





INFANT FORMULA COUNCIL

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CONFIDENTIAL

Via Federal Express

August 22, 1996

Dan Raiten, Ph.D.  
Senior Staff Scientist  
Federation for American Societies  
for Experimental Biology-Life Sciences  
Research Office  
9650 Rockville Pike  
Bethesda, MD 20184-3998

Dear Dr. Raiten:

In April, the Federation for American Societies for Experimental Biology (FASEB) requested infant formula manufacturers provide certain data and related information on upper limits of nutrients in infant formula in conjunction with FASEB's review of nutrient requirements for formulas for term infants. As advised in our April 25 letter, enclosed are the requested data for Infant Formula Council (IFC)\* member company products as well as related information.

Data are provided for each of the 29 nutrients required by the Infant Formula Act (IFA) (grouped by type of formula [milk, soy and protein hydrolysate], as well as by product form [ready-to-feed, liquid concentrate and powder]) as follows: (1) target value, (2) value when product released for sale, which includes a mean and a range, and (3) anticipated percent loss or gain over shelf-life. Product made since January 1, 1995 are included in the industry database. [Note in some instances a company may have more than one code to reflect the manufacturer's differentiation among its products.] To assist FASEB staff and the Expert Panel in their review of these data, definitions of the terms used in the enclosed tables, as well as further explanatory details, follow:

\*Infant Formula Council members are: Carnation Nutritional Products, Division of Nestlé Food Company; Ross Products Division, Abbott Laboratories; and Wyeth-Ayerst Laboratories, Division of American Home Products.

### Target Value

Target value is the theoretical value for which a manufacturer aims to ensure label claim at the end of shelf-life. This value accounts for processing losses, as well as shelf-life losses. Note the determination of a "target value" varies according to manufacturer and/or nutrient, as follows:

1. For numerical values identified as "**Added**" (designated as "a" in the tables), the target value reflects only the amount of the nutrient added to the infant formula. Inherent amounts of the nutrient are not included in the target value.
2. If there is no numerical value listed for a particular nutrient, there is no target value because "**Inherent**" (designated as "inherent" in the tables) nutrients in the raw ingredients used to manufacture the infant formula are relied upon to meet nutrient label claims.
3. For numerical values identified as "**Added and Inherent**" (designated as "a/i" in the tables), the target value includes added and inherent amounts of the nutrient.

### Value When Product Released for Sale

The value when product is released for sale is the amount of each nutrient present in the infant formula when released for sale. These data are provided as a mean and a minimum and a maximum.

### Anticipated Percent Loss or Gain Over Shelf-life

The anticipated percent loss or gain of each nutrient over shelf-life is calculated for each product form from date of release (zero time) to the end of the shelf-life.

As the FASEB staff and Expert Panel review the data, variations in both target values and losses over shelf-life will be noted. It is important to understand that these differences are dependent upon a number of factors, including product formulations, premix used and the relative "fit" of nutrients within the product families, and varying shelf-lives among the formulas and manufacturers.

As we earlier advised Dr. Anderson, the Council submitted data regarding the nutrient stability of vitamins in milk-based and soy-based infant formulas in September 1994 in response to an FDA request. As Dr. Anderson earlier requested, we are enclosing the 1994 data for your additional information. Included, for each required vitamin in milk-based and soy-based infant formulas (grouped by product form), are:

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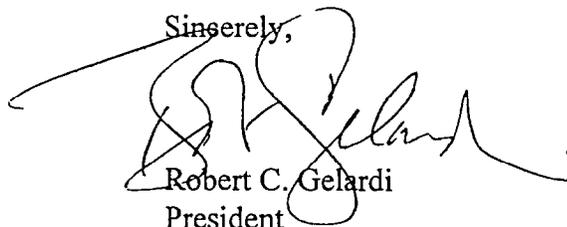
1. the percentage nutrient loss over shelf-life,
2. the percentage of the Infant Formula Act (IFA) minimum at the end of shelf-life, and
3. a summary statement identifying the range of percentage loss over shelf-life and discussing the minimum percentage IFA.

It is important to recognize these data were compiled to address the stability of the required nutrients at the end of product shelf-life. Thus, the format focused on infant formula vitamin levels at the end of shelf-life relative to IFA minimum requirements and not vitamin levels relative to IFA maxima.

As we stated in our May 31 submission to FASEB regarding this review of infant formula nutrient requirements, we believe it essential that maxima be established based on scientific evidence of adverse health effects. IFC further emphasizes that both the science and industry's experience do not justify setting upper limits for any additional currently required nutrients.

If you, your staff, or members of the Expert Panel have any questions regarding the enclosed data, please do not hesitate to contact me or any IFC staff.

Sincerely,

A handwritten signature in black ink, appearing to read "R. C. Gelardi", written over a printed name and title.

Robert C. Gelardi  
President

RCG/mdjcm  
Enclosures

cc: Dr. Sue Ann Anderson, FDA (without enclosures)

**PROTEIN (gm/100 kcal)  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
101	2.2 (a)	2.2	2.1	2.3	0
102	2.2	2.4	2.2	2.5	0
103	2.7 (a)	2.7	2.6	3.0	0
104	2.2	2.3	2.2	2.4	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
105	2.2	2.4	2.2	2.6	0
106	2.7 (a)	2.7	2.6	2.9	0
107	2.2 (a)	2.2	2.1	2.3	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
108	2.7 (a)	2.8	2.7	3.2	0
109	2.3 (a)	2.2	2.2	2.3	0
110	2.2	2.4	2.2	2.5	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**FAT (gm/100 kcal)  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
111	5.5 (a)	5.5	5.4	5.6	0
112	5.3	5.4	5.2	5.5	0
113	4.3 (a)	4.3	4.1	4.7	0
114	5.3	5.4	5.2	5.6	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
115	5.3	5.3	5.2	5.5	0
116	4.3 (a)	4.3	4.1	4.7	0
117	5.5 (a)	5.5	5.4	5.5	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
118	4.3 (a)	4.4	4.2	4.6	0
119	5.6 (a)	5.6	5.5	5.7	0
120	5.3	5.4	5.2	5.5	0

\*Values for product manufactured since January 1, 1995  
(a) = Value specifies amount of nutrient added only

**FAT (percent cal/100 kcal)  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
121	50 (a)	49	49	50	0
122	48	49	51	48	0
123	37	39	37	42	0
124	48	49	50	49	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
125	48	48	51	48	0
126	37	39	37	42	0
127	50 (a)	49	48	50	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
128	37	40	37	41	0
129	50 (a)	50	50	51	0
130	48	49	51	48	0

\*Values for product manufactured since January 1, 1995  
(a) = Value specifies amount of nutrient added only

**ESSENTIAL FATTY ACIDS [Linoleate] (percent cal/100 kcal)  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
131	Inherent	15	14	17	0
132	Inherent	6	5	7	0
133	Inherent	8	7	8	0
134	Inherent	6	5	7	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
135	Inherent	6	5	7	0
136	Inherent	8	6	9	0
137	Inherent	14	13	15	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
138	Inherent	8	7	8	0
139	Inherent	17	16	19	0
140	Inherent	6	5	7	0

\*Values for product manufactured since January 1, 1995

**ESSENTIAL FATTY ACIDS [Linoleate] (mg/100 kcal)  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
141	Inherent	1620	1538	1843	0
142	Inherent	670	500	776	0
143	Inherent	834	789	889	0
144	Inherent	670	500	790	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
145	Inherent	658	500	776	0
146	Inherent	834	709	1024	0
147	Inherent	1588	1436	1632	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
148	Inherent	839	780	916	0
149	Inherent	1900	1814	2106	0
150	Inherent	600	595	650	0

\*Values for product manufactured since January 1, 1995

**VITAMIN A (IU/100 kcal)  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
151	483 (a)	485	438	548	- <5%
152	500 (a)	552	479	663	0
153	489 (a)	455	312	551	- 25%
154	500 (a)	547	472	676	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
155	500 (a)	548	464	678	0
156	489 (a)	457	347	552	- 25%
157	482 (a)	498	454	541	- <5%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
158	489 (a)	435	310	555	- 25%
159	490 (a)	498	484	522	- 5%
160	476 (a)	460	410	510	- 15%

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**VITAMIN D (IU/100 kcal)  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
161	73 (a)	75	72	79	- <5%
162	80 (a)	82	73	99	- <5%
163	84 (a)	83	72	91	- <5%
164	80 (a)	86	73	95	- <5%

