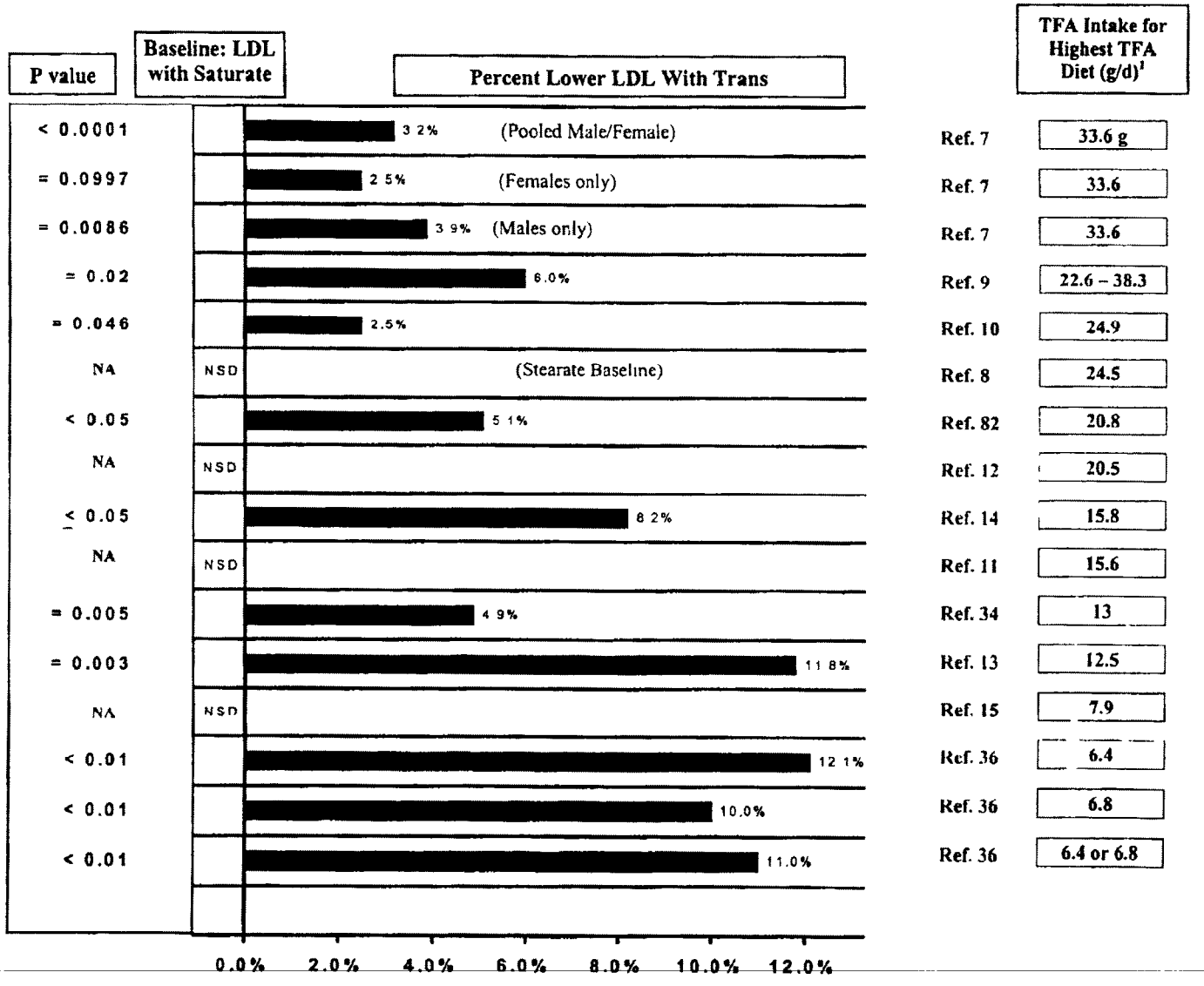
ATTACHMENT A

Percent Lower LDL-Cholesterol Observed With Trans Fat Diet Than With Saturated Fat Diet



Key:

TFA = Trans fatty acid

NSD = No significant difference between LDL Cholesterol levels observed for highest trans fat and highest saturated fat diet

Baseline LDL with Saturate = Comparative LDL Cholesterol level observed with highest saturated fat experimental diet

Percent Lower LDL With Trans = Percent lower LDL Cholesterol observed with the highest trans fat experimental diet than with highest saturated fat experimental diet. For purposes of establishing a consistent basis for comparison of study results, the expressed was calculated by subtracting the average LDL Cholesterol reported for the trans fat diet from the average LDL Cholesterol reported for the saturated fat diet (e.g., in a study in which the average LDL Cholesterol for the highest saturated fat diet is 3.07 mmol/liter and for the highest trans fat LDL-Cholesterol is 3.00 mmol/liter, the calculation would be ((3.07 - 3.00) ÷ 3.07) x 100, resulting in a value of 2.3%).

g/d = grams/day

P value = Level of Statistical Significance reported by investigators with respect to the difference between the LDL Cholesterol level observed

Ref. = Study reference numbers used in FDA's TFA labeling proposal (64 Fed. Reg. 62746 (November 17, 1999)).

NA = Not applicable

[1] Values for all studies were obtained from FDA's trans fat labeling proposal (64 Fed. Reg. 62746 (November 17, 1999)).

