods</u>						
Low Fat Salty Snacks	8.7	1,449	0.8	0.7	7.9	18.1
<u>Soft Candy</u>						
Chocolate	17.2	2,871	0.9	3.2	4.5	9.8
<u>Soups and Soup Mixes</u>						
Processed Soups	26.9	4,490	1.6	5.4	6.3	13.9

na = not available

*Indicates an intake estimate that may not be statistically reliable, as the CV of the mean is equal to or greater than 30% or the sample size is less than 30 individuals (see Section 2.3).

APPENDIX C

**Representative NHANES 2003-2006 Food Codes for All Proposed
Food-Uses of Phytosterols in the United States**

**Representative NHANES 2003-2004, 2005-2006 Food Codes for All Proposed Food-Uses
of Phytosterols in the United States**

Baked Goods and Baking Mixes

Bagels and English Muffins

[Phytosterols] = 0.91%

51180010	Bagel
51180020	Bagel, toasted
51180030	Bagel, with raisins
51180040	Bagel, with raisins, toasted
51180080	Bagel, with fruit other than raisins
51180090	Bagel, with fruit other than raisins, toasted
51186010	Muffin, English
51186020	Muffin, English, toasted
51186100	Muffin, English, with raisins
51186120	Muffin, English, with raisins, toasted
51202000	Muffin, English, whole wheat, 100%
51202020	Muffin, English, whole wheat, 100%, toasted
51208000	Bagel, whole wheat, 100%
51208010	Bagel, whole wheat, 100%, toasted
51208100	Bagel, whole wheat, 100%, with raisins
51208110	Bagel, whole wheat, 100%, with raisins, toasted
51301700	Bagel, wheat
51301710	Bagel, wheat, toasted
51301750	Bagel, whole wheat, other than 100% or NS as to 100%
51301760	Bagel, whole wheat, other than 100% or NS as to 100%, toasted
51301800	Bagel, wheat, with raisins
51301810	Bagel, wheat, with raisins, toasted
51301820	Bagel, wheat, with fruit and nuts
51301830	Bagel, wheat, with fruit and nuts, toasted
51301900	Bagel, wheat bran
51301910	Bagel, wheat bran, toasted
51303010	Muffin, English, wheat or cracked wheat
51303020	Muffin, English, wheat or cracked wheat, toasted
51303030	Muffin, English, whole wheat, other than 100% or NS as to 100%
51303040	Muffin, English, whole wheat, other than 100% or NS as to 100%, toasted
51404500	Bagel, pumpernickel
51404510	Bagel, pumpernickel, toasted
51501080	Bagel, oat bran
51501090	Bagel, oat bran, toasted
51630000	Bagel, multigrain
51630010	Bagel, multigrain, toasted
51630100	Bagel, multigrain, with raisins
51630110	Bagel, multigrain, with raisins, toasted
51630200	Muffin, English, multigrain
51630210	Muffin, English, multigrain, toasted

Mixtures Containing Bagels and English Muffins
(Adjusted for bagels and English muffin content of ~17 to 57%)
[Phytosterols] = ~0.15 to 0.52%

32101500 Egg, Benedict
32202025 Egg, cheese and ham on bagel
32202045 Egg, cheese, and steak on bagel
32202085 Egg, cheese and bacon on bagel
32202120 Egg, cheese and sausage on bagel

Bread

[Phytosterols] = 1.00%

51000100 Bread, NS as to major flour
51000110 Toast, NS as to major flour
51101000 Bread, white
51101010 Bread, white, toasted
51102010 Bread, white with whole wheat swirl
51102020 Bread, white with whole wheat swirl, toasted
51105010 Bread, Cuban
51105040 Bread, Cuban, toasted
51106010 Bread, Native, Puerto Rican style (Pan Criollo)
51106020 Bread, Native, Puerto Rican style, toasted (Pan Criollo)
51106100 Bread, Native water, Puerto Rican style (Pan de agua)
51106200 Bread, lard, Puerto Rican style (Pan de manteca)
51106210 Bread, lard, Puerto Rican style, toasted (Pan de manteca)
51106300 Bread, caressed, Puerto Rican style (Pan sobao)
51106310 Bread, caressed, Puerto Rican style, toasted (Pan sobao)
51107010 Bread, French or Vienna
51107040 Bread, French or Vienna, toasted
51108010 Focaccia, Italian flatbread, plain
51108100 Naan, Indian flatbread
51109010 Bread, Italian, Grecian, Armenian
51109040 Bread, Italian, Grecian, Armenian, toasted
51109100 Bread, pita
51109110 Bread, pita, toasted
51109150 Bread, pita with fruit
51109200 Bread, pita with fruit, toasted
51110010 Bread, batter
51111010 Bread, cheese
51111040 Bread, cheese, toasted
51113010 Bread, cinnamon
51113100 Bread, cinnamon, toasted
51115010 Bread, cornmeal and molasses
51115020 Bread, cornmeal and molasses, toasted
51119010 Bread, egg, Challah
51119040 Bread, egg, Challah, toasted
51119100 Bread, lowfat, 98% fat free
51119110 Bread, lowfat, 98% fat free, toasted
51121010 Bread, garlic
51121040 Bread, garlic, toasted
51121110 Bread, onion
51122000 Bread, reduced calorie and/or high fiber, white or NFS
51122010 Bread, reduced calorie and/or high fiber, white or NFS, toasted
51122050 Bread, reduced calorie and/or high fiber, Italian
51122060 Bread, reduced calorie and/or high fiber, Italian, toasted

51122100 Bread, reduced calorie and/or high fiber, white or NFS, with fruit and/or nuts
 51122110 Bread, reduced calorie and/or high fiber, white or NFS, with fruit and/or nuts, toasted
 51122300 Bread, white, special formula, added fiber
 51122310 Bread, white, special formula, added fiber, toasted
 51122410 Bread, special formula, high-calcium, dark, toasted
 51123010 Bread, high protein
 51123020 Bread, high protein, toasted
 51126010 Bread, milk and honey
 51126020 Bread, milk and honey, toasted
 51129010 Bread, raisin
 51129020 Bread, raisin, toasted
 51130510 Bread, white, low sodium or no salt
 51130520 Bread, white, low sodium or no salt, toasted
 51133010 Bread, sour dough
 51133020 Bread, sour dough, toasted
 51135000 Bread, vegetable
 51135010 Bread, vegetable, toasted
 51140100 Bread, dough, fried
 51168000 Bread, Spanish coffee
 51201010 Bread, whole wheat, 100%
 51201020 Bread, whole wheat, 100%, toasted
 51201060 Bread, whole wheat, 100%, made from home recipe or purchased at bakery
 51201070 Bread, whole wheat, 100%, made from home recipe or purchased at bakery, toasted
 51201110 Bread, whole wheat, 100%, with raisins
 51201120 Bread, whole wheat, 100%, with raisins, toasted
 51201150 Bread, pita, whole wheat, 100%
 51201160 Bread, pita, whole wheat, 100%, toasted
 51204010 Bread, wheat germ
 51204020 Bread, wheat germ, toasted
 51207010 Bread, sprouted wheat
 51207020 Bread, sprouted wheat, toasted
 51300050 Bread, whole grain white
 51300060 Bread, whole grain white, toasted
 51300110 Bread, whole wheat, other than 100% or NS as to 100%
 51300120 Bread, whole wheat, other than 100% or NS as to 100%, toasted
 51300140 Bread, whole wheat, other than 100% or NS as to 100%, made from home recipe or purchased at bakery
 51300150 Bread, whole wheat, other than 100% or NS as to 100%, made from home recipe or purchased at bakery, toasted
 51300180 Bread, puri or poori (Indian puffed bread), whole wheat, other than 100% or NS as to 100%, filled with coconut, fried
 51300210 Bread, whole wheat, NS as to 100%, with raisins
 51300220 Bread, whole wheat, NS as to 100%, with raisins, toasted
 51301010 Bread, wheat or cracked wheat
 51301020 Bread, wheat or cracked wheat, toasted
 51301040 Bread, wheat or cracked wheat, made from home recipe or purchased at bakery
 51301050 Bread, wheat or cracked wheat, made from home recipe or purchased at bakery, toasted
 51301120 Bread, wheat or cracked wheat, with raisins
 51301130 Bread, wheat or cracked wheat, with raisins, toasted
 51301200 Bread, special formula, high-calcium, dark
 51301210 Bread, special formula, high-calcium, dark, toasted
 51301510 Bread, wheat or cracked wheat, reduced calorie and/or high fiber
 51301520 Bread, wheat or cracked wheat, reduced calorie and/or high fiber, toasted
 51301540 Bread, French or Vienna, whole wheat, other than 100% or NS as to 100%, made from home recipe or purchased at bakery

51301550 Bread, French or Vienna, whole wheat, other than 100% or NS as to 100%, made from home recipe or purchased at bakery, toasted

51301600 Bread, pita, whole wheat, other than 100% or NS as to 100%

51301610 Bread, pita, whole wheat, other than 100% or NS as to 100%, toasted

51301620 Bread, pita, wheat or cracked wheat

51301630 Bread, pita, wheat or cracked wheat, toasted

51302010 Bread, wheat bran

51302020 Bread, wheat bran, toasted

51302050 Bread, wheat bran, with raisins

51302060 Bread, wheat bran, with raisins, toasted

51401010 Bread, rye

51401020 Bread, rye, toasted

51401030 Bread, marble rye and pumpernickel

51401040 Bread, marble rye and pumpernickel, toasted

51401060 Bread, rye, reduced calorie and/or high fiber

51401070 Bread, rye, reduced calorie and/or high fiber, toasted

51404010 Bread, pumpernickel

51404020 Bread, pumpernickel, toasted

51407010 Bread, black

51407020 Bread, black, toasted

51501010 Bread, oatmeal

51501020 Bread, oatmeal, toasted

51501040 Bread, oat bran

51501050 Bread, oat bran, toasted

51501060 Bread, oat bran, reduced calorie and/or high fiber

51501070 Bread, oat bran, reduced calorie and/or high fiber, toasted

51601010 Bread, multigrain, toasted

51601020 Bread, multigrain

51601210 Bread, multigrain, with raisins

51601220 Bread, multigrain, with raisins, toasted

51602010 Bread, multigrain, reduced calorie and/or high fiber

51602020 Bread, multigrain, reduced calorie and/or high fiber, toasted

51801010 Bread, barley

51802010 Bread, triticale

51802020 Bread, triticale, toasted

51803010 Bread, buckwheat

51803020 Bread, buckwheat, toasted

51804010 Bread, soy

51804020 Bread, soy, toasted

51805010 Bread, sunflower meal

51805020 Bread, sunflower meal, toasted

51806010 Bread, rice

51806020 Bread, rice, toasted

51807000 Injera (American-style Ethiopian bread)

51808000 Bread, low gluten

51808010 Bread, low gluten, toasted

Mixtures Containing Bread

(Adjusted for bread content of ~31 to 68%)

[Phytosterols] = ~0.31 to 0.68%

14640000 Cheese sandwich

14640100 Cheese sandwich, grilled

14640300 Cheese spread sandwich

27500050 Sandwich, NFS

27500100 Meat sandwich, NFS

27510000 Beef sandwich, NFS

000106

27510910	Corned beef sandwich
27511010	Pastrami sandwich
27520110	Bacon sandwich, with spread
27520120	Bacon and cheese sandwich, with spread
27520150	Bacon, lettuce, and tomato sandwich with spread
27520300	Ham sandwich, with spread
27520310	Ham sandwich with lettuce and spread
27520320	Ham and cheese sandwich, with lettuce and spread
27520330	Ham and egg sandwich
27520340	Ham salad sandwich
27520350	Ham and cheese sandwich, with spread, grilled
27520520	Pork sandwich
27540110	Chicken sandwich, with spread
27540120	Chicken salad or chicken spread sandwich
27540130	Chicken barbecue sandwich
27540310	Turkey sandwich, with spread
27540320	Turkey salad or turkey spread sandwich
27550710	Tuna salad sandwich, with lettuce
27550720	Tuna salad sandwich
27560000	Luncheon meat sandwich, NFS, with spread
27560110	Bologna sandwich, with spread
27560120	Bologna and cheese sandwich, with spread
27560510	Salami sandwich, with spread
27560710	Sausage sandwich
27563010	Meat spread or potted meat sandwich
32201000	Fried egg sandwich
32203010	Egg salad sandwich
32204010	Scrambled egg sandwich
42301010	Peanut butter sandwich
42302010	Peanut butter and jelly sandwich
42303010	Peanut butter and banana sandwich
51167000	Brioche

Mixtures Containing Bread

(Adjusted for bread content of ~3 to 30%)

[Phytosterols] = ~0.03 to 0.30%

13210110	Pudding, bread
13210150	Puerto Rican bread pudding made with evaporated milk and rum (Budin de pan)
13210180	Pudding, Mexican bread (Capirotada)
13210190	Pudding, Mexican bread (Capirotada), lower fat
27260010	Meat loaf, NS as to type of meat
27260050	Meatballs, with breading, NS as to type of meat, with gravy
27260080	Meat loaf made with beef and pork
27260090	Meat loaf made with beef, veal and pork
27260100	Meat loaf made with beef and pork, with tomato-based sauce
27260510	Liver dumpling
27510950	Reuben sandwich (corned beef sandwich with sauerkraut and cheese), with spread
27513020	Roast beef sandwich, with gravy
27513030	Roast beef sandwich dipped in egg, fried, with gravy and spread
27516010	Gyro sandwich (pita bread, beef, lamb, onion, condiments), with tomato and spread
27520140	Bacon and egg sandwich
27520530	Pork sandwich, with gravy
27520540	Ham and tomato club sandwich, with lettuce and spread
27540330	Turkey sandwich, with gravy
27550110	Crab cake sandwich, on bun

000107

27550510 Sardine sandwich, with lettuce and spread
32105190 Egg casserole with bread, cheese, milk and meat

Cookies

[Phytosterols] = 1.67%

53200100 Cookie, batter or dough, raw, not chocolate
53201000 Cookie, NS as to type
53202000 Cookie, almond
53203000 Cookie, applesauce
53203500 Cookie, biscotti (Italian sugar cookie)
53205500 Cookie, butterscotch chip
53205600 Cookie, caramel coated, with nuts
53205750 Cookie, carob
53206000 Cookie, chocolate chip
53206010 Cookie, chocolate chip, with raisins
53206020 Cookie, chocolate chip, made from home recipe or purchased at a bakery
53206030 Cookie, chocolate chip, reduced fat
53206050 Cookie, rich, chocolate chip, with chocolate filling
53206100 Cookie, chocolate chip sandwich
53206500 Cookie, chocolate, made with rice cereal (no-bake)
53206550 Cookie, chocolate, made with oatmeal and coconut (no-bake)
53207000 Cookie, chocolate fudge, with/without nuts
53207050 Cookie, chocolate, with chocolate filling or coating, fat free
53208000 Cookie, chocolate-covered marshmallow
53208200 Cookie, marshmallow pie, chocolate covered
53209000 Cookie, chocolate, chocolate sandwich or chocolate-coated or striped
53209010 Cookie, chocolate-covered, sugar wafer, creme- or caramel-filled
53209020 Cookie, chocolate sandwich, reduced fat
53209050 Cookie, chocolate-covered, chocolate sandwich
53209100 Cookie, chocolate, sandwich, with extra filling
53209500 Cookie, chocolate and vanilla sandwich
53210000 Cookie, chocolate wafer
53210900 Cookie, graham cracker sandwich with chocolate and marshmallow filling
53210910 Cookie, graham cracker with marshmallow
53211000 Cookie bar, with chocolate, nuts, and graham crackers
53215500 Cookie, coconut
53216000 Cookie, coconut and nut
53220000 Cookie, fruit-filled bar
53220010 Cookie, fruit-filled bar, fat free
53220020 Cookie, date bar
53220030 Cookie, fig bar
53220040 Cookie, fig bar, fat free
53222010 Cookie, fortune
53222020 Cookie, cone shell, ice cream type, wafer or cake
53222100 Cookie, cone shell, ice cream type, brown sugar
53223000 Cookie, gingersnaps
53223100 Cookie, granola
53224000 Cookie, ladyfinger
53224250 Cookie, lemon bar
53225000 Cookie, macaroon, coconut-meringue type, no flour
53226000 Cookie, marshmallow, with coconut
53226500 Cookie, marshmallow, with rice cereal (no-bake)
53226550 Cookie, marshmallow, with rice cereal and chocolate chips
53226600 Cookie, marshmallow and peanut butter, with oat cereal (no-bake)
53227000 Cookie, marshmallow pies, non-chocolate coating

000108

53228000	Cookie, meringue
53230000	Cookie, molasses
53231000	Cookie, Lebkuchen
53231400	Cookie, multigrain, high fiber
53233000	Cookie, oatmeal
53233010	Cookie, oatmeal, with raisins
53233020	Cookie, oatmeal, with fruit filling
53233030	Cookie, oatmeal, fat free, with raisins
53233040	Cookie, oatmeal, reduced fat, with raisins
53233050	Cookie, oatmeal sandwich, with creme filling
53233060	Cookie, oatmeal, with chocolate chips
53233080	Cookie, oatmeal sandwich, with peanut butter and jelly filling
53233100	Cookie, oatmeal, with chocolate and peanut butter (no-bake)
53233500	Cookie, oat bran
53234000	Cookie, peanut butter
53234010	Cookie, peanut butter, with oatmeal
53234100	Cookie, peanut butter, with chocolate
53234250	Cookie, peanut butter with rice cereal (no-bake)
53235000	Cookie, peanut
53235500	Cookie, with peanut butter filling, chocolate-coated
53235600	Cookie, Pfeffernusse
53236000	Cookie, pizzelle (Italian style wafer)
53236100	Cookie, pumpkin
53237000	Cookie, raisin
53237010	Cookie, raisin sandwich, cream-filled
53237500	Cookie, rum ball (no-bake)
53238000	Cookie, sandwich-type, not chocolate or vanilla
53239000	Cookie, shortbread
53239010	Cookie, shortbread, reduced fat
53239050	Cookie, shortbread, with chocolate filling
53241500	Cookie, butter or sugar cookie
53241600	Cookie, butter or sugar cookie, with fruit and/or nuts
53242000	Cookie, sugar wafer
53242500	Cookie, toffee bar
53243000	Cookie, vanilla sandwich
53243050	Cookie, vanilla sandwich, reduced fat
53243100	Cookie, rich, all chocolate, with chocolate filling or chocolate chips
53244010	Cookie, butter or sugar, with chocolate icing or filling
53244020	Cookie, butter or sugar, iced, with icing other than chocolate
53245000	Cookie, vanilla waffle creme
53246000	Cookie, tea, Japanese
53247000	Cookie, vanilla wafer
53247050	Cookie, vanilla wafer, reduced fat
53247500	Cookie, vanilla with caramel, coconut, and chocolate coating
53248000	Cookie, whole wheat, dried fruit, nut
53251100	Cookie, rugelach
53260030	Cookie, dietetic, chocolate chip
53260150	Cookie, lemon wafer, lowfat
53260200	Cookie, dietetic, oatmeal with raisins
53260300	Cookie, dietetic, sandwich type
53260400	Cookie, dietetic, sugar or plain
53270100	Cookies, Puerto Rican (Mantecaditos polvorones)

Mixtures Containing Cookies
(Adjusted for cookie content of ~7.4 to 62%)
[Phytosterols] = ~0.12 to 1.04%

000109

13161520	Milk dessert sandwich bar, frozen, with low-calorie sweetener, made from lowfat milk
13241000	Pudding, with fruit and vanilla wafers
53104500	Cheesecake
53104520	Cheesecake, diet
53104550	Cheesecake with fruit
53104570	Cheesecake, diet, with fruit
53111500	Cake, graham cracker, without icing
53366000	Pie, yogurt, frozen
53371100	Pie, chiffon, with liqueur
53373000	Pie, black bottom
53382000	Pie, chocolate-marshmallow
53390100	Pie, tofu with fruit

Cookies (Brownies)

[Phytosterols] = 1.25%

53204000	Cookie, brownie, NS as to icing
53204010	Cookie, brownie, without icing
53204100	Cookie, brownie, with icing
53204500	Cookie, brownie, with cream cheese filling, without icing
53204600	Cookie, brownie, with peanut butter fudge icing
53204800	Cookie, brownie, diet, NS as to icing
53204830	Cookie, brownie, lowfat, with icing
53204840	Cookie, brownie, lowfat, without icing
53204850	Cookie, brownie, fat free, cholesterol free, with icing
53204860	Cookie, brownie, fat free, without icing
53205250	Cookie, butterscotch, brownie
53205760	Cookie, carob and honey brownie

Crackers

[Phytosterols] = 3.33%

54001000	Crackers, NS as to sweet or nonsweet
54101010	Cracker, animal
54102010	Crackers, graham
54102020	Crackers, graham, chocolate covered
54102050	Crackers, oatmeal
54102060	Crackers, Cuban
54102070	Crackers, Cuca
54102080	Crackers, graham, with raisins
54102100	Crackers, graham, lowfat
54102110	Crackers, graham, fat free
54102200	Crackers, graham, sandwich-type, with filling
54201010	Crackers, matzo, low sodium
54202010	Crackers, saltine, low sodium
54202050	Crackers, saltine, fat free, low sodium
54203010	Crackers, toast thins (rye, wheat, white flour), low sodium
54204010	Cracker, 100% whole wheat, low sodium
54205010	Cracker, snack, low sodium
54205030	Cracker, cheese, low sodium
54205100	Cracker, snack, lowfat, low sodium
54210010	Cracker, multigrain, salt free
54222000	Crispbread, rye, low sodium
54301000	Cracker, snack
54301100	Cracker, snack, reduced fat

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54301200	Cracker, snack, fat free
54304000	Cracker, cheese
54304100	Cracker, cheese, reduced fat
54304500	Cracker, high fiber, no added fat
54307000	Crackers, matzo
54308000	Crackers, milk
54309000	Crackers, oat
54313000	Crackers, oyster
54318500	Rice cake, cracker-type
54319000	Crackers, rice
54322000	Crispbread, rye, no added fat
54325000	Crackers, saltine
54325050	Crackers, saltine, whole wheat
54327950	Crackers, cylindrical, peanut-butter filled
54328000	Crackers, sandwich-type, NFS
54328100	Cracker, sandwich-type, peanut butter filled
54328110	Cracker, sandwich-type, peanut butter filled, reduced fat
54328200	Cracker, sandwich-type, cheese-filled
54334000	Crackers, toast thins (rye, pumpernickel, white flour)
54336000	Crackers, water biscuits
54337000	Cracker, 100% whole wheat
54337050	Cracker, 100% whole wheat, reduced fat
54337100	Crackers, whole wheat and bran
54338000	Crackers, wheat
54338100	Crackers, wheat, reduced fat
54339000	Crackers, corn

Mixtures Containing Crackers

(Adjusted for cracker content of ~1.3 to 6.9%)

[Phytosterols] = ~0.04 to 0.23%

24302010	Duck, pressed, Chinese
27148010	Stuffed chicken, drumstick or breast, Puerto Rican style (Muslo de pollo o pechuga rellena)
27220010	Meat loaf made with ham (not luncheon meat)
58157110	Spicy rice pudding, Puerto Rican style (arroz con dulce, arroz con especie)
75418220	Creamed christophine, Puerto Rican style (Chayote a la crema)

Muffins, Quick Breads, and Sweet Rolls

[Phytosterols] = 0.91%

51160000	Roll, sweet
51160010	Roll, sweet, toasted
51160100	Roll, sweet, cinnamon bun, no frosting
51160110	Roll, sweet, cinnamon bun, frosted
51161000	Roll, sweet, with fruit, no frosting
51161020	Roll, sweet, with fruit, frosted
51161030	Roll, sweet, with fruit, frosted, diet
51161050	Roll, sweet, with nuts, frosted
51161070	Roll, sweet, with fruit, frosted, fat free
51161100	Roll, sweet, with fruit and nuts, no frosting
51161150	Roll, sweet, with fruit and nuts, frosted
51161200	Roll, sweet, with nuts, no frosting
51161250	Roll, sweet, no topping, Mexican (Pan Dulce)
51161260	Roll, sweet, crumb topping, Mexican (Pan Dulce)
51161270	Roll, sweet, sugar topping, Mexican (Pan Dulce)

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51161280	Roll, sweet, with raisins and icing, Mexican (Pan Dulce)
52301000	Muffin, NFS
52302010	Muffin, fruit and/or nuts
52302020	Muffin, fruit and/or nut, low fat
52302100	Muffin, fruit, fat free, cholesterol free
52302500	Muffin, chocolate chip
52302600	Muffin, chocolate
52303010	Muffin, whole wheat
52303500	Muffin, wheat
52303550	Muffin, buckwheat
52304010	Muffin, wheat bran
52304040	Muffin, bran with fruit, lowfat
52304060	Muffin, bran with fruit, no fat, no cholesterol
52304100	Muffin, oatmeal
52304150	Muffin, oat bran
52304200	Muffin, oat bran with fruit and/or nuts
52306010	Muffin, plain
52306300	Muffin, cheese
52306500	Muffin, pumpkin
52306550	Muffin, zucchini
52306700	Muffin, carrot
52307020	Muffin, multigrain, with nuts
52307120	Muffin, multigrain, with fruit
52308010	Matzo, fritters
52401000	Bread, Boston Brown
52403000	Bread, nut
52404060	Bread, pumpkin
52405010	Bread, fruit, without nuts
52405100	Bread, fruit and nut
52406010	Bread, whole wheat, with nuts
52407000	Bread, zucchini
52408000	Bread, Irish soda
53610100	Coffee cake, crumb or quick-bread type
53610120	Coffee cake, crumb or quick-bread type, reduced fat, cholesterol free
53610170	Coffee cake, crumb or quick-bread type, with fruit
53610200	Coffee cake, crumb or quick-bread type, cheese-filled
53610250	Coffee cake, crumb or quick-bread type, custard filled

Mixtures Containing Pizza Crust

(Adjusted for pizza crust content of ~11 to 53.3%)

[Phytosterols] = ~0.10 to 0.48%

58106210	Pizza, cheese, NS as to type of crust
58106220	Pizza, cheese, thin crust
58106230	Pizza, cheese, thick crust
58106310	Pizza, cheese, with vegetables, NS as to type of crust
58106320	Pizza, cheese, with vegetables, thin crust
58106330	Pizza, cheese, with vegetables, thick crust
58106360	Pizza, cheese, with fruit, thick crust
58106510	Pizza with meat, NS as to type of crust
58106520	Pizza with meat, thin crust
58106530	Pizza with meat, thick crust
58106710	Pizza with meat and vegetables, NS as to type of crust
58106720	Pizza with meat and vegetables, thin crust
58106730	Pizza with meat and vegetables, thick crust
58106740	Pizza with meat and fruit, NS as to type of crust

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58106750	Pizza with meat and fruit, thin crust
58106760	Pizza with meat and fruit, thick crust
58106780	Pizza with meat and vegetables, prepared from frozen, lowfat, thin crust
58106810	Pizza with beans and vegetables, NS as to type of crust
58106820	Pizza with beans and vegetables, thin crust
58106830	Pizza with beans and vegetables, thick crust
58106900	Pizza with seafood, NS as to type of crust
58106910	Pizza with seafood, thin crust
58106920	Pizza with seafood, thick crust
58107000	Ground beef with tomato sauce on a pizza crust
58107030	Pizza, no cheese, NS as to type of crust
58107050	Pizza, no cheese, thin crust
58107100	Pizza, no cheese, thick crust
58107210	White pizza, NS as to type of crust
58107220	White pizza, thin crust
58107230	White pizza, thick crust

Beverages and Beverage Bases

Meal Replacement Drinks (ready-to-drink; non-milk-based)

[Phytosterols] = 0.21%

41440010	Meal replacement or supplement, liquid, soy-base, high protein
41440020	Ensure with fiber, liquid
41440050	Ensure Plus liquid nutrition
41440100	Meal replacement or supplement, liquid, soy-based

Breakfast Cereals

Instant and Regular Hot Cereals

[Phytosterols] = 0.21%

56200300	Cereal, cooked, NFS
56200350	Cereal, cooked, instant, NS as to grain
56200390	Barley, cooked, NS as to fat added in cooking
56200400	Barley, cooked, fat not added in cooking
56200490	Buckwheat groats, cooked, NS as to fat added in cooking
56200500	Buckwheat groats, cooked, fat not added in cooking
56200510	Buckwheat groats, cooked, fat added in cooking
56200990	Grits, cooked, corn or hominy, NS as to regular, quick or instant, NS as to fat added in cooking
56201000	Grits, cooked, corn or hominy, NS as to regular, quick, or instant, fat not added in cooking
56201010	Grits, cooked, corn or hominy, regular, fat not added in cooking
56201020	Grits, cooked, corn or hominy, regular, fat added in cooking
56201030	Grits, cooked, corn or hominy, regular, NS as to fat added in cooking
56201040	Grits, cooked, corn or hominy, NS as to regular, quick, or instant, fat added in cooking
56201060	Grits, cooked, corn or hominy, with cheese, NS as to regular, quick, or instant, NS as to fat added
56201061	Grits, cooked, corn or hominy, with cheese, NS as to regular, quick, or instant, fat not added in cooking
56201062	Grits, cooked, corn or hominy, with cheese, NS as to regular, quick, or instant, fat added in cooking
56201070	Grits, cooked, corn or hominy, with cheese, regular, NS as to fat added in cooking
56201071	Grits, cooked, corn or hominy, with cheese, regular, fat not added in cooking
56201072	Grits, cooked, corn or hominy, with cheese, regular, fat added in cooking
56201080	Grits, cooked, corn or hominy, with cheese, quick, NS as to fat added in cooking

56201081 Grits, cooked, corn or hominy, with cheese, quick, fat not added in cooking
 56201082 Grits, cooked, corn or hominy, with cheese, quick, fat added in cooking
 56201090 Grits, cooked, corn or hominy, with cheese, instant, NS as to fat added in cooking
 56201091 Grits, cooked, corn or hominy, with cheese, instant, fat not added in cooking
 56201092 Grits, cooked, corn or hominy, with cheese, instant, fat added in cooking
 56201110 Grits, cooked, corn or hominy, quick, fat not added in cooking
 56201120 Grits, cooked, corn or hominy, quick, fat added in cooking
 56201130 Grits, cooked, corn or hominy, quick, NS as to fat added in cooking
 56201210 Grits, cooked, corn or hominy, instant, fat not added in cooking
 56201220 Grits, cooked, corn or hominy, instant, fat added in cooking
 56201230 Grits, cooked, corn or hominy, instant, NS as to fat added in cooking
 56201240 Grits, cooked, flavored, corn or hominy, instant, fat not added in cooking
 56201250 Grits, cooked, flavored, corn or hominy, instant, fat added in cooking
 56201260 Grits, cooked, flavored, corn or hominy, instant, NS as to fat added in cooking
 56201300 Grits, cooked, corn or hominy, NS as to regular, quick, or instant, NS as to fat added in cooking, made with milk

 56201510 Cornmeal mush, made with water
 56201520 Cornmeal mush, fried
 56201530 Cornmeal mush, made with milk
 56201540 Cornmeal, made with evaporated milk and sugar, Puerto Rican Style (Harina de maize con leche)

 56201550 Cornmeal dumpling
 56201560 Cornmeal sticks, boiled
 56201600 Cornmeal, lime-treated, cooked (Masa harina)
 56201700 Cornstarch with milk, eaten as a cereal (2 tbsp cornstarch in 2-1/2 cups milk)
 56201990 Millet, cooked, NS as to fat added in cooking
 56202000 Millet, cooked, fat not added in cooking
 56202100 Millet, cooked, fat added in cooking
 56202960 Oatmeal, cooked, NS as to regular, quick or instant; NS as to fat added in cooking
 56202970 Oatmeal, cooked, quick (1 or 3 minutes), NS as to fat added in cooking
 56202980 Oatmeal, cooked, regular, NS as to fat added in cooking
 56203000 Oatmeal, cooked, NS as to regular, quick or instant, fat not added in cooking
 56203010 Oatmeal, cooked, regular, fat not added in cooking
 56203020 Oatmeal, cooked, quick (1 or 3 minutes), fat not added in cooking
 56203030 Oatmeal, cooked, instant, fat not added in cooking
 56203040 Oatmeal, cooked, NS as to regular, quick, or instant, fat added in cooking
 56203050 Oatmeal, cooked, regular, fat added in cooking
 56203060 Oatmeal, cooked, quick (1 or 3 minutes), fat added in cooking
 56203070 Oatmeal, cooked, instant, fat added in cooking
 56203080 Oatmeal, cooked, instant, NS as to fat added in cooking
 56203110 Oatmeal with maple flavor, cooked
 56203200 Oatmeal with fruit, cooked
 56203210 Oatmeal, NS as to regular, quick, or instant, made with milk, fat not added in cooking
 56203220 Oatmeal, NS as to regular, quick, or instant, made with milk, fat added in cooking
 56203230 Oatmeal, NS as to regular, quick, or instant, made with milk, NS as to fat added in cooking