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
165	80 (a)	87	82	92	- <5%
166	84 (a)	79	70	88	- 10%
167	73 (a)	74	67	78	- <5%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
168	84 (a)	85	72	93	- 10%
169	74 (a)	77	69	81	- <5%
170	81 (a)	86	81	92	0

\*Values for product manufactured since January 1, 1995  
(a) = Value specifies amount of nutrient added only

**VITAMIN K ( $\mu\text{g}/100 \text{ kcal}$ )  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
171	15 (a)	20	15	27	- <5%
172	9 (a/i)	14	12	16	0
173	14 (a)	14	12	15	- 15%
174	9 (a/i)	14	12	15	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
175	9 (a/i)	14	12	15	0
176	14 (a)	14	11	15	- 20%
177	15 (a)	20	16	28	- <5%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
178	14 (a)	15	11	17	- 10%
179	15 (a)	18	13	26	- 10%
180	9 (a/i)	11	9	13	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**VITAMIN E (IU/100 kcal)  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
181	3.4 (a)	3.3	3.2	3.6	- <5%
182	2.0 (a/i)	2.6	2.0	3.2	- 7%
183	2.3 (a)	3.1	2.5	4.0	- <5%
184	2.0 (a/i)	2.6	2.2	2.9	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
185	2.0 (a/i)	2.5	2.0	3.2	- <5%
186	2.3 (a)	3.0	2.5	3.6	- 10%
187	3.4 (a)	3.3	3.1	3.6	- <5%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
188	2.3 (a)	3.1	2.3	3.9	- <5%
189	3.5 (a)	3.4	3.3	3.5	- <5%
190	2.0 (a/i)	2.4	2.2	2.6	- 8%

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**VITAMIN C (mg/100 kcal)  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
191	35 (a)	25	20	29	- 5%
192	20 (a)	19	15	24	- 22%
193	28 (a)	22	17	48	- 25%
194	20 (a)	21	16	26	- 20%
195	68 (a)	54	47	59	-14%
196	104 (a)	77	72	81	-30%

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
197	16 (a)	18	13	26	- 18%
198	28 (a)	25	21	38	- 30%
199	35 (a)	24	19	27	- 20%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
200	28 (a)	27	24	31	- 25%
201	25 (a)	23	21	24	- <5%
202	17 (a)	16	14	18	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**VITAMIN B<sub>1</sub> (µg/100 kcal)  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
203	220 (a)	201	178	209	- 15%
204	157 (a/i)	179	165	203	- 20%
205	120 (a)	155	126	205	- 20%
206	157 (a/i)	173	158	190	- 20%
207	220 (a)	189	176	200	- 19%

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
208	157 (a/i)	176	157	196	- 16%
209	120 (a)	149	128	192	- 20%
210	213 (a)	200	183	209	- 10%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
211	120 (a)	169	137	226	- 10%
212	220 (a)	219	210	228	- <5%
213	150 (a/i)	180	165	195	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**VITAMIN B<sub>2</sub> (µg/100 kcal)  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
214	97 (a)	245	194	294	- <5%
215	212 (a/i)	319	278	351	- <5%
216	110 (a)	203	169	231	- <5%
217	212 (a/i)	319	278	351	- <5%
218	245 (a)	355	311	429	- 5%

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
219	212 (a/i)	325	273	375	- <5%
220	110 (a)	223	184	264	- <5%
221	94 (a)	254	214	317	- <5%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
222	110 (a)	198	165	216	0
223	97 (a)	267	222	309	- <5%
224	222 (a/i)	320	250	400	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**VITAMIN B<sub>6</sub> (μg/100 kcal)  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
225	73 (a)	72	66	79	- <5%
226	109 (a/i)	124	104	196	- 28%
227	76 (a)	135	91	185	- <5%
228	109 (a/i)	123	103	186	- 20%

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
229	109 (a/i)	119	97	191	- 26%
230	76 (a)	120	90	152	- <5%
231	71 (a)	72	67	77	- <5%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
232	76 (a)	124	113	150	0
233	73 (a)	72	67	76	- <5%
234	94 (a/i)	105	85	125	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**VITAMIN B<sub>12</sub> (µg/100 kcal)**  
**IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
235	0.68 (a)	1.04	0.93	1.21	- <5%
236	0.30 (a/i)	0.40	0.30	0.60	- 20%
237	0.41 (a)	0.63	0.55	0.68	- <5%
238	0.30 (a/i)	0.50	0.40	0.60	- 20%

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
239	0.30 (a/i)	0.40	0.30	0.50	- <5%
240	0.41 (a)	0.56	0.50	0.61	- <5%
241	0.66 (a)	0.97	0.86	1.07	- <5%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
242	0.41 (a)	0.71	0.58	0.77	- 15%
243	0.68 (a)	1.05	1.01	1.11	- <5%
244	0.25 (a/i)	0.30	0.20	0.38	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**NIACIN ( $\mu\text{g}/100 \text{ kcal}$ )  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
245	1430 (a)	1556	1365	1657	- <5%
246	807 (a/i)	1011	827	1159	- <5%
247	1767 (a)	1846	1692	2000	- <5%
248	807 (a/i)	968	838	1123	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
249	807 (a/i)	887	818	940	- <5%
250	1767 (a)	1966	1920	2080	- <5%
251	1387 (a)	1540	1405	1627	- <5%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
252	1767 (a)	2021	1863	2248	0
253	1430 (a)	1423	1357	1553	- 5%
254	1125 (a/i)	1200	950	1440	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**FOLIC ACID ( $\mu\text{g}/100 \text{ kcal}$ )  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
255	30 (a)	26	23	28	- 21%
256	10 (a/i)	15	9	26	0
257	26 (a)	24	20	29	- 10%
258	10 (a/i)	14	8	22	0
259	30 (a)	26	23	27	- 14%

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
260	10 (a/i)	11	9	15	0
261	26 (a)	24	21	25	- 15%
262	29 (a)	26	24	28	- 25%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
263	26 (a)	21	20	24	- <5%
264	30 (a)	28	26	29	- <5%
265	10 (a/i)	12	8	18	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**PANTOTHENIC ACID ( $\mu\text{g}/100 \text{ kcal}$ )  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
266	783 (a)	975	902	1036	- 5%
267	404 (a/i)	606	533	835	0
268	552 (a)	1129	923	1323	- 10%
269	404 (a/i)	602	531	735	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
270	404 (a/i)	573	517	647	0
271	552 (a)	1074	880	1520	- 15%
272	760 (a)	963	791	1006	- <5%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
273	552 (a)	938	857	1049	- 25%
274	783 (a)	1044	976	1183	- <5%
275	410 (a/i)	740	520	960	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**BIOTIN ( $\mu\text{g}/100 \text{ kcal}$ )  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
276	8.6 (a)	8.7	8.1	9.3	- 5%
277	2.8 (a/i)	3.3	2.8	5.0	0
278	2.3 (a)	3.7	2.5	4.5	- <5%
279	2.8 (a/i)	3.1	2.8	3.7	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
280	2.8 (a/i)	3.3	2.9	4.9	0
281	2.3 (a)	4.0	3.0	4.0	- 10%
282	8.3 (a)	9.1	8.0	10.1	- 5%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
283	2.3 (a)	3.4	3.1	4.0	0
284	8.6 (a)	9.9	9.2	10.7	- 10%
285	2.9 (a/i)	4.0	3.0	5.2	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**CHOLINE (mg/100 kcal)  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
286	8 (a)	21	18	24	- <5%
287	Inherent	23	21	25	- <5%
288	13 (a)	16	13	18	0
289	Inherent	23	21	25	- <5%

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
290	Inherent	25	23	26	- <5%
291	13 (a)	16	14	19	0
292	8 (a)	20	17	23	- <5%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
293	13 (a)	16	14	19	0
294	8 (a)	20	17	21	- <5%
295	18 (a/i)	27	16	31	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**INOSITOL (mg/100 kcal)  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
296	5 (a)	7	7	8	- <5%
297	Inherent				
298	21 (a)	21	18	25	0
299	Inherent				

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
300	Inherent				
301	21 (a)	23	19	26	0
302	5 (a)	7	7	8	- <5%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
303	21 (a)	23	19	28	0
304	5 (a)	7	7	7	- <5%
305	6 (a)	10	7	11	0

\*Values for product manufactured since January 1, 1995  
(a) = Value specifies amount of nutrient added only

**CALCIUM (mg/100 kcal)  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
306	Inherent	80	76	85	0
307	68 (a/i)	67	63	73	0
308	149 (a/i)	141	135	160	0
309	68 (a/i)	67	63	72	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
310	68 (a/i)	65	62	71	0
311	149 (a/i)	142	122	156	0
312	Inherent	79	76	81	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
313	149 (a/i)	146	135	163	0
314	Inherent	80	78	81	0
315	69 (a/i)	72	67	77	0