Saturated Fat and Trans Fat Content of Experimental Diets Used in Intervention Studies Comparing the Relative Effects of Saturated Fat and Trans Fat on Serum LDL-Cholesterol Levels[2] Expressed on the Basis of a 2000 Kcal/Day Diet

Ref. No.	Study Diets	% Kcals from Fat SFA	% Kcals from Fat TFA	Equivalent Grams Per Day for 2000 Kcal Diet SFA	Equivalent Grams Per Day for 2000 Kcal Diet TFA	TFA DIET: Relative Fatty Acid Content in 2000 Kcal Diet
7	SFA Diet	19.4%	0.8%	43.11 g/d	1.77 g/d	111% DV SFA plus TFA is 500% of average intake. SFA:TFA ratio = 1:1.
	TFA Diet	10%	11%	22.22 g/d	24.44 g/d	
8	SFA Diet	20%	0.3%	44.44 g/d	0.66 g/d	>100% DV SFA plus TFA is 340% of average intake. SFA:TFA ratio = 1.1
	TFA Diet	10.3%	7.7%	22.88 g/d	17.11 g/d	
9	SFA Diet	16.4%	0.9%	36.44 g/d	2 g/d	>122% DV SFA plus TFA is 377% of average intake. SFA:TFA ratio = 1:1
	TFA Diet	11.0%	8.5%	24.44 g/d	18.88 g/d	
10	SFA Diet	13.8%	0.8%	30.67 g/d	1.78 g/d	78.9% DV SFA plus TFA is 400% of average intake.
	TFA Diet	7.1%	8.7%	15.78 g/d	19.33 g/d	
11	SFA Diet	13.9%	<1%	30.89 g/d	2 g/d	110% DV SFA plus TFA is 200% of average intake. SFA:TFA ratio = 1.74:1.
	TFA Diet	9.9%	5.7%	22 g/d	12.67 g/d	
12	SFA Diet	20.9%	0.7%	46.44 g/d	1.55 g/d	151% DV SFA plus ≅ TFA is 300% of average intake.
	TFA Diet	13.6%	6.6%	30.22 g/d	14.66 g/d	

[2] This chart compares the saturated fat and trans fat content of the experimental diets in each study comparing the experimental saturated fat ("SFA Diet") with the experimental trans fat ("TFA Diet"). The percent of Kcal provided by saturated fat and trans fat in each diet is converted to grams per day, using the common basis of a diet containing 2000 kcal per day. This permits the relative amount of saturated fat and trans fat in experimental diets to be evaluated in the context of the 2000 kcal diet upon which FDA food labeling requirements are based. The percent of calories attributable to saturated fat and trans fat for the experimental diets was obtained from FDA's TFA labeling proposal (64 Fed. Reg. 62746 at 62798 - 62821 (Appendix A) (November 17, 1999)). Insufficient data were available for studies Ref. 15, 47 to perform calculations.

Key: SFA - Saturated Fat
TFA - Trans Fat
% DV SFA - Saturated Fat level expressed as percentage of 20 gram Daily Value.
TFA is x% of Average Intake - Trans Fat level expressed as percentage of 5 gram estimated average intake in the United States.

Ref. No.	Study Diets	% Kcals from Fat SFA	% Kcals from Fat TFA	Equivalent Grams Per Day for 2000 Kcal Diet SFA	Equivalent Grams Per Day for 2000 Kcal Diet TFA	TFA DIET: Relative Fatty Acid Content in 2000 Kcal Diet
13	SFA Diet (Baseline)	13%	0.8%	28.66 g/d	1.7 g/d	85% DV SFA plus TFA is 200% of average intake. SFA:TFA ratio = 1.8:1 grams.
	TFA Diet (Corn Oil Margarine)	7.7%	4.2%	17.11 g/d	9.33 g/d	
14	SFA Diet	22.4%	2.6%	49.77 g/d	5.78 g/d	> 100% DV SFA plus TFA is 400% of average intake. SFA:TFA ratio = 1:1.
	TFA Diet	10%	9.5%	22.22 g/d	21.11 g/d	
34	SFA Diet	11.2%	2.7%	24.9 g/d	6 g/d	87.75% DV SFA plus 173 % of average intake. SFA:TFA ratio = 2:1.
	TFA Diet	7.9%	3.9%	17.55 g/d	8.7 g/d	
36	SFA Diet	15.5%	1.3%	34.44 g/d	2.89 g/d	Canola TFA Diet: 100% DV SFA plus 100% average intake of TFA (plus 26% MUFA/PUFA (57 g/d)).
	TFA Diet (canola-TFA)	8.9%	2.4%	19.78 g/d	5.33 g/d	
36	SFA Diet	17.7%	1.5%	39.33 g/d	3.33. g/d	Sunflower TFA Diet: 146% DV SFA plus 142% average intake of trans fat (plus 19.4% kcals MUFA/PUFA (43 g/d)).
	TFA Diet (sunflower-TFA)	13.2%	3.2%	29.33 g/d	7.1 g/d	
82	SFA Diet	16.7%	N/A	37.11 g/d		94.4% SFA DV plus ≅ TFA is 300% of average intake.
	TFA Diet	8.5%	6.72%	18.88 g/d	14.9 g/d	

STUDY REFERENCE LIST

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