 56203540 Oatmeal, made with evaporated milk and sugar, Puerto Rican style
 56203600 Oatmeal, multigrain, cooked, NS as to fat added in cooking
 56203610 Oatmeal, multigrain, cooked, fat not added in cooking
 56203620 Oatmeal, multigrain, cooked, fat added in cooking
 56206970 Wheat, cream of, cooked, quick, NS as to fat added in cooking
 56206980 Wheat, cream of, cooked, regular, NS as to fat added in cooking
 56206990 Wheat, cream of, cooked, NS as to regular, quick, or instant, NS as to fat added in cooking

 56207000 Wheat, cream of, cooked, NS as to regular, quick, or instant, fat not added in cooking
 56207010 Wheat, cream of, cooked, regular, fat not added in cooking

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56207020 Wheat, cream of, cooked, quick, fat not added in cooking
 56207030 Wheat, cream of, cooked, instant, fat not added in cooking
 56207040 Wheat, cream of, cooked, made with milk
 56207050 Wheat, cream of, cooked, made with milk and sugar, Puerto Rican style
 56207060 Wheat, cream of, cooked, instant, fat added in cooking
 56207070 Wheat, cream of, cooked, instant, NS as to fat added in cooking
 56207080 Wheat, cream of, cooked, NS as to regular, quick, or instant, fat added in cooking
 56207100 Wheat, rolled, cooked, fat not added in cooking
 56207140 Wheat, rolled, cooked, NS as to fat added in cooking
 56207190 Whole wheat cereal, cooked, NS as to fat added in cooking
 56207200 Whole wheat cereal, cooked, fat not added in cooking
 56207210 Whole wheat cereal, cooked, fat added in cooking
 56207220 Wheat, cream of, cooked, regular, fat added in cooking
 56207230 Wheat, cream of, cooked, quick, fat added in cooking
 56207290 Wheat hearts, cooked, NS as to fat added in cooking
 56207300 Whole wheat cereal, wheat and barley, cooked, fat not added in cooking
 56207310 Wheat hearts, cooked, fat not added in cooking
 56207330 Whole wheat cereal, wheat and barley, cooked, fat added in cooking
 56207340 Whole wheat cereal, wheat and barley, cooked, NS as to fat added in cooking
 56207350 Wheat cereal, chocolate flavored, cooked, made with milk
 56207360 Wheat cereal, chocolate flavored, cooked, fat not added in cooking
 56207370 Wheat cereal, chocolate flavored, cooked, NS as to fat added in cooking
 56208500 Oat bran cereal, cooked, fat not added in cooking
 56208510 Oat bran cereal, cooked, fat added in cooking
 56208520 Oat bran cereal, cooked, NS as to fat added in cooking
 56208530 Oat bran cereal, cooked, made with milk, fat not added in cooking
 56208540 Oat bran cereal, cooked, made with milk, fat added in cooking
 56208550 Oat bran cereal, cooked, made with milk, NS as to fat added in cooking
 56209000 Rye, cream of, cooked
 56210000 Nestum cereal

Ready-to-Eat Breakfast Cereals (biscuit-type)

[Phytosterols] = 0.91%

57103500 Apple Cinnamon Squares Mini-Wheats, Kellogg's (formerly Apple Cinnamon Squares)
 57106050 Banana Nut Crunch Cereal (Post)
 57106100 Basic 4
 57143000 Cracklin' Oat Bran
 57143500 Cranberry Almond Crunch, Post
 57207000 Bran Flakes, NFS (formerly 40% Bran Flakes, NFS)
 57208000 Complete Wheat Bran Flakes, Kellogg's (formerly 40% Bran Flakes)
 57209000 Natural Bran Flakes, Post (formerly called 40% Bran Flakes, Post)
 57214000 Frosted Mini-Wheats
 57229000 Granola, lowfat, Kellogg's
 57229500 Granola with Raisins, lowfat, Kellogg's
 57231200 Great Grains, Raisin, Date, and Pecan Whole Grain Cereal, Post
 57231250 Great Grains Double Pecan Whole Grain Cereal, Post
 57241200 Honey Nut Shredded Wheat, Post
 57244000 Just Right
 57245000 Just Right Fruit and Nut (formerly Just Right with raisins, dates, and nuts)
 57301510 Kashi GoLean
 57301511 Kashi GoLean Crunch
 57301520 Kashi Good Friends
 57307010 Maple Pecan Crunch Cereal, Post
 57308150 Mueslix cereal, NFS
 57308190 Muesli with raisins, dates, and almonds

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57308900 Natural Muesli, Jenny's Cuisine
 57309100 Nature Valley Granola, with fruit and nuts
 57316410 Apple Cinnamon Oatmeal Crisp (formerly Oatmeal Crisp with Apples)
 57316450 Oatmeal Crisp with Almonds
 57316500 Oatmeal Raisin Crisp
 57318000 100% Bran
 57319000 100% Natural Cereal, plain, Quaker
 57319500 Sun Country 100% Natural Granola, with Almonds
 57320000 100% Natural Cereal, w/apples and cinnamon
 57320500 100 % Natural Cereal, with oats, honey and raisins, Quaker
 57321500 100 % Natural Wholegrain Cereal with raisins, lowfat, Quaker
 57327500 Quaker Oatmeal Squares (formerly Quaker Oat Squares)
 57329000 Raisin bran, NFS
 57330000 Raisin Bran, Kellogg
 57330010 Raisin Bran Crunch, Kellogg's
 57331000 Raisin Bran, Post
 57332050 Raisin Bran, Total
 57332100 Raisin Nut Bran
 57335000 Raisins, Rice and Rye
 57335500 Raisin Squares Mini-Wheats, Kellogg's (formerly Raisin Squares)
 57341000 Shredded Wheat'N Bran
 57412000 Wheat germ, plain
 57413000 Wheat germ, with sugar and honey
 57417000 Shredded Wheat, 100%

Ready-to-Eat Breakfast Cereals (regular)

[Phytosterols] = 1.67%

57000000 Cereal, NFS
 57000050 Kashi cereal, NS as to ready to eat or cooked
 57000100 Oat cereal, NFS
 57100100 Cereal, ready-to-eat, NFS
 57100400 Character cereals, TV or movie, General Mills
 57100500 Character cereals, TV or movie, Kelloggs
 57101000 All-Bran
 57101020 All-Bran with Extra Fiber
 57102000 Alpen
 57103000 Alpha-Bits
 57103020 Alpha-bits with marshmallows
 57103050 Amaranth Flakes
 57103100 Apple Cinnamon Cheerios
 57104000 Apple Jacks
 57106000 Banana Frosted Flakes
 57106200 Batman
 57106250 Berry Berry Kix
 57106260 Berry Burst Cheerios
 57106300 Bigg Mixx
 57106500 Bill and Ted's Excellent Adventure
 57106530 Blueberry Morning, Post
 57107000 Booberry
 57110000 All-Bran Bran Buds, Kellogg's (formerly Bran Buds)
 57111000 Bran Chex
 57111300 Bran News
 57111500 Bran Muffin Crisp
 57112500 Breakfast with Barbie
 57113000 Buc Wheats

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57113300	Bunuelitos
57114000	C-3PO's
57115000	C.W. Post Plain
57116000	C.W. Post w/raisins
57116100	Cabbage Patch
57117000	Cap'n Crunch
57117500	Cap'n Crunch's Christmas Crunch
57118000	Cap'n Crunch's Choco Crunch
57119000	Cap'n Crunch's Crunch Berries
57120000	Cap'n Crunch's Peanut Butter Crunch
57123000	Cheerios
57124000	Chex cereal, NFS
57124200	Chocolate flavored frosted puffed corn cereal
57124500	Cinnamon Grahams, General Mills
57125000	Cinnamon Toast Crunch
57125900	Honey Nut Clusters (formerly called Clusters)
57126000	Cocoa Krispies
57126500	Cocoa Blasts, Quaker
57127000	Cocoa Pebbles
57128000	Cocoa Puffs
57128880	Common Sense Oat Bran, plain
57130000	Cookie-Crisp
57131000	Crunchy Corn Bran, Quaker
57132000	Corn Chex
57134000	Corn flakes, NFS
57134090	Corn flakes, low sodium
57135000	Corn flakes, Kellogg
57138000	Total Corn Flakes
57139000	Count Chocula
57141000	Cracker Jack
57144000	Crisp Crunch
57148000	Crispix
57148500	Crispy Brown Rice Cereal
57148600	Harmony cereal, General Mills
57151000	Crispy Rice
57152000	Crispy Wheats'n Raisins
57152100	Croonchy Stars
57201200	Dairy Crisp w/strawberries
57201700	Dino Pebbles
57201800	Disney cereals, Kellogg's
57202100	Donkey Kong
57203100	Donkey Kong Jr.
57204100	Donutz Cereal
57205100	Donutz Cereal, Chocolate
57205300	E.T. Cereal
57206000	Familia
57206700	Fiber One
57206800	Fiber 7 Flakes, Health Valley
57211000	Frankenberry
57212100	French Toast Crunch, General Mills
57213000	Froot Loops
57213850	Frosted Cheerios
57213900	Frosted Chex
57214100	Frosted Wheat Bites
57215000	Frosty O's
57216000	Frosted rice, NFS

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57218000	Frosted Rice Krispies
57219000	Fruit & Fibre (fiber), NFS
57221000	Fruit & Fibre (fiber) with dates, raisins, and walnuts
57221250	Fruit & Fibre (fiber) harvest medley
57221500	Fruit & Fibre (fiber) tropical fruit w/oat clusters
57221650	Fruit Harvest cereal, Kellogg's
57221700	Fruit Rings, NFS
57221800	Fruit Whirls
57222000	Fruitful Bran
57223000	Fruity Pebbles
57223800	G.I. Joe Action Stars
57224000	Golden Grahams
57230000	Grape-Nuts
57231000	Grape-Nut Flakes
57231500	Gremlins
57232000	Halfies
57235500	Heartwise, plain
57235600	Heartwise, with fruit nuggets
57237100	Honey Bunches of Oats
57237300	Honey Bunches of Oats with Almonds, Post
57238000	Honeycomb, plain
57239000	Honeycomb, strawberry
57239100	Honey Crunch Corn Flakes, Kellogg's
57240100	Honey Nut Chex
57241000	Honey Nut Cheerios
57243000	Honey Smacks
57243500	Horizon
57243600	Hot Wheels
57243900	Jetsons
57301100	Kaboom
57301530	Kashi Heart to Heart
57301700	Kenmei Rice Bran
57302100	King Vitaman
57303100	Kix
57304100	Life (plain and cinnamon)
57305100	Lucky Charms
57305150	Frosted oat cereal with marshmallows
57305170	Malt-O-Meal Coco-Roos
57305180	Malt-O-Meal Corn Bursts
57305200	Malt-O-Meal Crispy Rice
57305210	Malt-O-Meal Frosted Flakes
57305500	Malt-O-Meal Honey and Nut Toasty O's
57305600	Malt-O-Meal Marshmallow Mateys
57306500	Malt-O-Meal Golden Puffs (formerly Sugar Puffs)
57306700	Malt-O-Meal Toasted Oat Cereal
57306800	Malt-O-meal Tootie Fruities
57307150	Marshmallow Safari, Quaker
57308000	Morning Funnies
57308100	Most
57308250	Mr. T
57308300	Multi Bran Chex
57308400	Multi Grain Cheerios
57311600	Nintendo
57311700	Nu System Cuisine Toasted Grain Circles
57311790	Nut and Honey crunch biscuits
57311900	Nutrific Oatmeal Flakes

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57313000	Nutri-Grain Corn
57313900	Nutri-Grain Raisin Bran
57316200	Nutty Nuggets, Ralston Purina
57316300	Oat Bran Flakes, Health Valley
57316350	Oat Bran Options
57316360	Oatbake, Honey Bran
57316370	Oatbake, Raisin Nut
57316710	Oh's, Honey Graham
57316750	Oh's, Fruitangy, Quaker
57316800	O.J.'s
57321700	Optimum, Nature's Path
57321800	Optimum Slim, Nature's Path
57322500	Oreo O's cereal, Post
57323000	Sweet Crunch, Quaker (formerly called Popeye)
57323050	Sweet Puffs, Quaker
57324000	Peanut Butter Toast Crunch, General Mills
57325000	Product 19
57327450	Quaker Oat Bran Cereal
57327600	Quaker Rice Bran
57328000	Quisp
57328500	Rainbow Brite
57335550	Reese's Peanut Butter Puffs cereal
57336000	Rice Chex
57337000	Rice Flakes, NFS
57339000	Rice Krispies
57339500	Rice Krispies Treats Cereal (Kellogg's)
57340500	Rocky Road
57340700	Scooby Doo Cinnamon Marshmallow Cereal, Kellogg's
57340900	S.W. Graham
57341200	Smart Start, Kellogg's
57342000	Slimer! & Ghostbusters
57343000	Smurf Magic Berries
57344000	Special K
57344010	Special K Red Berries
57344015	Special K Fruit & Yogurt
57344020	Special K Vanilla Almond
57345000	Strawberry Krispies
57346000	Strawberry Shortcake
57346500	Toasted Oatmeal, Honey Nut (Quaker)
57347000	Corn Pops
57347500	Strawberry Squares Mini-Wheats, Kellogg's (formerly Strawberry Squares)
57348000	Frosted corn flakes, NFS
57349000	Frosted Flakes, Kellogg
57349020	Frosted Flakes 1/3 Less Sugar, Kellogg's
57355000	Golden Crisp (Formerly called Super Golden Crisp)
57401100	Toasted oat cereal
57402250	Teddy Grahams Breakfast Bears
57402500	Teenage Mutant Ninja Turtles
57402750	Tiny Toon Adventures
57403100	Toasties, Post
57404100	Malt-O-Meal Toasty O's
57404200	Malt-O-Meal Apple and Cinnamon Toasty O's
57406100	Total
57407100	Trix
57408100	Uncle Sam's Hi Fiber Cereal
57409100	Waffle Crisp, Post

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57410000 Weetabix Whole Wheat Cereal
57411000 Wheat Chex
57415000 Wheat'n Raisin Chex
57418000 Wheaties
57419000 Yogurt Burst Cheerios

Ready-to-Eat Breakfast Cereals (puffed)

[Phytosterols] = 3.33%

57137000 Corn Puffs
57301500 Kashi, Puffed
57306100 Malt-O-Meal Puffed Rice
57306120 Malt-O-Meal Puffed Wheat
57307500 Millet, puffed
57340000 Rice, puffed
57416000 Wheat, puffed, plain
57416010 Wheat, puffed, presweetened with sugar

Cheeses

Cottage Cheese

[Phytosterols] = 0.45%

14201200 Cottage cheese, farmer's
14200100 Cheese, cottage, NFS
14201010 Cheese, cottage, creamed, large or small curd
14202010 Cheese, cottage, with fruit
14202020 Cheese, cottage, with vegetables
14203010 Cheese, cottage, dry curd
14203020 Cheese, cottage, salted, dry curd
14203510 Puerto Rican white cheese (queso del pais, blanco)
14204010 Cheese, cottage, lowfat (1-2% fat)
14204020 Cheese, cottage, lowfat, with fruit
14204030 Cheese, cottage, lowfat, with vegetables
14206010 Cheese, cottage, lowfat, low sodium
14207010 Cheese, cottage, lowfat, lactose reduced

Mixtures Containing Cottage Cheese

(Adjusted for cottage cheese content of ~12 to 66%)

[Phytosterols] = ~0.05 to 0.30%

14610200 Cheese, cottage cheese, with gelatin dessert
14610210 Cheese, cottage cheese, with gelatin dessert and fruit
14610250 Cheese, cottage cheese, with gelatin dessert and vegetables
53104500 Cheesecake
53104550 Cheesecake with fruit
53400200 Blintz, cheese-filled
53400300 Blintz, fruit-filled
53511500 Danish pastry, with cheese, fat free, cholesterol free
58122320 Knish, cheese

Grated Cheese (such as parmesan or romano)

[Phytosterols] = 10%

14108010 Cheese, Parmesan, dry grated
14108015 Cheese, Parmesan, dry grated, reduced fat

000120

14108020 Cheese, Parmesan, hard
14108050 Cheese, Parmesan, low sodium
14108060 Parmesan cheese topping, fat free

Mixtures Containing Grated Cheese (such as parmesan or romano)
(Adjusted for grated cheese content of ~0.10 to 9.4%)
[Phytosterols] = ~0.001 to 0.94%

14610520 Cheese with nuts
27135020 Veal scallopini
27135110 Veal parmigiana
27146300 Chicken or turkey parmigiana
27443150 Chicken or turkey divan
51184030 Bread stick, soft, prepared with garlic and parmesan cheese
54402500 Salty snacks, wheat- and corn-based chips
58106210 Pizza, cheese, NS as to type of crust
58106220 Pizza, cheese, thin crust
58106230 Pizza, cheese, thick crust
58106310 Pizza, cheese, with vegetables, NS as to type of crust
58106320 Pizza, cheese, with vegetables, thin crust
58106330 Pizza, cheese, with vegetables, thick crust
58106360 Pizza, cheese, with fruit, thick crust
58106510 Pizza with meat, NS as to type of crust
58106520 Pizza with meat, thin crust
58106530 Pizza with meat, thick crust
58106710 Pizza with meat and vegetables, NS as to type of crust
58106720 Pizza with meat and vegetables, thin crust
58106730 Pizza with meat and vegetables, thick crust
58106740 Pizza with meat and fruit, NS as to type of crust
58106750 Pizza with meat and fruit, thin crust
58106760 Pizza with meat and fruit, thick crust
58107210 White pizza, NS as to type of crust
58107220 White pizza, thin crust
58107230 White pizza, thick crust
58108000 Calzone, with cheese, meatless
58108050 Pizza rolls
58109000 Italian pie, meatless
58122210 Gnocchi, cheese
58127210 Croissant sandwich, filled with ham and cheese
58134610 Tortellini, meat-filled, with tomato sauce
58134630 Tortellini, cheese-filled, meatless, with vegetables and vinaigrette dressing
58134650 Tortellini, meat-filled, no sauce
58134710 Tortellini, spinach-filled, with tomato sauce
58134720 Tortellini, spinach-filled, no sauce
58145140 Macaroni or noodles with cheese and tomato
58147100 Pasta with pesto sauce
58147330 Macaroni, creamed, with cheese
58155210 Stuffed rice with chicken, Dominican style (Arroz relleno Dominicano)
58155610 Rice meal fritter, Puerto Rican style (Almojabana)
58156510 Soupy rice from Puerto Rican style Asopao de Pollo (chicken parts reported separately)
71201300 Potato based snacks, reduced fat, low sodium, all flavors
72116140 Caesar salad (with romaine)
75400500 Artichokes, stuffed
75412060 Eggplant parmesan casserole, regular
75412070 Eggplant with cheese and tomato sauce
75414020 Mushrooms, stuffed

000121

77250710 Tannier fritters, Puerto Rican style (Frituras de yautia)
77316600 Eggplant and meat casserole

Natural and Processed Cheese (including cream cheese and spreads)

[Phytosterols] = 1.67%

14010000 Cheese, NFS
14010100 Cheese, Cheddar or American type, NS as to natural or processed
14100100 Cheese, natural, NFS
14101010 Cheese, Blue or Roquefort
14102010 Cheese, Brick
14102110 Cheese, Brick, with salami
14103010 Cheese, Camembert
14103020 Cheese, Brie
14104010 Cheese, natural, Cheddar or American type
14104015 Cheese, natural, Cheddar or American type, reduced fat
14104020 Cheese, Cheddar or American type, dry, grated
14104200 Cheese, Colby
14104250 Cheese, Colby Jack
14104400 Cheese, Feta
14104600 Cheese, Fontina
14104700 Cheese, goat
14105010 Cheese, Gouda or Edam
14105200 Cheese, Gruyere
14106010 Cheese, Limburger
14106200 Cheese, Monterey
14106500 Cheese, Monterey, lowfat
14107010 Cheese, Mozzarella, NFS
14107020 Cheese, Mozzarella, whole milk
14107030 Cheese, Mozzarella, part skim
14107040 Cheese, Mozzarella, low sodium
14107060 Cheese, Mozzarella, nonfat or fat free
14107200 Cheese, Muenster
14107250 Cheese, Muenster, lowfat
14108200 Cheese, Port du Salut
14108400 Cheese, Provolone
14108420 Cheese, provolone, reduced fat
14109010 Cheese, Swiss
14109020 Cheese, Swiss, low sodium
14109030 Cheese, Swiss, lowfat
14110010 Cheese, Cheddar or Colby, low sodium
14110030 Cheese, Cheddar or Colby, lowfat
14120010 Cheese, Mexican blend
14120020 Cheese, Mexican blend, reduced fat
14131000 Queso Anejo (aged Mexican cheese)
14131500 Queso Asadero
14132000 Queso Chihuahua
14133000 Queso Fresco
14201500 Cheese, Ricotta
14301010 Cheese, cream
14303010 Cheese, cream, lowfat
14410100 Cheese, processed, American and Swiss blends
14410200 Cheese, processed, American or Cheddar type
14410210 Cheese, processed, American or Cheddar type, low sodium
14410300 Cheese, processed, American or Cheddar type, lowfat
14410330 Cheese, processed cheese product, American or Cheddar type, reduced fat

000122

14410350	Cheese, processed, American or Cheddar type, nonfat or fat free
14410380	Cheese, processed cream cheese product, nonfat or fat free
14410400	Cheese, processed, Swiss
14410420	Cheese, processed, Swiss, lowfat
14410500	Cheese, processed cheese food
14410600	Cheese, processed, with vegetables
14410620	Cheese, processed, with wine
14420000	Cheese spread, NFS
14420100	Cheese spread, American or Cheddar cheese base
14420160	Cheese spread, Swiss cheese base
14420200	Cheese spread, cream cheese or Neufchatel base
14420210	Cheese spread, cream cheese, light or lite
14420300	Cheese spread, pressurized can

Mixtures Containing Natural and Processed Cheese (including cream cheese and spreads)
 (Adjusted for natural and processed cheese content of ~30 to 83%)
 [Phytosterols] = ~0.51 to 1.39%

14610520	Cheese with nuts
14620100	Dip, cream cheese base
14620120	Shrimp dip, cream cheese base
14630100	Cheese fondue
14660200	Cheese, nuggets or pieces, breaded, baked, or fried
27515040	Steak and cheese submarine sandwich, plain, on roll
27520120	Bacon and cheese sandwich, with spread
58111200	Puffs, fried, crab meat and cream cheese filled
58134640	Tortellini, cheese-filled, meatless, with vinaigrette dressing

Mixtures Containing Natural and Processed Cheese (including cream cheese and spreads)
 (Adjusted for natural and processed cheese content of ~10 to 28%)
 [Phytosterols] = ~0.17 to 0.47%

14630200	Cheese souffle
14630300	Welsh rarebit
14640200	Cheese sandwich, hoagie
25220490	Bologna, with cheese
27135110	Veal parmigiana
27146300	Chicken or turkey parmigiana
27320030	Ham or pork, noodles and vegetables (excluding carrots, broccoli, and dark-green leafy), cheese sauce (mixture)
27416300	Beef taco filling: beef, cheese, tomato, taco sauce
27450090	Tuna salad with cheese
27510270	Double cheeseburger (2 patties), plain, on bun
27510340	Double cheeseburger (2 patties), with mayonnaise or salad dressing and tomatoes, on bun
27510380	Triple cheeseburger (3 patties, 1/4 lb meat each), with mayonnaise or salad dressing and tomatoes, on bun
27510710	Pizzaburger (hamburger, cheese, sauce) on 1/2 bun
27510950	Reuben sandwich (corned beef sandwich with sauerkraut and cheese), with spread
27515020	Steak and cheese submarine sandwich, on roll, with lettuce and tomato
27515030	Steak and cheese sandwich, plain, on roll
27520320	Ham and cheese sandwich, with lettuce and spread
27520350	Ham and cheese sandwich, with spread, grilled
27560120	Bologna and cheese sandwich, with spread
27560330	Frankfurter or hot dog, with cheese, plain, on bun
27560410	Puerto Rican sandwich (Sandwich criollo)

000123

32105010 Egg omelet or scrambled egg, with cheese
 32105080 Egg omelet or scrambled egg, with cheese and ham or bacon
 32105085 Egg omelet or scrambled egg, with cheese, ham or bacon, and tomatoes
 52104100 Biscuit, cheese
 53104500 Cheesecake
 53104550 Cheesecake with fruit
 53104600 Cheesecake, chocolate
 53116650 Cake, Quezadilla, El Salvadorian style
 53340500 Pie, cherry, made with cream cheese and sour cream
 53452450 Cheese pastry puffs
 58100120 Burrito with beef, beans, and cheese
 58100220 Burrito with chicken, beans, and cheese
 58100530 Enchilada with beef and cheese, no beans
 58100560 Enchilada with ham and cheese, no beans
 58100630 Enchilada with chicken and cheese, no beans, tomato- based sauce
 58100720 Enchilada with beans and cheese, meatless
 58100800 Enchilada with cheese, meatless, no beans
 58104080 Nachos with beef, beans, cheese, and sour cream
 58104090 Nachos with cheese and sour cream
 58104120 Nachos with beans and cheese
 58104130 Nachos with beef, beans, and cheese
 58104140 Nachos with beef and cheese
 58104250 Nachos with chicken or turkey and cheese
 58104310 Chalupa with beans, chicken, cheese, lettuce and tomato
 58104510 Chimichanga with beef, cheese, lettuce and tomato
 58104520 Chimichanga with beans and cheese, meatless, with lettuce and tomato
 58104710 Quesadilla with cheese, meatless
 58104730 Quesadilla with meat and cheese
 58106210 Pizza, cheese, NS as to type of crust
 58106310 Pizza, cheese, with vegetables, NS as to type of crust
 58106510 Pizza with meat, NS as to type of crust
 58106520 Pizza with meat, thin crust
 58106710 Pizza with meat and vegetables, NS as to type of crust
 58106720 Pizza with meat and vegetables, thin crust
 58106740 Pizza with meat and fruit, NS as to type of crust
 58106750 Pizza with meat and fruit, thin crust
 58106900 Pizza with seafood, NS as to type of crust
 58106910 Pizza with seafood, thin crust
 58108030 Panzerotti, with meat, vegetables, and cheese
 58108040 Panzerotti, with vegetables and cheese
 58115210 Taco with crab meat, Puerto Rican style (Taco de jueye)
 58116310 Cheese turnover, Puerto Rican style (Pastelillo de queso; Empanadilla)
 58124210 Pastry, cheese-filled
 58124250 Spanakopitta
 58130020 Lasagna with meat and spinach
 58130140 Lasagna with chicken or turkey
 58130310 Lasagna, meatless
 58130320 Lasagna, meatless, with spinach
 58130610 Lasagna with meat, whole wheat noodles
 58130810 Lasagna, meatless, whole wheat noodles
 58130910 Lasagna with meat, spinach noodles
 58130950 Lasagna, meatless, spinach noodles
 58134620 Tortellini, cheese-filled, meatless, with tomato sauce
 58134660 Tortellini, cheese-filled, with cream sauce
 58145110 Macaroni or noodles with cheese
 58145120 Macaroni or noodles with cheese and tuna

000124

58145150 Macaroni or noodles with cheese and pork or ham
 58145160 Macaroni or noodles with cheese and frankfurters or hot dogs
 58145170 Macaroni and cheese with egg
 58146120 Pasta with cheese and meat sauce
 58155610 Rice meal fritter, Puerto Rican style (Almojabana)
 58162090 Stuffed pepper, with meat
 63413020 Pineapple salad with cream cheese
 71410500 White potato skins, with adhering flesh, fried, with cheese
 71411000 White potato skins, with adhering flesh, fried, with cheese and bacon
 72201230 Broccoli, cooked, NS as to form, with cheese sauce
 72201231 Broccoli, cooked, from fresh, with cheese sauce
 72201232 Broccoli, cooked, from frozen, with cheese sauce
 73102250 Carrots, cooked, NS as to form, with cheese sauce
 73102251 Carrots, cooked, from fresh, with cheese sauce
 73102252 Carrots, cooked, from frozen, with cheese sauce
 73102253 Carrots, cooked, from canned, with cheese sauce
 75140500 Broccoli salad with cauliflower, cheese, bacon bits, and dressing
 75141500 Celery, stuffed with cheese
 75146000 Greek Salad
 75401010 Asparagus, NS as to form, creamed or with cheese sauce
 75401011 Asparagus, from fresh, creamed or with cheese sauce
 75401012 Asparagus, from frozen, creamed or with cheese sauce
 75402010 Beans, lima, immature, NS as to form, creamed or with cheese sauce
 75402011 Beans, lima, immature, from fresh, creamed or with cheese sauce
 75402012 Beans, lima, immature, from frozen, creamed or with cheese sauce
 75402013 Beans, lima, immature, from canned, creamed or with cheese sauce
 75403010 Beans, string, green, NS as to form, creamed or with cheese sauce
 75403011 Beans, string, green, from fresh, creamed or with cheese sauce
 75403012 Beans, string, green, from frozen, creamed or with cheese sauce
 75403013 Beans, string, green, from canned, creamed or with cheese sauce
 75404010 Beans, string, yellow, NS as to form, creamed or with cheese sauce
 75404011 Beans, string, yellow, from fresh, creamed or with cheese sauce
 75404012 Beans, string, yellow, from frozen, creamed or with cheese sauce
 75404013 Beans, string, yellow, from canned, creamed or with cheese sauce
 75409011 Cauliflower, from fresh, creamed
 75409012 Cauliflower, from frozen, creamed
 75409013 Cauliflower, from canned, creamed
 75410500 Chiles rellenos, cheese-filled (stuffed chili peppers)
 75412060 Eggplant parmesan casserole, regular
 75412070 Eggplant with cheese and tomato sauce
 75416600 Pea salad with cheese
 91511050 Gelatin dessert, dietetic, with cream cheese, sweetened with low calorie sweetener

Mixtures Containing Natural and Processed Cheese (including cream cheese and spreads)
 (Adjusted for natural and processed cheese content of ~0.80 to <10%)
 [Phytosterols] = ~0.013 to <0.17%

27111430 Chili con carne, NS as to beans, with cheese
 27111440 Chili con carne with beans and cheese
 27135150 Veal cordon bleu
 27146250 Chicken or turkey cordon bleu
 27148010 Stuffed chicken, drumstick or breast, Puerto Rican style (Muslo de pollo o pechuga rellena)
 27212050 Beef and macaroni with cheese sauce (mixture)
 27220190 Sausage and noodles with cream or white sauce (mixture)
 27242350 Chicken or turkey tetrazzini

000125

27250110 Scallops and noodles with cheese sauce (mixture)
 27250130 Shrimp and noodles with cheese sauce (mixture)
 27313310 Beef, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy),
 (mushroom) soup (mixture)
 27313320 Beef, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy),
 (mushroom) soup (mixture)
 27320070 Ham or pork, noodles, and vegetables (including carrots, broccoli, and/or dark-green
 leafy), tomato-based sauce (mixture)
 27320120 Sausage, potatoes, and vegetables (including carrots, broccoli, and/or dark-green leafy),
 gravy (mixture)
 27320130 Sausage, potatoes, and vegetables (excluding carrots, broccoli, and dark-green leafy),
 gravy (mixture)
 27343950 Chicken or turkey, noodles, and vegetables (including carrots, broccoli, and/or dark-green
 leafy), cheese sauce (mixture)
 27343960 Chicken or turkey, noodles, and vegetables (excluding carrots, broccoli, and dark-green
 leafy), cheese sauce (mixture)
 27443150 Chicken or turkey divan
 27460490 Julienne salad (meat, cheese, eggs, vegetables), no dressing
 27460510 Antipasto with ham, fish, cheese, vegetables
 27510420 Taco burger, on bun
 27510720 Pizzaburger (hamburger, cheese, sauce) on whole bun
 32105150 Egg omelet or scrambled egg, with chili, cheese, tomatoes, and beans
 51154600 Roll, cheese
 53104000 Cake, carrot, NS as to icing
 53104260 Cake, carrot, with icing
 53124100 Cake, zucchini, NS as to icing
 53124120 Cake, zucchini, with icing
 58101720 Taco or tostada with beans and cheese, meatless, with lettuce, tomato and salsa
 58101820 Mexican casserole made with ground beef, beans, tomato sauce, cheese, taco
 seasonings, and corn chips
 58101910 Taco or tostada salad with beef and cheese, corn chips
 58101930 Taco or tostada salad with beef and cheese, fried flour tortilla
 58101940 Taco or tostada salad, meatless, with cheese, fried flour tortilla
 58104260 Chalupa with beans, cheese, lettuce and tomato
 58106760 Pizza with meat and fruit, thick crust
 58107210 White pizza, NS as to type of crust
 58107220 White pizza, thin crust
 58117110 Cornmeal fritter, Puerto Rican style (Arepá; P.R. arepita)
 58117210 Cornmeal stick, Puerto Rican style (Surullo)
 58120110 Crepes, filled with meat, fish, or poultry, with sauce
 58125180 Cheese quiche, meatless
 58127150 Vegetables and cheese in pastry
 58130013 Lasagna with meat, canned
 58134623 Tortellini, cheese-filled, meatless, with tomato sauce, canned
 58134630 Tortellini, cheese-filled, meatless, with vegetables and vinaigrette dressing
 58145130 Macaroni or noodles with cheese and beef
 58148180 Macaroni salad with cheese
 58155320 Seafood paella, Puerto Rican style (Paella a la marinera)
 58161110 Rice casserole with cheese
 58162120 Stuffed pepper, with rice, meatless
 72125250 Spinach, cooked, NS as to form, with cheese sauce
 72125251 Spinach, cooked, from fresh, with cheese sauce
 72125252 Spinach, cooked, from frozen, with cheese sauce
 72125253 Spinach, cooked, from canned, with cheese sauce
 72202020 Broccoli casserole (broccoli, rice, cheese, and mushroom sauce)
 73305010 Squash, winter, baked with cheese