\*Values for product manufactured since January 1, 1995  
(a/i) = Value includes added and inherent amounts

**PHOSPHORUS (mg/100 kcal)  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
316	Inherent	66	63	71	0
317	Inherent	49	46	52	0
318	99 (a/i)	96	90	106	0
319	Inherent	48	45	51	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
320	Inherent	49	45	53	0
321	99 (a/i)	21	85	113	0
322	Inherent	65	62	68	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
323	99 (a/i)	98	90	109	0
324	Inherent	63	61	65	0
325	47 (a/i)	62	59	65	0

\*Values for product manufactured since January 1, 1995

(a/i) = Value includes added and inherent amounts

**MAGNESIUM (mg/100 kcal)  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
326	Inherent	9	8	10	0
327	Inherent	11	10	13	0
328	9 (a/i)	10	9	11	0
329	Inherent	11	10	12	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
330	Inherent	9	8	12	0
331	9 (a/i)		9	11	0
332	Inherent	8	8	9	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
333	9 (a/i)	10	9	11	0
334	Inherent	9	8	9	0
335	8 (a/i)	9	9	10	0

\*Values for product manufactured since January 1, 1995

(a/i) = Value includes added and inherent amounts

**IRON (mg/100 kcal)  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
336	2.0 (a)	2.0	2.0	2.1	+ 14%
337	2.0 (a)	2.0	1.8	2.1	0
338	2.1 (a)	2.5	2.2	2.7	0
339	2.0 (a)	2.0	1.8	2.1	0
340	2.0 (a)	2.0	2.0	2.1	+ 11%

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
341	2.0 (a)	1.9	1.8	2.1	0
342	2.1 (a)	2.5	2.3	2.8	0
343	2.0 (a)	2.0	2.0	2.1	+ 5 %

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
344	2.1 (a)	2.4	1.9	2.7	0
345	2.0 (a)	2.0	1.9	2.1	0
346	2.0 (a)	1.9	1.9	2.0	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**IODINE ( $\mu\text{g}/100 \text{ kcal}$ )  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
347	Inherent	29	20	44	0
348	Inherent	21	14	30	0
349	8 (a)	44	46	57	0
350	Inherent	21	11	31	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
351	Inherent	22	14	37	0
352	8 (a)	42	34	59	0
353	Inherent	29	18	38	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
354	8 (a)	29	28	31	0
355	Inherent	39	34	54	0
356	11 (a)	26	18	35	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**ZINC (mg/100 kcal)  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
357	0.8 (a)	1.1	1.0	1.1	0
358	0.9 (a/i)	0.9	0.9	1.0	0
359	0.8 (a)	1.4	1.1	2.4	0
360	0.9 (a/i)	0.9	0.8	1.0	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
361	0.9 (a/i)	0.9	0.8	1.0	0
362	0.8 (a)	1.3	1.2	1.3	0
363	0.8 (a)	1.0	1.0	1.1	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
364	0.8 (a)	1.2	1.2	1.3	0
365	0.8 (a)	1.0	1.0	1.1	0
366	0.8 (a/i)	0.9	0.9	0.9	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**COPPER ( $\mu\text{g}/100 \text{ kcal}$ )  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
367	100 (a)	103	94	111	0
368	78 (a/i)	83	71	100	0
369	90 (a)	107	100	117	0
370	78 (a/i)	83	73	94	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
371	78 (a/i)	84	72	96	0
372	90 (a)	103	94	114	0
373	97 (a)	102	97	111	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
374	90 (a)	103	99	113	0
375	100 (a)	104	95	113	0
376	79 (a/i)	78	73	84	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**MANGANESE ( $\mu\text{g}/100 \text{ kcal}$ )  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
377	8 (a)	12	10	16	0
378	16 (a/i)	21	18	24	0
379	9 (a)	13	10	18	0
380	16 (a/i)	21	19	23	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
381	16 (a/i)	19	18	21	0
382	9 (a)	14	10	18	0
383	8 (a)	12	10	16	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
384	9 (a)	13	9	16	0
385	8 (a)	12	10	14	0
386	17 (a/i)	26	25	30	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**SODIUM (mg/100 kcal)  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
387	Inherent	30	28	36	0
388	24 (a/i)	25	22	26	0
389	43 (a/i)	40	39	46	0
390	24 (a/i)	24	22	27	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
391	24 (a/i)	25	22	30	0
392	43 (a/i)	40	39	44	0
393	Inherent	29	28	31	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
394	43 (a/i)	42	39	47	0
395	Inherent	29	28	31	0
396	23 (a/i)	24	22	26	0

\*Values for product manufactured since January 1, 1995  
(a/i) = Value includes added and inherent amounts

**POTASSIUM (mg/100 kcal)  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
397	Inherent	123	114	135	0
398	100 (a/i)	114	107	123	0
399	149 (a/i)	146	135	163	0
400	100 (a/i)	112	100	121	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
401	100 (a/i)	105	95	131	0
402	149 (a/i)	147	135	159	0
403	Inherent	121	115	130	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
404	149 (a/i)	147	133	162	0
405	Inherent	142	136	148	0
406	92 (a/i)	100	94	105	0

\*Values for product manufactured since January 1, 1995  
(a/i) = Value includes added and inherent amounts

**CHLORIDE (mg/100 kcal)  
IN MILK-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
407	Inherent	74	69	82	0
408	63 (a/i)	63	60	69	0
409	99 (a/i)	96	90	105	0
410	63 (a/i)	63	60	69	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
411	63 (a/i)	62	58	71	0
412	99 (a/i)	97	87	106	0
413	Inherent	73	68	80	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
414	99 (a/i)	99	93	107	0
415	Inherent	73	69	82	0
416	60 (a/i)	72	66	78	0

\*Values for product manufactured since January 1, 1995  
(a/i) = Value includes added and inherent amounts

**PROTEIN (gm/100 kcal)  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
501	2.5 (a)	2.5	2.5	2.7	0
502	2.7	2.8	2.5	2.9	0
503	3.2 (a)	3.3	3.2	3.5	0
504	2.7	2.8	2.7	3.0	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
505	2.7	2.8	2.6	2.9	0
506	3.2 (a)	3.3	3.2	3.4	0
507	2.5 (a)	2.5	2.5	2.5	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
508	3.2 (a)	3.2	3.2	3.3	0
509	2.5 (a)	2.6	2.5	2.6	0
510	2.5	2.5	2.5	2.7	0
511	3.2 (a)	3.2	3.2	3.4	0

\*Values for product manufactured since January 1, 1995  
(a) = Value specifies amount of nutrient added only

**FAT (gm/100 kcal)  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
512	5.6 (a)	5.5	5.5	5.6	0
513	5.3	5.4	5.2	5.5	0
514	5.7 (a)	5.9	5.7	6.1	0
515	5.3	5.4	5.2	5.5	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
516	5.3	5.3	5.2	5.4	0
517	5.7 (a)	5.9	5.6	6.2	0
518	5.5 (a)	5.5	5.4	5.6	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
519	5.7 (a)	5.7	5.6	5.8	0
520	5.6 (a)	5.6	5.5	5.6	0
521	5.3	5.4	5.2	5.5	0
522	5.7 (a)	5.9	5.8	6.0	0

\*Values for product manufactured since January 1, 1995  
(a) = Value specifies amount of nutrient added only

**FAT (percent cal/100 kcal)  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
523	50 (a)	50	49	51	0
524	48	48	48	48	0
525	51	53	51	55	0
526	48	48	48	48	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
527	48	47	48	47	0
528	51	53	50	56	0
529	50 (a)	49	49	50	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
51	51	51	50	52	0
531	50 (a)	50	50	50	0
532	48	48	48	48	0
533	51	53	52	54	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**ESSENTIAL FATTY ACIDS [Linoleate] (percent cal/100 kcal)  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
534	Inherent	15	14	17	0
535	Inherent	6	5	7	0
536	Inherent	26	25	28	0
537	Inherent	6	5	7	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
538	Inherent	6	5	7	0
539	Inherent	25	24	27	0
540	Inherent	15	14	17	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
541	Inherent	25	24	28	0
542	Inherent	17	16	17	0
543	Inherent	6	5	7	0
544	Inherent	25	24	28	0

