

footnote might be ignored. Some comments said that consumers rarely look at any nutrition information beyond calories and total fat and that consumer concerns about fat have dwindled. One comment argued that consumers have not significantly altered their dietary habits because of the implementation of the 1990 amendments. One comment stated that educated consumers probably already know enough to look for and avoid *trans* fat. There was also one comment arguing that shelf labeling is more likely to attract consumer attention than are product labels, and the use of shelf labeling is probably more prevalent than that of product labels. One comment stated that FDA has underestimated consumer awareness of *trans* fatty acids. Another comment stated that consumer awareness is likely to increase as *trans* fat dietary recommendations accumulate and consumer education devotes more attention to *trans* fat.

FDA is not going forward with the proposed asterisk for saturated fat and footnote listing the amount of *trans* fat. Instead, this final rule requires *trans* fat to be listed on a separate line immediately below saturated fat. Consumers who look at the Nutrition Facts panel for information on total fat and its fatty acid subcomponents are likely to notice the information on *trans* fat.

In the November 1999 proposal, FDA used results of earlier research and estimated that direct consumer choice in response to *trans* fat labeling would result in a 1 percent decrease in *trans* fat intake (64 FR 62746 at 62766). This final rule requires that the amount of *trans* fat be declared in nutrition labels on a separate line immediately under the line for saturated fat. This placement of *trans* fat is more prominent than the footnote specified in the November 1999 proposal and may be more readily noticed by consumers. In the November 1999 proposal, the amount of *trans* fat was to be included in the amount and % DV declared for saturated fat. This association of *trans* fat with saturated fat, which also may have assisted consumers in using the information on *trans* fat, is absent in this final rule. Also, as a result of this final rule, consumer response to *trans* fat information will be based solely on the declaration of the amount of *trans* fat in grams. As discussed in section V of this document, there will not be information on a % DV for *trans* fat. In the November 1999 proposal, the agency proposed to define the nutrient content claim for “*trans* fat free” and also proposed that the amount of *trans* fat be limited wherever saturated fat limits are

placed on nutrient content claims, health claims, or disclosure and disqualifying levels. As explained in sections V and VI of this document, this final rule does not establish definitions for nutrient content claims about *trans* fat and does not place *trans* fat limits on claims regarding saturated fat, cholesterol or other nutrients. In summary, the declaration of *trans* fat in this final rule is prominent and straightforward. This feature of the final rule may tend to increase the magnitude of consumer response to the *trans* fat information. However, the provisions of this final rule also do not link *trans* fat with saturated fat or with a % DV for *trans* fat and do not change existing regulations regarding claims. The absence of these features in the final rule may tend to decrease the magnitude of consumer response to the *trans* fat information.

Based on previous research, the November 1999 proposal projected a 1 percent decrease in *trans* fat intake from direct consumer choice in response to *trans* fat labeling (64 FR 62746 at 62766). This overall 1 percent decrease in *trans* fat intake could be thought of as a 2.2 percent decrease in *trans* fat intake by the 45 percent of consumers shown in previous research to use food labels to make purchase decisions (Refs. 68 and 74) (64 FR 62746 at 62766).

In the process of evaluating these comments about consumer awareness, FDA has identified additional data relevant to these issues. In the 1999 Discovery Health survey, 66 percent of those responding to the survey knew that saturated fat was related to disease and 31 percent knew that partially hydrogenated fat was related to disease (Ref. 118). In the 2001–2002 Consumer Attitudes About Nutrition survey, 83 percent of respondents reported that saturated fat is unhealthy, 46 percent reported that *trans* fat is unhealthy and 44 percent reported that hydrogenated fat is unhealthy (Ref. 135). These results indicate that survey respondents were about half as likely to know that partially hydrogenated fat was “unhealthy” or related to disease as to know that saturated fat was related to disease. If these surveys are representative of the population, this indicates a significant level of awareness of the health effect of partially hydrogenated fat, and its component, *trans* fat, even though consumers have very little easily obtainable information on *trans* fat and even though nutrition education efforts, until very recently, have focused on saturated fat to the exclusion of *trans* fat. Once nutrition education efforts include *trans* fat in their messages and

once consumers have information on nutrition labels about *trans* fat content, consumer awareness of the relationship between saturated fat, *trans* fat, and cholesterol and heart disease will increase. Another recent study, by Kim et al., estimated that food label use has a large effect on nutrient intake. (Ref. 119) This study reported that 73 percent of individuals surveyed use nutrition labels and look for information on saturated fat.

In the study by Kim et al., 73 percent of individuals surveyed who use nutrition labels and look for information on saturated fat had 15 percent lower saturated fat intake than those who did not use nutrition labels. This corresponds with an overall 11 percent decrease ($0.15 \times 73 \text{ percent} = 11 \text{ percent}$) in saturated fat intake because of nutrition labeling. Thus, the study by Kim et al. gave a high estimate of an 11 percent decrease in saturated fat intake because of nutrition labeling and FDA’s earlier research gave a low estimate of a 1 percent decrease in saturated fat intake.

The Discovery Health study and the Consumer Attitudes About Nutrition survey indicated that consumer awareness of a nutrient-disease relationship involving *trans* fat was about half as prevalent as consumer awareness of a nutrient-disease relationship involving saturated fat. Accounting for the lower prevalence of awareness of the nutrient-disease relationship for *trans* fat, would reduce, by about one-half, the estimates for decreases in saturated fat intake. This would give a high estimate of a 5.5 percent decrease and a low estimate of a 0.5 percent decrease in *trans* fat intake because of labeling.

The estimates for decreases in *trans* fat intake due to nutrition labeling may also be affected by the features of this final rule. As noted previously, the prominence of the declaration of *trans* fat in this final rule may tend to increase the magnitude of consumer response to the *trans* fat information. However, the magnitude of consumer response to the *trans* fat information may decrease because there is no link with saturated fat or with a % DV and there are no changes in existing regulations regarding claims. Recognizing that different features of this final rule may tend to either increase or decrease consumer response to the *trans* fat information, FDA acknowledges considerable uncertainty in incorporating the features of this final rule into its estimate of the consumer response to *trans* fat labeling. One possibility is that the increased and decreased responses related to features