000126

75145000	Seven-layer salad (lettuce salad made with a combination of onion, celery, green pepper, peas, mayonnaise, cheese, eggs, and/or bacon)
75148000	Cobb salad with dressing
75401013	Asparagus, from canned, creamed or with cheese sauce
75409020	Cauliflower, batter-dipped, fried
75410530	Chiles rellenos, filled with meat and cheese (stuffed chili peppers)
75418020	Squash, summer, casserole with tomato and cheese
75418040	Squash, summer, casserole, with cheese sauce
91501050	Gelatin dessert with cream cheese
91501080	Gelatin dessert with fruit and cream cheese
91511080	Gelatin dessert, dietetic, with fruit and cream cheese, sweetened with low calorie sweetener

Coffee and Tea

Ready-to-Drink Tea Beverages

[Phytosterols] = 0.21%

92301000	Tea, NS as to type, unsweetened
92301060	Tea, NS as to type, presweetened with sugar
92301080	Tea, NS as to type, presweetened with low calorie sweetener
92301100	Tea, NS as to type, decaffeinated, unsweetened
92301130	Tea, NS as to type, presweetened, NS as to sweetener
92301160	Tea, NS as to type, decaffeinated, presweetened with sugar
92301180	Tea, NS as to type, decaffeinated, presweetened with low calorie sweetener
92301190	Tea, NS as to type, decaffeinated, presweetened, NS as to sweetener
92304000	Tea, made from frozen concentrate, unsweetened
92304700	Tea, made from frozen concentrate, decaffeinated, presweetened with low calorie sweetener
92305000	Tea, made from powdered instant, presweetened, NS as to sweetener
92305010	Tea, made from powdered instant, unsweetened
92305040	Tea, made from powdered instant, presweetened with sugar
92305050	Tea, made from powdered instant, decaffeinated, presweetened with sugar
92305090	Tea, made from powdered instant, presweetened with low calorie sweetener
92305110	Tea, made from powdered instant, decaffeinated, presweetened with low calorie sweetener
92305180	Tea, made from powdered instant, decaffeinated, unsweetened
92305800	Tea, made from powdered instant, decaffeinated, presweetened, NS as to sweetener
92306000	Tea, herbal
92306020	Tea, herbal, presweetened with sugar
92306030	Tea, herbal, presweetened with low calorie sweetener
92306040	Tea, herbal, presweetened, NS as to sweetener
92306700	Tea, chamomile

Powdered Ready-to-Drink Beverages

(Adjusted for not being reconstituted, assuming preparation of 16 g of powder to 240 mL of water)

[Phytosterols] = 3.125%

92307000	Tea, powdered instant, unsweetened, dry
92307400	Tea, powdered instant, sweetened, NS as to sweetener, dry

Specialty Coffee Drinks (e.g. lattes, cappuccinos)

[Phytosterols] = 0.21%

92101900	Coffee, latte
92101910	Coffee, latte, decaffeinated

92101920	Frappuccino, regular
92101930	Frappuccino, decaffeinated
92101950	Coffee, mocha
92121020	Coffee and cocoa (mocha), made from powdered instant mix, with whitener, presweetened
92121030	Coffee and cocoa (mocha), made from powdered instant mix, with whitener and low calorie sweetener
92121050	Coffee and cocoa (mocha), made from powdered instant mix, with whitener and low calorie sweetener, decaffeinated
92161000	Cappuccino
92162000	Cappuccino, decaffeinated

Powdered Specialty Coffee Drinks (e.g. lattes, cappuccinos)

(Adjusted for not being reconstituted, assuming preparation of 42 g of powder to 240 mL of water)
 [Phytosterols] = 1.2%

92192000	Coffee and cocoa (mocha) mix, dry instant powder with whitener, presweetened
92192030	Coffee and cocoa (mocha) mix, dry instant powder with whitener and low calorie sweetener
92192040	Coffee and cocoa (mocha) mix, dry instant powder, with whitener and low calorie sweetener, decaffeinated

Dairy Product Analogs

Soy Beverages and Soy-Based Drinks

[Phytosterols] = 0.42%

11320000	Milk, soy, ready-to-drink, not baby's
11321000	Milk, soy, ready-to-drink, not baby's, chocolate

Fats and Oils

Margarine

[Phytosterols] = 3.33%

81100000	Table fat, NFS
81102000	Margarine, NFS
81102010	Margarine, stick, salted
81102020	Margarine, tub, salted
81102030	Margarine, liquid, salted
81103020	Margarine, whipped, tub, salted
81103030	Margarine, stick, unsalted
81103040	Margarine-like spread, stick, salted
81103041	Margarine-like spread, made with yogurt, stick, salted
81103060	Margarine, tub, unsalted
81103070	Margarine, whipped, tub, unsalted
81103080	Margarine-like spread, tub, salted
81103090	Margarine-like spread, liquid, salted
81103100	Margarine-like spread, stick, unsalted
81103120	Margarine-like spread, tub, unsalted
81103130	Margarine-like spread, whipped, tub, salted
81103140	Margarine-like spread, tub, sweetened
81104010	Margarine-like spread, reduced calorie, about 40% fat, tub, salted
81104011	Margarine-like spread, reduced calorie, about 40% fat, made with yogurt, tub, salted
81104020	Margarine-like spread, reduced calorie, about 40% fat, stick, salted
81104050	Margarine-like spread, reduced calorie, about 20% fat, tub, salted

000128

81104070 Margarine-like spread, reduced calorie, about 20% fat, tub, unsalted
 81104100 Margarine-like spread, fat free, tub, salted
 81104110 Margarine-like spread, fat free, liquid, salted
 81104500 Vegetable oil-butter spread, stick, salted
 81105010 Butter-margarine blend, stick, salted
 81105020 Butter-margarine blend, tub, salted
 81105030 Butter-margarine blend, stick, unsalted
 81105500 Butter-vegetable oil blend

Mixtures Containing Margarine

(Adjusted for margarine content of ~20 to 71%)

[Phytosterols] = ~0.70 to 2.37%

27211500 Beef and potatoes with cheese sauce (mixture)
 27220520 Ham or pork and potatoes with cheese sauce (mixture)
 53387000 Pie, Toll house chocolate chip
 58121610 Dumpling, potato- or cheese-filled
 58124500 Pastry, filled with potatoes and peas, fried
 71503010 White potato, patty

Mixtures Containing Margarine

(Adjusted for margarine content of ~10 to 19%)

[Phytosterols] = ~0.33 to 0.63%

26133130 Porgy, breaded or battered, baked
 27116100 Beef curry
 27135020 Veal scallopini
 27151050 Shrimp in garlic sauce, Puerto Rican style (mixture) (Camarones al ajillo)
 27360050 Meat pie, NFS
 27560410 Puerto Rican sandwich (Sandwich criollo)
 32104100 Egg, scrambled, made from dry eggs
 33102010 Scrambled egg, made from powdered mixture
 51167000 Brioche
 53109300 Cake, Dobos Torte (non-chocolate layer cake with chocolate filling and icing)
 53111500 Cake, graham cracker, without icing
 53116000 Cake, pound, without icing
 53116270 Cake, pound, chocolate
 53116650 Cake, Quezadilla, El Salvadorian style
 53116750 Cake, soy flour, without icing
 53415300 Crisp, blueberry
 53420310 Wheat flour fritter, without syrup
 53452450 Cheese pastry puffs
 58122310 Knish, potato
 58122320 Knish, cheese
 58122330 Knish, meat
 58124210 Pastry, cheese-filled
 58128210 Dressing with oysters
 63107090 Banana, red, fried
 63107210 Banana, ripe, fried
 91305010 Icing, chocolate
 91305020 Icing, white

Mixtures Containing Margarine

(Adjusted for margarine content of ~0.2 to 10%)

[Phytosterols] = ~0.006 to 0.33%

000129

13170000 Baked Alaska
 13210110 Pudding, bread
 13210150 Puerto Rican bread pudding made with evaporated milk and rum (Budin de pan)
 13210750 Pudding, pumpkin
 13210810 Puerto Rican pumpkin pudding (Flan de calabaza)
 14630200 Cheese souffle
 14630300 Welsh rarebit
 14640000 Cheese sandwich
 14640100 Cheese sandwich, grilled
 26100120 Fish, NS as to type, baked or broiled
 26100130 Fish, NS as to type, breaded or battered, baked
 26103110 Barracuda, cooked, NS as to cooking method
 26103120 Barracuda, baked or broiled
 26105120 Carp, baked or broiled
 26107120 Catfish, baked or broiled
 26107130 Catfish, breaded or battered, baked
 26109120 Cod, baked or broiled
 26109130 Cod, breaded or battered, baked
 26111120 Croaker, baked or broiled
 26111130 Croaker, breaded or battered, baked
 26115110 Flounder, cooked, NS as to cooking method
 26115120 Flounder, baked or broiled
 26115130 Flounder, breaded or battered, baked
 26117110 Haddock, cooked, NS as to cooking method
 26117120 Haddock, baked or broiled
 26117130 Haddock, breaded or battered, baked
 26119120 Herring, baked or broiled
 26121110 Mackerel, cooked, NS as to cooking method
 26121120 Mackerel, baked or broiled
 26123120 Mullet, baked or broiled
 26125110 Ocean perch, cooked, NS as to cooking method
 26125120 Ocean perch, baked or broiled
 26125130 Ocean perch, breaded or battered, baked
 26127120 Perch, baked or broiled
 26127130 Perch, breaded or battered, baked
 26129120 Pike, baked or broiled
 26131110 Pompano, cooked, NS as to cooking method
 26131120 Pompano, baked or broiled
 26133120 Porgy, baked or broiled
 26135110 Ray, cooked, NS as to cooking method
 26135120 Ray, baked or broiled
 26137120 Salmon, baked or broiled
 26141110 Sea bass, cooked, NS as to cooking method
 26141120 Sea bass, baked or broiled
 26141130 Sea bass, breaded or battered, baked
 26143110 Shark, cooked, NS as to cooking method
 26143120 Shark, baked or broiled
 26145120 Smelt, baked or broiled
 26149110 Swordfish, cooked, NS as to cooking method
 26149120 Swordfish, baked or broiled
 26151110 Trout, cooked, NS as to cooking method
 26151120 Trout, baked or broiled
 26153110 Tuna, fresh, cooked, NS as to cooking method
 26153120 Tuna, fresh, baked or broiled
 26157110 Whiting, cooked, NS as to cooking method
 26157120 Whiting, baked or broiled

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26157130 Whiting, breaded or battered, baked
 26207110 Roe, shad, cooked
 26213120 Squid, baked, broiled
 26215120 Turtle (terrapin), cooked, NS as to cooking method
 26301110 Abalone, cooked, NS as to cooking method
 26303120 Clams, baked or broiled
 26305120 Crab, baked or broiled
 26313110 Mussels, cooked, NS as to cooking method
 26315110 Oysters, cooked, NS as to cooking method
 26315120 Oysters, baked or broiled
 26317120 Scallops, baked or broiled
 26317130 Scallops, steamed or boiled
 26319120 Shrimp, baked or broiled
 27113000 Beef with cream or white sauce (mixture)
 27113200 Creamed chipped or dried beef
 27120120 Sausage gravy
 27135030 Veal with cream sauce (mixture)
 27143000 Chicken or turkey with cream sauce (mixture)
 27146150 Chicken curry
 27150020 Crab, deviled
 27150030 Crab imperial
 27150100 Shrimp, curried
 27150310 Fish with tomato-based sauce (mixture)
 27211190 Beef and potatoes with cream or white sauce (mixture)
 27212000 Beef and noodles, no sauce (mixture)
 27212300 Beef and noodles with cream or white sauce (mixture)
 27213000 Beef and rice, no sauce (mixture)
 27213400 Beef and rice with (mushroom) soup (mixture)
 27214300 Beef wellington
 27214600 Creamed dried beef on toast
 27220020 Ham and noodles with cream or white sauce (mixture)
 27220030 Ham and rice with (mushroom) soup (mixture)
 27220080 Ham croquette
 27220210 Ham and noodles, no sauce (mixture)
 27220310 Ham or pork and rice, no sauce (mixture)
 27233000 Lamb or mutton and noodles with gravy (mixture)
 27235750 Veal and noodles with cream or white sauce (mixture)
 27236000 Venison/deer and noodles with cream or white sauce (mixture)
 27242300 Chicken or turkey and noodles with cream or white sauce (mixture)
 27242350 Chicken or turkey tetrazzini
 27242400 Chicken or turkey and noodles, tomato-based sauce (mixture)
 27243300 Chicken or turkey and rice with cream sauce (mixture)
 27243400 Chicken or turkey and rice with (mushroom) soup (mixture)
 27246300 Chicken or turkey cake, patty, or croquette
 27246400 Chicken or turkey souffle
 27250020 Clams, stuffed
 27250040 Crab cake
 27250080 Salmon loaf
 27250110 Scallops and noodles with cheese sauce (mixture)
 27250130 Shrimp and noodles with cheese sauce (mixture)
 27250150 Tuna loaf
 27250210 Clam cake or patty
 27250220 Oyster fritter
 27250250 Flounder with crab stuffing
 27250270 Clams Casino
 27250410 Shrimp with crab stuffing

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27250550 Seafood souffle
 27250610 Tuna noodle casserole with cream or white sauce
 27250630 Tuna noodle casserole with (mushroom) soup
 27250710 Tuna and rice with (mushroom) soup (mixture)
 27250810 Fish and rice with tomato-based sauce
 27250820 Fish and rice with cream sauce
 27250830 Fish and rice with (mushroom) soup
 27250900 Fish and noodles with (mushroom) soup
 27250950 Shellfish mixture and noodles, tomato-based sauce (mixture)
 27260510 Liver dumpling
 27311510 Shepherd's pie with beef
 27313110 Beef chow mein or chop suey with noodles
 27317010 Beef pot pie
 27320030 Ham or pork, noodles and vegetables (excluding carrots, broccoli, and dark-green leafy),
 cheese sauce
 27320040 Pork, potatoes, and vegetables (including carrots, broccoli, and/or dark-green leafy), no
 sauce (mixture)
 27320070 Ham or pork, noodles, and vegetables (including carrots, broccoli, and/or dark-green
 leafy), tomato-based sauce (mixture)
 27320100 Pork, potatoes, and vegetables (including carrots, broccoli, and/or dark-green leafy),
 tomato-based sauce (mixture)
 27320110 Pork, potatoes, and vegetables (excluding carrots, broccoli, and dark-green leafy),
 tomato-based sauce (mixture)
 27320120 Sausage, potatoes, and vegetables (including carrots, broccoli, and/or dark-green leafy),
 gravy (mixture)
 27320130 Sausage, potatoes, and vegetables (excluding carrots, broccoli, and dark-green leafy),
 gravy (mixture)
 27320140 Pork, potatoes, and vegetables (including carrots, broccoli, and/or dark-green leafy),
 gravy (mixture)
 27320150 Pork, potatoes, and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy
 (mixture)
 27320210 Pork, potatoes, and vegetables (excluding carrots, broccoli, and dark-green leafy), no
 sauce (mixture)
 27320340 Pork, rice, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-
 based sauce (mixture)
 27320350 Pork, rice, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-
 based sauce (mixture)
 27330010 Shepherd's pie with lamb
 27330050 Lamb or mutton, rice, and vegetables (excluding carrots, broccoli, and dark-green leafy),
 gravy (mixture)
 27330060 Lamb or mutton, rice, and vegetables (including carrots, broccoli, and/or dark-green
 leafy), tomato-based sauce (mixture)
 27343950 Chicken or turkey, noodles, and vegetables (including carrots, broccoli, and/or dark-green
 leafy), cheese sauce (mixture)
 27343960 Chicken or turkey, noodles, and vegetables (excluding carrots, broccoli, and dark-green
 leafy), cheese sauce (mixture)
 27345440 Chicken or turkey, rice, and vegetables (including carrots, broccoli, and/or dark-green
 leafy), cheese sauce (mixture)
 27345450 Chicken or turkey, rice, and vegetables (excluding carrots, broccoli, and dark-green
 leafy), cheese sauce (mixture)
 27347100 Chicken or turkey pot pie
 27347200 Chicken or turkey, stuffing, and vegetables (including carrots, broccoli, and/or dark-green
 leafy),
 27347210 Chicken or turkey, stuffing, and vegetables (excluding carrots, broccoli, and dark green
 leafy), no sauce (mixture)

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27347220 Chicken or turkey, stuffing, and vegetables (including carrots, broccoli, and/or dark-green leafy), gravy (mixture)

27347230 Chicken or turkey, stuffing, and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy (mixture)

27350040 Shad creole, with rice

27350060 Shrimp creole, with rice

27350070 Tuna pot pie

27350200 Oyster pie

27350410 Tuna noodle casserole with vegetables and (mushroom) soup

27360080 Chow mein or chop suey, NS as to type of meat, with noodles

27360120 Chow mein or chop suey, various types of meat, with noodles

27410210 Beef and vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)), no sauce (mixture)

27410220 Beef and vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)), no sauce (mixture)

27415150 Beef chow mein or chop suey, no noodles

27420390 Pork chow mein or chop suey, no noodles

27443110 Chicken or turkey a la king with vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)), cream, white, or soup-based sauce

27443120 Chicken or turkey a la king with vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)), cream, white, or soup-based sauce

27443150 Chicken or turkey divan

27446400 Chicken or turkey and vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes))

27446410 Chicken or turkey and vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)), cheese sauce (mixture)

27450450 Shrimp creole, no rice

27450510 Tuna casserole with vegetables and (mushroom) soup, no noodles

27450650 Shellfish mixture and vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)), (mushroom) soup (mixture)

27450660 Shellfish mixture and vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)), (mushroom) soup (mixture)

27450700 Fish and vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)), tomato-based sauce (mixture)

27450710 Fish and vegetables (excluding carrots, broccoli, and dark- green leafy (no potatoes)), tomato-based sauce (mixture)

27460010 Chow mein or chop suey, NS as to type of meat, no noodles

27460100 Lau lau (pork and fish wrapped in taro or spinach leaves)

27463000 Stewed gizzards, Puerto Rican style (Mollejitas guisadas)

27500050 Sandwich, NFS

27500100 Meat sandwich, NFS

27513030 Roast beef sandwich dipped in egg, fried, with gravy and spread

27520310 Ham sandwich with lettuce and spread

27520320 Ham and cheese sandwich, with lettuce and spread

27520350 Ham and cheese sandwich, with spread, grilled

27520360 Ham and cheese sandwich, on bun, with lettuce and spread

27520410 Cuban sandwich, (Sandwich cubano), with spread

27520420 Midnight sandwich, (Media noche), with spread

27550110 Crab cake sandwich, on bun

27560000 Luncheon meat sandwich, NFS, with spread

27560110 Bologna sandwich, with spread

27560120 Bologna and cheese sandwich, with spread

27560510 Salami sandwich, with spread

28340590 Chicken corn soup, home recipe

28355250 Lobster bisque

28355260 Lobster gumbo

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28355440 Shrimp gumbo
 31105000 Egg, whole, fried
 31106000 Egg, whole, baked, NS as to fat added in cooking
 31106020 Egg, whole, baked, fat added in cooking
 32101500 Egg, Benedict
 32104900 Egg omelet or scrambled egg, NS as to fat added in cooking
 32105000 Egg omelet or scrambled egg, fat added in cooking
 32105010 Egg omelet or scrambled egg, with cheese
 32105020 Egg omelet or scrambled egg, with fish
 32105030 Egg omelet or scrambled egg, with ham or bacon
 32105040 Egg omelet or scrambled egg, with dark-green vegetables
 32105050 Egg omelet or scrambled egg, with vegetables other than dark-green vegetables
 32105060 Egg omelet or scrambled egg, with peppers, onion, and ham
 32105070 Egg omelet or scrambled egg, with mushrooms
 32105080 Egg omelet or scrambled egg, with cheese and ham or bacon
 32105085 Egg omelet or scrambled egg, with cheese, ham or bacon, and tomatoes
 32105100 Egg omelet or scrambled egg, with potatoes and/or onions (Tortilla Espanola, traditional style Spanish omelet)
 32105110 Egg omelet or scrambled egg, with beef
 32105120 Egg omelet or scrambled egg, with sausage and mushrooms
 32105121 Egg omelet or scrambled egg, with sausage and cheese
 32105122 Egg omelet or scrambled egg, with sausage
 32105130 Egg omelet or scrambled egg, with onions, peppers, tomatoes, and mushrooms
 32105150 Egg omelet or scrambled egg, with chili, cheese, tomatoes, and beans
 32105160 Egg omelet or scrambled egg, with chorizo
 32105170 Egg omelet or scrambled egg with chicken
 32202030 Egg, cheese, and sausage on English muffin
 32202040 Egg, cheese, and beef on English Muffin
 32202050 Egg, cheese, and sausage on biscuit
 32202130 Egg and steak on biscuit
 32202200 Egg and cheese on biscuit
 33000100 Egg substitute, NS as to powdered, frozen, or liquid
 33201010 Scrambled egg, made from cholesterol-free frozen mixture
 33201110 Scrambled egg, made from cholesterol-free frozen mixture with cheese
 33201500 Scrambled egg, made from cholesterol-free frozen mixture with vegetables
 33202010 Scrambled egg, made from frozen mixture
 33301010 Scrambled egg, made from packaged liquid mixture
 41108010 Mung beans, fat added in cooking
 41108020 Mung beans, NS as to fat added in cooking
 41304980 Lentils, dry, cooked, NS as to fat added in cooking
 41304990 Lentils, dry, cooked, fat added in cooking
 42116100 Walnuts, honey-roasted
 51000250 Roll, made from home recipe or purchased at a bakery, NS as to major flour
 51000260 Roll, made from home recipe or purchased at a bakery, toasted, NS as to major flour
 51151060 Roll, white, soft, made from home recipe or purchased at a bakery
 52105100 Scone
 52105110 Scone, whole wheat
 52105200 Scone, with fruit
 52213010 Spoonbread
 52220110 Cornmeal bread, Dominican style (Arepa Dominicana)
 53102000 Cake, applesauce, NS as to icing
 53102200 Cake, applesauce, with icing
 53102300 Cake, applesauce, diet, without icing
 53102500 Cake, banana, NS as to icing
 53102600 Cake, banana, without icing
 53102700 Cake, banana, with icing

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53104300 Cake, carrot, diet
 53104500 Cheesecake
 53104550 Cheesecake with fruit
 53104600 Cheesecake, chocolate
 53104900 Cake, chocolate, made with mayonnaise or salad dressing, NS as to icing
 53104950 Cake, chocolate, made with mayonnaise or salad dressing, with icing, coating, or filling
 53105000 Cake, chocolate, devil's food, or fudge, standard-type mix (eggs and water added to dry mix), NS as to icing
 53105050 Cake, chocolate, devil's food, or fudge, made from home recipe or purchased ready-to-eat, NS as to icing
 53105200 Cake, chocolate, devil's food, or fudge, standard-type mix (eggs and water added to dry mix), with icing, coating, or filling
 53105260 Cake, chocolate, devil's food, or fudge, with icing, coating, or filling, made from home recipe or purchased ready-to-eat
 53105500 Cake, chocolate, with icing, diet
 53107000 Cake, cupcake, NS as to type or icing
 53107200 Cake, cupcake, NS as to type, with icing
 53108000 Cake, cupcake, chocolate, NS as to icing
 53109000 Cake, cupcake, not chocolate, NS as to icing
 53113950 Cake, lemon, NS as to icing
 53114100 Cake, lemon, with icing
 53115000 Cake, marble, NS as to icing
 53115200 Cake, marble, with icing
 53115300 Cake, nut, NS as to icing
 53115320 Cake, nut, with icing
 53115410 Cake, oatmeal, with icing
 53115450 Cake, peanut butter, with icing
 53116560 Cake, raisin-nut, with icing
 53116570 Cake, Ravani (made with farina)
 53117000 Cake, spice, NS as to icing
 53117200 Cake, spice, with icing
 53118310 Cake, sponge, chocolate, with icing
 53118500 Cake, torte
 53118600 Cake, chiffon, NS as to icing
 53118800 Cake, chiffon, with icing
 53118950 Cake, chiffon, chocolate, with icing
 53119000 Cake, upside down (all fruits)
 53120000 Cake, white, standard-type mix (egg whites and water added), NS as to icing
 53120200 Cake, white, standard-type mix (egg whites and water added to mix), with icing
 53121000 Cake, yellow, standard-type mix (eggs and water added to dry mix), NS as to icing
 53121060 Cake, yellow, made from home recipe or purchased ready-to-eat, NS as to icing
 53121200 Cake, yellow, standard-type mix (eggs and water added to dry mix), with icing
 53124100 Cake, zucchini, NS as to icing
 53124120 Cake, zucchini, with icing
 53301080 Pie, apple, fried pie
 53301500 Pie, apple, one crust
 53302080 Pie, apricot, fried pie
 53303000 Pie, blackberry, two crust
 53303070 Pie, blackberry, individual size or tart
 53303500 Pie, berry, not blackberry, blueberry, boysenberry, huckleberry, raspberry, or strawberry; two crust
 53303510 Pie, berry, not blackberry, blueberry, boysenberry, huckleberry, raspberry, or strawberry; one crust
 53303570 Pie, berry, not blackberry, blueberry, boysenberry, huckleberry, raspberry, or strawberry, individual size or tart
 53304070 Pie, blueberry, individual size or tart

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53305010	Pie, cherry, one crust
53305070	Pie, cherry, individual size or tart
53305700	Pie, lemon (not cream or meringue)
53305720	Pie, lemon (not cream or meringue), individual size or tart
53307080	Pie, peach, fried pie
53310000	Pie, raspberry, one crust
53310050	Pie, raspberry, two crust
53345000	Pie, lemon cream
53345070	Pie, lemon cream, individual size or tart
53347500	Pie, sour cream, raisin
53366000	Pie, yogurt, frozen
53371000	Pie, chiffon, chocolate
53371100	Pie, chiffon, with liqueur
53373000	Pie, black bottom
53382000	Pie, chocolate-marshmallow
53385500	Pie, oatmeal
53386250	Pie, pudding, chocolate, with chocolate coating, individual size
53386500	Pie, pudding, flavors other than chocolate, with chocolate coating, individual size
53390100	Pie, tofu with fruit
53400200	Blintz, cheese-filled
53400300	Blintz, fruit-filled
53410100	Cobbler, apple
53410500	Cobbler, cherry
53410900	Cobbler, rhubarb
53415100	Crisp, apple, apple dessert
53415200	Fritter, banana
53415220	Fritter, berry
53415400	Crisp, cherry
53415500	Crisp, peach
53415600	Crisp, rhubarb
53420300	Air filled fritter or fried puff, without syrup, Puerto Rican style (Bunuelos de viento)
53430000	Crepe, dessert type, NS as to filling
53430100	Crepe, dessert type, chocolate-filled
53430200	Crepe, dessert type, fruit-filled
53430300	Crepe, dessert type, ice cream-filled
53440300	Strudel, berry
53440500	Strudel, cherry
53440600	Strudel, cheese
53440700	Strudel, peach
53440750	Strudel, pineapple
53440800	Strudel, cheese and fruit
53450000	Turnover or dumpling, apple
53450500	Turnover or dumpling, cherry
53450800	Turnover or dumpling, lemon
53451500	Turnover, guava
53520150	Doughnut, cake type, chocolate covered, dipped in peanuts
53520160	Doughnut, cake type, chocolate, with chocolate icing
53521100	Doughnut, raised or yeast, chocolate, with chocolate icing
53521130	Doughnut, raised or yeast, chocolate covered
53521300	Doughnut, wheat, chocolate covered
55105100	Pancakes, cornmeal
56205090	Rice, cream of, cooked, fat added in cooking
56205130	Yellow rice, cooked, regular, NS as to fat added in cooking
56205170	Yellow rice, cooked, regular, fat added in cooking
56205320	Rice, white and wild, cooked, fat added in cooking
56205330	Rice, white and wild, cooked, NS as to fat added in cooking

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56205340 Rice, brown and wild, cooked, fat added in cooking
 56205350 Rice, brown and wild, cooked, NS as to fat added in cooking
 56205400 Rice, cooked, NS as to type, fat added in cooking
 56205420 Rice, white, cooked, regular, fat added in cooking
 56205430 Rice, white, cooked, instant, fat added in cooking
 56205440 Rice, white, cooked, converted, fat added in cooking
 56205510 Rice, brown, cooked, regular, fat added in cooking
 56205530 Rice, brown, cooked, instant, NS as to fat added in cooking
 56205550 Rice, brown, cooked, instant, fat added in cooking
 58108010 Calzone, with meat and cheese
 58115150 Tamal in a leaf, Puerto Rican style (Tamales en hoja)
 58120110 Crepes, filled with meat, fish, or poultry, with sauce
 58122210 Gnocchi, cheese
 58128110 Chicken cornbread
 58128120 Cornmeal dressing with chicken or turkey and vegetables
 58128220 Dressing with chicken or turkey and vegetables
 58128250 Dressing with meat and vegetables
 58140310 Macaroni with tuna, Puerto Rican style (Macarrones con atun)
 58147310 Macaroni, creamed
 58155320 Seafood paella, Puerto Rican style (Paella a la marinera)
 58155610 Rice meal fritter, Puerto Rican style (Almojabana)
 58156410 Rice with onions, Puerto Rican style (arroz con cebollas)
 58157110 Spicy rice pudding, Puerto Rican style (arroz con dulce, arroz con especie)
 58160110 Rice with beans
 58160120 Rice with beans and tomatoes
 58160130 Rice with beans and chicken
 58160140 Rice with beans and pork
 58161300 White rice with tomato sauce
 58161310 Rice, brown, with tomato sauce
 58162090 Stuffed pepper, with meat
 58162120 Stuffed pepper, with rice, meatless
 58162130 Stuffed tomato, with rice and meat
 58162140 Stuffed tomato, with rice, meatless
 58162310 Rice pilaf
 58163310 Flavored rice mixture
 58163330 Flavored rice mixture with cheese
 58163360 Flavored rice, brown and wild
 58163380 Flavored rice and pasta mixture
 58163400 Flavored rice and pasta mixture, reduced sodium
 58163510 Rice dressing
 58163610 Rice-vegetable medley
 61113500 Lemon pie filling
 63101410 Apple rings, fried
 63101500 Apple, fried
 63113030 Cherry pie filling
 71101100 White potato, baked, peel eaten, NS as to fat added in cooking
 71101120 White potato, baked, peel eaten, fat added in cooking
 71103000 White potato, boiled, without peel, NS as to fat added in cooking
 71103020 White potato, boiled, without peel, fat added in cooking
 71103100 White potato, boiled, with peel, NS as to fat added in cooking
 71103120 White potato, boiled, with peel, fat added in cooking
 71103200 White potato, boiled, without peel, canned, low sodium, NS as to fat added in cooking
 71103220 White potato, boiled, without peel, canned, low sodium, fat added in cooking
 71104000 White potato, roasted, NS as to fat added in cooking
 71104020 White potato, roasted, fat added in cooking
 71301000 White potato, cooked, with sauce, NS as to sauce