\*Values for product manufactured since January 1, 1995

**ESSENTIAL FATTY ACIDS [Linoleate] (mg/100 kcal)  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
545	Inherent	1645	1538	1858	0
546	Inherent	670	500	776	0
547	2783 (a)	2898	2758	3133	0
548	Inherent	670	500	776	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
549	Inherent	658	500	761	0
550	2783 (a)	2746	2650	2971	0
551	Inherent	1642	1578	1837	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
552	2783 (a)	2825	2650	3077	0
553	Inherent	1865	1805	1936	0
554	Inherent	648	616	678	0
555	2783 (a)	2781	2650	3095	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**VITAMIN A (IU/100 kcal)  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
556	471 (a)	455	409	502	- 6%
557	500 (a)	498	425	592	0
558	607 (a)	424	390	700	- 25%
559	500 (a)	488	429	565	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
560	500 (a)	502	424	640	0
561	607 (a)	449	390	739	- 25%
562	473 (a)	494	434	537	- 5%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
563	607 (a)	502	449	585	- 30%
564	486 (a)	498	449	548	- 5%
565	476 (a)	416	312	472	- 15%
566	607 (a)	477	429	540	- 30%

\*Values for product manufactured since January 1, 1995  
(a) = Value specifies amount of nutrient added only

**VITAMIN D (IU/100 kcal)  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
567	71 (a)	71	65	75	- <5%
568	80 (a)	87	80	93	- <5%
569	81 (a)	85	82	88	- <5%
570	80 (a)	73	70	76	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
571	80 (a)	84	78	91	0
572	81 (a)	87	81	97	0
573	71 (a)	74	68	77	- 5%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
574	81 (a)	78	78	78	- <5%
575	74 (a)	77	72	82	- <5%
576	81 (a)	86	82	90	0
577	81 (a)	81	69	93	- <5%

\*Values for product manufactured since January 1, 1995  
(a) = Value specifies amount of nutrient added only

**VITAMIN K ( $\mu\text{g}/100 \text{ kcal}$ )  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
578	15 (a)	27	22	42	- <5%
579	18 (a)	22	19	27	0
580	10 (a)	19	12	25	0
581	18 (a)	22	18	26	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
582	18 (a)	22	17	30	0
583	10 (a)	19	12	26	0
584	15 (a)	25	22	33	- <5%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
585	10 (a)	31	30	32	0
586	15 (a)	22	20	24	- 5%
587	18 (a)	19	16	22	0
588	10 (a)	20	13	28	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**VITAMIN E (IU/100 kcal)  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
589	3.3 (a)	3.3	3.2	3.5	- <5%
590	2.0 (a/i)	2.5	2.1	2.9	- <5%
591	2.8 (a)	4.1	3.7	4.6	- 10%
592	2.0 (a/i)	2.5	2.4	2.9	- <5%

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
593	2.0 (a/i)	2.5	2.0	2.9	0
594	2.8 (a)	4.3	3.9	4.7	0
595	3.3 (a)	3.3	3.1	3.4	- <5%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
596	2.8 (a)	3.5	2.9	3.9	- 10%
597	3.4 (a)	3.4	3.2	3.5	- <5%
598	2.0 (a/i)	2.4	2.2	2.6	- 8%
599	2.8 (a)	3.7	3.1	4.3	- 10%

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**VITAMIN C (mg/100 kcal)  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
600	35 (a)	30	27	33	-6%
601	11 (a)	17	14	25	- 13%
602	40 (a)	34	26	57	- 25%
603	11 (a)	18	16	21	- 20%
604	68 (a)	57	53	61	-10%
605	104 (a)	82	73	99	

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
606	13 (a)	17	14	20	- 10%
607	40 (a)	34	28	39	- 25%
608	52 (a)	24	18	31	- 20%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
609	40 (a)	24	19	33	- 25%
610	31 (a)	27	25	30	- <5%
611	17 (a)	16	13	20	0
612	40 (a)	24	17	32	- 25%

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**VITAMIN B<sub>1</sub> (µg/100 kcal)  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
613	272 (a)	226	216	240	- 15%
614	178 (a)	167	149	193	- 20%
615	157 (a)	227	188	289	- 10%
616	178 (a)	148	132	176	- 20%
617	272 (a)	210	203	222	- 16%

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
618	157 (a)	155	127	182	- 20%
619	157 (a)	230	197	277	- 10%
620	264 (a)	236	207	428	- 20%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
621	157 (a)	182	154	232	- <5%
622	283 (a)	262	241	274	- <5%
623	160 (a)	169	147	209	0
624	157 (a)	184	153	246	- <5%

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**VITAMIN B<sub>2</sub> (µg/100 kcal)**  
**IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
625	120 (a)	115	109	122	- <5%
626	212 (a/i)	230	206	252	0
627	133 (a)	152	136	182	0
628	212 (a/i)	230	206	252	0
629	211 (a)	189	178	207	- 5%

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
630	212 (a/i)	227	194	259	0
631	133 (a)	167	142	189	0
632	116 (a)	112	106	117	- <5%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
633	133 (a)	117	112	122	0
634	125 (a)	127	117	136	- <5%
635	213 (a/i)	222	188	268	0
636	133 (a)	125	118	132	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**VITAMIN B<sub>6</sub> (µg/100 kcal)  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
637	90 (a)	92	85	117	- <5%
638	109 (a/i)	138	119	172	- <5%
639	113 (a)	180	142	227	0
640	109 (a/i)	133	121	153	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
641	109 (a/i)	139	116	217	0
642	113 (a)	183	118	236	0
643	87 (a)	88	84	92	- <5%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
644	113 (a)	138	122	155	0
645	94 (a)	96	92	99	- <5%
646	110 (a/i)	147	120	183	0
647	113 (a)	149	98	213	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**VITAMIN B<sub>12</sub> (µg/100 kcal)  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
648	0.85 (a)	0.96	0.87	1.09	- <5%
649	0.50 (a/i)	0.60	0.50	0.80	0
650	0.44 (a)	0.62	0.41	0.83	0
651	0.50 (a/i)	0.60	0.50	0.70	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
652	0.50 (a/i)	0.60	0.50	0.70	- 10%
653	0.44 (a)	0.58	0.40	0.73	0
654	0.82 (a)	0.98	0.89	1.07	- <5%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
655	0.44 (a)	0.52	0.48	0.56	0
656	0.88 (a)	1.08	0.96	1.21	- <5%
657	0.47 (a/i)	0.63	0.49	0.75	0
658	0.44 (a)	0.52	0.46	0.58	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**NIACIN ( $\mu\text{g}/100$  kcal)  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
659	1768 (a)	1796	1701	1849	- 9%
660	1070 (a/i)	1183	1080	1281	- <5%
661	1391 (a)	1542	1318	1818	0
662	1070 (a/i)	1217	1085	1391	0
663	1768 (a)	1766	1746	1849	- 5%

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
664	1070 (a/i)	1071	1010	1142	- <5%
665	1391 (a)	1719	1496	1811	0
666	1715 (a)	1808	1716	1894	- <5%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
667	1391 (a)	1431	1412	1451	0
668	1837 (a)	1913	1790	2027	- <5%
669	1005 (a/i)	1090	950	1300	0
670	1391 (a)	1450	1315	1586	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**FOLIC ACID ( $\mu\text{g}/100 \text{ kcal}$ )  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
671	37 (a)	33	30	35	- 15%
672	10 (a/i)	15	12	30	- <5%
673	19 (a)	23	19	25	0
674	10 (a/i)	15	11	26	- <5%
675	37 (a)	33	31	35	- 8%

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
676	10 (a/i)	14	11	19	- <5%
677	19 (a)	21	18	29	0
678	36 (a)	32	29	36	- 15%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
679	19 (a)	19	18	21	0
680	38 (a)	36	33	38	- <5%
681	10 (a/i)	17	15	19	0
682	19 (a)	19	16	21	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**PANTOTHENIC ACID ( $\mu\text{g}/100 \text{ kcal}$ )  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
683	967 (a)	849	799	888	- 5%
684	539 (a/i)	709	624	814	0
685	604 (a)	886	636	1060	0
686	539 (a/i)	755	688	843	0
687	967 (a)	882	843	917	- 10%

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
688	539 (a/i)	709	633	799	0
689	604 (a)	954	606	1102	0
690	938 (a)	866	828	917	- <5%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
691	604 (a)	774	696	851	0
692	1005 (a)	949	902	1006	- <5%
693	552 (a/i)	705	590	810	0
694	604 (a)	743	600	851	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**BIOTIN ( $\mu\text{g}/100 \text{ kcal}$ )  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
695	10.6 (a)	9.8	8.0	11.1	- 5%
696	5.9 (a/i)	6.5	6.3	6.8	- <5%
697	9.6 (a)	12.9	11.5	14.2	0
698	5.9 (a/i)	6.5	5.6	7.3	- <5%

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
699	5.9 (a/i)	6.5	5.9	7.3	0
700	9.6 (a)	14.5	10.0	18.1	0
701	10.3 (a)	9.8	5.2	11.7	- <5%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
702	9.6 (a)	10.1	9.8	10.4	0
703	11.0 (a)	10.6	10.1	10.9	- 10%
704	6.4 (a/i)	8.0	7.0	9.0	0
705	9.6 (a)	10.0	8.5	10.4	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**CHOLINE (mg/100 kcal)  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
706	8 (a)	16	15	19	- <5%
707	14 (a/i)	21	18	25	- <5%
708	12 (a)	24	22	27	0
709	14 (a/i)	20	18	23	- <5%

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
710	14 (a/i)	20	17	26	- <5%
711	12 (a)	23	21	25	0
712	8 (a)	16	13	19	- <5%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
713	12 (a)	19	18	19	0
714	8 (a)	14	13	15	- <5%
715	16 (a/i)	17	13	21	0
716	12 (a)	21	19	22	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**INOSITOL (mg/100 kcal)  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
717	6 (a)	6	6	7	- <5%
718	Inherent	18	15	21	- <5%
719	18 (a)	29	20	44	0
720	Inherent	18	15	23	- <5%

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
721	Inherent	18	15	23	- <5%
722	18 (a)	27	18	42	0
723	6 (a)	6	6	7	- <5%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
724	18 (a)	24	15	33	0
725	6 (a)	7	6	7	- <5%
726	Inherent	17	10	22	0
727	18 (a)	26	22	35	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**CALCIUM (mg/100 kcal)  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
728	129 (a)	124	118	131	0
729	101 (a/i)	103	94	109	0
730	112 (a/i)	105	102	120	0
731	101 (a/i)	97	91	102	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
732	99 (a/i)	100	94	107	0
733	112 (a/i)	112	102	133	0
734	129 (a)	122	117	127	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
735	112 (a/i)	101	102	106	0
736	129 (a)	128	126	130	0
737	101 (a/i)	104	99	108	0
738	149 (a/i)	148	140	157	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**PHOSPHORUS (mg/100 kcal)  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
739	85 (a)	84	78	88	0
740	71 (a/i)	70	64	74	0
741	69 (a/i)	65	63	84	0
742	71 (a/i)	67	63	70	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
743	69 (a/i)	69	63	73	0
744	69 (a/i)	70	63	88	0
745	89 (a)	83	77	89	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
746	69 (a/i)	72	64	76	0
747	89 (a)	87	85	88	0
748	71 (a/i)	83	78	88	0
749	99 (a/i)	103	96	111	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**MAGNESIUM (mg/100 kcal)  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
750	8 (a)	9	8	10	0
751	11 (a/i)	11	11	12	0
752	12 (a/i)	12	11	14	0
753	11 (a/i)	11	11	12	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
754	11 (a/i)	11	10	12	0
755	12 (a/i)	13	11	15	0
756	8 (a)	10	9	10	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
757	12 (a/i)	13	12	15	0
758	7 (a)	8	8	9	0
759	11 (a/i)	11	10	12	0
760	12 (a/i)	13	12	15	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**IRON (mg/100 kcal)  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
761	1.4 (a)	1.9	1.9	1.9	+ 14%
762	2.0 (a/i)	1.9	1.8	2.0	0
763	2.1 (a)	2.2	1.9	2.6	0
764	2.0 (a/i)	1.9	1.8	1.9	0
765	1.4 (a)	1.9	1.8	2.0	+ 11%

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
766	2.0 (a/i)	1.9	1.8	2.0	0
767	2.1 (a)	2.4	2.1	2.7	0
768	1.4 (a)	1.9	1.9	2.0	+ 6%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
769	2.1 (a)	2.3	2.0	2.4	0
770	1.5 (a)	1.9	1.9	2.0	0
771	1.9 (a/i)	1.9	1.9	2.0	0
772	2.1 (a)	2.4	2.2	2.7	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**IODINE ( $\mu\text{g}/100 \text{ kcal}$ )  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
773	15 (a)	24	17	41	0
774	10 (a/i)	24	16	37	0
775	9 (a)	28	24	32	0
776	10 (a/i)	31	20	43	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
777	10 (a/i)	24	14	43	0
778	9 (a)	29	21	35	0
779	15 (a)	22	19	29	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
780	9 (a)	22	21	23	0
781	15 (a)	21	20	22	0
782	10 (a/i)	25	19	52	0
783	9 (a)	27	23	29	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**ZINC (mg/100 kcal)  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
784	1.0 (a)	1.1	1.0	1.1	0
785	0.9 (a/i)	1.0	0.9	1.0	0
786	0.9 (a)	1.2	1.0	1.2	0
787	0.9 (a/i)	1.0	0.9	1.0	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
788	0.9 (a/i)	1.0	0.9	1.0	0
789	0.9 (a)	1.1	1.0	1.2	0
790	1.0 (a)	1.1	1.0	1.1	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
791	0.9 (a)	1.0	1.0	1.1	0
792	1.0 (a)	1.1	1.1	1.1	0
793	0.9 (a/i)	0.9	0.8	0.9	0
794	0.9 (a)	1.0	1.0	1.2	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**COPPER ( $\mu\text{g}/100 \text{ kcal}$ )  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
795	124 (a)	158	145	171	0
796	81 (a/i)	87	72	101	0
797	129 (a)	143	125	153	0
798	81 (a/i)	84	75	93	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
799	81 (a/i)	87	74	98	0
800	129 (a)	150	130	168	0
801	120 (a)	157	151	162	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
802	129 (a)	148	136	168	0
803	129 (a)	164	157	170	0
804	77 (a/i)	83	73	97	0
805	129 (a)	143	122	169	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**MANGANESE ( $\mu\text{g}/100 \text{ kcal}$ )  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
806	10 (a)	43	33	48	0
807	Inherent	37	33	42	0
808	Inherent	48	32	64	0
809	Inherent	37	34	40	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
810	Inherent	36	31	45	0
811	Inherent	49	40	72	0
812	10 (a)	46	42	51	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
813	Inherent	40	30	54	0
814	11 (a)	54	47	76	0
815	38 (a)	59	51	68	0
816	Inherent	40	30	56	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**SODIUM (mg/100 kcal)  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
817	49 (a)	48	45	50	0
818	31 (a/i)	34	31	36	0
819	46 (a/i)	50	43	55	0
820	31 (a/i)	34	32	35	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
821	31 (a/i)	32	30	35	0
822	46 (a/i)	51	45	57	0
823	49 (a)	50	46	51	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
824	46 (a/i)	42	42	44	0
825	47 (a)	49	46	51	0
826	32 (a/i)	33	30	36	0
827	46 (a/i)	46	44	48	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**POTASSIUM (mg/100 kcal)  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
828	98 (a)	145	127	170	0
829	118 (a/i)	123	116	128	0
830	129 (a/i)	135	126	147	0
831	118 (a/i)	123	118	127	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
832	118 (a/i)	121	131	129	0
833	129 (a/i)	138	130	155	0
834	99 (a)	114	109	120	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
835	129 (a/i)	143	133	158	0
836	127 (a)	138	134	142	0
837	117 (a/i)	125	118	135	0
838	126 (a/i)	131	121	141	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**CHLORIDE (mg/100 kcal)  
IN SOY-BASED INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
839	65 (a)	66	61	69	0
840	59 (a/i)	67	63	78	0
841	86 (a/i)	80	78	84	0
842	59 (a/i)	67	63	78	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
843	59 (a/i)	66	62	72	0
844	86 (a/i)	82	78	84	0
845	86 (a)	90	87	93	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
846	103 (a/i)	93	90	95	0
847	83 (a)	87	85	91	0
848	62 (a/i)	69	59	77	0
849	86 (a/i)	81	78	84	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**PROTEIN (gm/100 kcal)  
IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
901	2.9 (a)	2.8	2.8	2.8	0
902	2.5 (a)	2.6	2.5	2.8	0
903	2.5 (a)	2.5	2.3	2.7	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
904	2.5 (a)	2.5	2.4	2.7	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
905	2.5 (a)	2.5	2.4	2.7	0

\*Values for product manufactured since January 1, 1995  
(a) = Value specifies amount of nutrient added only