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71301020 White potato, cooked, with cheese
 71305010 White potato, scalloped
 71305110 White potato, scalloped, with ham
 71403500 White potato, home fries, with green or red peppers and onions
 71501000 White potato, mashed, NFS
 71501020 White potato, from fresh, mashed, made with milk and fat
 71501030 White potato, from fresh, mashed, made with fat
 71501040 White potato, from dry, mashed, made with milk and fat
 71501050 White potato, from fresh, mashed, made with milk, fat and cheese
 71501070 White potato, from dry, mashed, made with milk, fat, egg and cheese
 71501300 White potato, from dry, mashed, NS as to milk or fat
 71501310 White potato, from fresh, mashed, NS as to milk or fat
 71507000 White potato, stuffed, baked, peel not eaten, NS as to topping
 71507010 White potato, stuffed, baked, peel not eaten, stuffed with sour cream
 71507020 White potato, stuffed, baked, peel not eaten, stuffed with cheese
 71507030 White potato, stuffed, baked, peel not eaten, stuffed with chili
 71507040 White potato, stuffed, baked, peel not eaten, stuffed with broccoli and cheese sauce
 71507050 White potato, stuffed, baked, peel not eaten, stuffed with meat in cream sauce
 71507100 White potato, stuffed, baked, peel not eaten, stuffed with chicken, broccoli and cheese sauce

 71508000 White potato, stuffed, baked, peel eaten, NS as to topping
 71508010 White potato, stuffed, baked, peel eaten, stuffed with sour cream
 71508020 White potato, stuffed, baked, peel eaten, stuffed with cheese
 71508030 White potato, stuffed, baked, peel eaten, stuffed with chili
 71508040 White potato, stuffed, baked, peel eaten, stuffed with broccoli and cheese sauce
 71508050 White potato, stuffed, baked, peel eaten, stuffed with meat in cream sauce
 71508060 White potato, stuffed, baked, peel eaten, stuffed with bacon and cheese
 71508070 White potato, stuffed, baked, peel not eaten, stuffed with bacon and cheese
 71508100 White potato, stuffed, baked, peel eaten, stuffed with chicken, broccoli and cheese sauce
 71702000 Potato pudding
 71803010 Potato chowder
 71905210 Candied ripe plantain, Puerto Rican style (Platano en almibar)
 71930090 Cassava (yuca blanca), cooked, NS as to fat added in cooking
 71930120 Cassava (yuca blanca), cooked, fat added in cooking
 71941130 Sweetpotatoes, Puerto Rican, roasted or baked
 71945020 Yam buns, Puerto Rican style (Bunuelos de name)
 72101200 Beet greens, cooked, NS as to fat added in cooking
 72101220 Beet greens, cooked, fat added in cooking
 72104200 Chard, cooked, NS as to fat added in cooking
 72104220 Chard, cooked, fat added in cooking
 72107200 Collards, cooked, NS as to form, NS as to fat added in cooking
 72107201 Collards, cooked, from fresh, NS as to fat added in cooking
 72107202 Collards, cooked, from frozen, NS as to fat added in cooking
 72107203 Collards, cooked, from canned, NS as to fat added in cooking
 72107220 Collards, cooked, NS as to form, fat added in cooking
 72107221 Collards, cooked, from fresh, fat added in cooking
 72107222 Collards, cooked, from frozen, fat added in cooking
 72107223 Collards, cooked, from canned, fat added in cooking
 72110200 Cress, cooked, NS as to form, NS as to fat added in cooking
 72110201 Cress, cooked, from fresh, NS as to fat added in cooking
 72110203 Cress, cooked, from canned, NS as to fat added in cooking
 72110220 Cress, cooked, NS as to form, fat added in cooking
 72110221 Cress, cooked, from fresh, fat added in cooking
 72110223 Cress, cooked, from canned, fat added in cooking
 72113200 Dandelion greens, cooked, NS as to fat added in cooking
 72113220 Dandelion greens, cooked, fat added in cooking

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72116200 Escarole, cooked, NS as to fat added in cooking
 72116220 Escarole, cooked, fat added in cooking
 72118200 Greens, cooked, NS as to form, NS as to fat added in cooking
 72118201 Greens, cooked, from fresh, NS as to fat added in cooking
 72118202 Greens, cooked, from frozen, NS as to fat added in cooking
 72118203 Greens, cooked, from canned, NS as to fat added in cooking
 72118220 Greens, cooked, NS as to form, fat added in cooking
 72118221 Greens, cooked, from fresh, fat added in cooking
 72118222 Greens, cooked, from frozen, fat added in cooking
 72118223 Greens, cooked, from canned, fat added in cooking
 72119200 Kale, cooked, NS as to form, NS as to fat added in cooking
 72119201 Kale, cooked, from fresh, NS as to fat added in cooking
 72119202 Kale, cooked, from frozen, NS as to fat added in cooking
 72119203 Kale, cooked, from canned, NS as to fat added in cooking
 72119220 Kale, cooked, NS as to form, fat added in cooking
 72119221 Kale, cooked, from fresh, fat added in cooking
 72119222 Kale, cooked, from frozen, fat added in cooking
 72119223 Kale, cooked, from canned, fat added in cooking
 72120200 Lambsquarter, cooked, NS as to fat added in cooking
 72120220 Lambsquarter, cooked, fat added in cooking
 72122200 Mustard greens, cooked, NS as to form, NS as to fat added in cooking
 72122201 Mustard greens, cooked, from fresh, NS as to fat added in cooking
 72122202 Mustard greens, cooked, from frozen, NS as to fat added in cooking
 72122203 Mustard greens, cooked, from canned, NS as to fat added in cooking
 72122220 Mustard greens, cooked, NS as to form, fat added in cooking
 72122221 Mustard greens, cooked, from fresh, fat added in cooking
 72122222 Mustard greens, cooked, from frozen, fat added in cooking
 72122223 Mustard greens, cooked, from canned, fat added in cooking
 72123000 Poke greens, cooked, NS as to fat added in cooking
 72123020 Poke greens, cooked, fat added in cooking
 72125200 Spinach, cooked, NS as to form, NS as to fat added in cooking
 72125201 Spinach, cooked, from fresh, NS as to fat added in cooking
 72125202 Spinach, cooked, from frozen, NS as to fat added in cooking
 72125203 Spinach, cooked, from canned, NS as to fat added in cooking
 72125220 Spinach, cooked, NS as to form, fat added in cooking
 72125221 Spinach, cooked, from fresh, fat added in cooking
 72125222 Spinach, cooked, from frozen, fat added in cooking
 72125223 Spinach, cooked, from canned, fat added in cooking
 72125240 Spinach souffle
 72128200 Turnip greens, cooked, NS as to form, NS as to fat added in cooking
 72128201 Turnip greens, cooked, from fresh, NS as to fat added in cooking
 72128202 Turnip greens, cooked, from frozen, NS as to fat added in cooking
 72128203 Turnip greens, cooked, from canned, NS as to fat added in cooking
 72128220 Turnip greens, cooked, NS as to form, fat added in cooking
 72128221 Turnip greens, cooked, from fresh, fat added in cooking
 72128222 Turnip greens, cooked, from frozen, fat added in cooking
 72128223 Turnip greens, cooked, from canned, fat added in cooking
 72128400 Turnip greens with roots, cooked, NS as to form, NS as to fat added in cooking
 72128401 Turnip greens with roots, cooked, from fresh, NS as to fat added in cooking
 72128402 Turnip greens with roots, cooked, from frozen, NS as to fat added in cooking
 72128403 Turnip greens with roots, cooked, from canned, NS as to fat added in cooking
 72128420 Turnip greens with roots, cooked, NS as to form, fat added in cooking
 72128421 Turnip greens with roots, cooked, from fresh, fat added in cooking
 72128422 Turnip greens with roots, cooked, from frozen, fat added in cooking
 72128423 Turnip greens with roots, cooked, from canned, fat added in cooking
 72128500 Turnip greens, canned, low sodium, cooked, NS as to fat added in cooking

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72128520 Turnip greens, canned, low sodium, cooked, fat added in cooking
72201200 Broccoli, cooked, NS as to form, NS as to fat added in cooking
72201201 Broccoli, cooked, from fresh, NS as to fat added in cooking
72201202 Broccoli, cooked, from frozen, NS as to fat added in cooking
72201220 Broccoli, cooked, NS as to form, fat added in cooking
72201221 Broccoli, cooked, from fresh, fat added in cooking
72201222 Broccoli, cooked, from frozen, fat added in cooking
72202010 Broccoli casserole (broccoli, noodles, and cream sauce)
72202020 Broccoli casserole (broccoli, rice, cheese, and mushroom sauce)
73102200 Carrots, cooked, NS as to form, NS as to fat added in cooking
73102201 Carrots, cooked, from fresh, NS as to fat added in cooking
73102202 Carrots, cooked, from frozen, NS as to fat added in cooking
73102203 Carrots, cooked, from canned, NS as to fat added in cooking
73102220 Carrots, cooked, NS as to form, fat added in cooking
73102221 Carrots, cooked, from fresh, fat added in cooking
73102222 Carrots, cooked, from frozen, fat added in cooking
73102223 Carrots, cooked, from canned, fat added in cooking
73102240 Carrots, cooked, NS as to form, glazed
73102241 Carrots, cooked, from fresh, glazed
73102242 Carrots, cooked, from frozen, glazed
73102243 Carrots, cooked, from canned, glazed
73103000 Carrots, canned, low sodium, NS as to fat added in cooking
73103020 Carrots, canned, low sodium, fat added in cooking
73111200 Peas and carrots, cooked, NS as to form, NS as to fat added in cooking
73111201 Peas and carrots, cooked, from fresh, NS as to fat added in cooking
73111202 Peas and carrots, cooked, from frozen, NS as to fat added in cooking
73111203 Peas and carrots, cooked, from canned, NS as to fat added in cooking
73111220 Peas and carrots, cooked, NS as to form, fat added in cooking
73111221 Peas and carrots, cooked, from fresh, fat added in cooking
73111222 Peas and carrots, cooked, from frozen, fat added in cooking
73111223 Peas and carrots, cooked, from canned, fat added in cooking
73111250 Peas and carrots, canned, low sodium, NS as to fat added in cooking
73111260 Peas and carrots, canned, low sodium, fat added in cooking
73201000 Pumpkin, cooked, NS as to form, NS as to fat added in cooking
73201001 Pumpkin, cooked, from fresh, NS as to fat added in cooking
73201002 Pumpkin, cooked, from frozen, NS as to fat added in cooking
73201003 Pumpkin, cooked, from canned, NS as to fat added in cooking
73201020 Pumpkin, cooked, NS as to form, fat added in cooking
73201021 Pumpkin, cooked, from fresh, fat added in cooking
73201022 Pumpkin, cooked, from frozen, fat added in cooking
73201023 Pumpkin, cooked, from canned, fat added in cooking
73211110 Sweetpotato and pumpkin casserole, Puerto Rican style
73301000 Squash, winter type, mashed, NS as to fat or sugar added in cooking
73301020 Squash, winter type, mashed, fat added in cooking, no sugar added in cooking
73301030 Squash, winter type, mashed, fat and sugar added in cooking
73303000 Squash, winter type, baked, NS as to fat or sugar added in cooking
73303020 Squash, winter type, baked, fat added in cooking, no sugar added in cooking
73303030 Squash, winter type, baked, fat and sugar added in cooking
73305010 Squash, winter, baked with cheese
73401000 Sweetpotato, NFS
73402000 Sweetpotato, baked, peel eaten, NS as to fat added in cooking
73402020 Sweetpotato, baked, peel eaten, fat added in cooking
73403000 Sweetpotato, baked, peel not eaten, NS as to fat added in cooking
73403020 Sweetpotato, baked, peel not eaten, fat added in cooking
73405000 Sweetpotato, boiled, without peel, NS as to fat added in cooking
73405020 Sweetpotato, boiled, without peel, fat added in cooking

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73405100 Sweetpotato, boiled, with peel, NS as to fat added in cooking
73405120 Sweetpotato, boiled, with peel, fat added in cooking
73406000 Sweetpotato, candied
73407030 Sweetpotato, canned in syrup, with fat added in cooking
73409000 Sweetpotato, casserole or mashed
74203010 Tomatoes, NS as to form, scalloped
74203011 Tomatoes, from fresh, scalloped
74204011 Tomatoes, from fresh, stewed
74504000 Tomato and okra, cooked, NS as to fat added in cooking
74504020 Tomato and okra, cooked, fat added in cooking
74504100 Tomato and onion, cooked, NS as to fat added in cooking
74504120 Tomato and onion, cooked, fat added in cooking
74505000 Tomato with corn and okra, cooked, NS as to fat added in cooking
74505020 Tomato with corn and okra, cooked, fat added in cooking
75200120 Vegetables, NS as to type, cooked, fat added in cooking
75201000 Artichoke, globe (French), cooked, NS as to form, NS as to fat added in cooking
75201001 Artichoke, globe (French), cooked, from fresh, NS as to fat added in cooking
75201002 Artichoke, globe (French), cooked, from frozen, NS as to fat added in cooking
75201003 Artichoke, globe (French), cooked, from canned, NS as to fat added in cooking
75201020 Artichoke, globe (French), cooked, NS as to form, fat added in cooking
75201021 Artichoke, globe (French), cooked, from fresh, fat added in cooking
75201022 Artichoke, globe (French), cooked, from frozen, fat added in cooking
75201023 Artichoke, globe (French), cooked, from canned, fat added in cooking
75202000 Asparagus, cooked, NS as to form, NS as to fat added in cooking
75202001 Asparagus, cooked, from fresh, NS as to fat added in cooking
75202002 Asparagus, cooked, from frozen, NS as to fat added in cooking
75202003 Asparagus, cooked, from canned, NS as to fat added in cooking
75202020 Asparagus, cooked, NS as to form, fat added in cooking
75202021 Asparagus, cooked, from fresh, fat added in cooking
75202022 Asparagus, cooked, from frozen, fat added in cooking
75202023 Asparagus, cooked, from canned, fat added in cooking
75203020 Bamboo shoots, cooked, fat added in cooking
75204000 Beans, lima, immature, cooked, NS as to form, NS as to fat added in cooking
75204001 Beans, lima, immature, cooked, from fresh, NS as to fat added in cooking
75204002 Beans, lima, immature, cooked, from frozen, NS as to fat added in cooking
75204003 Beans, lima, immature, cooked, from canned, NS as to fat added in cooking
75204020 Beans, lima, immature, cooked, NS as to form, fat added in cooking
75204021 Beans, lima, immature, cooked, from fresh, fat added in cooking
75204022 Beans, lima, immature, cooked, from frozen, fat added in cooking
75204023 Beans, lima, immature, cooked, from canned, fat added in cooking
75204100 Beans, lima, immature, canned, low sodium, NS as to fat added in cooking
75204120 Beans, lima, immature, canned, low sodium, fat added in cooking
75204980 Beans, string, cooked, NS as to form, NS as to color, fat added in cooking
75204981 Beans, string, cooked, from fresh, NS as to color, fat added in cooking
75204982 Beans, string, cooked, from frozen, NS as to color, fat added in cooking
75204983 Beans, string, cooked, from canned, NS as to color, fat added in cooking
75205000 Beans, string, cooked, NS as to form, NS as to color, NS as to fat added in cooking
75205001 Beans, string, cooked, from fresh, NS as to color, NS as to fat added in cooking
75205002 Beans, string, cooked, from frozen, NS as to color, NS as to fat added in cooking
75205003 Beans, string, cooked, from canned, NS as to color, NS as to fat added in cooking
75205010 Beans, string, green, cooked, NS as to form, NS as to fat added in cooking
75205011 Beans, string, green, cooked, from fresh, NS as to fat added in cooking
75205012 Beans, string, green, cooked, from frozen, NS as to fat added in cooking
75205013 Beans, string, green, cooked, from canned, NS as to fat added in cooking
75205030 Beans, string, green, cooked, NS as to form, fat added in cooking
75205031 Beans, string, green, cooked, from fresh, fat added in cooking

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75205032 Beans, string, green, cooked, from frozen, fat added in cooking
75205033 Beans, string, green, cooked, from canned, fat added in cooking
75205110 Beans, string, green, canned, low sodium, NS as to fat added in cooking
75205130 Beans, string, green, canned, low sodium, fat added in cooking
75206000 Beans, string, yellow, cooked, NS as to form, NS as to fat added in cooking
75206001 Beans, string, yellow, cooked, from fresh, NS as to fat added in cooking
75206002 Beans, string, yellow, cooked, from frozen, NS as to fat added in cooking
75206003 Beans, string, yellow, cooked, from canned, NS as to fat added in cooking
75206020 Beans, string, yellow, cooked, NS as to form, fat added in cooking
75206021 Beans, string, yellow, cooked, from fresh, fat added in cooking
75206022 Beans, string, yellow, cooked, from frozen, fat added in cooking
75206023 Beans, string, yellow, cooked, from canned, fat added in cooking
75207000 Bean sprouts, cooked, NS as to form, NS as to fat added in cooking
75207001 Bean sprouts, cooked, from fresh, NS as to fat added in cooking
75207003 Bean sprouts, cooked, from canned, NS as to fat added in cooking
75207020 Bean sprouts, cooked, NS as to form, fat added in cooking
75207021 Bean sprouts, cooked, from fresh, fat added in cooking
75207023 Bean sprouts, cooked, from canned, fat added in cooking
75208000 Beets, cooked, NS as to form, NS as to fat added in cooking
75208001 Beets, cooked, from fresh, NS as to fat added in cooking
75208002 Beets, cooked, from frozen, NS as to fat added in cooking
75208003 Beets, cooked, from canned, NS as to fat added in cooking
75208020 Beets, cooked, NS as to form, fat added in cooking
75208021 Beets, cooked, from fresh, fat added in cooking
75208022 Beets, cooked, from frozen, fat added in cooking
75208023 Beets, cooked, from canned, fat added in cooking
75208100 Beets, canned, low sodium, NS as to fat added in cooking
75208120 Beets, canned, low sodium, fat added in cooking
75208290 Bitter melon, cooked, NS as to fat added in cooking
75208310 Bitter melon, cooked, fat added in cooking
75208700 Broccoflower, cooked, NS as to fat added in cooking
75208720 Broccoflower, cooked, fat added in cooking
75209000 Brussels sprouts, cooked, NS as to form, NS as to fat added in cooking
75209001 Brussels sprouts, cooked, from fresh, NS as to fat added in cooking
75209002 Brussels sprouts, cooked, from frozen, NS as to fat added in cooking
75209020 Brussels sprouts, cooked, NS as to form, fat added in cooking
75209021 Brussels sprouts, cooked, from fresh, fat added in cooking
75209022 Brussels sprouts, cooked, from frozen, fat added in cooking
75210000 Cabbage, Chinese, cooked, NS as to fat added in cooking
75210020 Cabbage, Chinese, cooked, fat added in cooking
75211010 Cabbage, green, cooked, NS as to fat added in cooking
75211030 Cabbage, green, cooked, fat added in cooking
75212000 Cabbage, red, cooked, NS as to fat added in cooking
75212020 Cabbage, red, cooked, fat added in cooking
75213000 Cabbage, savoy, cooked, NS as to fat added in cooking
75213020 Cabbage, savoy, cooked, fat added in cooking
75213100 Cactus, cooked, NS as to fat added in cooking
75213120 Cactus, cooked, fat added in cooking
75214000 Cauliflower, cooked, NS as to form, NS as to fat added in cooking
75214001 Cauliflower, cooked, from fresh, NS as to fat added in cooking
75214002 Cauliflower, cooked, from frozen, NS as to fat added in cooking
75214003 Cauliflower, cooked, from canned, NS as to fat added in cooking
75214020 Cauliflower, cooked, NS as to form, fat added in cooking
75214021 Cauliflower, cooked, from fresh, fat added in cooking
75214022 Cauliflower, cooked, from frozen, fat added in cooking
75214023 Cauliflower, cooked, from canned, fat added in cooking

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75215000 Celery, cooked, NS as to fat added in cooking
75215020 Celery, cooked, fat added in cooking
75216000 Corn, cooked, NS as to form, NS as to color, NS as to fat added in cooking
75216001 Corn, cooked, from fresh, NS as to color, NS as to fat added in cooking
75216002 Corn, cooked, from frozen, NS as to color, NS as to fat added in cooking
75216003 Corn, cooked, from canned, NS as to color, NS as to fat added in cooking
75216020 Corn, cooked, NS as to form, NS as to color, fat added in cooking
75216021 Corn, cooked, from fresh, NS as to color, fat added in cooking
75216022 Corn, cooked, from frozen, NS as to color, fat added in cooking
75216023 Corn, cooked, from canned, NS as to color, fat added in cooking
75216070 Corn, dried, cooked
75216100 Corn, yellow, cooked, NS as to form, NS as to fat added in cooking
75216101 Corn, yellow, cooked, from fresh, NS as to fat added in cooking
75216102 Corn, yellow, cooked, from frozen, NS as to fat added in cooking
75216103 Corn, yellow, cooked, from canned, NS as to fat added in cooking
75216120 Corn, yellow, cooked, NS as to form, fat added in cooking
75216121 Corn, yellow, cooked, from fresh, fat added in cooking
75216122 Corn, yellow, cooked, from frozen, fat added in cooking
75216123 Corn, yellow, cooked, from canned, fat added in cooking
75216160 Corn, yellow and white, cooked, NS as to form, NS as to fat added in cooking
75216161 Corn, yellow and white, cooked, from fresh, NS as to fat added in cooking
75216162 Corn, yellow and white, cooked, from frozen, NS as to fat added in cooking
75216163 Corn, yellow and white, cooked, from canned, NS as to fat added in cooking
75216180 Corn, yellow and white, cooked, NS as to form, fat added in cooking
75216181 Corn, yellow and white, cooked, from fresh, fat added in cooking
75216182 Corn, yellow and white, cooked, from frozen, fat added in cooking
75216183 Corn, yellow and white, cooked, from canned, fat added in cooking
75216190 Corn, yellow, NS as to form, cream style, fat added in cooking
75216193 Corn, yellow, from canned, cream style, fat added in cooking
75216200 Corn, white, cooked, NS as to form, NS as to fat added in cooking
75216201 Corn, white, cooked, from fresh, NS as to fat added in cooking
75216202 Corn, white, cooked, from frozen, NS as to fat added in cooking
75216203 Corn, white, cooked, from canned, NS as to fat added in cooking
75216220 Corn, white, cooked, NS as to form, fat added in cooking
75216221 Corn, white, cooked, from fresh, fat added in cooking
75216222 Corn, white, cooked, from frozen, fat added in cooking
75216223 Corn, white, cooked, from canned, fat added in cooking
75216300 Corn, yellow, canned, low sodium, NS as to fat added in cooking
75216320 Corn, yellow, canned, low sodium, fat added in cooking
75216700 Cucumber, cooked, NS as to fat added in cooking
75216720 Cucumber, cooked, fat added in cooking
75217000 Eggplant, cooked, NS as to fat added in cooking
75217020 Eggplant, cooked, fat added in cooking
75217490 Hominy, cooked, NS as to fat added in cooking
75217520 Hominy, cooked, fat added in cooking
75218400 Leek, cooked, NS as to fat added in cooking
75219000 Mushrooms, cooked, NS as to form, NS as to fat added in cooking
75219001 Mushrooms, cooked, from fresh, NS as to fat added in cooking
75219002 Mushrooms, cooked, from frozen, NS as to fat added in cooking
75219003 Mushrooms, cooked, from canned, NS as to fat added in cooking
75219020 Mushrooms, cooked, NS as to form, fat added in cooking
75219021 Mushrooms, cooked, from fresh, fat added in cooking
75219022 Mushrooms, cooked, from frozen, fat added in cooking
75219023 Mushrooms, cooked, from canned, fat added in cooking
75220000 Okra, cooked, NS as to form, NS as to fat added in cooking
75220001 Okra, cooked, from fresh, NS as to fat added in cooking

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75220002 Okra, cooked, from frozen, NS as to fat added in cooking
75220003 Okra, cooked, from canned, NS as to fat added in cooking
75220020 Okra, cooked, NS as to form, fat added in cooking
75220021 Okra, cooked, from fresh, fat added in cooking
75220022 Okra, cooked, from frozen, fat added in cooking
75220023 Okra, cooked, from canned, fat added in cooking
75221000 Onions, mature, cooked, NS as to form, NS as to fat added in cooking
75221001 Onions, mature, cooked, from fresh, NS as to fat added in cooking
75221002 Onions, mature, cooked, from frozen, NS as to fat added in cooking
75221020 Onions, mature, cooked or sauteed, NS as to form, fat added in cooking
75221021 Onions, mature, cooked or sauteed, from fresh, fat added in cooking
75221022 Onions, mature, cooked or sauteed, from frozen, fat added in cooking
75221040 Onion, young green, cooked, NS as to form, NS as to fat added in cooking
75221041 Onion, young green, cooked, from fresh, NS as to fat added in cooking
75221060 Onion, young green, cooked, NS as to form, fat added in cooking
75221061 Onion, young green, cooked, from fresh, fat added in cooking
75222000 Parsnips, cooked, NS as to fat added in cooking
75222020 Parsnips, cooked, fat added in cooking
75223000 Peas, cowpeas, field peas, or blackeye peas (not dried), cooked, NS as to form, NS as to fat added in cooking
75223001 Peas, cowpeas, field peas, or blackeye peas (not dried), cooked, from fresh, NS as to fat added in cooking
75223002 Peas, cowpeas, field peas, or blackeye peas (not dried), cooked, from frozen, NS as to fat added in cooking
75223003 Peas, cowpeas, field peas, or blackeye peas (not dried), cooked, from canned, NS as to fat added in cooking
75223020 Peas, cowpeas, field peas, or blackeye peas (not dried), cooked, NS as to form, fat added in cooking
75223021 Peas, cowpeas, field peas, or blackeye peas (not dried), cooked, from fresh, fat added in cooking
75223022 Peas, cowpeas, field peas, or blackeye peas (not dried), cooked, from frozen, fat added in cooking
75223023 Peas, cowpeas, field peas, or blackeye peas (not dried), cooked, from canned, fat added in cooking
75224010 Peas, green, cooked, NS as to form, NS as to fat added in cooking
75224011 Peas, green, cooked, from fresh, NS as to fat added in cooking
75224012 Peas, green, cooked, from frozen, NS as to fat added in cooking
75224013 Peas, green, cooked, from canned, NS as to fat added in cooking
75224030 Peas, green, cooked, NS as to form, fat added in cooking
75224031 Peas, green, cooked, from fresh, fat added in cooking
75224032 Peas, green, cooked, from frozen, fat added in cooking
75224033 Peas, green, cooked, from canned, fat added in cooking
75224110 Peas, green, canned, low sodium, NS as to fat added in cooking
75224130 Peas, green, canned, low sodium, fat added in cooking
75226000 Peppers, green, cooked, NS as to fat added in cooking
75226020 Peppers, green, cooked, fat added in cooking
75226060 Peppers, red, cooked, fat added in cooking
75227110 Radish, Japanese (daikon), cooked, fat added in cooking
75228000 Rutabaga, cooked, NS as to fat added in cooking
75228020 Rutabaga, cooked, fat added in cooking
75230020 Sauerkraut, cooked, fat added in cooking
75231000 Snowpea (pea pod), cooked, NS as to form, NS as to fat added in cooking
75231001 Snowpea (pea pod), cooked, from fresh, NS as to fat added in cooking
75231002 Snowpea (pea pod), cooked, from frozen, NS as to fat added in cooking
75231020 Snowpea (pea pod), cooked, NS as to form, fat added in cooking
75231021 Snowpea (pea pod), cooked, from fresh, fat added in cooking

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75231022 Snowpea (pea pod), cooked, from frozen, fat added in cooking
 75233000 Squash, summer, cooked, NS as to form, NS as to fat added in cooking
 75233001 Squash, summer, cooked, from fresh, NS as to fat added in cooking
 75233002 Squash, summer, cooked, from frozen, NS as to fat added in cooking
 75233003 Squash, summer, cooked, from canned, NS as to fat added in cooking
 75233020 Squash, summer, cooked, NS as to form, fat added in cooking
 75233021 Squash, summer, cooked, from fresh, fat added in cooking
 75233022 Squash, summer, cooked, from frozen, fat added in cooking
 75233023 Squash, summer, cooked, from canned, fat added in cooking
 75233200 Squash, spaghetti, cooked, NS as to fat added in cooking
 75233210 Squash, spaghetti, cooked, fat added in cooking
 75234000 Turnip, cooked, NS as to form, NS as to fat added in cooking
 75234001 Turnip, cooked, from fresh, NS as to fat added in cooking
 75234002 Turnip, cooked, from frozen, NS as to fat added in cooking
 75234003 Turnip, cooked, from canned, NS as to fat added in cooking
 75234020 Turnip, cooked, NS as to form, fat added in cooking
 75234021 Turnip, cooked, from fresh, fat added in cooking
 75234022 Turnip, cooked, from frozen, fat added in cooking
 75234023 Turnip, cooked, from canned, fat added in cooking
 75301100 Beans, lima and corn (succotash), cooked, NS as to fat added in cooking
 75301120 Beans, lima and corn (succotash), cooked, fat added in cooking
 75302200 Beans, green string, with onions, NS as to fat added in cooking
 75302210 Beans, green string, with onions, fat added in cooking
 75307000 Green peppers and onions, cooked, fat added in cooking
 75311000 Mixed vegetables (corn, lima beans, peas, green beans, and carrots), cooked, NS as to form, NS as to fat added in cooking
 75311002 Mixed vegetables (corn, lima beans, peas, green beans, and carrots), cooked, from frozen, NS as to fat added in cooking
 75311003 Mixed vegetables (corn, lima beans, peas, green beans, and carrots), cooked, from canned, NS as to fat added in cooking
 75311020 Mixed vegetables (corn, lima beans, peas, green beans, and carrots), cooked, NS as to form, fat added in cooking
 75311022 Mixed vegetables (corn, lima beans, peas, green beans, and carrots), cooked, from frozen, fat added in cooking
 75311023 Mixed vegetables (corn, lima beans, peas, green beans, and carrots), cooked, from canned, fat added in cooking
 75311100 Mixed vegetables (corn, lima beans, peas, green beans, and carrots), canned, low sodium, NS as to fat added in cooking
 75311120 Mixed vegetables (corn, lima beans, peas, green beans, and carrots), canned, low sodium, fat added in cooking
 75315000 Peas and corn, cooked, NS as to fat added in cooking
 75315020 Peas and corn, cooked, fat added in cooking
 75315100 Peas and onions, cooked, NS as to fat added in cooking
 75315120 Peas and onions, cooked, fat added in cooking
 75316020 Squash, summer, and onions, cooked, fat added in cooking
 75317000 Vegetables, stew type (including potatoes, carrots, onions, celery) cooked, NS as to fat added in cooking
 75317010 Vegetables, stew type (including potatoes, carrots, onions, celery) cooked, fat added in cooking
 75340000 Vegetable combinations, Oriental style, (broccoli, green pepper, water chestnut, etc) cooked, NS as to fat added in cooking
 75340020 Vegetable combinations, Oriental style, (broccoli, green pepper, water chestnuts, etc), cooked, fat added in cooking
 75340100 Vegetable combinations (broccoli, carrots, corn, cauliflower, etc.), cooked, NS as to fat added in cooking

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75340120 Vegetable combinations (broccoli, carrots, corn, cauliflower, etc.), cooked, fat added in cooking

75340130 Vegetable combination (green beans, broccoli, onions, mushrooms), cooked, NS as to fat added in cooking

75340150 Vegetable combination (green beans, broccoli, onions, mushrooms), cooked, fat added in cooking

75405010 Beets with Harvard sauce

75410530 Chiles rellenos, filled with meat and cheese (stuffed chili peppers)

75411010 Corn, scalloped or pudding

75411020 Corn fritter

75414020 Mushrooms, stuffed

75418020 Squash, summer, casserole with tomato and cheese

75418060 Squash, summer, souffle

75418220 Creamed christophine, Puerto Rican style (Chayote a la crema)

75460800 Vegetable combinations (including carrots, broccoli, and/or dark-green leafy), cooked, with butter sauce and pasta