**FAT (gm/100 kcal)**  
**IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
906	5.6 (a)	5.6	5.5	5.7	0
907	5.3 (a)	5.3	5.1	5.5	0
908	5.3 (a)	5.4	5.1	5.8	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
909	5.3 (a)	5.3	5.1	5.8	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
910	5.3 (a)	5.3	5.1	5.5	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**FAT (percent cal/100 kcal)  
IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
911	50 (a)	50	49	51	0
912	48	48	46	50	0
913	48	48	46	52	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
914	48	48	46	52	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
915	48	48	46	50	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**ESSENTIAL FATTY ACIDS [Linoleate] (percent cal/100 kcal)  
IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
916	Inherent	17	16	17	0
917	Inherent	9	8	9	0
918	Inherent	9	8	10	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
919	Inherent	9	8	10	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
920	Inherent	9	8	10	0

\*Values for product manufactured since January 1, 1995

**ESSENTIAL FATTY ACIDS [Linoleate] (mg/100 kcal)  
IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
921	Inherent	1840	1756	1924	0
922	930 (a)	948	917	1009	0
923	930 (a)	992	915	1120	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
924	930 (a)	970	851	1102	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
925	930 (a)	989	911	1061	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**VITAMIN A (IU/100 kcal)  
IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
926	495 (a)	474	382	609	- <5%
927	510 (a)	389	343	452	- 20%
928	510 (a)	528	425	665	- 20%

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
929	510 (a)	527	426	606	- 20%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
930	510 (a)	520	406	650	- 20%

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**VITAMIN D (IU/100 kcal)  
IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
931	116 (a)	90	81	98	- 40%
932	76 (a)	74	72	75	0
933	76 (a)	77	71	83	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
934	76 (a)	72	65	81	- 10%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
935	76 (a)	80	70	90	- 10%

\*Values for product manufactured since January 1, 1995  
(a) = Value specifies amount of nutrient added only

**VITAMIN K ( $\mu\text{g}/100 \text{ kcal}$ )  
IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
936	15 (a)	24	21	28	- <5%
937	13 (a)	16	10	24	- 5%
938	13 (a)	15	11	24	- 5%

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
939	13 (a)	13	10	16	- 25%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
940	13 (a)	15	9	23	- 25%

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**VITAMIN E (IU/100 kcal)  
IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
941	3.5 (a)	3.5	3.3	3.8	- <5%
942	2.3 (a)	3.3	3.1	3.6	0
943	2.3 (a)	3.2	2.7	3.5	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
944	2.3 (a)	3.2	2.7	3.7	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
945	2.3 (a)	3.2	2.7	3.8	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**VITAMIN C (mg/100 kcal)  
IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
946	73 (a)	61	49	76	- 8%
947	28 (a)	26	22	29	- 15%
948	28 (a)	22	11	31	- 15%

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
949	28 (a)	23	10	33	-15%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
950	28 (a)	24	16	27	- 15%

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**VITAMIN B<sub>1</sub> (μg/100 kcal)**  
**IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
951	272 (a)	228	197	250	- <5%
952	90 (a)	101	87	130	- 10%
953	90 (a)	112	78	146	- 10%

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
954	90 (a)	109	88	146	- 10%

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
955	90 (a)	111	92	149	- 10%

\*Values for product manufactured since January 1, 1995  
(a) = Value specifies amount of nutrient added only

**VITAMIN B<sub>2</sub> (µg/100 kcal)**  
**IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
956	120 (a)	108	93	121	- <5%
957	155 (a)	235	231	246	0
958	155 (a)	215	154	308	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
959	155 (a)	241	181	299	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
960	155 (a)	218	156	297	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**VITAMIN B<sub>6</sub> (μg/100 kcal)**  
**IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
961	90 (a)	89	80	100	- <5%
962	86 (a)	217	169	251	0
963	86 (a)	141	98	169	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
964	86 (a)	153	98	213	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
965	86 (a)	130	111	170	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**VITAMIN B<sub>12</sub> (µg/100 Kcal)**  
**IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
966	0.9 (a)	0.9	0.8	0.9	- <5%
967	0.3 (a)	0.6	0.5	0.6	0
968	0.3 (a)	0.6	0.4	0.7	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
969	0.3 (a)	0.5	0.5	0.7	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
970	0.3 (a)	0.5	0.4	0.6	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**NIACIN ( $\mu\text{g}/100 \text{ kcal}$ )  
IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
971	1772 (a)	1861	1701	2012	- 9%
972	1038 (a)	1127	1015	1230	0
973	1038 (a)	1077	954	1231	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
974	1038 (a)	1046	945	1102	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
975	1038 (a)	1054	879	1152	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**FOLIC ACID ( $\mu\text{g}/100 \text{ kcal}$ )  
IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
976	37 (a)	34	30	38	- 8%
977	15 (a)	19	17	22	0
978	15 (a)	16	11	19	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
979	15 (a)	16	12	18	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
980	15 (a)	14	10	18	0

\*Values for product manufactured since January 1, 1995  
(a) = Value specifies amount of nutrient added only

**PANTOTHENIC ACID ( $\mu\text{g}/100 \text{ KCAL}$ )  
IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
981	969 (a)	1005	947	1080	- 7%
982	621 (a)	1046	923	1169	0
983	621 (a)	991	831	1123	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
984	621 (a)	938	764	1181	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
985	621 (a)	859	645	1055	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**BIOTIN ( $\mu\text{g}/100 \text{ kcal}$ )  
IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
986	11 (a)	11	10	11	- 11%
987	3 (a)	4	4	5	0
988	3 (a)	4	3	5	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
989	3 (a)	4	3	5	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
990	3 (a)	3	2	5	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**CHOLINE (mg/100 kcal)  
IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
991	10 (a)	15	14	18	- <5%
992	13 (a)	19	17	22	0
993	13 (a)	18	13	21	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
994	13 (a)	15	13	18	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
995	13 (a)	16	14	19	- 20%

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**INOSITOL (mg/100 kcal)  
IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
996	6 (a)	12	12	13	- <5%
997	20 (a)	25	23	26	0
998	20 (a)	22	18	27	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
999	20 (a)	21	18	26	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1000	20 (a)	21	18	26	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**CALCIUM (mg/100 kcal)  
IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1001	114 (a)	128	123	133	0
1002	70 (a/i)	66	64	70	0
1003	70 (a/i)	72	64	82	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1004	70 (a/i)	71	64	82	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1005	70 (a/i)	71	64	80	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**PHOSPHORUS (mg/100 kcal)  
IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1006	82 (a)	85	81	88	0
1007	40 (a/i)	36	36	38	0
1008	40 (a/i)	41	36	44	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1009	40 (a/i)	38	36	45	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1010	40 (a/i)	40	37	43	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**MAGNESIUM (mg/100 kcal)  
IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1011	8 (a)	10	10	10	0
1012	7 (a/i)	8	7	9	0
1013	7 (a/i)	8	7	8	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1014	7 (a/i)	8	7	9	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1015	7 (a/i)	8	7	9	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**IRON (mg/100 kcal)  
IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1016	1.8 (a)	2.1	2.0	2.2	+ 8%
1017	1.8 (a)	2.0	1.9	2.1	0
1018	1.8 (a)	2.0	1.7	2.3	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1019	1.8 (a)	2.0	1.6	2.3	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1020	1.8 (a)	2.0	1.6	2.3	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**IODINE ( $\mu\text{g}/100 \text{ kcal}$ )  
IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1021	22 (a)	28	25	31	0
1022	13 (a)	18	14	22	0
1023	13 (a)	15	12	23	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1024	13 (a)	16	12	18	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1025	13 (a)	17	14	21	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**ZINC (mg/100 kcal)  
IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1026	1.0 (a)	1.1	1.1	1.2	0
1027	0.9 (a)	1.1	1.1	1.1	0
1028	0.9 (a)	1.1	1.0	1.1	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1029	0.9 (a)	1.1	1.0	1.2	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1030	0.9 (a)	1.1	1.0	1.1	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**COPPER ( $\mu\text{g}/100 \text{ kcal}$ )  
IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1031	124 (a)	131	122	141	0
1032	100 (a)	115	113	118	0
1033	100 (a)	111	92	121	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1034	100 (a)	114	102	126	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1035	100 (a)	109	94	125	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**MANGANESE ( $\mu\text{g}/100 \text{ kcal}$ )  
IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1036	21 (a)	38	36	42	0
1037	9 (a)	16	16	17	0
1038	9 (a)	14	13	17	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1039	9 (a)	14	12	18	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1040	9 (a)	14	14	15	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

**SODIUM (mg/100 kcal)**  
**IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1041	44 (a)	52	51	59	0
1042	26 (a/i)	30	28	32	0
1043	26 (a/i)	28	25	31	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1044	26 (a/i)	28	24	34	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1045	26 (a/i)	28	24	31	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**POTASSIUM (mg/100 kcal)  
IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1046	122 (a)	144	128	174	0
1047	108 (a/i)	110	102	118	0
1048	108 (a/i)	110	98	122	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1049	108 (a/i)	107	98	124	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1050	108 (a/i)	107	94	118	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**CHLORIDE (mg/100 kcal)  
IN PROTEIN HYDROLYSATES INFANT FORMULAS**

**READY-TO-FEED**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1051	85 (a)	92	88	98	0
1052	65 (a/i)	72	69	76	0
1053	65 (a/i)	70	65	76	0

**LIQUID CONCENTRATE**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1054	65 (a/i)	69	59	82	0

**POWDER**

Manufacturer	Target Value	Value When Product Released For Sale*			Anticipated % Loss (-) or Gain (+) Over Shelf Life
		Mean	Minimum	Maximum	
1055	65 (a/i)	70	62	76	0

\*Values for product manufactured since January 1, 1995

(a) = Value specifies amount of nutrient added only

(a/i) = Value includes added and inherent amounts

**MILK-BASED AND SOY-BASED INFANT FORMULA  
1994 NUTRIENT STABILITY DATA**

Nutrient	% Loss Over Shelf Life	% IFA Minimum at End of Shelf Life
<b>Vitamin A</b>		
Ready-To-Feed		
Product A	7	167
Product B	18	158
Product C	2	173
Product D	0	170
Product E	0	210
Concentrate		
Product F	0	200
Product G	0	170
Product H	14	158
Product I	0	187
Product J	7	175
Powder		
Product K	5	180
Product L	17	164
Product M	22	143
Product N	10	174
Product O	13	162

Vitamin A percentage loss over shelf life ranges from 0 to 22% depending on product. The minimum percentage Infant Formula Act (IFA) at end of shelf life is 143%. If the same percentage loss were to occur for the next twelve months, the worst case scenario product would still be well above the IFA minimum.

Note: These data were compiled to address nutrient stability in product at the end of shelf life. Thus, the format focused on infant formula vitamin levels at the end of shelf life relative to Infant Formula Act (IFA) minimum requirements and not vitamin levels relative to IFA maxima.

**MILK-BASED AND SOY-BASED INFANT FORMULA  
1994 NUTRIENT STABILITY DATA**

Nutrient	% Loss Over Shelf Life	% IFA Minimum at End of Shelf Life
<b>Vitamin D</b>		
Ready-To-Feed		
Product A	3	174
Product B	0	192
Product C	4	178
Product D	4	200
Product E	8	218
Concentrate		
Product F	0	220
Product G	6	188
Product H	0	177
Product I	0	184
Product J	5	177
Powder		
Product K	0	195
Product L	0	213
Product M	5	181
Product N	0	188
Product O	0	193

Vitamin D percentage loss over shelf life ranges from 0 to 8% depending on product. The minimum percentage Infant Formula Act (IFA) at end of shelf life is 174%. If the same percentage loss were to occur for the next twelve months, the worst case scenario product would still be well above the IFA minimum.

Note: These data were compiled to address nutrient stability in product at the end of shelf life. Thus, the format focused on infant formula vitamin levels at the end of shelf life relative to Infant Formula Act (IFA) minimum requirements and not vitamin levels relative to IFA maxima.

**MILK-BASED AND SOY-BASED INFANT FORMULA  
1994 NUTRIENT STABILITY DATA**

Nutrient	% Loss Over Shelf Life	% IFA Minimum at End of Shelf Life
<b>Vitamin E</b>		
Ready-To-Feed		
Product A	2	470
Product B	6	349
Product C	0	470
Product D	0	329
Product E	7	357
Concentrate		
Product F	0	329
Product G	0	329
Product H	0	361
Product I	2	473
Product J	4	483
Powder		
Product K	0	503
Product L	15	320
Product M	26	349
Product N	3	475
Product O	1	359

Vitamin E percentage loss over shelf life ranges from 0 to 26% depending on product. The minimum percentage Infant Formula Act (IFA) at end of shelf life is 320%. If the same percentage loss were to occur for the next twelve months, the worst case scenario product would still be well above the IFA minimum.

Note: These data were compiled to address nutrient stability in product at the end of shelf life. Thus, the format focused on infant formula vitamin levels at the end of shelf life relative to Infant Formula Act (IFA) minimum requirements and not vitamin levels relative to IFA maxima.

**MILK-BASED AND SOY-BASED INFANT FORMULA  
1994 NUTRIENT STABILITY DATA**

Nutrient	% Loss Over Shelf Life	% IFA Minimum at End of Shelf Life
<b>Vitamin K</b>		
<b>Ready-To-Feed</b>		
Product A	0	635
Product B	0	327
Product C	0	492
Product D	0	350
Product E	0	350
<b>Concentrate</b>		
Product F	6	318
Product G	0	325
Product H	15	419
Product I	3	485
Product J	0	691
<b>Powder</b>		
Product K	12	333
Product L	0	288
Product M	0	407
Product N	7	477
Product O	5	473

Vitamin K percentage loss over shelf life ranges from 0 to 15% depending on product. The minimum percentage Infant Formula Act (IFA) at end of shelf life is 288%. If the same percentage loss were to occur for the next twelve months, the worst case scenario product would still be well above the IFA minimum.

Note: These data were compiled to address nutrient stability in product at the end of shelf life. Thus, the format focused on infant formula vitamin levels at the end of shelf life relative to Infant Formula Act (IFA) minimum requirements and not vitamin levels relative to IFA maxima.

**MILK-BASED AND SOY-BASED INFANT FORMULA  
1994 NUTRIENT STABILITY DATA**

Nutrient	% Loss Over Shelf Life	% IFA Minimum at End of Shelf Life
<b>Thiamine</b>		
Ready-To-Feed		
Product A	11	523
Product B	0	277
Product C	18	418
Product D	3	363
Product E	6	388
Concentrate		
Product F	15	350
Product G	7	350
Product H	0	286
Product I	16	423
Product J	24	447
Powder		
Product K	0	578
Product L	12	448
Product M	0	305
Product N	0	710
Product O	20	383

Thiamine percentage loss over shelf life ranges from 0 to 24% depending on product. The minimum percentage Infant Formula Act (IFA) at end of shelf life is 277%. If the same percentage loss were to occur for the next twelve months, the worst case scenario product would still be well above the IFA minimum.

Note: These data were compiled to address nutrient stability in product at the end of shelf life. Thus, the format focused on infant formula vitamin levels at the end of shelf life relative to Infant Formula Act (IFA) minimum requirements and not vitamin levels relative to IFA maxima.

**MILK-BASED AND SOY-BASED INFANT FORMULA  
1994 NUTRIENT STABILITY DATA**

Nutrient	% Loss Over Shelf Life	% IFA Minimum at End of Shelf Life
<b>Riboflavin</b>		
Ready-To-Feed		
Product A	0	180
Product B	15	326
Product C	0	416
Product D	4	400
Product E	4	542
Concentrate		
Product F	3	517
Product G	0	383
Product H	0	466
Product I	0	403
Product J	0	196
Powder		
Product K	4	468
Product L	0	637
Product M	1	492
Product N	1	215
Product O	5	347

Riboflavin percentage loss over shelf life ranges from 0 to 15% depending on product. The minimum percentage Infant Formula Act (IFA) at end of shelf life is 180%. If the same percentage loss were to occur for the next twelve months, the worst case scenario product would still be well above the IFA minimum.

Note: These data were compiled to address nutrient stability in product at the end of shelf life. Thus, the format focused on infant formula vitamin levels at the end of shelf life relative to Infant Formula Act (IFA) minimum requirements and not vitamin levels relative to IFA maxima.

**MILK-BASED AND SOY-BASED INFANT FORMULA  
1994 NUTRIENT STABILITY DATA**

Nutrient	% Loss Over Shelf Life	% IFA Minimum at End of Shelf Life
<b>Vitamin B<sub>6</sub></b>		
Ready-To-Feed		
Product A	0	254
Product B	0	396
Product C	0	216
Product D	0	443
Product E	9	371
Concentrate		
Product F	8	357
Product G	3	457
Product H	0	415
Product I	0	212
Product J	0	265
Powder		
Product K	3	204
Product L	8	303
Product M	0	379
Product N	0	278
Product O	15	397

Vitamin B<sub>6</sub> percentage loss over shelf life ranges from 0 to 15% depending on product. The minimum percentage Infant Formula Act (IFA) at end of shelf life is 204%. If the same percentage loss were to occur for the next twelve months, the worst case scenario product would still be well above the IFA minimum.