75460810 Vegetable combinations (excluding carrots, broccoli, and dark-green leafy), cooked, with butter sauce

75649110 Vegetable soup, home recipe

75649150 Vegetable noodle soup, home recipe

77316010 Stuffed cabbage, with meat, Puerto Rican style (Repollo relleno con carne)

77316600 Eggplant and meat casserole

91361020 Fruit sauce

91361030 Raisin sauce

91361040 Plain dessert sauce

91735000 Pralines

Salad Dressing

[Phytosterols] = 1.67%

83100100 Salad dressing, NFS

83101000 Blue or roquefort cheese dressing

83101500 Bacon dressing (hot)

83101600 Bacon and tomato dressing

83102000 Caesar dressing

83103000 Coleslaw dressing

83103500 Feta Cheese Dressing

83104000 French dressing

83105500 Honey mustard dressing

83106000 Italian dressing, made with vinegar and oil

83109000 Russian dressing

83110000 Mayonnaise-type salad dressing

83110010 Mayonnaise-type salad dressing, cholesterol-free

83111000 Boiled, cooked-type dressing

83112000 Green Goddess dressing

83112500 Creamy dressing, made with sour cream and/or buttermilk and oil

83112600 Cream cheese dressing

83112900 Milk, vinegar, and sugar dressing

83112950 Poppy seed dressing

83112960 Peppercorn Dressing

83112980 Celery seed dressing

83112990 Sesame dressing

83113000 Sweet and sour dressing

83114000 Thousand Island dressing

83115000 Yogurt dressing

83200100 Salad dressing, low-calorie, NFS

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83201000	Blue or roquefort cheese dressing, low-calorie
83201050	Blue or roquefort cheese dressing, reduced calorie
83201200	Blue or roquefort cheese dressing, reduced calorie, fat-free, cholesterol-free
83201400	Coleslaw dressing, reduced calorie
83202000	French dressing, low-calorie
83202010	French dressing, reduced calorie, fat-free, cholesterol-free
83202020	French dressing, reduced calorie
83203000	Caesar dressing, low-calorie
83203250	Mayonnaise-type salad dressing, fat-free
83204050	Mayonnaise-type salad dressing, low-calorie or diet
83204060	Mayonnaise-type salad dressing, low-calorie or diet, cholesterol-free
83204500	Honey mustard dressing, reduced calorie
83205000	Italian dressing, low calorie
83205450	Italian dressing, reduced calorie
83205500	Italian dressing, reduced calorie, fat-free
83206000	Russian dressing, low-calorie
83207000	Thousand Island dressing, low-calorie
83207100	Thousand Island dressing, reduced calorie, fat-free, cholesterol-free
83208000	Vinegar, sugar, and water dressing
83208500	Korean dressing or marinade
83210000	Creamy dressing, made with sour cream and/or buttermilk and oil, diet, NS as to low or reduced calorie
83210050	Creamy dressing made with sour cream and/or buttermilk and oil, low calorie
83210100	Creamy dressing, made with sour cream and/or buttermilk and oil, reduced calorie
83210200	Creamy dressing, made with sour cream and/or buttermilk and oil, reduced calorie, fat-free, cholesterol
83210250	Creamy dressing, made with sour cream and/or buttermilk and oil, reduced calorie, cholesterol-free
83220000	Salad dressing, low calorie, oil-free

Mixtures Containing Salad Dressing
(Adjusted for salad dressing content of ~8 to 17%)
[Phytosterols] = 0.14 to 0.28%

27510950	Reuben sandwich (corned beef sandwich with sauerkraut and cheese), with spread
27520540	Ham and tomato club sandwich, with lettuce and spread
41203020	Kidney bean salad
75141300	Cabbage, Chinese, salad, with dressing
75148000	Cobb salad with dressing
75302080	Bean salad, yellow and/or green string beans

Vegetable Oil
[Phytosterols] = 3.33%

82101000	Vegetable oil, NFS
82102000	Corn oil
82102500	Corn and canola oil
82103000	Cottonseed oil
82103500	Flaxseed oil
82104000	Olive oil
82105500	Rapeseed oil
82105750	Canola and soybean oil
82105800	Canola, soybean and sunflower oil
82106000	Safflower oil
82107000	Sesame oil
82108000	Soybean oil

000147

82108250 Soybean and sunflower oil
82108500 Sunflower oil
82109000 Wheat germ oil

Mixtures Containing Vegetable Oil
(Adjusted for vegetable oil content of ~10 to 25%)
[Phytosterols] = 0.33 to 0.83%

21500200 Ground beef or patty, breaded, cooked
22002100 Pork, ground or patty, breaded, cooked
26141180 Sea bass, pickled (Mero en escabeche)
27150140 Clam sauce, white
27150170 Sweet and sour shrimp
27151050 Shrimp in garlic sauce, Puerto Rican style (mixture) (Camarones al ajillo)
27420160 Moo Shu (Mu Shi) Pork, without Chinese pancake
27450080 Seafood salad
27451070 Codfish salad, Puerto Rican style (Serenata)
41209000 Falafil
53104000 Cake, carrot, NS as to icing
53104100 Cake, carrot, without icing
53104260 Cake, carrot, with icing
53106000 Cake, chocolate, devil's food, or fudge, pudding-type mix (oil, eggs, and water added to dry mix), without icing or filling
53124100 Cake, zucchini, NS as to icing
53124110 Cake, zucchini, without icing
53124120 Cake, zucchini, with icing
58161510 Grape leaves stuffed with rice
63107410 Banana, batter-dipped, fried
71900200 Plantain, fried, NS as to green or ripe
71905110 Fried ripe plantain, Puerto Rican style (Platano maduro frito)
71910310 Pickled green bananas, Puerto Rican style (Guineos verdes en escabeche)
72116140 Caesar salad (with romaine)
75414030 Mushrooms, batter-dipped, fried
75418010 Squash, summer, yellow or green, breaded or battered, fried
77121110 Potato and ham fritters, Puerto Rican style (Frituras de papa y jamon)
77205110 Ripe plantain fritters, Puerto Rican style (Pionono)
77250110 Stuffed tannier fritters, Puerto Rican style (Alcapurrias)

Mixtures Containing Vegetable Oil
(Adjusted for vegetable oil content of ~5 to <10%)
[Phytosterols] = 0.17 to <0.33%

22300120 Ham, fried, NS as to fat eaten
22300130 Ham, fried, lean and fat eaten
22300140 Ham, fried, lean only eaten
27133010 Stewed goat, Puerto Rican style (Cabrito en fricase, chilindron de chivo)
27150190 Lobster sauce (broth-based)
27151040 Crabs in tomato-based sauce, Puerto Rican style (mixture) (Salmorejo de jueyes)
27260500 Vienna sausages stewed with potatoes, Puerto Rican style (Salchichas guisadas)
27315270 Stuffed grape leaves with beef and rice
27330170 Stuffed grape leaves with lamb and rice
27335500 Stewed rabbit, Puerto Rican style (Fricase de conejo)
27348100 Chicken fricasee, Puerto Rican style (Fricase de pollo)
27351020 Codfish salad, Puerto Rican style (Gazpacho de bacalao)
27351040 Biscayne codfish, Puerto Rican style (Bacalao a la Vizcaina)
27351050 Codfish salad, Puerto Rican style (Ensalada de bacalao)

000148

27416150 Pepper steak
 27420170 Pork and onions with soy-based sauce (mixture)
 27448010 Chicken or turkey fricassee, no potatoes, Puerto Rican style, NFS (assume with sauce)
 27448020 Chicken or turkey fricassee, with sauce, no potatoes, Puerto Rican style (potatoes reported separate)
 27451010 Fish a la creole, Puerto Rican style (Pescado frito con mojo)
 27451030 Lobster creole, Puerto Rican style (Langosta a la criolla)
 27451060 Octopus salad, Puerto Rican style (Ensalada de pulpo)
 32105310 Ripe plantain omelet, Puerto Rican style (Tortilla de amarillo)
 41310210 Stewed chickpeas with Spanish sausages, Puerto Rican style (Garbanzos guisados con chorizos)
 51220030 Roll, whole wheat, 100%, made from home recipe or purchased at bakery
 51220040 Roll, whole wheat, 100%, made from home recipe or purchased at bakery, toasted
 51320040 Roll, wheat or cracked wheat, made from home recipe or purchased at bakery
 52202060 Cornbread, made from home recipe
 52206060 Cornbread muffin, stick, round, made from home recipe
 53105900 Cake, chocolate, devil's food, or fudge, pudding-type mix (oil, eggs, and water added to dry mix), NS as to icing
 53106050 Cake, chocolate, devil's food, or fudge, pudding-type mix (oil, eggs, and water added to dry mix), with icing, coating, or filling
 53115300 Cake, nut, NS as to icing
 53115310 Cake, nut, without icing
 53115320 Cake, nut, with icing
 53118350 Cake, sweetpotato, with icing
 53118600 Cake, chiffon, NS as to icing
 53118700 Cake, chiffon, without icing
 53118800 Cake, chiffon, with icing
 53118900 Cake, chiffon, chocolate, without icing
 53118950 Cake, chiffon, chocolate, with icing
 53120300 Cake, white, pudding-type mix (oil, egg whites, and water added to dry mix), NS as to icing
 53120330 Cake, white, pudding-type mix (oil, egg whites, and water added to dry mix), without icing
 53120350 Cake, white, pudding-type mix (oil, egg whites, and water added to dry mix), with icing
 53120400 Cake, white, eggless, lowfat
 53121300 Cake, yellow, pudding-type mix (oil, eggs, and water added to dry mix), without icing
 55105200 Pancakes, whole wheat
 58175110 Tabbouleh (bulgar with tomatoes and parsley)
 63402050 Fried dwarf banana with cheese, Puerto Rican style
 71403000 White potato, home fries
 71905120 Plantain, ripe, rolled in flour, fried
 73111400 Carrots in tomato sauce
 74420110 Puerto Rican ground seasoning
 74506000 Tomato and cucumber salad made with tomato, cucumber, oil, and vinegar
 75142550 Cucumber salad made with cucumber, oil, and vinegar
 75201030 Artichoke salad in oil
 75316050 Ratatouille
 77121010 Fried stuffed potatoes, Puerto Rican style (Rellenos de papas)
 77141010 Potato chicken pie, Puerto Rican style (Pastelon de pollo)
 77201210 Green plantain with cracklings, Puerto Rican style (Mofongo)
 77205610 Ripe plantain meat pie, Puerto Rican style (Pinon)
 77230210 Cassava Pasteles, Puerto Rican style (Pasteles de yuca)

Mixtures Containing Vegetable Oil
 (Adjusted for vegetable oil content of ~0.15 to <5%)
 [Phytosterols] = 0.0049 to <0.17%

000149

21103110 Beef steak, breaded or floured, baked or fried, NS as to fat eaten
 21103120 Beef steak, breaded or floured, baked or fried, lean and fat eaten
 21103130 Beef steak, breaded or floured, baked or fried, lean only eaten
 22000300 Pork, NS as to cut, breaded or floured, fried, NS as to fat eaten
 22000310 Pork, NS as to cut, breaded or floured, fried, lean and fat eaten
 22000320 Pork, NS as to cut, breaded or floured, fried, lean only eaten
 22101300 Pork chop, breaded or floured, fried, NS as to fat eaten
 22101310 Pork chop, breaded or floured, fried, lean and fat eaten
 22101320 Pork chop, breaded or floured, fried, lean only eaten
 22201400 Pork steak or cutlet, breaded or floured, fried, NS as to fat eaten
 22201410 Pork steak or cutlet, breaded or floured, fried, lean and fat eaten
 22201420 Pork steak or cutlet, breaded or floured, fried, lean only eaten
 22210310 Pork, tenderloin, breaded, fried
 22300150 Ham, breaded or floured, fried, NS as to fat eaten
 22300160 Ham, breaded or floured, fried, lean and fat eaten
 22300170 Ham, breaded or floured, fried, lean only eaten
 23321250 Venison/deer steak, breaded or floured, cooked, NS as to cooking method
 25160130 Tongue pot roast, Puerto Rican style (Lengua al caldero)
 26129150 Pike, battered, fried
 26131150 Pompano, battered, fried
 26133150 Porgy, battered, fried
 27111000 Beef with tomato-based sauce (mixture)
 27111050 Spaghetti sauce with beef or meat other than lamb or mutton, homemade-style
 27111200 Beef burgundy
 27113100 Beef stroganoff
 27115100 Steak teriyaki with sauce (mixture)
 27116300 Beef with sweet and sour sauce (mixture)
 27118120 Stewed seasoned ground beef, Puerto Rican style (Picadillo guisado, picadillo de carne)
 27118130 Stewed dried beef, Puerto Rican style (Tasajo guisado, carne cecina guisada)
 27118140 Stuffed pot roast, Puerto Rican style, NFS (assume with gravy and stuffing)
 27118180 Puerto Rican style beef stew, meat with gravy (potatoes reported separately)
 27120060 Sweet and sour pork
 27120080 Ham stroganoff
 27120100 Ham or pork with tomato-based sauce (mixture)
 27121010 Stewed pork, Puerto Rican style
 27130040 Spaghetti sauce with lamb or mutton, homemade-style
 27135050 Veal Marsala
 27135110 Veal parmigiana
 27141000 Chicken or turkey cacciatore
 27141030 Spaghetti sauce with poultry, home-made style
 27146050 Chicken wing with hot pepper sauce
 27146100 Sweet and sour chicken or turkey
 27146300 Chicken or turkey parmigiana
 27150160 Shrimp with lobster sauce (mixture)
 27151070 Stewed codfish, Puerto Rican style
 27161010 Puerto Rican style meat loaf (Albondigon)
 27162050 Spaghetti sauce with combination of meats, homemade-style
 27212350 Beef stroganoff with noodles
 27214300 Beef wellington
 27218110 Puerto Rican style stuffed pot roast (larded meat) (Carne mechada con papas boliche)
 27218210 Puerto-Rican style beef stew (Carne guisada con papas)
 27218310 Stewed corned beef, Puerto Rican style ("Corned beef" guisado)
 27221100 Stewed pig's feet, Puerto Rican style (Patitas de cerdo guisadas)
 27221110 Pork roast, stuffed, Puerto Rican style
 27251010 Stewed salmon, Puerto Rican style (Salmon guisado)

000150

27313150 Beef, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), soy-based sauce (mixture)

27313160 Beef, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), soy-based sauce (mixture)

27315510 Beef, rice, and vegetables (including carrots, broccoli, and/or dark-green leafy), soy-based sauce (mixture)

27315520 Beef, rice, and vegetables (excluding carrots, broccoli, and dark-green leafy), soy-based sauce (mixture)

27320080 Sausage, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce

27320090 Sausage, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce

27320500 Sweet and sour pork with rice

27343910 Chicken or turkey chow mein or chop suey with noodles

27350020 Paella with seafood

27350110 Bouillabaisse

27351010 Codfish with starchy vegetables, Puerto Rican style (Serenata de bacalao) (mixture)

27351030 Stewed codfish, Puerto Rican style (Bacalao guisado)

27360090 Paella, NFS

27360100 Brunswick stew

27363000 Gumbo with rice (New Orleans type with shellfish, pork, and/or poultry, tomatoes, okra, rice)

27411120 Swiss steak

27415100 Beef and vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)), soy-based

27415200 Beef and vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)), soy-based sauce

27416100 Beef and vegetables, Hawaiian style (mixture)

27418210 Puerto-Rican style beef stew (Carne a la Judia)

27418310 Corned beef with tomato sauce and onion, Puerto Rican style (mixture)

27420500 Pork and vegetables (including carrots, broccoli, and/or dark-green leafy), soy-based sauce (mixture)

27420510 Pork and vegetables (excluding carrots, broccoli, and dark- green leafy), soy-based sauce (mixture)

27421010 Stuffed christophine, Puerto Rican style (Chayote relleno)

27422010 Pork chop stewed with vegetables, Puerto Rican style (mixture) (Chuletas a la jardinera)

27445110 Chicken or turkey and vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes))

27445120 Chicken or turkey and vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)),

27445180 Moo Goo Gai Pan

27445250 Almond chicken

27446100 Chicken or turkey chow mein or chop suey, no noodles

27446350 Oriental chicken or turkey garden salad (chicken and/or turkey, lettuce, fruit, nuts), no dressing

27448030 Chicken or turkey fricassee, no sauce, no potatoes, Puerto Rican style (sauce and potatoes reported)

27450740 Fish and vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)), soy-based

27450750 Fish and vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)), soy-based sauce

27461010 Stewed seasoned ground beef, Puerto Rican style (Picadillo para relleno)

27462000 Stewed chitterlings, Puerto Rican style (cuajo guisado)

27464000 Gumbo, no rice (New Orleans type with shellfish, pork, and/or poultry, tomatoes, okra)

27515070 Steak and cheese submarine sandwich, with fried peppers and onions, on roll

41210100 Stewed dry red beans, Puerto Rican style (Habichuelas coloradas guisadas)

000151

41210110 Stewed dry lima beans, Puerto Rican style
 41210120 Stewed white beans, Puerto Rican style
 41210150 Stewed pink beans with viandas, ham, Puerto Rican style
 41210200 Black beans, Cuban style (Habichuelas negras guisadas a la Cubana)
 41303500 Stewed green peas, Puerto Rican style (Habichuelas del pais)
 41306000 Loaf, lentil
 41310100 Stewed pigeon peas, Puerto Rican style (Gandules guisados, Gandur, Gandules)
 41310150 Stewed chickpeas, Puerto Rican style
 41310160 Stewed chickpeas, with potatoes, Puerto Rican style
 41310200 Chickpeas stewed with pig's feet, Puerto Rican style (Garbanzos guisados con patitos de cerdo)
 52311010 Popover
 53105300 Cake, German chocolate, with icing and filling
 53121280 Cake, yellow, pudding-type mix (oil, eggs, and water added to dry mix), NS as to icing
 53121330 Cake, yellow, pudding-type mix (oil, eggs, and water added to dry mix), with icing
 55202000 Waffle, wheat, bran, or multigrain
 55310100 Bread fritters, Puerto Rican style (Torrejas, Galician fritters)
 55601000 Flour and milk patty
 58100150 Burrito with beef and potato, no beans
 58100360 Chilaquiles, tortilla casserole with salsa, cheese, and egg
 58100370 Chilaquiles, tortilla casserole with salsa and cheese, no egg
 58101930 Taco or tostada salad with beef and cheese, fried flour tortilla
 58109000 Italian pie, meatless
 58109010 Italian pie with meat
 58112110 Dim sum, meat filled (egg roll-type)
 58115110 Tamale casserole, Puerto Rican style (Tamales en cazuela)
 58115150 Tamal in a leaf, Puerto Rican style (Tamales en hoja)
 58115210 Taco with crab meat, Puerto Rican style (Taco de jueye)
 58123110 Manapua, filled with meat
 58124250 Spanakopitta
 58156610 Pigeon pea asopao (Asopao de gandules)
 71931010 Cassava with creole sauce, Puerto Rican style (Yuca al mojo)
 74410110 Sofrito, Puerto Rican seasoning
 74415110 Tomato and sofrito stewing sauce, Puerto Rican style
 75226040 Peppers, red, cooked, NS as to fat added in cooking
 75340300 Pinacbet (eggplant with tomatoes, bitter melon, etc.)
 75400500 Artichokes, stuffed
 75412030 Eggplant dip
 75439500 Chop suey, meatless
 75440400 Vegetables, dipped in chick-pea flour batter, (pakora), fried
 75651000 Minestrone soup, home recipe
 77230510 Cassava pie stuffed with crab meat, Puerto Rican style (Empanada de jueyes)
 77250710 Tannier fritters, Puerto Rican style (Frituras de yautia)
 77316010 Stuffed cabbage, with meat, Puerto Rican style (Repollo relleno con carne)
 77316510 Stuffed cabbage, with meat and rice, Syrian dish, Puerto Rican style (Repollo relleno con carne y co)
 77563010 Puerto Rican stew (Sancocho)

Frozen Dairy Desserts and Mixes

Ice Cream

[Phytosterols] = 0.42%

13110000 Ice cream, NFS
 13110100 Ice cream, regular, flavors other than chocolate
 13110110 Ice cream, regular, chocolate

000152

13110120 Ice cream, rich, flavors other than chocolate
13110130 Ice cream, rich, chocolate
13110140 Ice cream, rich, NS as to flavor
13110200 Ice cream, soft serve, flavors other than chocolate
13110210 Ice cream, soft serve, chocolate
13110220 Ice cream, soft serve, NS as to flavor
13110310 Ice cream, no sugar added, NS as to flavor
13110320 Ice cream, no sugar added, flavors other than chocolate
13110330 Ice cream, no sugar added, chocolate
13120050 Ice cream bar or stick, not chocolate covered or cake covered
13120100 Ice cream bar or stick, chocolate covered
13120110 Ice cream bar or stick, chocolate or caramel covered, with nuts
13120120 Ice cream bar or stick, rich chocolate ice cream, thick chocolate covering
13120121 Ice cream bar or stick, rich ice cream, thick chocolate covering
13120130 Ice cream bar or stick, rich ice cream, chocolate covered, with nuts
13120140 Ice cream bar or stick, chocolate ice cream, chocolate covered
13120300 Ice cream bar, cake covered
13120400 Ice cream bar or stick with fruit
13120500 Ice cream sandwich
13120550 Ice cream cookie sandwich
13120700 Ice cream cone with nuts, flavors other than chocolate
13120710 Ice cream cone, chocolate covered, with nuts, flavors other than chocolate
13120720 Ice cream cone, chocolate covered or dipped, flavors other than chocolate
13120730 Ice cream cone, no topping, flavors other than chocolate
13120740 Ice cream cone, no topping, NS as to flavor
13120750 Ice cream cone with nuts, chocolate ice cream
13120760 Ice cream cone, chocolate covered or dipped, chocolate ice cream
13120770 Ice cream cone, no topping, chocolate ice cream
13120780 Ice cream cone, chocolate covered, with nuts, chocolate ice cream
13130100 Light ice cream, NFS (formerly ice milk)
13130300 Light ice cream, flavors other than chocolate (formerly ice milk)
13130310 Light ice cream, chocolate (formerly ice milk)
13130320 Light ice cream, no sugar added, NS as to flavor
13130330 Light ice cream, no sugar added, flavors other than chocolate
13130340 Light ice cream, no sugar added, chocolate
13130590 Light ice cream, soft serve, NS as to flavor (formerly ice milk)
13130600 Light ice cream, soft serve, flavors other than chocolate (formerly ice milk)
13130610 Light ice cream, soft serve, chocolate (formerly ice milk)
13130620 Light ice cream, soft serve cone, flavors other than chocolate (formerly ice milk)
13130630 Light ice cream, soft serve cone, chocolate (formerly ice milk)
13130640 Light ice cream, soft serve cone, NS as to flavor (formerly ice milk)
13130700 Light ice cream, soft serve, blended with candy or cookies
13135000 Light ice cream, sandwich (formerly ice milk)
13135010 Ice cream sandwich, made with light chocolate ice cream
13136000 Ice cream sandwich, made with light, no sugar added ice cream
13140100 Light ice cream, bar or stick, chocolate-coated (formerly ice milk)
13140110 Light ice cream, bar or stick, chocolate covered, with nuts (formerly ice milk)
13140450 Light ice cream, cone, NFS (formerly ice milk)
13140500 Light ice cream, cone, flavors other than chocolate (formerly ice milk)
13140550 Light ice cream, cone, chocolate (formerly ice milk)
13140700 Light ice cream, creamsicle or dreamsicle (formerly ice milk)
13140900 Light ice cream, fudgesicle (formerly ice milk)
13160150 Fat free ice cream, no sugar added, chocolate
13160160 Fat free ice cream, no sugar added, flavors other than chocolate
13160400 Fat free ice cream, flavors other than chocolate
13160410 Fat free ice cream, chocolate

- 13160420 Fat free ice cream, NS as to flavor
- 13161630 Light ice cream, bar or stick, with low-calorie sweetener, chocolate-coated (formerly ice milk)

Mixtures Containing Ice Cream

(Adjusted for ice cream content of ~50 to 87%)

[Phytosterols] = ~0.21 to 0.37%

- 13121000 Ice cream sundae, NS as to topping, with whipped cream
- 13121100 Ice cream sundae, fruit topping, with whipped cream
- 13121300 Ice cream sundae, chocolate or fudge topping, with whipped cream
- 13121400 Ice cream sundae, not fruit or chocolate topping, with whipped cream
- 13122100 Ice cream pie, no crust
- 13126000 Ice cream, fried
- 13140600 Light ice cream, sundae, soft serve, chocolate or fudge topping, with whipped cream (formerly ice milk)
- 13140630 Light ice cream, sundae, soft serve, fruit topping, with whipped cream (formerly ice milk)
- 13140660 Light ice cream, sundae, soft serve, chocolate or fudge topping (without whipped cream) (formerly ice milk)
- 13140670 Light ice cream, sundae, soft serve, fruit topping (without whipped cream) (formerly ice milk)
- 13140680 Light ice cream, sundae, soft serve, not fruit or chocolate topping (without whipped cream) (formerly ice milk)

Mixtures Containing Ice Cream

(Adjusted for ice cream content of ~21 to 45%)

[Phytosterols] = ~0.09 to 0.19%

- 13120800 Ice cream soda, flavors other than chocolate
- 13120810 Ice cream soda, chocolate
- 13121500 Ice cream sundae, fudge topping, with cake, with whipped cream
- 13122500 Ice cream pie, with cookie crust, fudge topping, and whipped cream
- 13140650 Light ice cream, sundae, soft serve, not fruit or chocolate topping, with whipped cream (formerly ice milk)
- 53112000 Cake, ice cream and cake roll, chocolate
- 53112100 Cake, ice cream and cake roll, not chocolate
- 53430300 Crepe, dessert type, ice cream-filled
- 91611050 Ice pop filled with ice cream, all flavor varieties
- 92510730 Fruit punch, made with soda, fruit juice, and sherbet or ice cream

Grain Products and Pastas

Cereal and Granola Bars

[Phytosterols] = 1.25%

- 53540000 Breakfast bar, NFS
- 53540200 Breakfast bar, cereal crust with fruit filling, lowfat
- 53540250 Breakfast bar, cereal crust with fruit filling, fat free
- 53540500 Breakfast bar, date, with yogurt coating
- 53540600 Milk 'n Cereal bar
- 53542100 Granola bar, oats, sugar, raisins, coconut
- 53542200 Granola bar, oats, fruit and nuts, lowfat
- 53542210 Granola bar, nonfat
- 53543100 Granola bar, peanuts, oats, sugar, wheat germ
- 53544200 Granola bar, chocolate-coated
- 53544210 Granola bar, with coconut, chocolate-coated

000154

53544220 Granola bar with nuts, chocolate-coated
 53544250 Granola bar, coated with non-chocolate coating
 53544300 Granola bar, high fiber, coated with non-chocolate yogurt coating
 53544400 Granola bar, with rice cereal

Energy, Meal Replacement, and Fortified Bars

[Phytosterols] = 1.25%

53540700 Kellogg's Special K bar
 53541200 Meal replacement bar
 53544450 PowerBar (fortified high energy bar)
 91780010 Snickers Marathon Energy bar
 91781010 Snickers Marathon Protein bar

Pasta and Noodles (as served)

[Phytosterols] = 0.21%

56101000 Macaroni, cooked, NS as to fat added in cooking
 56101010 Macaroni, cooked, fat not added in cooking
 56101030 Macaroni, cooked, fat added in cooking
 56102000 Macaroni, whole wheat, cooked, NS as to fat added in cooking
 56102010 Macaroni, whole wheat, cooked, fat not added in cooking
 56102020 Macaroni, whole wheat, cooked, fat added in cooking
 56103000 Macaroni, cooked, spinach, NS as to fat added in cooking
 56103010 Macaroni, cooked, spinach, fat not added in cooking
 56103020 Macaroni, cooked, spinach, fat added in cooking
 56104000 Macaroni, cooked, vegetable, NS as to fat added in cooking
 56104010 Macaroni, cooked, vegetable, fat not added in cooking
 56104020 Macaroni, cooked, vegetable, fat added in cooking
 56112000 Noodles, cooked, NS as to fat added in cooking
 56112010 Noodles, cooked, fat not added in cooking
 56112030 Noodles, cooked, fat added in cooking
 56113000 Noodles, cooked, whole wheat, NS as to fat added in cooking
 56113010 Noodles, cooked, whole wheat, fat not added in cooking
 56113990 Noodles, cooked, spinach, NS as to fat added in cooking
 56114000 Noodles, cooked, spinach, fat not added in cooking
 56114020 Noodles, cooked, spinach, fat added in cooking
 56116000 Noodles, chow mein
 56117090 Chow fun rice noodles, cooked, NS as to fat added in cooking
 56117100 Chow fun rice noodles, cooked, fat not added in cooking
 56117110 Chow fun rice noodles, cooked, fat added in cooking
 56130000 Spaghetti, cooked, NS as to fat added in cooking
 56130010 Spaghetti, cooked, fat not added in cooking
 56131000 Spaghetti, cooked, fat added in cooking
 56132000 Spaghetti, cooked, high protein type (assume no fat added)
 56132990 Spaghetti, cooked, whole wheat, NS as to fat added in cooking
 56133000 Spaghetti, cooked, whole wheat, fat not added in cooking
 56133010 Spaghetti, cooked, whole wheat, fat added in cooking

Mixtures Containing Pasta and Noodles (as served)

(Adjusted for pasta and noodles content of ~40 to 84%)

[Phytosterols] = ~0.084 to 0.18%

27220210 Ham and noodles, no sauce (mixture)
 27242000 Chicken or turkey and noodles, no sauce (mixture)
 27250950 Shellfish mixture and noodles, tomato-based sauce (mixture)

000155

27343010 Chicken or turkey, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), no sauce (mixture)

27343020 Chicken or turkey, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), no sauce (mixture)

58130310 Lasagna, meatless

58130810 Lasagna, meatless, whole wheat noodles

58130950 Lasagna, meatless, spinach noodles

58132110 Spaghetti with tomato sauce, meatless

58132340 Spaghetti with tomato sauce and vegetables

58132350 Spaghetti with tomato sauce, meatless, whole wheat noodles

58132450 Spaghetti with tomato sauce, meatless, made with spinach noodles

58132800 Spaghetti with clam sauce, NS as to red or white

58132810 Spaghetti with red clam sauce

58132820 Spaghetti with white clam sauce

58134610 Tortellini, meat-filled, with tomato sauce

58134613 Tortellini, meat-filled, with tomato sauce, canned

58134710 Tortellini, spinach-filled, with tomato sauce

58135110 Chow fun noodles with meat and vegetables

58135120 Chow fun noodles with vegetables, meatless

58140110 Spaghetti with corned beef, Puerto Rican style

58140310 Macaroni with tuna, Puerto Rican style (Macarrones con atun)

58145110 Macaroni or noodles with cheese

58145114 Macaroni or noodles with cheese, made from dry mix

58145115 Macaroni or noodles with cheese, from boxed mix with already prepared cheese sauce

58145140 Macaroni or noodles with cheese and tomato

58145190 Macaroni or noodles with cheese and chicken or turkey

58146100 Pasta with tomato sauce, meatless

58146120 Pasta with cheese and meat sauce

58146130 Pasta with carbonara sauce

58146200 Pasta, meat-filled, with gravy, canned

58146300 Pasta, whole wheat, with meat sauce

58146310 Pasta, whole wheat, with tomato sauce, meatless

58147100 Pasta with pesto sauce

58147110 Macaroni or noodles with beans or lentils and tomato sauce

58147310 Macaroni, creamed

58147330 Macaroni, creamed, with cheese

58148110 Macaroni salad

58148120 Macaroni salad with egg

58148130 Macaroni salad with tuna

58148140 Macaroni salad with crab meat

58148150 Macaroni salad with shrimp

58148180 Macaroni salad with cheese

58148500 Pasta salad (macaroni or noodles, vegetables, dressing)

58148550 Pasta salad with meat (macaroni or noodles, vegetables, meat, dressing)

58149110 Noodle pudding

Mixtures Containing Pasta and Noodles (as served)
 (Adjusted for pasta and noodles content of ~6.5 to <40%)
 [Phytosterols] = ~0.014 to <0.084%

27212150 Beef goulash with noodles

27212200 Beef and noodles with gravy (mixture)

27212300 Beef and noodles with cream or white sauce (mixture)

27212400 Beef and noodles with (mushroom) soup (mixture)

27220020 Ham and noodles with cream or white sauce (mixture)

27220190 Sausage and noodles with cream or white sauce (mixture)

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27233000 Lamb or mutton and noodles with gravy (mixture)
 27235750 Veal and noodles with cream or white sauce (mixture)
 27236000 Venison/deer and noodles with cream or white sauce (mixture)
 27242200 Chicken or turkey and noodles with gravy (mixture)
 27242250 Chicken or turkey and noodles with (mushroom) soup (mixture)
 27242300 Chicken or turkey and noodles with cream or white sauce (mixture)
 27242310 Chicken or turkey and noodles with cheese sauce (mixture)
 27242400 Chicken or turkey and noodles, tomato-based sauce (mixture)
 27250110 Scallops and noodles with cheese sauce (mixture)
 27250130 Shrimp and noodles with cheese sauce (mixture)
 27250610 Tuna noodle casserole with cream or white sauce
 27250630 Tuna noodle casserole with (mushroom) soup
 27250900 Fish and noodles with (mushroom) soup
 27313010 Beef, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), no sauce (mixture)
 27313020 Beef, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), no sauce (mixture)
 27313110 Beef chow mein or chop suey with noodles
 27313150 Beef, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), soy-based sauce (mixture)
 27313160 Beef, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), soy-based sauce (mixture)
 27313210 Beef, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)
 27313220 Beef, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce (mixture)
 27313310 Beef, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), (mushroom) soup (mixture)
 27313320 Beef, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), (mushroom) soup (mixture)
 27313410 Beef, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), gravy (mixture)
 27313420 Beef, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy (mixture)
 27320030 Ham or pork, noodles and vegetables (excluding carrots, broccoli, and dark-green leafy), cheese sauce (mixture)
 27320070 Ham or pork, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)
 27320080 Sausage, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce
 27320090 Sausage, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce
 27320310 Pork chow mein or chop suey with noodles
 27336300 Venison/deer, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)
 27336310 Venison/deer, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce (mixture)
 27343410 Chicken or turkey, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), gravy (mixture)
 27343420 Chicken or turkey, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy (mixture)
 27343470 Chicken or turkey, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), cream, white, or (mushroom) soup-based sauce (mixture)
 27343480 Chicken or turkey, noodles, and vegetables (excluding carrots, broccoli, and/or dark-green leafy), cream, white, or (mushroom) soup-based sauce (mixture)