Note: These data were compiled to address nutrient stability in product at the end of shelf life. Thus, the format focused on infant formula vitamin levels at the end of shelf life relative to Infant Formula Act (IFA) minimum requirements and not vitamin levels relative to IFA maxima.

**MILK-BASED AND SOY-BASED INFANT FORMULA  
1994 NUTRIENT STABILITY DATA**

Nutrient	% Loss Over Shelf Life	% IFA Minimum at End of Shelf Life
<b>Vitamin B<sub>12</sub></b>		
Ready-To-Feed		
Product A	4	509
Product B	33	318
Product C	7	454
Product D	25	400
Product E	0	267
Concentrate		
Product F	0	267
Product G	13	467
Product H	19	323
Product I	0	490
Product J	0	521
Powder		
Product K	0	584
Product L	1	240
Product M	13	365
Product N	5	560
Product O	3	387

Vitamin B<sub>12</sub> percentage loss over shelf life ranges from 0 to 33% depending on product. The minimum percentage Infant Formula Act (IFA) at end of shelf life is 240%. If the same percentage loss were to occur for the next twelve months, the worst case scenario product would still be well above the IFA minimum.

Note: These data were compiled to address nutrient stability in product at the end of shelf life. Thus, the format focused on infant formula vitamin levels at the end of shelf life relative to Infant Formula Act (IFA) minimum requirements and not vitamin levels relative to IFA maxima.

**MILK-BASED AND SOY-BASED INFANT FORMULA  
1994 NUTRIENT STABILITY DATA**

Nutrient	% Loss Over Shelf Life	% IFA Minimum at End of Shelf Life
<b>Niacin</b>		
<b>Ready-To-Feed</b>		
Product A	0	722
Product B	0	650
Product C	4	595
Product D	0	400
Product E	10	360
<b>Concentrate</b>		
Product F	15	340
Product G	9	420
Product H	0	419
Product I	0	618
Product J	0	762
<b>Powder</b>		
Product K	4	572
Product L	10	468
Product M	0	430
Product N	4	690
Product O	0	463

Niacin percentage loss over shelf life ranges from 0 to 15% depending on product. The minimum percentage Infant Formula Act (IFA) at end of shelf life is 340%. If the same percentage loss were to occur for the next twelve months, the worst case scenario product would still be well above the IFA minimum.

Note: These data were compiled to address nutrient stability in product at the end of shelf life. Thus, the format focused on infant formula vitamin levels at the end of shelf life relative to Infant Formula Act (IFA) minimum requirements and not vitamin levels relative to IFA maxima.

**MILK-BASED AND SOY-BASED INFANT FORMULA  
1994 NUTRIENT STABILITY DATA**

Nutrient	% Loss Over Shelf Life	% IFA Minimum at End of Shelf Life
<b>Folic Acid</b>		
<b>Ready-To-Feed</b>		
Product A	18	773
Product B	0	500
Product C	22	572
Product D	0	400
Product E	0	400
<b>Concentrate</b>		
Product F	0	375
Product G	0	400
Product H	0	464
Product I	24	534
Product J	17	820
<b>Powder</b>		
Product K	6	697
Product L	0	416
Product M	0	352
Product N	0	925
Product O	0	463

Folic Acid percentage loss over shelf life ranges from 0 to 24% depending on product. The minimum percentage Infant Formula Act (IFA) at end of shelf life is 352%. If the same percentage loss were to occur for the next twelve months, the worst case scenario product would still be well above the IFA minimum.

Note: These data were compiled to address nutrient stability in product at the end of shelf life. Thus, the format focused on infant formula vitamin levels at the end of shelf life relative to Infant Formula Act (IFA) minimum requirements and not vitamin levels relative to IFA maxima.

**MILK-BASED AND SOY-BASED INFANT FORMULA  
1994 NUTRIENT STABILITY DATA**

Nutrient	% Loss Over Shelf Life	% IFA Minimum at End of Shelf Life
<b>Pantothenic Acid</b>		
Ready-To-Feed		
Product A	3	301
Product B	19	405
Product C	6	328
Product D	2	205
Product E	0	210
Concentrate		
Product F	5	175
Product G	6	227
Product H	0	403
Product I	7	334
Product J	0	303
Powder		
Product K	0	343
Product L	0	292
Product M	0	430
Product N	0	343
Product O	0	230

Pantothenic Acid percentage loss over shelf life ranges from 0 to 19% depending on product. The minimum percentage Infant Formula Act (IFA) at end of shelf life is 175%. If the same percentage loss were to occur for the next twelve months, the worst case scenario product would still be well above the IFA minimum.

Note: These data were compiled to address nutrient stability in product at the end of shelf life. Thus, the format focused on infant formula vitamin levels at the end of shelf life relative to Infant Formula Act (IFA) minimum requirements and not vitamin levels relative to IFA maxima.

**SOY-BASED INFANT FORMULA  
1994 NUTRIENT STABILITY DATA**

Nutrient	% Loss Over Shelf Life	% IFA Minimum at End of Shelf Life
<b>Biotin</b>		
Ready-To-Feed		
Product A	0	400
Product B	8	657
Concentrate		
Product C	8	647
Product D	11	520
Powder		
Product E	4	513
Product F	10	789

Biotin percentage loss over shelf life ranges from 0 to 11% depending on product. The minimum percentage Infant Formula Act (IFA) at end of shelf life is 400%. If the same percentage loss were to occur for the next twelve months, the worst case scenario product would still be well above the IFA minimum.

Note: These data were compiled to address nutrient stability in product at the end of shelf life. Thus, the format focused on infant formula vitamin levels at the end of shelf life relative to Infant Formula Act (IFA) minimum requirements and not vitamin levels relative to IFA maxima.

**MILK-BASED AND SOY-BASED INFANT FORMULA  
1994 NUTRIENT STABILITY DATA**

Nutrient	% Loss Over Shelf Life	% IFA Minimum at End of Shelf Life
<b>Vitamin C</b>		
Ready-To-Feed		
Product A	0	418
Product B	20	392
Product C	18	237
Product D	3	219
Product E	5	263
Concentrate		
Product F	19	244
Product G	24	200
Product H	30	204
Product I	18	236
Product J	17	261
Powder		
Product K	2	292
Product L	2	207
Product M	4	176
Product N	0	347
Product O	12	176

Vitamin C percentage loss over shelf life ranges from 0 to 30% depending on product. The minimum percentage Infant Formula Act (IFA) at end of shelf life is 176%. If the same percentage loss were to occur for the next twelve months, the worst case scenario product would still be well above the IFA minimum.

Note: These data were compiled to address nutrient stability in product at the end of shelf life. Thus, the format focused on infant formula vitamin levels at the end of shelf life relative to Infant Formula Act (IFA) minimum requirements and not vitamin levels relative to IFA maxima.

**SOY-BASED INFANT FORMULA  
1994 NUTRIENT STABILITY DATA**

Nutrient	% Loss Over Shelf Life	% IFA Minimum at End of Shelf Life
<b>Choline</b>		
Ready-To-Feed		
Product A	9	286
Product B	8	225
Concentrate		
Product C	10	237
Product D	14	271
Powder		
Product E	15	266
Product F	4	228

Choline percentage loss over shelf life ranges from 4 to 15% depending on product. The minimum percentage Infant Formula Act (IFA) at end of shelf life is 225%. If the same percentage loss were to occur for the next twelve months, the worst case scenario product would still be well above the IFA minimum.

Note: These data were compiled to address nutrient stability in product at the end of shelf life. Thus, the format focused on infant formula vitamin levels at the end of shelf life relative to Infant Formula Act (IFA) minimum requirements and not vitamin levels relative to IFA maxima.

**SOY-BASED INFANT FORMULA  
1994 NUTRIENT STABILITY DATA**

Nutrient	% Loss Over Shelf Life	% IFA Minimum at End of Shelf Life
<b>Inositol</b>		
Ready-To-Feed		
Product A	6	425
Product B	5	152
Concentrate		
Product C	6	149
Product D	5	475
Powder		
Product E	0	463
Product F	0	160

Inositol percentage loss over shelf life ranges from 0 to 6% depending on product. The minimum percentage Infant Formula Act (IFA) at end of shelf life is 149%. If the same percentage loss were to occur for the next twelve months, the worst case scenario product would still be well above the IFA minimum.

Note: These data were compiled to address nutrient stability in product at the end of shelf life. Thus, the format focused on infant formula vitamin levels at the end of shelf life relative to Infant Formula Act (IFA) minimum requirements and not vitamin levels relative to IFA maxima.