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27343510 Chicken or turkey, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)

27343520 Chicken or turkey, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce (mixture)

27343910 Chicken or turkey chow mein or chop suey with noodles

27343950 Chicken or turkey, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), cheese sauce (mixture)

27343960 Chicken or turkey, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), cheese sauce (mixture)

27350050 Shrimp chow mein or chop suey with noodles

27350080 Tuna noodle casserole with vegetables, cream or white sauce

27350090 Fish, noodles, and vegetables (including carrots, broccoli, and/or dark green leafy), cheese sauce (mixture)

27350100 Fish, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), cheese sauce (mixture)

27350410 Tuna noodle casserole with vegetables and (mushroom) soup

27351060 Shrimp and pasta garden salad (shrimp, pasta salad, tomato and/or carrots, other vegetables), no dressing

27360080 Chow mein or chop suey, NS as to type of meat, with noodles

27360120 Chow mein or chop suey, various types of meat, with noodles

58130011 Lasagna with meat

58130013 Lasagna with meat, canned

58130020 Lasagna with meat and spinach

58130140 Lasagna with chicken or turkey

58130150 Lasagna, with chicken or turkey, and spinach

58130320 Lasagna, meatless, with spinach

58130610 Lasagna with meat, whole wheat noodles

58130910 Lasagna with meat, spinach noodles

58131100 Ravioli, NS as to filling, no sauce

58131110 Ravioli, NS as to filling, with tomato sauce

58131310 Ravioli, meat-filled, no sauce

58131320 Ravioli, meat-filled, with tomato sauce or meat sauce

58131323 Ravioli, meat-filled, with tomato sauce or meat sauce, canned

58131510 Ravioli, cheese-filled, no sauce

58131520 Ravioli, cheese-filled, with tomato sauce

58131523 Ravioli, cheese-filled, with tomato sauce, canned

58131530 Ravioli, cheese-filled, with meat sauce

58131600 Ravioli, cheese and spinach-filled, with cream sauce

58131610 Ravioli, cheese and spinach filled, with tomato sauce

58132113 Pasta with tomato sauce and cheese, canned

58132310 Spaghetti with tomato sauce and meatballs or spaghetti with meat sauce or spaghetti with meat sauce and meatballs

58132313 Pasta with tomato sauce and meat or meatballs, canned

58132360 Spaghetti with tomato sauce and meatballs, whole wheat noodles or spaghetti with meat sauce, whole wheat noodles or spaghetti with meat sauce and meatballs, whole wheat noodles

58132460 Spaghetti with tomato sauce and meatballs made with spinach noodles, or spaghetti with meat sauce made with spinach noodles, or spaghetti with meat sauce and meatballs made with spinach noodles

58132710 Spaghetti with tomato sauce and frankfurters or hot dogs

58132713 Pasta with tomato sauce and frankfurters or hot dogs, canned

58132910 Spaghetti with tomato sauce and chicken or turkey

58133110 Manicotti, cheese-filled, no sauce

58133120 Manicotti, cheese-filled, with tomato sauce, meatless

58133130 Manicotti, cheese-filled, with meat sauce

58133140 Manicotti, vegetable- and cheese-filled, with tomato sauce, meatless

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58134110	Stuffed shells, cheese-filled, no sauce
58134120	Stuffed shells, cheese-filled, with tomato sauce, meatless
58134130	Stuffed shells, cheese-filled, with meat sauce
58134160	Stuffed shell, cheese- and spinach- filled, no sauce
58134210	Stuffed shells, with chicken, with tomato sauce
58134310	Stuffed shells, with fish and/or shellfish, with tomato sauce
58134620	Tortellini, cheese-filled, meatless, with tomato sauce
58134623	Tortellini, cheese-filled, meatless, with tomato sauce, canned
58134630	Tortellini, cheese-filled, meatless, with vegetables and vinaigrette dressing
58134640	Tortellini, cheese-filled, meatless, with vinaigrette dressing
58134650	Tortellini, meat-filled, no sauce
58134660	Tortellini, cheese-filled, with cream sauce
58134680	Tortellini, cheese-filled, no sauce
58134720	Tortellini, spinach-filled, no sauce
58134810	Cannelloni, cheese- and spinach-filled, no sauce
58136110	Lo mein, NFS
58136120	Lo mein, meatless
58136130	Lo mein, with shrimp
58136140	Lo mein, with pork
58136150	Lo mein, with beef
58136160	Lo mein, with chicken
58137210	Pad Thai, NFS
58137220	Pad Thai, meatless
58137230	Pad Thai with chicken
58137240	Pad Thai with seafood
58137250	Pad Thai with meat
58145113	Macaroni or noodles with cheese, canned
58145120	Macaroni or noodles with cheese and tuna
58145130	Macaroni or noodles with cheese and beef
58145150	Macaroni or noodles with cheese and pork or ham
58145160	Macaroni or noodles with cheese and frankfurters or hot dogs
58145170	Macaroni and cheese with egg
58146110	Pasta with meat sauce
58146150	Pasta with cheese and tomato sauce, meatless
58146160	Pasta with vegetables, no sauce or dressing
58147350	Macaroni, creamed, with vegetables
58147510	Flavored pasta
58147520	Yat Ga Mein with meat, fish, or poultry
58148160	Macaroni salad with tuna and egg
58148170	Macaroni salad with chicken
58148600	Pasta tetrazzini, dry mix, prepared with water
58149160	Noodle pudding, with milk
58149210	Somen salad with noodles, lettuce, egg, fish, and pork

Gravies and Sauces

Major Main Entrée Sauce (spaghetti, tomato)

[Phytosterols] = 0.40%

74403010	Tomato sauce
74403050	Tomato sauce, low sodium
74404010	Spaghetti sauce
74404020	Spaghetti sauce with vegetables, homemade-style
74404030	Spaghetti sauce with meat, canned, no extra meat added
74404050	Spaghetti sauce, low sodium
74404060	Spaghetti sauce, fat free

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Mixtures Containing Major Main Entrée Sauce (spaghetti, tomato)
(Adjusted for major main entrée sauce content of ~40 to 70%)
[Phytosterols] = ~0.16 to 0.28%

27111050	Spaghetti sauce with beef or meat other than lamb or mutton, homemade-style
27120100	Ham or pork with tomato-based sauce (mixture)
27120110	Sausage with tomato-based sauce (mixture)
27120250	Frankfurters or hot dogs with tomato-based sauce (mixture)
27130040	Spaghetti sauce with lamb or mutton, homemade-style
27141030	Spaghetti sauce with poultry, home-made style
27162010	Meat with tomato-based sauce (mixture)
27162050	Spaghetti sauce with combination of meats, homemade-style
27162060	Spaghetti sauce with meat and vegetables, homemade-style
27212100	Beef and noodles with tomato-based sauce (mixture)
27320350	Pork, rice, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce (mixture)
27411200	Beef with vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)), tomato-based sauce (mixture)
58132110	Spaghetti with tomato sauce, meatless
58132350	Spaghetti with tomato sauce, meatless, whole wheat noodles
58132450	Spaghetti with tomato sauce, meatless, made with spinach noodles
58132710	Spaghetti with tomato sauce and frankfurters or hot dogs
58132910	Spaghetti with tomato sauce and chicken or turkey
75306010	Eggplant in tomato sauce, cooked, fat not added in cooking

Mixtures Containing Major Main Entrée Sauce (spaghetti, tomato)
(Adjusted for major main entrée sauce content of ~20 to <40%)
[Phytosterols] = ~0.08 to <0.16%

27111500	Beef sloppy joe (no bun)
27116100	Beef curry
27118110	Meatballs, Puerto Rican style (Albondigas)
27135110	Veal parmigiana
27136050	Venison/deer with tomato-based sauce (mixture)
27146150	Chicken curry
27146300	Chicken or turkey parmigiana
27220110	Pork and rice with tomato-based sauce (mixture)
27242400	Chicken or turkey and noodles, tomato-based sauce (mixture)
27313210	Beef, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)
27313220	Beef, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce (mixture)
27315210	Beef, rice, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)
27315220	Beef, rice, and vegetables (excluding carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)
27319010	Stuffed green pepper, Puerto Rican style (Pimiento relleno)
27320070	Ham or pork, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)
27320080	Sausage, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce
27320090	Sausage, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce
27320100	Pork, potatoes, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)

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27320110 Pork, potatoes, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce (mixture)

27320340 Pork, rice, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)

27451030 Lobster creole, Puerto Rican style (Langosta a la criolla)

27510700 Meatball and spaghetti sauce submarine sandwich, on roll

27510710 Pizzaburger (hamburger, cheese, sauce) on 1/2 bun

27560720 Sausage and spaghetti sauce sandwich

32110100 Eggs a la Malaguena, Puerto Rican style (Huevos a la Malaguena)

58103210 Tamale, meatless, Puerto Rican or Caribbean style

58132310 Spaghetti with tomato sauce and meatballs or spaghetti with meat sauce or spaghetti with meat sauce and meatballs

58132460 Spaghetti with tomato sauce and meatballs made with spinach noodles, or spaghetti with meat sauce made with spinach noodles, or spaghetti with meat sauce and meatballs made with spinach noodles

58146300 Pasta, whole wheat, with meat sauce

58146310 Pasta, whole wheat, with tomato sauce, meatless

58161300 White rice with tomato sauce

58161310 Rice, brown, with tomato sauce

75302010 Beans, green string, with tomatoes, cooked, fat not added in cooking

75412060 Eggplant parmesan casserole, regular

75412070 Eggplant with cheese and tomato sauce

75418030 Squash, summer, casserole, with rice and tomato sauce

77316010 Stuffed cabbage, with meat, Puerto Rican style (Repollo relleno con carne)

Mixtures Containing Major Main Entrée Sauce (spaghetti, tomato)

(Adjusted for major main entrée sauce content of ~2.0 to <20%)

[Phytosterols] = ~0.0085 to <0.08%

27111300 Mexican style beef stew, no potatoes, tomato-based sauce (mixture) (Carne guisada sin papas)

27111310 Mexican style beef stew, no potatoes, with chili peppers, tomato-based sauce (mixture) (Carne guisada con chile)

27111400 Chili con carne, NS as to beans

27111410 Chili con carne with beans

27111420 Chili con carne without beans

27118120 Stewed seasoned ground beef, Puerto Rican style (Picadillo guisado, picadillo de carne)

27118130 Stewed dried beef, Puerto Rican style (Tasajo guisado, carne cecina guisada)

27118180 Puerto Rican style beef stew, meat with gravy (potatoes reported separately)

27120130 Mexican style pork stew, no potatoes, tomato-based sauce (mixture) (cerdo guisado sin papas)

27121410 Chili con carne with beans, made with pork

27136100 Chili con carne with venison/deer and beans

27141050 Stewed chicken with tomato-based sauce, Mexican style (mixture) (Pollo guisado con tomate)

27141500 Chili con carne with chicken or turkey and beans

27211110 Mexican style beef stew with potatoes, tomato-based sauce (mixture) (Carne guisada con papas)

27212120 Chili con carne with beans and macaroni

27214110 Meat loaf made with beef, with tomato-based sauce

27218210 Puerto-Rican style beef stew (Carne guisada con papas)

27218310 Stewed corned beef, Puerto Rican style ("Corned beef" guisado)

27221110 Pork roast, stuffed, Puerto Rican style

27221150 Mexican style pork stew, with potatoes, tomato-based sauce (mixture) (cerdo guisado con papas)

27260100 Meat loaf made with beef and pork, with tomato-based sauce

27260500 Vienna sausages stewed with potatoes, Puerto Rican style (Salchichas guisadas)
 27315250 Stuffed cabbage rolls with beef and rice
 27330060 Lamb or mutton, rice, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)
 27330210 Lamb or mutton stew with potatoes and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce
 27330220 Lamb or mutton stew with potatoes and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce
 27331150 Veal fricasee, Puerto Rican style (ternera en fricase)
 27335500 Stewed rabbit, Puerto Rican style (Fricase de conejo)
 27336300 Venison/deer, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)
 27336310 Venison/deer, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce (mixture)
 27348100 Chicken fricasee, Puerto Rican style (Fricase de pollo)
 27351040 Biscayne codfish, Puerto Rican style (Bacalao a la Vizcaina)
 27418310 Corned beef with tomato sauce and onion, Puerto Rican style (mixture)
 27420400 Pork and vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)), tomato-based sauce (mixture)
 27420410 Pork and vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)), tomato-based sauce (mixture)
 27441120 Chicken or turkey creole, without rice
 27450700 Fish and vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)), tomato-based sauce (mixture)
 27450710 Fish and vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)), tomato-based sauce (mixture)
 27451010 Fish a la creole, Puerto Rican style (Pescado frito con mojo)
 27461010 Stewed seasoned ground beef, Puerto Rican style (Picadillo para relleno)
 27462000 Stewed chitterlings, Puerto Rican style (cuajo guisado)
 27510720 Pizzaburger (hamburger, cheese, sauce) on whole bun
 28510030 Gravy, meat-based, from Puerto-Rican style beef stew
 41210100 Stewed dry red beans, Puerto Rican style (Habichuelas coloradas guisadas)
 41310200 Chickpeas stewed with pig's feet, Puerto Rican style (Garbanzos guisados con patitos de cerdo)
 41310210 Stewed chickpeas with Spanish sausages, Puerto Rican style (Garbanzos guisados con chorizos)
 58100220 Burrito with chicken, beans, and cheese
 58100240 Burrito with chicken, NFS
 58100400 Enchilada with beef, no beans
 58100510 Enchilada with beef and beans
 58100530 Enchilada with beef and cheese, no beans
 58100560 Enchilada with ham and cheese, no beans
 58100600 Enchilada with chicken, tomato-based sauce
 58100610 Enchilada with chicken and beans, tomato-based sauce
 58100630 Enchilada with chicken and cheese, no beans, tomato-based sauce
 58100710 Enchilada with beans, meatless
 58100720 Enchilada with beans and cheese, meatless
 58100800 Enchilada with cheese, meatless, no beans
 58100900 Enchilada with seafood, tomato-based sauce
 58101820 Mexican casserole made with ground beef, beans, tomato sauce, cheese, taco seasonings, and corn chips
 58108030 Panzerotti, with meat, vegetables, and cheese
 58108040 Panzerotti, with vegetables and cheese
 58155110 Rice with chicken, Puerto Rican style (Arroz con Pollo)
 58155210 Stuffed rice with chicken, Dominican style (Arroz relleno Dominicano)
 58155810 Stewed rice, Puerto Rican style (arroz quisado)

58155910	Rice with squid, Puerto Rican style (arroz con calamares)
58156210	Rice with vienna sausage, Puerto Rican style (arroz con salchichas)
58156310	Rice with Spanish sausage, Puerto Rican style
74415110	Tomato and sofrito stewing sauce, Puerto Rican style
75410500	Chiles rellenos, cheese-filled (stuffed chili peppers)
77141010	Potato chicken pie, Puerto Rican style (Pastelon de pollo)
77205110	Ripe plantain fritters, Puerto Rican style (Pionono)
77230510	Cassava pie stuffed with crab meat, Puerto Rican style (Empanada de jueyes)
77250110	Stuffed tannier fritters, Puerto Rican style (Alcapurrias)
77316510	Stuffed cabbage, with meat and rice, Syrian dish, Puerto Rican style (Repollo relleno con carne y con arroz; Arabe Mihsy Melful)
77563010	Puerto Rican stew (Sancocho)

Minor Main Entrée Sauce (gravy, pesto, white, cheese, salsa, cocktail)

[Phytosterols] = 0.83%

13411000	White sauce, milk sauce
13412000	Milk gravy, quick gravy
14650100	Cheese sauce
14650150	Cheese sauce made with lowfat cheese
28500010	Gravy, meat or poultry, with wine
28500020	Gravy, meat, with fruit
28500030	Gravy, poultry, low sodium
28500040	Gravy, beef or meat
28500050	Gravy, giblet
28500060	Gravy, beef or meat, low sodium
28500100	Gravy, mushroom
28500150	Gravy, redeye
28501010	Gravy, beef or meat, fat free
28501110	Gravy, poultry, fat free
28510010	Gravy or sauce, poultry-based from Puerto Rican-style chicken fricasse
28510020	Gravy, meat-based, from Puerto-Rican style stuffed pot roast
28520000	Gravy or sauce, Chinese (soy sauce, stock or bouillon, cornstarch)
74402100	Salsa, NFS
74402110	Salsa, red, uncooked
74402150	Salsa, red, cooked, not homemade
74402310	Green tomato-chile sauce, raw (Salsa de tomate verde cruda)
74402350	Green tomato-chile sauce, cooked (Salsa verde, NFS)
74406500	Cocktail sauce
81302070	Pesto sauce

Mixtures Containing Minor Main Entrée Sauce (pizza, pesto, white, cheese, salsa, cocktail)

(Adjusted for minor main entrée sauce content of 30 to 52%)

[Phytosterols] = 0.25 to 0.43%

27120020	Ham or pork with gravy (mixture)
27130010	Lamb or mutton with gravy (mixture)
27135010	Veal with gravy (mixture)
27136080	Venison/deer with gravy (mixture)
27142000	Chicken with gravy (mixture)
27142200	Turkey with gravy (mixture)
27163010	Meat with gravy, NS as to type of meat (mixture)
27212200	Beef and noodles with gravy (mixture)
27213200	Beef and rice with gravy (mixture)
27260050	Meatballs, with breading, NS as to type of meat, with gravy

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27313410	Beef, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), gravy (mixture)
27313420	Beef, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy (mixture)
27317100	Beef, dumplings, and vegetables (including carrots, broccoli, and/or dark-green leafy), gravy (mixture)
27317110	Beef, dumplings, and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy (mixture)
27320140	Pork, potatoes, and vegetables (including carrots, broccoli, and/or dark-green leafy), gravy (mixture)
27320150	Pork, potatoes, and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy (mixture)
27513020	Roast beef sandwich, with gravy
27513030	Roast beef sandwich dipped in egg, fried, with gravy and spread
27520530	Pork sandwich, with gravy
27540330	Turkey sandwich, with gravy
32105180	Huevos rancheros
58126120	Turnover, meat-filled, with gravy
58145130	Macaroni or noodles with cheese and beef
71106020	Potato from Puerto Rican style stuffed pot roast, with gravy
71106050	Potato from Puerto Rican beef stew, with gravy
71106070	Potato from Puerto Rican chicken fricassee, with sauce
75439010	Vegetable stew without meat

Mixtures Containing Minor Main Entrée Sauce (pizza, pesto, white, cheese, salsa, cocktail)
 (Adjusted for minor main entrée sauce content of 9.5 to <30%)
 [Phytosterols] = 0.079 to 0.25%

14650160	Alfredo sauce
27150110	Shrimp cocktail (shrimp with cocktail sauce)
27211300	Beef (roast) hash
27311510	Shepherd's pie with beef
27330010	Shepherd's pie with lamb
27330030	Lamb or mutton stew with potatoes and vegetables (including carrots, broccoli, and/or dark-green leafy)
27330050	Lamb or mutton, rice, and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy (mixture)
27330110	Lamb or mutton stew with potatoes and vegetables (excluding carrots, broccoli, and dark-green leafy)
27347230	Chicken or turkey, stuffing, and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy
27347240	Chicken or turkey, dumplings, and vegetables (including carrots, broccoli, and/or dark green leafy),
27347250	Chicken or turkey, dumplings, and vegetables (excluding carrots, broccoli, and dark green leafy), gravy
27360100	Brunswick stew
27430400	Lamb or mutton stew with vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)
27430410	Lamb or mutton stew with vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)
58101310	Taco or tostada with beef, lettuce, tomato and salsa
58101540	Taco or tostada with fish, lettuce, tomato, salsa
58121510	Dumpling, meat-filled
58145115	Macaroni or noodles with cheese, from boxed mix with already prepared cheese sauce
58163110	Rice with gravy

Sauces for Dipping (barbecue, hollandaise, tartar, mustard, sweet and sour)

[Phytosterols] = 1.67%

74406010	Barbecue sauce
74406050	Barbecue sauce, low sodium
75506100	Mustard sauce
81302010	Hollandaise sauce
81302050	Tartar sauce
81312000	Tartar sauce, low calorie
91361010	Sweet and sour sauce

Milk, Whole and Skim**Fluid Milk and Powdered Milk**

[Phytosterols] = 0.42%

11100000	Milk, NFS
11111000	Milk, cow's, fluid, whole
11111100	Milk, cow's, fluid, whole, low-sodium
11111150	Milk, calcium fortified, cow's, fluid, whole
11111160	Milk, calcium fortified, cow's, fluid, 1% fat
11111170	Milk, calcium fortified, cow's, fluid, skim or nonfat
11112000	Milk, cow's, fluid, other than whole, NS as to 2%, 1%, or skim (formerly milk, cow's, fluid, "lowfat", NS as to percent fat)
11112110	Milk, cow's, fluid, 2% fat
11112120	Milk, cow's, fluid, acidophilus, 1% fat
11112130	Milk, cow's, fluid, acidophilus, 2% fat
11112210	Milk, cow's, fluid, 1% fat
11113000	Milk, cow's, fluid, skim or nonfat, 0.5% or less butterfat
11114000	Milk, cow's, fluid, filled with vegetable oil, NS as to percent fat
11114100	Milk, cow's, fluid, filled with vegetable oil, whole
11114200	Milk, cow's, fluid, filled with vegetable oil, lowfat
11114300	Milk, cow's, fluid, lactose reduced, 1% fat
11114310	Milk, cow's, fluid, lactose reduced, 1% fat, fortified with calcium
11114320	Milk, cow's, fluid, lactose reduced, nonfat
11114321	Milk, cow's, fluid, lactose reduced, nonfat, fortified with calcium
11114330	Milk, cow's, fluid, lactose reduced, 2% fat
11114350	Milk, cow's, fluid, lactose reduced, whole
11116000	Milk, goat's, fluid, whole
11120000	Milk, dry, reconstituted, NFS
11121100	Milk, dry, reconstituted, whole
11121210	Milk, dry, reconstituted, lowfat
11121300	Milk, dry, reconstituted, nonfat

Mixtures Containing Fluid Milk or Powdered Milk

(Adjusted for fluid milk and powdered milk content of ~50 to 85%)

[Phytosterols] = ~0.21 to 0.36%

13200110	Pudding, NFS
13210110	Pudding, bread
13210220	Pudding, chocolate, ready-to-eat, NS as to from dry mix or canned
13210260	Rice flour cream, Puerto Rican style (Majarete, manjar blanco)
13210270	Spanish custard, Puerto Rican style (Natilla Espanol)
13210300	Custard
13210410	Pudding, rice
13210500	Pudding, tapioca, made from home recipe, made with milk

13210520 Pudding, tapioca, made from dry mix, made with milk
 13210530 Pudding, tapioca, chocolate, made with milk
 13210610 Pudding, coconut
 13210710 Pudding, Indian (milk, molasses and cornmeal-based pudding)
 13210820 Fresh corn custard, Puerto Rican style (Mazamorra, Mundo Nuevo)
 13220110 Pudding, flavors other than chocolate, prepared from dry mix, milk added
 13220120 Pudding, chocolate, prepared from dry mix, milk added
 27113000 Beef with cream or white sauce (mixture)
 27113200 Creamed chipped or dried beef
 27120120 Sausage gravy
 27143000 Chicken or turkey with cream sauce (mixture)
 27146350 Lemon chicken, Chinese style
 27150100 Shrimp, curried
 27150510 Scallops with cheese sauce (mixture)
 27214600 Creamed dried beef on toast
 28355250 Lobster bisque
 28355310 Oyster stew
 52213010 Spoonbread
 53116600 Cake, rice flour, without icing
 53344070 Pie, custard, individual size or tart
 53386000 Pie, pudding, flavors other than chocolate
 55105000 Pancakes, buckwheat
 55105200 Pancakes, whole wheat
 55205000 Waffle, 100% whole wheat or 100% whole grain
 55801000 Funnel cake
 58149160 Noodle pudding, with milk
 58161110 Rice casserole with cheese

Mixtures Containing Fluid Milk or Powdered Milk

(Adjusted for fluid milk and powdered milk content of ~10 to <50%)

[Phytosterols] = ~0.042 to <0.21%

13210160 Diplomat pudding, Puerto Rican style (Budin Diplomatico)
 13210810 Puerto Rican pumpkin pudding (Flan de calabaza)
 21500200 Ground beef or patty, breaded, cooked
 22002100 Pork, ground or patty, breaded, cooked
 27120090 Ham or pork with (mushroom) soup (mixture)
 27135110 Veal parmigiana
 27146200 Chicken or turkey with cheese sauce (mixture)
 27146300 Chicken or turkey parmigiana
 27150030 Crab imperial
 27211190 Beef and potatoes with cream or white sauce (mixture)
 27211500 Beef and potatoes with cheese sauce (mixture)
 27212300 Beef and noodles with cream or white sauce (mixture)
 27212400 Beef and noodles with (mushroom) soup (mixture)
 27213400 Beef and rice with (mushroom) soup (mixture)
 27214100 Meat loaf made with beef
 27220030 Ham and rice with (mushroom) soup (mixture)
 27220080 Ham croquette
 27220190 Sausage and noodles with cream or white sauce (mixture)
 27230010 Lamb or mutton loaf
 27235000 Meat loaf made with venison / deer
 27235750 Veal and noodles with cream or white sauce (mixture)
 27236000 Venison/deer and noodles with cream or white sauce (mixture)
 27242250 Chicken or turkey and noodles with (mushroom) soup (mixture)
 27242300 Chicken or turkey and noodles with cream or white sauce (mixture)

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27243300 Chicken or turkey and rice with cream sauce (mixture)
 27246300 Chicken or turkey cake, patty, or croquette
 27246400 Chicken or turkey souffle
 27246500 Meat loaf made with chicken or turkey
 27250080 Salmon loaf
 27250110 Scallops and noodles with cheese sauce (mixture)
 27250130 Shrimp and noodles with cheese sauce (mixture)
 27250150 Tuna loaf
 27250550 Seafood souffle
 27250610 Tuna noodle casserole with cream or white sauce
 27250630 Tuna noodle casserole with (mushroom) soup
 27250710 Tuna and rice with (mushroom) soup (mixture)
 27250810 Fish and rice with tomato-based sauce
 27250820 Fish and rice with cream sauce
 27250830 Fish and rice with (mushroom) soup
 27250900 Fish and noodles with (mushroom) soup
 27260010 Meat loaf, NS as to type of meat
 27260080 Meat loaf made with beef and pork
 27260090 Meat loaf made with beef, veal and pork
 27320030 Ham or pork, noodles and vegetables (excluding carrots, broccoli, and dark-green leafy),
 cheese sauce (mixture)
 27343950 Chicken or turkey, noodles, and vegetables (including carrots, broccoli, and/or dark-green
 leafy), cheese sauce (mixture)
 27343960 Chicken or turkey, noodles, and vegetables (excluding carrots, broccoli, and dark-green
 leafy), cheese sauce (mixture)
 27350200 Oyster pie
 27443110 Chicken or turkey a la king with vegetables (including carrots, broccoli, and/or dark-green
 leafy (no potatoes)), cream, white, or soup-based sauce
 27443120 Chicken or turkey a la king with vegetables (excluding carrots, broccoli, and dark-green
 leafy (no potatoes)), cream, white, or soup-based sauce
 27450510 Tuna casserole with vegetables and (mushroom) soup, no noodles
 27560300 Corn dog (frankfurter or hot dog with cornbread coating)
 27560310 Corny dog, with chili, on bun
 32104900 Egg omelet or scrambled egg, NS as to fat added in cooking
 32104950 Egg omelet or scrambled egg, fat not added in cooking
 32105000 Egg omelet or scrambled egg, fat added in cooking
 32105010 Egg omelet or scrambled egg, with cheese
 32105020 Egg omelet or scrambled egg, with fish
 32105030 Egg omelet or scrambled egg, with ham or bacon
 32105040 Egg omelet or scrambled egg, with dark-green vegetables
 32105050 Egg omelet or scrambled egg, with vegetables other than dark-green vegetables
 32105060 Egg omelet or scrambled egg, with peppers, onion, and ham
 32105070 Egg omelet or scrambled egg, with mushrooms
 32105080 Egg omelet or scrambled egg, with cheese and ham or bacon
 32105085 Egg omelet or scrambled egg, with cheese, ham or bacon, and tomatoes
 32105100 Egg omelet or scrambled egg, with potatoes and/or onions (Tortilla Espanola, traditional
 style Spanish omelet)
 32105110 Egg omelet or scrambled egg, with beef
 32105120 Egg omelet or scrambled egg, with sausage and mushrooms
 32105121 Egg omelet or scrambled egg, with sausage and cheese
 32105122 Egg omelet or scrambled egg, with sausage
 32105130 Egg omelet or scrambled egg, with onions, peppers, tomatoes, and mushrooms
 32105150 Egg omelet or scrambled egg, with chili, cheese, tomatoes, and beans
 32105160 Egg omelet or scrambled egg, with chorizo
 32105170 Egg omelet or scrambled egg with chicken
 32105190 Egg casserole with bread, cheese, milk and meat

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33201010 Scrambled egg, made from cholesterol-free frozen mixture
 33201110 Scrambled egg, made from cholesterol-free frozen mixture with cheese
 33201500 Scrambled egg, made from cholesterol-free frozen mixture with vegetables
 33202010 Scrambled egg, made from frozen mixture
 33301010 Scrambled egg, made from packaged liquid mixture
 51000250 Roll, made from home recipe or purchased at a bakery, NS as to major flour
 51000260 Roll, made from home recipe or purchased at a bakery, toasted, NS as to major flour
 51151060 Roll, white, soft, made from home recipe or purchased at a bakery
 51502010 Roll, oatmeal
 51502020 Roll, oatmeal, toasted
 52101100 Biscuit, baking powder or buttermilk type, made from mix
 52104010 Biscuit, baking powder or buttermilk type, made from home recipe
 52104040 Biscuit, whole wheat
 52104100 Biscuit, cheese
 53100050 Cake batter, raw, chocolate
 53100100 Cake, NS as to type, with or without icing
 53104650 Cheesecake, chocolate, reduced fat
 53107100 Cake, cupcake, NS as to type, without icing
 53110100 Cake, plum pudding
 53111500 Cake, graham cracker, without icing
 53112000 Cake, ice cream and cake roll, chocolate
 53112100 Cake, ice cream and cake roll, not chocolate
 53112150 Cake, frozen yogurt and cake layer, not chocolate, with icing
 53112160 Cake, frozen yogurt and cake layer, chocolate, with icing
 53115500 Cake, pineapple, fat free, cholesterol free, without icing
 53115600 Cake, poppyseed, without icing
 53116270 Cake, pound, chocolate
 53116280 Cake, pound, chocolate, fat free, cholesterol free
 53116390 Cake, pound, reduced fat, cholesterol free
 53116650 Cake, Quezadilla, El Salvadorian style
 53116750 Cake, soy flour, without icing
 53118900 Cake, chiffon, chocolate, without icing
 53119000 Cake, upside down (all fruits)
 53120400 Cake, white, eggless, lowfat
 53122070 Cake, shortcake, biscuit type, with whipped cream and fruit
 53122080 Cake, shortcake, biscuit type, with fruit
 53341070 Pie, banana cream, individual size or tart
 53341500 Pie, buttermilk
 53342000 Pie, chocolate cream
 53342070 Pie, chocolate cream, individual size or tart
 53343070 Pie, coconut cream, individual size or tart
 53345000 Pie, lemon cream
 53345070 Pie, lemon cream, individual size or tart
 53346000 Pie, peanut butter cream
 53346500 Pie, pineapple cream
 53347070 Pie, pumpkin, individual size or tart
 53347600 Pie, squash
 53360000 Pie, sweetpotato
 53373000 Pie, black bottom
 53382000 Pie, chocolate-marshmallow
 53386050 Pie, pudding, flavors other than chocolate, individual size or tart
 53400200 Blintz, cheese-filled
 53400300 Blintz, fruit-filled
 53410100 Cobbler, apple
 53410300 Cobbler, berry
 53415120 Fritter, apple

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53415200 Fritter, banana
 53415220 Fritter, berry
 53430000 Crepe, dessert type, NS as to filling
 53430100 Crepe, dessert type, chocolate-filled
 53430200 Crepe, dessert type, fruit-filled
 53430250 Crepe suzette
 53430300 Crepe, dessert type, ice cream-filled
 53441210 Basbousa (semolina dessert dish)
 53452170 Pastry, cookie type, fried
 53511500 Danish pastry, with cheese, fat free, cholesterol free
 53520500 Doughnut, oriental
 53521130 Doughnut, raised or yeast, chocolate covered
 53521220 Doughnut, chocolate cream-filled
 53521230 Doughnut, custard-filled, with icing
 55103000 Pancakes, with fruit
 55105100 Pancakes, cornmeal
 55202000 Waffle, wheat, bran, or multigrain
 55204000 Waffle, cornmeal
 55211050 Waffle, plain, lowfat
 55301000 French toast, plain
 55310100 Bread fritters, Puerto Rican style (Torrejas, Galician fritters)
 55401000 Crepe, plain
 55601000 Flour and milk patty
 58120110 Crepes, filled with meat, fish, or poultry, with sauce
 58124210 Pastry, cheese-filled
 58140310 Macaroni with tuna, Puerto Rican style (Macarrones con atun)
 58145110 Macaroni or noodles with cheese
 58145114 Macaroni or noodles with cheese, made from dry mix
 58145120 Macaroni or noodles with cheese and tuna
 58145150 Macaroni or noodles with cheese and pork or ham
 58145160 Macaroni or noodles with cheese and frankfurters or hot dogs
 58145170 Macaroni and cheese with egg
 58147310 Macaroni, creamed
 71301000 White potato, cooked, with sauce, NS as to sauce
 71301020 White potato, cooked, with cheese
 71305010 White potato, scalloped
 71305110 White potato, scalloped, with ham
 71501000 White potato, mashed, NFS
 71501010 White potato, from fresh, mashed, made with milk
 71501020 White potato, from fresh, mashed, made with milk and fat
 71501050 White potato, from fresh, mashed, made with milk, fat and cheese
 71501060 White potato, from dry, mashed, made with milk, fat and egg
 71501090 White potato, from dry, mashed, made with milk, no fat
 71501300 White potato, from dry, mashed, NS as to milk or fat
 71501310 White potato, from fresh, mashed, NS as to milk or fat
 71702000 Potato pudding
 71803010 Potato chowder
 72125240 Spinach souffle
 72202020 Broccoli casserole (broccoli, rice, cheese, and mushroom sauce)
 73304010 Squash fritter or cake
 73409000 Sweetpotato, casserole or mashed
 74202050 Tomatoes, red, NS as to form, fried
 74202051 Tomatoes, red, from fresh, fried
 74205010 Tomatoes, green, cooked, NS as to form
 74205011 Tomatoes, green, cooked, from fresh
 75403020 Beans, string, green, cooked, NS as to form, with mushroom sauce

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75403021 Beans, string, green, cooked, from fresh, with mushroom sauce
75403022 Beans, string, green, cooked, from frozen, with mushroom sauce
75403023 Beans, string, green, cooked, from canned, with mushroom sauce
75411010 Corn, scalloped or pudding
75411020 Corn fritter
75418060 Squash, summer, souffle
75440500 Vegetable combinations (including carrots, broccoli, and/or dark-green leafy), cooked, with cheese sauce
75440510 Vegetable combinations (excluding carrots, broccoli, and dark-green leafy), cooked, with cheese sauce
77230510 Cassava pie stuffed with crab meat, Puerto Rican style (Empanada de jueyes)
91303750 Chocolate gravy
92611100 Oatmeal beverage with milk (Atole de avena)
92613010 Atole (corn meal beverage)
92613510 Corn beverage with chocolate and milk (Champurrado, Atole de Chocolate)

Mixtures Containing Fluid Milk or Powdered Milk

(Adjusted for fluid milk and powdered milk content of 2 to <10%)

[Phytosterols] = 0.0084 to <0.042%

13241000 Pudding, with fruit and vanilla wafers
21103110 Beef steak, breaded or floured, baked or fried, NS as to fat eaten
21103120 Beef steak, breaded or floured, baked or fried, lean and fat eaten
21103130 Beef steak, breaded or floured, baked or fried, lean only eaten
22101400 Pork chop, battered, fried, NS as to fat eaten
22101410 Pork chop, battered, fried, lean and fat eaten
22101420 Pork chop, battered, fried, lean only eaten
22201050 Pork steak or cutlet, battered, fried, NS as to fat eaten
22201060 Pork steak or cutlet, battered, fried, lean and fat eaten
22201070 Pork steak or cutlet, battered, fried, lean only eaten
22210450 Pork, tenderloin, battered, fried
26111110 Croaker, cooked, NS as to cooking method
26111140 Croaker, floured or breaded, fried
26127110 Perch, cooked, NS as to cooking method
26127140 Perch, floured or breaded, fried
26133110 Porgy, cooked, NS as to cooking method
26133140 Porgy, floured or breaded, fried
26307140 Crab, soft shell, floured or breaded, fried
27113300 Swedish meatballs with cream or white sauce (mixture)
27144000 Chicken or turkey with (mushroom) soup (mixture)
27146250 Chicken or turkey cordon bleu
27150050 Fish timbale or mousse
27214110 Meat loaf made with beef, with tomato-based sauce
27220010 Meat loaf made with ham (not luncheon meat)
27220150 Sausage and rice with (mushroom) soup (mixture)
27220520 Ham or pork and potatoes with cheese sauce (mixture)
27246100 Chicken or turkey with dumplings (mixture)
27250250 Flounder with crab stuffing
27260050 Meatballs, with breading, NS as to type of meat, with gravy
27260100 Meat loaf made with beef and pork, with tomato-based sauce
27311510 Shepherd's pie with beef
27320120 Sausage, potatoes, and vegetables (including carrots, broccoli, and/or dark-green leafy), gravy (mixture)
27320130 Sausage, potatoes, and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy (mixture)
27330010 Shepherd's pie with lamb

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27350410 Tuna noodle casserole with vegetables and (mushroom) soup
 27443150 Chicken or turkey divan
 53102000 Cake, applesauce, NS as to icing
 53102200 Cake, applesauce, with icing
 53102500 Cake, banana, NS as to icing
 53102600 Cake, banana, without icing
 53102700 Cake, banana, with icing
 53103500 Cake, butter, NS as to icing
 53103600 Cake, butter, with icing
 53104580 Cheesecake -type dessert, made with yogurt, with fruit
 53104900 Cake, chocolate, made with mayonnaise or salad dressing, NS as to icing
 53104950 Cake, chocolate, made with mayonnaise or salad dressing, with icing, coating, or filling
 53105500 Cake, chocolate, with icing, diet
 53107000 Cake, cupcake, NS as to type or icing
 53107200 Cake, cupcake, NS as to type, with icing
 53109000 Cake, cupcake, not chocolate, NS as to icing
 53109210 Cake, cupcake, not chocolate, with icing or filling, lowfat, cholesterol free
 53109270 Cake, cupcake, chocolate, with or without icing, fruit filling or cream filling, lowfat, cholesterol free

 53115000 Cake, marble, NS as to icing
 53115200 Cake, marble, with icing
 53115300 Cake, nut, NS as to icing
 53115320 Cake, nut, with icing
 53116000 Cake, pound, without icing
 53116560 Cake, raisin-nut, with icing
 53117000 Cake, spice, NS as to icing
 53117200 Cake, spice, with icing
 53118310 Cake, sponge, chocolate, with icing
 53118500 Cake, torte
 53118950 Cake, chiffon, chocolate, with icing
 53120000 Cake, white, standard-type mix (egg whites and water added), NS as to icing
 53120060 Cake, white, made from home recipe or purchased ready-to-eat, NS as to icing
 53120200 Cake, white, standard-type mix (egg whites and water added to mix), with icing
 53121000 Cake, yellow, standard-type mix (eggs and water added to dry mix), NS as to icing
 53121200 Cake, yellow, standard-type mix (eggs and water added to dry mix), with icing
 53123500 Cake, shortcake, with whipped topping and fruit, diet
 53386250 Pie, pudding, chocolate, with chocolate coating, individual size
 53386500 Pie, pudding, flavors other than chocolate, with chocolate coating, individual size
 53390100 Pie, tofu with fruit
 53410200 Cobbler, apricot
 53410500 Cobbler, cherry
 53410800 Cobbler, peach
 53410850 Cobbler, pear
 53410860 Cobbler, pineapple
 53410880 Cobbler, plum
 53410900 Cobbler, rhubarb
 53520150 Doughnut, cake type, chocolate covered, dipped in peanuts
 53520160 Doughnut, cake type, chocolate, with chocolate icing
 53521100 Doughnut, raised or yeast, chocolate, with chocolate icing
 58132310 Spaghetti with tomato sauce and meatballs or spaghetti with meat sauce or spaghetti with meat sauce and meatballs
 58132360 Spaghetti with tomato sauce and meatballs, whole wheat noodles or spaghetti with meat sauce, whole wheat noodles or spaghetti with meat sauce and meatballs, whole wheat noodles

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58132460 Spaghetti with tomato sauce and meatballs made with spinach noodles, or spaghetti with meat sauce made with spinach noodles, or spaghetti with meat sauce and meatballs made with spinach noodles

71945020 Yam buns, Puerto Rican style (Bunuelos de name)

72201240 Broccoli, cooked, NS as to form, with mushroom sauce

72201241 Broccoli, cooked, from fresh, with mushroom sauce

72201242 Broccoli, cooked, from frozen, with mushroom sauce

72202030 Broccoli, batter-dipped and fried

73305020 Squash, winter, souffle

75402021 Beans, lima, immature, cooked, from fresh, with mushroom sauce

75402022 Beans, lima, immature, cooked, from frozen, with mushroom sauce

75402023 Beans, lima, immature, cooked, from canned, with mushroom sauce

75417020 Peas, cooked, NS as to form, with mushroom sauce

75417021 Peas, cooked, from fresh, with mushroom sauce

75417022 Peas, cooked, from frozen, with mushroom sauce

75417023 Peas, cooked, from canned, with mushroom sauce

77230210 Cassava Pasteles, Puerto Rican style (Pasteles de yuca)

77272010 Puerto Rican pasteles (Pasteles de masa)

77316600 Eggplant and meat casserole

91304010 Topping, butterscotch or caramel

91304070 Topping, peanut butter, thick, fudge type

91305010 Icing, chocolate

91305020 Icing, white

Mixtures Containing Fluid Milk or Powdered Milk

(Adjusted for fluid milk and powdered milk content of ~0.08 to <2%)

[Phytosterols] = ~0.00034 to <0.0084%

24301210 Duck, battered, fried

26100130 Fish, NS as to type, breaded or battered, baked

26100140 Fish, NS as to type, floured or breaded, fried

26100150 Fish, NS as to type, battered, fried

26100240 Fish stick, patty, or fillet, NS as to type, floured or breaded, fried

26100250 Fish stick, patty, or fillet, NS as to type, battered, fried

26105110 Carp, cooked, NS as to cooking method

26105140 Carp, floured or breaded, fried

26107110 Catfish, cooked, NS as to cooking method

26107130 Catfish, breaded or battered, baked

26107140 Catfish, floured or breaded, fried

26107150 Catfish, battered, fried

26109110 Cod, cooked, NS as to cooking method

26109130 Cod, breaded or battered, baked

26109140 Cod, floured or breaded, fried

26109150 Cod, battered, fried

26111130 Croaker, breaded or battered, baked

26115130 Flounder, breaded or battered, baked

26115140 Flounder, floured or breaded, fried

26115150 Flounder, battered, fried

26117130 Haddock, breaded or battered, baked

26117140 Haddock, floured or breaded, fried

26117150 Haddock, battered, fried

26119140 Herring, floured or breaded, fried

26121140 Mackerel, floured or breaded, fried

26123110 Mullet, cooked, NS as to cooking method

26123140 Mullet, floured or breaded, fried

26125130 Ocean perch, breaded or battered, baked

26125140 Ocean perch, floured or breaded, fried
 26125150 Ocean perch, battered, fried
 26127130 Perch, breaded or battered, baked
 26127150 Perch, battered, fried
 26129110 Pike, cooked, NS as to cooking method
 26129140 Pike, floured or breaded, fried
 26129150 Pike, battered, fried
 26131140 Pompano, floured or breaded, fried
 26131150 Pompano, battered, fried
 26133130 Porgy, breaded or battered, baked
 26133150 Porgy, battered, fried
 26135140 Ray, floured or breaded, fried
 26137140 Salmon, floured or breaded, fried
 26137150 Salmon, battered, fried
 26141130 Sea bass, breaded or battered, baked
 26141140 Sea bass, floured or breaded, fried
 26145110 Smelt, cooked, NS as to cooking method
 26145140 Smelt, floured or breaded, fried
 26145150 Smelt, battered, fried
 26147140 Sturgeon, floured or breaded, fried
 26149140 Swordfish, floured or breaded, fried
 26151130 Trout, breaded or battered, baked
 26151140 Trout, floured or breaded, fried
 26151150 Trout, battered, fried
 26153140 Tuna, fresh, floured or breaded, fried
 26157130 Whiting, breaded or battered, baked
 26157140 Whiting, floured or breaded, fried
 26157150 Whiting, battered, fried
 26205110 Octopus, cooked, NS as to cooking method
 26213140 Squid, breaded, fried
 26303110 Clams, cooked, NS as to cooking method
 26303140 Clams, floured or breaded, fried
 26304150 Conch, battered, fried
 26311140 Lobster, floured or breaded, fried
 26311150 Lobster, battered, fried
 26315140 Oysters, floured or breaded, fried
 26317110 Scallops, cooked, NS as to cooking method
 26317140 Scallops, floured or breaded, fried
 27112010 Salisbury steak with gravy (mixture)
 27550000 Fish sandwich, on bun, with spread
 53102300 Cake, applesauce, diet, without icing
 53104300 Cake, carrot, diet
 53104520 Cheesecake, diet
 53104570 Cheesecake, diet, with fruit
 53108000 Cake, cupcake, chocolate, NS as to icing
 53108100 Cake, cupcake, chocolate, without icing or filling
 53115410 Cake, oatmeal, with icing
 53115450 Cake, peanut butter, with icing
 53118350 Cake, sweetpotato, with icing
 53124100 Cake, zucchini, NS as to icing
 53124120 Cake, zucchini, with icing
 53451500 Turnover, guava
 53521300 Doughnut, wheat, chocolate covered
 75412010 Eggplant, batter-dipped, fried
 75412060 Eggplant parmesan casserole, regular
 75440170 Vegetable sticks, breaded (including corn, carrots, and green beans)

Fluid Milk or Powdered Milk

(Adjusted for not being reconstituted, assuming 24 g of powder to 240 mL of water)

[Phytosterols] = 4.2%

- 11810000 Milk, dry, not reconstituted, NS as to whole, lowfat, or nonfat
- 11811000 Milk, dry, whole, not reconstituted
- 11812000 Milk, dry, lowfat, not reconstituted
- 11813000 Milk, dry, nonfat, not reconstituted

Milk Products

Cocoa and Chocolate Beverages

[Phytosterols] = 0.21%

- 11512000 Cocoa, hot chocolate, not from dry mix, made with whole milk
- 11512500 Spanish-style hot chocolate drink, Puerto Rican style, made with evaporated milk
- 11512510 Hot chocolate, Puerto Rican style, made with low fat milk
- 11513000 Cocoa and sugar mixture, milk added, NS as to type of milk
- 11513100 Cocoa and sugar mixture, whole milk added
- 11513150 Cocoa and sugar mixture, reduced fat milk added
- 11513200 Cocoa and sugar mixture, lowfat milk added
- 11513300 Cocoa and sugar mixture, skim milk added
- 11513400 Chocolate syrup, milk added, NS as to type of milk
- 11513500 Chocolate syrup, whole milk added
- 11513550 Chocolate syrup, reduced fat milk added
- 11513600 Chocolate syrup, lowfat milk added
- 11513700 Chocolate syrup, skim milk added
- 11514100 Cocoa, sugar, and dry milk mixture, water added
- 11514300 Cocoa with nonfat dry milk and low calorie sweetener, mixture, water added
- 11514500 Cocoa, whey, and low calorie sweetener, mixture, fortified, water added
- 11515100 Cocoa and sugar mixture fortified with vitamins and minerals, milk added, NS as to type of milk, Puerto Rican style
- 11515400 Cocoa with nonfat dry milk and low calorie sweetener, high calcium, water added
- 11516000 Cocoa, whey, and low-calorie sweetener mixture, lowfat milk added
- 11518000 Milk beverage with nonfat dry milk and low calorie sweetener, water added, chocolate
- 11518100 Milk beverage with nonfat dry milk and low calorie sweetener, high calcium, water added, chocolate
- 11521000 Milk, malted, unfortified, chocolate, made with milk
- 11521010 Milk, malted, unfortified, chocolate, made with skim milk
- 11526000 Milk, malted, fortified, chocolate, made with milk
- 11541110 Milk shake, homemade or fountain-type, chocolate
- 11541500 Milk shake, made with skim milk, chocolate
- 11542100 Carry-out milk shake, chocolate
- 11560000 Chocolate-flavored drink, whey- and milk-based

Powdered Cocoa and Chocolate Beverages

(Adjusted for not being reconstituted, assuming 28 g of powder to 240 mL of water)

[Phytosterols] = 1.8%

- 11830100 Cocoa (or chocolate) with dry milk and sugar, dry mix, not reconstituted
- 11830110 Cocoa powder with nonfat dry milk and low calorie sweetener, dry mix, not reconstituted
- 11830120 Cocoa, whey, and low calorie sweetener, fortified, dry mix, not reconstituted
- 11830140 Chocolate, instant, dry mix, fortified with vitamins and minerals, not reconstituted, Puerto Rican style
- 11830150 Cocoa powder, not reconstituted (no dry milk)

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11830160 Cocoa (or chocolate) flavored beverage powder with sugar, dry mix, not reconstituted
 11830170 Cocoa, whey, and low-calorie sweetener mixture, not reconstituted
 11830250 Milk, malted, dry mix, unfortified, not reconstituted, chocolate
 11830260 Milk, malted, dry mix, fortified, not reconstituted, chocolate
 11830500 Milk beverage, powder, with nonfat dry milk and low calorie sweetener, dry mix, not reconstituted, chocolate

Cream

[Phytosterols] = 3.33%

12100100 Cream, NS as to light, heavy, or half and half
 12110100 Cream, light, fluid
 12110300 Cream, light, whipped, unsweetened
 12120100 Cream, half and half
 12120110 Cream, half and half, fat free
 12130100 Cream, heavy, fluid
 12130200 Cream, heavy, whipped, unsweetened
 12140000 Cream, heavy, whipped, sweetened
 12140100 Cream, whipped, pressurized container
 12140105 Cream, whipped, pressurized container, light

Mixtures Containing Cream

(Adjusted for cream content of ~34 to 79%)

[Phytosterols] = ~1.13 to 2.63%

13250100 Mousse, not chocolate
 13251000 Chantilly Cream
 13252500 Barfi or Burfi, Indian dessert, made from milk and/or cream and/or Ricotta cheese
 27150060 Lobster newburg
 27150130 Seafood newburg

Mixtures Containing Cream

(Adjusted for cream content of ~13 to 27%)

[Phytosterols] = ~0.43 to 0.90%

13121000 Ice cream sundae, NS as to topping, with whipped cream
 13121100 Ice cream sundae, fruit topping, with whipped cream
 13121300 Ice cream sundae, chocolate or fudge topping, with whipped cream
 13121400 Ice cream sundae, not fruit or chocolate topping, with whipped cream
 13121500 Ice cream sundae, fudge topping, with cake, with whipped cream
 13122100 Ice cream pie, no crust
 13140600 Light ice cream, sundae, soft serve, chocolate or fudge topping, with whipped cream (formerly ice milk)
 13140630 Light ice cream, sundae, soft serve, fruit topping, with whipped cream (formerly ice milk)
 13250000 Mousse, chocolate
 27150050 Fish timbale or mousse
 27443110 Chicken or turkey a la king with vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)), cream, white, or soup-based sauce
 27443120 Chicken or turkey a la king with vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)), cream, white, or soup-based sauce
 52105100 Scone
 52105110 Scone, whole wheat
 52105200 Scone, with fruit
 53122070 Cake, shortcake, biscuit type, with whipped cream and fruit
 53347100 Pie, raspberry cream
 53348000 Pie, strawberry cream

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53348070 Pie, strawberry cream, individual size or tart
 53371100 Pie, chiffon, with liqueur
 53373000 Pie, black bottom
 53452420 Pastry, puff, custard or cream filled, iced or not iced
 91760500 Truffles

Mixtures Containing Cream

(Adjusted for cream content of ~1.9 to 9.5%)
 [Phytosterols] = ~0.06 to 0.32%

13120810 Ice cream soda, chocolate
 13122500 Ice cream pie, with cookie crust, fudge topping, and whipped cream
 13140650 Light ice cream, sundae, soft serve, not fruit or chocolate topping, with whipped cream (formerly ice milk)
 14620100 Dip, cream cheese base
 27135150 Veal cordon bleu
 27146250 Chicken or turkey cordon bleu
 27430580 Veal with vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)), cream or white sauce
 27430590 Veal with vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)), cream or white sauce
 27443150 Chicken or turkey divan
 53123070 Cake, shortcake, sponge type, with whipped cream and fruit
 63401030 Apple and fruit salad with dressing
 63402960 Fruit salad (excluding citrus fruits) with cream
 63403020 Fruit salad (including citrus fruit) with cream

Cultured Dairy Drinks

[Phytosterols] = 0.83%

11553000 Fruit smoothie drink, made with fruit or fruit juice and dairy products
 11553100 Fruit smoothie drink, NFS

Meal Replacement Drinks (ready-to-drink; milk-based)

[Phytosterols] = 0.21%

11611000 Instant breakfast, fluid, canned
 11612000 Instant breakfast, powder, milk added
 11613000 Instant breakfast, powder, sweetened with low calorie sweetener, milk added
 11621000 Diet beverage, liquid, canned
 11622010 Diet beverage, powder, reconstituted with skim milk
 11623000 Meal supplement or replacement, commercially prepared, ready-to-drink
 11631000 High calorie beverage, canned or powdered, reconstituted
 11641000 Meal supplement or replacement, milk-based, high protein, liquid
 11641020 Meal replacement or supplement, milk based, ready-to-drink
 11651010 Meal replacement formula, Cambridge diet, reconstituted, all flavors

Powdered Meal Replacement Drinks (ready-to-drink; milk-based)

(Adjusted for not being reconstituted, assuming 16 g of powder to 240 mL of water)
 [Phytosterols] = 3.125%

11830800 Instant breakfast, powder, not reconstituted
 11830810 Instant breakfast, powder, sweetened with low calorie sweetener, not reconstituted
 11830850 High calorie milk beverage, powder, not reconstituted
 11830900 Protein supplement, milk-based, powdered, not reconstituted

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- 11830940 Meal replacement, high protein, milk based, fruit juice mixable formula, powdered, not reconstituted
- 11830970 Meal replacement, protein type, milk-based, powdered, not reconstituted
- 11830990 Nutrient supplement, milk-based, powdered, not reconstituted
- 11831500 Nutrient supplement, milk-based, high protein, powdered, not reconstituted
- 11832000 Meal replacement, protein type, milk- and soy-based, powdered, not reconstituted
- 11835000 Meal replacement or nutritional supplement, Cambridge diet formula, powdered, nonfat milk solids base
- 11835100 Meal replacement, Amway's Nutrilite brand Positrim Drink Mix, powdered nonfat dry milk-based, dry, not reconstituted
- 11835150 Dynatrim, meal replacement, powder
- 41430200 Meal replacement or supplement, soy- and milk-base, powder, reconstituted with water

Milk-Based Drinks and Flavored Milk

[Phytosterols] = 0.42%

- 11511000 Milk, chocolate, NFS
- 11511100 Milk, chocolate, whole milk-based
- 11511200 Milk, chocolate, reduced fat milk-based (formerly "lowfat")
- 11511300 Milk, chocolate, skim milk-based
- 11511400 Milk, chocolate, lowfat milk-based
- 11518050 Milk beverage with nonfat dry milk and low calorie sweetener, water added, flavors other than chocolate
- 11519000 Milk beverage, made with whole milk, flavors other than chocolate
- 11519050 Milk, flavors other than chocolate, whole milk-based
- 11520000 Milk, malted, unfortified, NS as to flavor, made with milk
- 11522000 Milk, malted, unfortified, natural flavor, made with milk
- 11525000 Milk, malted, fortified, natural flavor, made with milk
- 11527000 Milk, malted, fortified, NS as to flavor, made with milk
- 11531000 Egnog, made with whole milk
- 11531500 Egnog, made with 2% reduced fat milk (formerly eggnog, made with "2% lowfat" milk)
- 11541000 Milk shake, NS as to flavor or type
- 11541100 Milk shake, homemade or fountain-type, NS as to flavor
- 11541120 Milk shake, homemade or fountain-type, flavors other than chocolate
- 11541400 Milk shake with malt
- 11541510 Milk shake, made with skim milk, flavors other than chocolate
- 11542000 Carry-out milk shake, NS as to flavor
- 11551050 Milk fruit drink
- 11552200 Milk-based fruit drink
- 11560020 Flavored milk drink, whey- and milk-based, flavors other than chocolate

Powdered Milk-Based Drinks and Flavored Milk

(Adjusted for not being reconstituted, assuming 28 g of powder to 240 mL of water)

[Phytosterols] = 3.57%

- 11830200 Milk, malted, dry mix, unfortified, not reconstituted, flavors other than chocolate
- 11830210 Milk, malted, dry mix, fortified, not reconstituted, flavors other than chocolate
- 11830400 Milk beverage, powder, dry mix, not reconstituted, flavors other than chocolate
- 11830450 Milk beverage with sugar, dry milk, and egg white powder, dry mix, not reconstituted
- 11830550 Milk beverage, powder, with nonfat dry milk and low calorie sweetener, dry mix, not reconstituted, flavors other than chocolate

Yogurt (including cultured yogurt and cultured yogurt type products)

[Phytosterols] = 0.89%

- 11410000 Yogurt, NS as to type of milk or flavor

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11411010 Yogurt, plain, NS as to type of milk
 11411100 Yogurt, plain, whole milk
 11411200 Yogurt, plain, lowfat milk
 11411300 Yogurt, plain, nonfat milk
 11420000 Yogurt, vanilla, lemon, or coffee flavor, NS as to type of milk
 11421000 Yogurt, vanilla, lemon, or coffee flavor, whole milk
 11422000 Yogurt, vanilla, lemon, maple, or coffee flavor, lowfat milk
 11423000 Yogurt, vanilla, lemon, maple, or coffee flavor, nonfat milk
 11424000 Yogurt, vanilla, lemon, maple, or coffee flavor, nonfat milk, sweetened with low calorie sweetener
 11425000 Yogurt, chocolate, NS as to type of milk
 11426000 Yogurt, chocolate, whole milk
 11427000 Yogurt, chocolate, nonfat milk
 11430000 Yogurt, fruit variety, NS as to type of milk
 11431000 Yogurt, fruit variety, whole milk
 11432000 Yogurt, fruit variety, lowfat milk
 11432500 Yogurt, fruit variety, lowfat milk, sweetened with low-calorie sweetener
 11433000 Yogurt, fruit variety, nonfat milk
 11433500 Yogurt, fruit variety, nonfat milk, sweetened with low-calorie sweetener
 11444000 Yogurt, fruit and nuts, NS as to type of milk
 11445000 Yogurt, fruit and nuts, lowfat milk

Mixtures Containing Yogurt (including cultured yogurt and cultured yogurt type products)
 (Adjusted for yogurt content of ~5 to 50%)
 [Phytosterols] = 0.04 to 0.44%

27516010 Gyro sandwich (pita bread, beef, lamb, onion, condiments), with tomato and spread
 53104580 Cheesecake -type dessert, made with yogurt, with fruit
 53366000 Pie, yogurt, frozen
 53441210 Basbousa (semolina dessert dish)
 54430010 Yogurt chips
 58124500 Pastry, filled with potatoes and peas, fried

Plant Protein Products

Meat Analogs

[Phytosterols] = 0.91%

41420010 Soybean curd
 41420050 Soybean curd cheese
 41421010 Soybean curd, deep fried
 41421020 Soybean curd, breaded, fried
 41422010 Soybean meal
 41425010 Vermicelli, made from soybeans
 41810200 Bacon strip, meatless
 41810250 Bacon bits, meatless
 41810400 Breakfast link, pattie, or slice, meatless
 41810600 Chicken, meatless, NFS
 41810610 Chicken, meatless, breaded, fried
 41811200 Fish stick, meatless
 41811400 Frankfurter or hot dog, meatless
 41811600 Luncheon slice, meatless-beef, chicken, salami or turkey
 41811800 Meatball, meatless
 41811850 Scallops, meatless, breaded, fried (made with meat substitute)
 41811890 Vegetarian burger or patty, meatless, no bun
 41811900 Soyburger, meatless, no bun

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41811910 Vegetable burger or patty, meatless, no bun
 41811950 Swiss steak, with gravy, meatless
 41812000 Sandwich spread, meat substitute type
 41812400 Vegetarian pot pie
 41812450 Vegetarian chili (made with meat substitute)
 41812600 Vegetarian, fillet
 41812800 Vegetarian stew
 41812850 Vegetarian stroganoff (made with meat substitute)
 41812900 Vegetarian meat loaf or patties (meat loaf made with meat substitute)
 41901020 Soyburger, meatless, with cheese on bun

Mixtures Containing Meat Analogs
 (Adjusted for meat analog content of 46%)
 [Phytosterols] = 0.419%

41812500 Tofu and vegetables (including carrots, broccoli, and/or dark-green leafy vegetables (no potatoes)), with soy-based sauce (mixture)
 41812510 Tofu and vegetables (excluding carrots, broccoli, and dark-green leafy vegetables (no potatoes)), with soy-based sauce (mixture)

Processed Fruits and Fruit Juices

Fruit Juices and Smoothies
 [Phytosterols] = 0.42%

61201020 Grapefruit juice, unsweetened, NS as to form
 61201220 Grapefruit juice, canned, bottled or in a carton, unsweetened
 61201620 Grapefruit juice, frozen, unsweetened (reconstituted with water)
 61204000 Lemon juice, NS as to form
 61204200 Lemon juice, canned or bottled
 61204600 Lemon juice, frozen
 61207000 Lime juice, NS as to form
 61207200 Lime juice, canned or bottled
 61207600 Lime juice, frozen
 61210000 Orange juice, NFS
 61210220 Orange juice, canned, bottled or in a carton, unsweetened
 61210250 Orange juice, with calcium added, canned, bottled or in a carton, unsweetened
 61210620 Orange juice, frozen, unsweetened (reconstituted with water)
 61210820 Orange juice, frozen, with calcium added (reconstituted with water)
 61213000 Tangerine juice, NFS
 61213220 Tangerine juice, canned, unsweetened
 61213230 Tangerine juice, canned, with sugar
 61213620 Tangerine juice, frozen, unsweetened (reconstituted with water)
 61213800 Fruit juice blend, including citrus, 100% juice
 61213900 Fruit juice blend, including citrus, 100% juice, with calcium added
 61214000 Grape-tangerine-lemon juice
 61216000 Grapefruit and orange juice, NFS
 61216220 Grapefruit and orange juice, canned, unsweetened
 61216230 Grapefruit and orange juice, canned, with sugar
 61216620 Grapefruit and orange juice, frozen (reconstituted with water)
 61219000 Orange and banana juice
 61219100 Pineapple-orange-banana juice
 61219150 Orange-white grape-peach juice
 61219650 Apricot-orange juice
 61222000 Pineapple-grapefruit juice, NFS

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61222200 Pineapple-grapefruit juice, canned, bottled or in a carton, NS as to sweetened or unsweetened
61222220 Pineapple-grapefruit juice, canned, bottled or in a carton, unsweetened
61222230 Pineapple-grapefruit juice, canned, bottled or in a carton, with sugar
61222600 Pineapple-grapefruit juice, frozen (reconstituted with water)
61225000 Pineapple-orange juice, NFS
61225200 Pineapple-orange juice, canned, NS as to sweetened or unsweetened; sweetened, NS as to type of sweet
61225220 Pineapple-orange juice, canned, unsweetened
61225230 Pineapple-orange juice, canned, with sugar
61225600 Pineapple-orange juice, frozen (reconstituted with water)
61226000 Strawberry-banana-orange juice
64100100 Fruit juice, NFS
64100110 Fruit juice blend, 100% juice, with added Vitamin C
64100120 Ambrosia juice
64100200 Fruit juice blend, with cranberry, 100% juice
64104010 Apple juice
64104150 Apple-cherry juice
64104200 Apple-pear juice
64104450 Apple-raspberry juice
64104500 Apple-grape juice
64104550 Apple-grape-raspberry juice
64104600 Blackberry juice
64105400 Cranberry juice, unsweetened
64105500 Cranberry-white grape juice mixture, unsweetened
64116020 Grape juice, unsweetened
64120010 Papaya juice
64121000 Passion fruit juice
64122030 Peach juice, with sugar
64124020 Pineapple juice, unsweetened
64124200 Pineapple-apple-guava juice, with added vitamin C
64125000 Pineapple juice-non-citrus juice blend, unsweetened, with added vitamin C
64126000 Pomegranate juice
64132010 Prune juice, NS as to added sweetener
64132020 Prune juice, unsweetened
64132030 Prune juice, with sugar
64132500 Strawberry juice
64133100 Watermelon juice
64134000 Fruit smoothie drink, made with fruit or fruit juice only (no dairy products)

Concentrated Fruit Juices and Smoothies

(Adjusted for not being reconstituted, assuming preparation of 1 part concentrate to 3 parts water)
[Phytosterols] = 1.68%

61210720 Orange juice, frozen, unsweetened, not reconstituted

Powdered Fruit-Flavored Beverages

[Phytosterols] = 3.125%

92900100 Tang, dry concentrate
92900110 Fruit-flavored concentrate, dry powder, with sugar and vitamin C added
92900200 Fruit-flavored beverage, dry concentrate, low calorie, not reconstituted

Processed Vegetables and Vegetable Juices

Vegetable Juices

[Phytosterols] = 0.42%

73105010	Carrot juice
74301100	Tomato juice
74301150	Tomato juice, low sodium
74302000	Tomato juice cocktail
74303000	Tomato and vegetable juice, mostly tomato
74303100	Tomato and vegetable juice, mostly tomato, low sodium
74304000	Tomato juice with clam or beef juice
75132000	Mixed vegetable juice (vegetables other than tomato)
75132100	Celery juice
75200700	Aloe vera juice

Mixtures Containing Vegetable Juices

(Adjusted for vegetable juice content of ~26 to 77%)

[Phytosterols] = ~0.11 to 0.32%

27350030	Seafood stew with potatoes and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-base sauce
27350310	Seafood stew with potatoes and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-base sauce
74501010	Tomato aspic

Mixtures Containing Vegetable Juices

(Adjusted for vegetable juice content of ~5.4 to 17%)

[Phytosterols] = ~0.023 to 0.071%

27111100	Beef goulash
27130050	Lamb or mutton goulash
27211100	Beef stew with potatoes, tomato-based sauce (mixture)
27211150	Beef goulash with potatoes
27212150	Beef goulash with noodles
27313210	Beef, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)
27313220	Beef, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce (mixture)
27315210	Beef, rice, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)
27315220	Beef, rice, and vegetables (excluding carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)
27315270	Stuffed grape leaves with beef and rice
27330170	Stuffed grape leaves with lamb and rice
27336100	Venison/deer stew with potatoes and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce
27336150	Venison/deer stew with potatoes and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce
27360010	Goulash, NFS
27430500	Veal goulash with vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)), tomato-base sauce
27430510	Veal goulash with vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)), tomato-base sauce

Snack Foods

Low Fat Salty Snacks

[Phytosterols] = 1.67%

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54401120	Salty snacks, corn or cornmeal base, tortilla chips, fat free, made with Olean
54401150	Salty snacks, corn or cornmeal base, tortilla chips, lowfat, baked without fat
54401170	Salty snacks, corn or cornmeal base, tortilla chips, lowfat, baked without fat, unsalted
54401210	Salty snacks, corn based puffs and twists, cheese puffs and twists, lowfat
54408000	Pretzels, NFS
54408010	Pretzels, hard
54408020	Pretzels, soft
54408030	Pretzel, hard, unsalted
54408040	Pretzels, soft, unsalted
54408050	Pretzel, oatbran, hard
54408070	Pretzel, hard, multigrain
54408200	Pretzel, hard, chocolate-coated
54408250	Pretzel, yogurt-covered
54408300	Pretzels, cheese-filled
54420010	Multigrain mixture, pretzels, cereal and/or crackers, nuts
54420200	Multigrain mixture, bread sticks, sesame nuggets, pretzels, rye chips
71201050	White potato, chips, reduced fat
71201080	White potato, chips, fat free
71201090	White potato chips, fat free, made with Olean
71201200	White potato, chips, restructured, reduced fat and reduced sodium

Soft Candy

Chocolate

[Phytosterols] = 1.25%

91700500	M & M's Almond Chocolate Candies
91703070	Rolo
91703150	Toblerone, milk chocolate with honey and almond nougat
91703200	TWIX Cookie Bars
91703250	TWIX Chocolate Fudge Cookie Bars
91703300	TWIX Peanut Butter Cookie Bars
91703400	Whatchamacallit
91705010	Chocolate, milk, plain
91705020	Chocolate, milk, with cereal
91705030	Kit Kat
91705040	Chocolate, milk, with nuts, not almond or peanuts
91705050	Chocolate, milk, with fruit and nuts
91705060	Chocolate, milk, with almonds
91705070	Chocolate, milk, with peanuts
91705090	Chocolate with fondant and caramel
91705200	Chocolate, semi-sweet morsel
91705300	Chocolate, sweet or dark
91705400	Chocolate, white
91705410	Chocolate, white, with almonds
91705420	Chocolate, white, with cereal
91705500	Mexican chocolate (tablet)
91715100	SNICKERS Bar
91715200	Baby Ruth
91715300	100 GRAND Bar
91716010	Halvah, plain
91716110	Halvah, chocolate covered
91718000	Honey-combed hard candy with peanut butter
91718050	Honey-combed hard candy with peanut butter, chocolate covered
91718100	Butterfinger
91726130	MILKY WAY Bar

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91726140	MILKY WAY DARK Bar
91726150	MARS Bar
91726420	3 MUSKETEER Bar
91731010	M & M's Peanut Chocolate Candies
91731060	M & M's Peanut Butter Chocolate Candies
91732000	Peanut bar
91732100	Planters Peanut Bar
91733200	Peanut Bar, chocolate covered
91734000	Peanut butter, chocolate covered
91734100	Reese's Peanut Butter Cup
91734200	Reese's Pieces
91734300	Reese Sticks
91734400	Reese's Fast Break
91746100	M & M's Plain Chocolate Candies

Soups and Soup Mixes

Processed Soups

[Phytosterols] = 0.20%

14710100	Cheddar cheese soup
27418110	Seasoned shredded soup meat (Ropa vieja, sopa de carne ripiada)
28310110	Beef, broth, bouillon, or consommé
28310120	Beef, broth, bouillon, or consommé, canned, low sodium
28310150	Oxtail soup
28310210	Chili beef soup
28310220	Chili beef soup, chunky style
28310230	Meatball soup, Mexican style (Sopa de Albondigas)
28310320	Beef noodle soup, Puerto Rican style (Sopa de carne y fideos)
28310330	Beef and rice noodle soup, Oriental style (Vietnamese Pho Bo)
28310420	Beef and rice soup, Puerto Rican style
28311010	Pepperpot (tripe) soup
28315100	Beef vegetable soup with potato, stew type
28315110	Beef noodle soup, chunky style
28315120	Beef vegetable soup with noodles, stew type, chunky style
28315130	Beef vegetable soup with rice, stew type, chunky style
28315140	Beef vegetable soup, Mexican style (Sopa / caldo de Res)
28315150	Meat and corn hominy soup, Mexican style (Pozole)
28315160	Italian Wedding Soup
28316020	Beef and mushroom soup, canned, low sodium
28317010	Beef stroganoff soup, chunky style
28320110	Pork and rice soup, stew type, chunky style
28320120	Pork vegetable soup with noodles, stew type, chunky style
28320130	Ham, rice, and potato soup, Puerto Rican style
28320140	Ham, noodle, and vegetable soup, Puerto Rican style
28320150	Pork, vegetable soup with potatoes, stew type
28320300	Pork with vegetable (excluding carrots, broccoli and/or dark-green leafy) soup, Oriental Style
28321130	Bacon soup, cream of, prepared with water
28330110	Scotch broth (lamb, vegetables, and barley)
28331110	Lamb, pasta, and vegetable soup, Puerto Rican style
28340110	Chicken, broth, bouillon, or consommé
28340150	Mexican style chicken broth soup stock
28340160	Chicken broth, canned, less or reduced sodium
28340170	Chicken broth, canned, low sodium
28340210	Chicken rice soup, Puerto Rican style (Sopa de pollo con arroz)

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28340220 Chicken soup with noodles and potatoes, Puerto Rican style
 28340310 Chicken gumbo soup
 28340510 Chicken noodle soup, chunky style
 28340530 Chicken soup
 28340550 Sweet and sour soup
 28340580 Chicken soup with vegetables (broccoli, carrots, celery, potatoes and onions), Oriental style
 28340610 Chicken or turkey vegetable soup, stew type
 28340620 Turkey noodle soup, chunky style
 28340630 Chicken vegetable soup with rice, stew type, chunky style
 28340640 Chicken vegetable soup with noodles, stew type, chunky style
 28340650 Chicken vegetable soup with rice, stew type, chunky style, prepared with milk
 28340670 Chicken vegetable soup with rice, Mexican style (Sopa / Caldo de Pollo)
 28340680 Chicken or turkey and corn hominy soup, Mexican style (Pozole)
 28340690 Chicken vegetable soup with potato and cheese, chunky style
 28340700 Bird's nest soup (chicken, ham, and noodles)
 28340750 Hot and sour soup
 28340800 Chicken soup with vegetables and fruit, Oriental Style
 28345010 Chicken or turkey soup, cream of, canned, NS as to made with milk or water, reduced sodium
 28345020 Chicken or turkey soup, cream of, canned, made with milk, reduced sodium
 28345030 Chicken or turkey soup, cream of, canned, made with water, reduced sodium
 28345110 Chicken or turkey soup, cream of, NS as to prepared with milk or water
 28345120 Chicken or turkey soup, cream of, prepared with milk
 28345130 Chicken or turkey soup, cream of, prepared with water
 28345160 Chicken and mushroom soup, cream of, prepared with milk
 28345170 Duck soup
 28350050 Fish chowder
 28350110 Crab soup, NS as to tomato-base or cream style
 28350120 Crab soup, tomato-base
 28350210 Clam chowder, NS as to Manhattan or New England style
 28350220 Clam chowder, Manhattan
 28350310 Turtle and vegetable soup
 28351110 Fish and vegetable soup, no potatoes (Sopa de pescado)
 28351120 Fish soup, with potatoes (Sopa de Pescado)
 28351160 Codfish, rice, and vegetable soup, Puerto Rican style
 28351170 Codfish soup with noodles, Puerto Rican style
 28355110 Clam chowder, New England, NS as to prepared with water or milk
 28355120 Clam chowder, New England, prepared with milk
 28355130 Clam chowder, New England, prepared with water
 28355210 Crab soup, cream of, prepared with milk
 28355350 Salmon soup, cream style
 28355410 Shrimp soup, cream of, NS as to prepared with milk or water
 28355420 Shrimp soup, cream of, prepared with milk
 28355430 Shrimp soup, cream of, prepared with water
 28355450 Seafood soup with potatoes and vegetables (including carrots, broccoli, and/or dark-green leafy)
 28355460 Seafood soup with potatoes and vegetables (excluding carrots, broccoli, and dark-green leafy)
 28355470 Seafood soup with vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes))
 28355480 Seafood soup with vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes))
 28360100 Meat broth, Puerto Rican style (Caldo)
 28360210 Spanish vegetable soup, Puerto Rican style (Caldo gallego)
 32300100 Egg drop soup

32301100	Garlic egg soup, Puerto Rican style (Sopa de ajo)
41601010	Bean soup, NFS
41601020	Bean with bacon or pork soup
41601030	Black bean soup
41601040	Lima bean soup
41601050	Soybean soup, made with milk
41601060	Bean soup, with macaroni and meat
41601070	Soybean soup, miso broth
41601080	Pinto bean soup
41601090	Bean soup, with macaroni
41601100	Portuguese bean soup
41601110	Bean and ham soup, chunky style
41601120	Bean soup with vegetables, rice, and pork
41601130	Bean soup, mixed beans
41601160	Bean and ham soup, canned, reduced sodium, prepared with water or ready-to-serve
41601170	Bean and rice soup
41602010	Chunky pea and ham soup
41602020	Garbanzo or chickpea soup
41602030	Split pea and ham soup
41602040	Pea soup, instant type
41602050	Split pea soup
41602070	Split pea soup, canned, reduced sodium, prepared with water or ready-to-serve
41602090	Split pea and ham soup, canned, reduced sodium, prepared with water or ready-to-serve
41603010	Lentil soup
41610100	White bean soup, Puerto Rican style (Sopon de habichuelas blancas)
58400000	Soup, NFS
58400100	Noodle soup, NFS
58400200	Rice soup, NFS
58401010	Barley soup
58401200	Barley soup, sweet, with or without nuts, Oriental Style
58402000	Beef noodle soup, canned, undiluted
58402010	Beef noodle soup
58402020	Beef dumpling soup
58402030	Beef rice soup
58403010	Chicken noodle soup
58403020	Chicken noodle soup, canned, undiluted
58403030	Chicken noodle soup, canned, low sodium, ready-to-serve
58403050	Chicken noodle soup, cream of
58403060	Chicken noodle soup, canned, reduced sodium, ready-to-serve
58403100	Noodle and potato soup, Puerto Rican style
58404010	Chicken rice soup
58404020	Chicken and rice soup, canned, undiluted
58404040	Chicken rice soup, canned, reduced sodium, prepared with water or ready-to-serve
58404050	Chicken rice soup, canned, reduced sodium, prepared with milk
58404100	Rice and potato soup, Puerto Rican style
58404500	Matzo ball soup
58404510	Chicken soup with dumplings and potatoes
58404520	Chicken soup with dumplings
58406010	Turkey noodle soup
58407000	Instant soup, NFS
58407010	Instant soup, noodle
58407030	Soup, mostly noodles
58407040	Instant soup, rice
58407050	Instant soup, noodle with egg, shrimp or chicken
58408010	Won ton (wonton) soup
58408500	Noodle soup with vegetables, Oriental style

58409000 Noodle soup, with fish ball, shrimp, and dark green leafy vegetable
58410100 Rice soup, made with tea
58421000 Sopa seca (dry soup), Mexican style, NFS
58421010 Sopa Seca de Fideo, Mexican style, made with dry noodles
58421020 Sopa de Fideo Aguada, Mexican style noodle soup
58421060 Sopa seca de arroz (dry rice soup), Mexican style
58421080 Sopa de tortilla, Mexican style tortilla soup
58450300 Noodle soup, made with milk
71801000 Potato soup, NS as to made with milk or water
71801010 Potato soup, cream of, prepared with milk
71801020 Potato soup, prepared with water
71801040 Potato soup, instant, made from dry mix
71801100 Potato and cheese soup
71802010 Macaroni and potato soup
71851010 Plantain soup, Puerto Rican style (Sopa de platanos)
72302000 Broccoli soup
72302100 Broccoli cheese soup, prepared with milk
72305000 Escarole soup
72307000 Spinach soup
72308000 Dark-green leafy vegetable soup with meat, Oriental style
72308500 Dark-green leafy vegetable soup, meatless, Oriental style
73501000 Carrot soup, cream of, prepared with milk
73501010 Carrot with rice soup, cream of, prepared with milk
74601000 Tomato soup, NFS
74601010 Tomato soup, cream of, prepared with milk
74602010 Tomato soup, prepared with water
74602050 Tomato soup, instant type, prepared with water
74602100 Tomato soup, canned, low sodium, ready-to-serve
74602200 Tomato soup, canned, reduced sodium, prepared with water
74602300 Tomato soup, canned, reduced sodium, prepared with milk
74603010 Tomato beef soup, prepared with water
74604010 Tomato beef noodle soup, prepared with water
74604100 Tomato beef rice soup, prepared with water
74604500 Tomato noodle soup, prepared with water
74604600 Tomato noodle soup, cream of
74605010 Tomato rice soup, prepared with water
74606010 Tomato vegetable soup, prepared with water
74606020 Tomato vegetable soup with noodles, prepared with water
75600150 Soup, cream of, NFS
75601000 Asparagus soup, cream of, NS as to made with milk or water
75601010 Asparagus soup, cream of, prepared with milk
75601020 Asparagus soup, cream of, prepared with water
75601100 Beet soup (borscht)
75601200 Cabbage soup
75601210 Cabbage with meat soup
75602010 Cauliflower soup, cream of, prepared with milk
75603000 Celery soup, cream of, NS as to made with milk or water
75603010 Celery soup, cream of, prepared with milk
75603020 Celery soup, cream of, prepared with water
75604010 Corn soup, cream of, prepared with milk
75604020 Corn soup, cream of, prepared with water
75604510 Cucumber soup, cream of, prepared with milk
75604600 Gazpacho
75605010 Leek soup, cream of, prepared with milk
75605030 Leek soup, made from dry mix
75607000 Mushroom soup, NFS

75607010	Mushroom soup, cream of, prepared with milk
75607020	Mushroom soup, cream of, prepared with water
75607040	Mushroom soup, with meat broth, prepared with water
75607050	Mushroom soup, cream of, prepared with water, low sodium
75607060	Mushroom soup, cream of, NS as to made with milk or water
75607080	Mushroom with chicken soup, cream of, prepared with milk
75607090	Mushroom soup, cream of, canned, NS as to made with milk or water, reduced sodium
75607100	Mushroom soup, cream of, canned, prepared with milk, reduced sodium
75607130	Mushroom soup, made from dry mix
75607140	Mushroom soup, cream of, canned, prepared with water, reduced sodium
75608010	Onion soup, cream of, prepared with milk
75608100	Onion soup, French
75608200	Onion soup, made from dry mix
75609000	Pea soup, NFS
75609010	Pea soup, prepared with milk
75609020	Pea soup, prepared with water
75609030	Pea soup, instant type
75609050	Pea soup, canned, prepared with water, low sodium
75611010	Vegetable soup, cream of, prepared with milk
75612010	Zucchini soup, cream of, prepared with milk
75646010	Shav soup
75647000	Seaweed soup
75649010	Vegetable soup, prepared with water or ready-to-serve
75649030	Vegetable soup, canned, low sodium, prepared with water or ready-to-serve
75649050	Vegetable soup, made from dry mix
75649070	Vegetable soup, made from dry mix, low sodium
75649100	Vegetable soup, cream of, made from dry mix, low sodium, prepared with water
75650990	Minestrone soup, canned, reduced sodium, ready-to-serve
75651010	Vegetable bean soup, prepared with water or ready-to-serve
75651020	Vegetable beef soup, prepared with water
75651030	Vegetable beef noodle soup, prepared with water
75651040	Vegetable noodle soup, prepared with water
75651050	Vegetable chicken or turkey soup, prepared with water or ready-to-serve
75651070	Vegetable rice soup, prepared with water
75651080	Vegetable beef soup with rice, prepared with water or ready-to-serve
75651090	Vegetable chicken soup, canned, prepared with water, low sodium
75651110	Vegetable chicken rice soup, prepared with water or ready-to-serve
75651120	Vegetable chicken noodle soup, prepared with water or ready-to-serve
75651140	Vegetable soup with chicken broth, Mexican style (Sopa Ranchera)
75651150	Vegetable noodle soup, canned, reduced sodium, prepared with water or ready-to-serve
75652030	Vegetable beef soup, prepared with milk
75654010	Vegetarian vegetable soup, prepared with water
75656010	Vegetable soup, Spanish style, stew type
75656020	Vegetable soup, chunky style
75656040	Vegetable soup, with pasta, chunky style
75656060	Vegetable beef soup, chunky style
75657000	Vegetable broth, bouillon

Mixtures Containing Processed Soups
(Adjusted for processed soup content of ~30 to 65%)
[Phytosterols] = ~0.06 to 0.13%

27115000	Beef with soy-based sauce (mixture)
27130100	Lamb curry
27142100	Chicken or turkey fricassee
27150190	Lobster sauce (broth-based)

27233000 Lamb or mutton and noodles with gravy (mixture)
 27241010 Chicken or turkey and potatoes with gravy (mixture)
 27242200 Chicken or turkey and noodles with gravy (mixture)
 27315410 Beef, rice, and vegetables (including carrots, broccoli, and/or dark-green leafy), gravy (mixture)
 27315420 Beef, rice, and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy (mixture)
 27317010 Beef pot pie
 27320020 Ham pot pie
 27345310 Chicken or turkey, rice, and vegetables (including carrots, broccoli, and/or dark-green leafy), soy-based sauce (mixture)
 27345320 Chicken or turkey, rice, and vegetables (excluding carrots, broccoli, and dark-green leafy), soy-bas
 27350020 Paella with seafood
 27360050 Meat pie, NFS
 27360090 Paella, NFS
 27363000 Gumbo with rice (New Orleans type with shellfish, pork, and/or poultry, tomatoes, okra, rice)
 27445250 Almond chicken
 27464000 Gumbo, no rice (New Orleans type with shellfish, pork, and/or poultry, tomatoes, okra)
 28522000 Mole poblano (sauce)
 41205100 Black bean sauce
 58103250 Tamale, plain, meatless, no sauce, Mexican style
 58156710 Rice with stewed beans, Puerto Rican style
 58163130 Dirty rice
 58163610 Rice-vegetable medley
 81302030 Orange sauce (for duck)

Mixtures Containing Processed Soups
 (Adjusted for processed soup content of ~5.3 to <30%)
 [Phytosterols] = ~0.011 to <0.06%

24198710 Chicken patty with cheese, breaded, cooked
 27120150 Pork or ham with soy-based sauce (mixture)
 27150160 Shrimp with lobster sauce (mixture)
 27160100 Meatballs, NS as to type of meat, with sauce (mixture)
 27313110 Beef chow mein or chop suey with noodles
 27315510 Beef, rice, and vegetables (including carrots, broccoli, and/or dark-green leafy), soy-based sauce (mixture)
 27315520 Beef, rice, and vegetables (excluding carrots, broccoli, and dark-green leafy), soy-based sauce (mixture)
 27320310 Pork chow mein or chop suey with noodles
 27320320 Pork, rice, and vegetables (including carrots, broccoli, and/or dark-green leafy), soy-based sauce (mixture)
 27320330 Pork, rice, and vegetables (excluding carrots, broccoli, and dark-green leafy), soy-based sauce (mixture)
 27343410 Chicken or turkey, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), gravy
 27343420 Chicken or turkey, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), gravy
 27343510 Chicken or turkey, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy), tomato-based sauce (mixture)
 27343520 Chicken or turkey, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy), tomato-based sauce (mixture)
 27343910 Chicken or turkey chow mein or chop suey with noodles
 27347100 Chicken or turkey pot pie

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27350050 Shrimp chow mein or chop suey with noodles
 27350070 Tuna pot pie
 27350110 Bouillabaisse
 27360080 Chow mein or chop suey, NS as to type of meat, with noodles
 27360120 Chow mein or chop suey, various types of meat, with noodles
 27415100 Beef and vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)),
 soy-based
 27415150 Beef chow mein or chop suey, no noodles
 27416400 Sukiyaki (stir fried beef and vegetables in soy sauce)
 27420390 Pork chow mein or chop suey, no noodles
 27443110 Chicken or turkey a la king with vegetables (including carrots, broccoli, and/or dark-green
 leafy (no potatoes))
 27443120 Chicken or turkey a la king with vegetables (excluding carrots, broccoli, and dark-green
 leafy (no potatoes))
 27443150 Chicken or turkey divan
 27445110 Chicken or turkey and vegetables (including carrots, broccoli, and/or dark-green leafy (no
 potatoes))
 27445120 Chicken or turkey and vegetables (excluding carrots, broccoli, and dark-green leafy (no
 potatoes)),
 General Tso (General Gau) chicken
 27446100 Chicken or turkey chow mein or chop suey, no noodles
 27450040 Shrimp chow mein or chop suey, no noodles
 27450410 Shrimp and vegetables (including carrots, broccoli, and/or dark-green leafy (no
 potatoes)), soy-based sauce (mixture)
 27450420 Shrimp and vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)),
 soy-based sauce (mixture)
 27450600 Shellfish mixture and vegetables (including carrots, broccoli, and/or dark-green leafy (no
 potatoes))
 27450610 Shellfish mixture and vegetables (excluding carrots, broccoli, and dark-green leafy (no
 potatoes)),
 27460010 Chow mein or chop suey, NS as to type of meat, no noodles
 27513070 Roast beef submarine sandwich, on roll, au jus
 58112510 Dumpling, steamed, filled with meat, poultry, or seafood
 58120120 Crepe, filled with beef, pork, fish and/or poultry, no sauce on top
 58123110 Manapua, filled with meat
 58127110 Vegetables in pastry
 58135110 Chow fun noodles with meat and vegetables
 58151160 Sushi, with egg, no vegetables, no fish, rolled in seaweed
 58155210 Stuffed rice with chicken, Dominican style (Arroz relleno Dominicano)
 58160140 Rice with beans and pork

Condensed Soups

(Adjusted for not being reconstituted, assuming preparation with equal parts water)

[Phytosterols] = 0.40%

14710110 Cheddar cheese soup, canned, undiluted
 28340520 Chicken soup, canned, undiluted
 28345040 Chicken or turkey soup, cream of, canned, undiluted, reduced sodium
 28345140 Chicken or turkey soup, cream of, canned, undiluted
 74602030 Tomato soup, canned, undiluted
 74605000 Tomato rice soup, canned, undiluted
 75603030 Celery soup, cream of, canned, undiluted
 75604610 Gazpacho, canned, undiluted
 75607030 Mushroom soup, canned, undiluted
 75607150 Mushroom soup, cream of, canned, undiluted, reduced sodium
 75608030 Onion soup, cream of, canned, undiluted

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75649020 Vegetable soup, canned, undiluted
 75651060 Vegetable chicken or turkey soup, canned, undiluted
 75652020 Vegetable beef soup, canned, undiluted
 75654020 Vegetarian vegetable soup, undiluted

Mixtures Containing Condensed Soups
 (Adjusted for condensed soup content of ~10 to 45%)
 [Phytosterols] = 0.04 to 0.18%

27113100 Beef stroganoff
 27114000 Beef with (mushroom) soup (mixture)
 27120080 Ham stroganoff
 27120090 Ham or pork with (mushroom) soup (mixture)
 27135040 Veal with butter sauce (mixture)
 27144000 Chicken or turkey with (mushroom) soup (mixture)
 27212350 Beef stroganoff with noodles
 27212400 Beef and noodles with (mushroom) soup (mixture)
 27213120 Porcupine balls with tomato-based sauce (mixture)
 27213400 Beef and rice with (mushroom) soup (mixture)
 27213420 Porcupine balls with (mushroom) soup (mixture)
 27213500 Beef and rice with soy-based sauce (mixture)
 27220030 Ham and rice with (mushroom) soup (mixture)
 27220150 Sausage and rice with (mushroom) soup (mixture)
 27242250 Chicken or turkey and noodles with (mushroom) soup (mixture)
 27242350 Chicken or turkey tetrazzini
 27243400 Chicken or turkey and rice with (mushroom) soup (mixture)
 27250630 Tuna noodle casserole with (mushroom) soup
 27250710 Tuna and rice with (mushroom) soup (mixture)
 27250810 Fish and rice with tomato-based sauce
 27250830 Fish and rice with (mushroom) soup
 27250900 Fish and noodles with (mushroom) soup
 27311610 Beef, potatoes, and vegetables (including carrots, broccoli, and/or dark-green leafy),
 (mushroom) soup (mixture)
 27311620 Beef, potatoes, and vegetables (excluding carrots, broccoli, and dark-green leafy),
 (mushroom) soup (mixture)
 27313310 Beef, noodles, and vegetables (including carrots, broccoli, and/or dark-green leafy),
 (mushroom) soup (mixture)
 27313320 Beef, noodles, and vegetables (excluding carrots, broccoli, and dark-green leafy),
 (mushroom) soup (mixture)
 27315310 Beef, rice, and vegetables (including carrots, broccoli, and/or dark-green leafy),
 (mushroom) soup (mixture)
 27315320 Beef, rice, and vegetables (excluding carrots, broccoli, and dark-green leafy),
 (mushroom) soup (mixture)
 27320120 Sausage, potatoes, and vegetables (including carrots, broccoli, and/or dark-green leafy),
 gravy (mixture)
 27320130 Sausage, potatoes, and vegetables (excluding carrots, broccoli, and dark-green leafy),
 gravy (mixture)
 27345210 Chicken or turkey, rice, and vegetables (including carrots, broccoli, and/or dark-green
 leafy), gravy (mixture)
 27345220 Chicken or turkey, rice, and vegetables (excluding carrots, broccoli, and dark-green
 leafy), gravy (mixture)
 27345410 Chicken or turkey, rice, and vegetables (including carrots, broccoli, and/or dark-green
 leafy), (mushroom) soup (mixture)
 27345420 Chicken or turkey, rice, and vegetables (excluding carrots, broccoli, and dark-green
 leafy), (mushroom) soup (mixture)
 27350410 Tuna noodle casserole with vegetables and (mushroom) soup

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27414100	Beef with vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)), (mushroom) soup (mixture)
27414200	Beef with vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)), (mushroom) soup (mixture)
27450510	Tuna casserole with vegetables and (mushroom) soup, no noodles
27450650	Shellfish mixture and vegetables (including carrots, broccoli, and/or dark-green leafy (no potatoes)), (mushroom) soup (mixture)
27450660	Shellfish mixture and vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)), (mushroom) soup (mixture)
28522050	Mole verde (sauce)
32105190	Egg casserole with bread, cheese, milk and meat
58120110	Crepes, filled with meat, fish, or poultry, with sauce
58145120	Macaroni or noodles with cheese and tuna
58156410	Rice with onions, Puerto Rican style (arroz con cebollas)
58160130	Rice with beans and chicken
72125260	Spinach and cheese casserole
72201240	Broccoli, cooked, NS as to form, with mushroom sauce
72201241	Broccoli, cooked, from fresh, with mushroom sauce
72201242	Broccoli, cooked, from frozen, with mushroom sauce
73111400	Carrots in tomato sauce
75402020	Beans, lima, immature, cooked, NS as to form, with mushroom sauce
75402021	Beans, lima, immature, cooked, from fresh, with mushroom sauce
75402022	Beans, lima, immature, cooked, from frozen, with mushroom sauce
75402023	Beans, lima, immature, cooked, from canned, with mushroom sauce
75403020	Beans, string, green, cooked, NS as to form, with mushroom sauce
75403021	Beans, string, green, cooked, from fresh, with mushroom sauce
75403022	Beans, string, green, cooked, from frozen, with mushroom sauce
75403023	Beans, string, green, cooked, from canned, with mushroom sauce
75417020	Peas, cooked, NS as to form, with mushroom sauce
75417021	Peas, cooked, from fresh, with mushroom sauce
75417022	Peas, cooked, from frozen, with mushroom sauce
75417023	Peas, cooked, from canned, with mushroom sauce

Processed Soups (Powdered)

(Adjusted for not being reconstituted, assuming 8 g of dry soup mix to 245 mL water)
 [Phytosterols] = 6.25%

28310130	Beef, broth, bouillon, or consommé, dry, not reconstituted
28310140	Beef, broth, bouillon, or consommé, low sodium, dry, not reconstituted
28340140	Chicken broth, bouillon, or consommé, dry, not reconstituted
41813000	Vegetarian bouillon, dry
75608300	Onion soup, dry mix, not reconstituted
75649060	Vegetable soup, dry mix, not reconstituted

Mixtures Containing Processed Soups (Powdered)

(Adjusted for soup content of ~0.2 to 7.8%)
 [Phytosterols] = 0.01 to 0.49%

12350000	Dip, sour cream base
12350020	Dip, sour cream base, reduced calorie
12350100	Spinach dip, sour cream base
27113300	Swedish meatballs with cream or white sauce (mixture)
27135020	Veal scallopini
27243300	Chicken or turkey and rice with cream sauce (mixture)
27415200	Beef and vegetables (excluding carrots, broccoli, and dark-green leafy (no potatoes)), soy-based sau

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27420500 Pork and vegetables (including carrots, broccoli, and/or dark-green leafy), soy-based
sauce (mixture)
27420510 Pork and vegetables (excluding carrots, broccoli, and dark- green leafy), soy-based
sauce (mixture)
41207030 Beans, dry, cooked with ground beef
58155320 Seafood paella, Puerto Rican style (Paella a la marinera)
58163510 Rice dressing

SUBMISSION END

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