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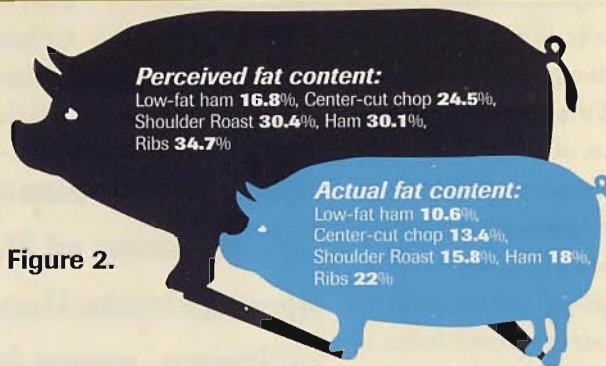


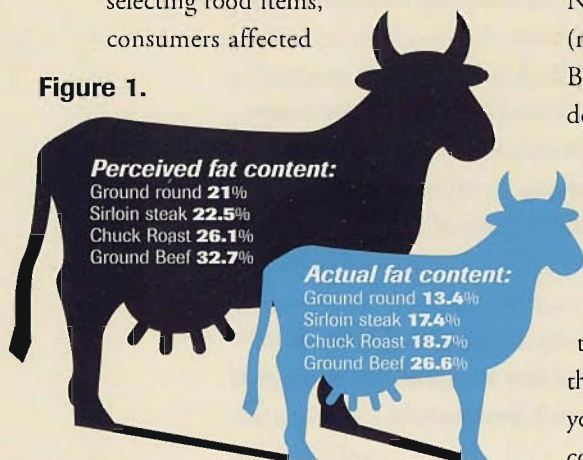
Figure 2.



The popular press inundates consumers with advice on what to eat and what not to eat to attain optimal health. Much of this advice mentions the importance of reducing intake of fat and cholesterol. Meat is often the focus of consumer advice to limit fat consumption, and it is likely that household purchasing decisions of at least some consumers have been influenced by this advice.

The impact of consumer awareness of the link between fat intake and health on meat consumption depends on how many households have changed their purchasing patterns due to health concerns and how accurate are perceptions of fat content. In selecting food items, consumers affected

Figure 1.



by the information campaigns probably either consciously or subconsciously consider how much fat they have consumed for the day and how much more they will consume. Such consumers' choices would arguably be influenced by a daily fat limit that is "used up" by selections of foods containing fat. In making these choices, it is consumers' perceptions of fat content, rather than the actual content, that affects buying behavior.

Do Individuals Restrict Fat Intake?

Consumers' perceptions of the fat content of meats make little difference if consumers are not restricting their fat intake. During the period November 1993 to March 1994, the National Livestock and Meat Board (now called the National Cattlemen's Beef Association) asked 1,057 respondents across the United States several questions about the importance of fat and cholesterol in their diets. Over 95 percent of respondents either strongly agreed (51.4 percent) or agreed (43.7 percent) that "It is really important to limit the amount of fat in one's diet even if you are not concerned with weight control." About three-quarters of the

respondents either strongly agreed (27.9 percent) or agreed (49.2 percent) with the statement "I make a real effort to avoid foods that are high in cholesterol." Finally, well over half of all respondents either strongly agreed (15.5 percent) or agreed (42.1 percent) with the statement "I have, or plan to cut down on the amount of meat I eat for health reasons."

How Accurate Are Fat Perceptions for Meat Products?

Inaccurate perceptions of meat's fat content can have two potential impacts. First, if perceived fat content is higher than actual content for meat products in general, then consumers will unnecessarily reduce their overall level of meat consumption in order to limit fat intake. Second, inaccurate perceptions of specific meat products can change the mix of products consumed as consumers substitute away from products with higher perceived fat content to products with lower perceived fat content.

In the National Livestock and Meat Board survey, respondents were asked to estimate the percentage of fat in one pound of 13 different meats. Figures 1-4 show the actual fat con-

Marketers selling meat to fat-conscious consumers should make certain consumer perceptions of fat content are accurate.

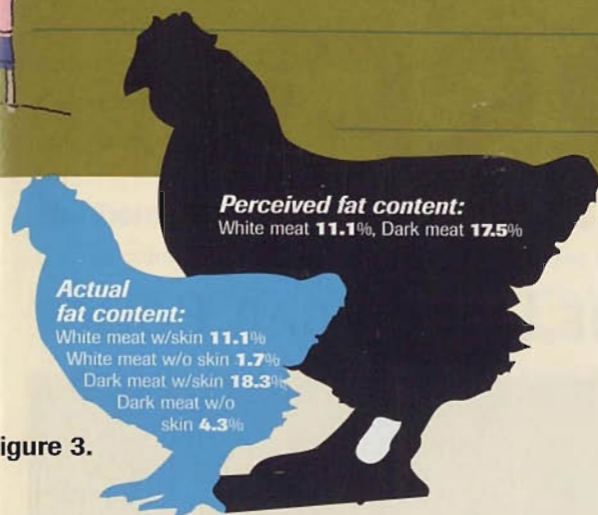


Figure 3.

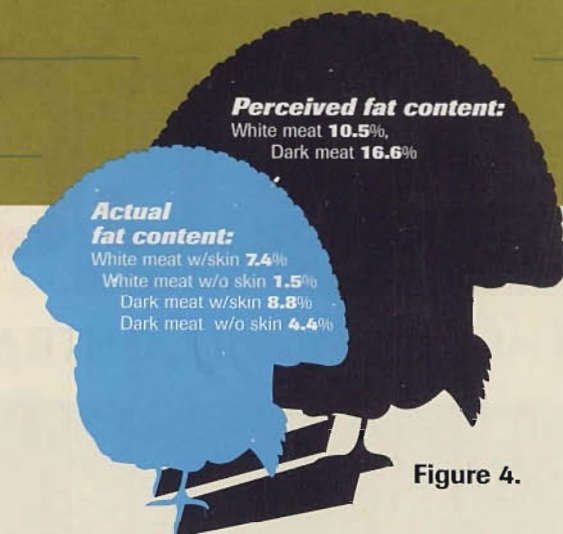


Figure 4.

tent and the average consumer estimate, or perceived fat content, for each of these meats.

Figure 1 compares the perceived versus actual fat content for four popular beef cuts. On average, consumers perceive beef to be substantially higher in fat than it actually is by about five to seven percent. On average across the cuts, consumers believe that beef contains one third more fat than it actually does.

Figure 2 provides a similar comparison between perceived and actual fat content for five common pork products. Consumer perceptions of the fat content of pork are even further off base than for beef. For poultry, the comparison is complicated by the fact that discarding the skin from chicken and turkey products has a dramatic effect on fat content. Skin removal reduces fat content substantially, ranging from a 50-percent reduction for dark meat turkey to an 85-percent reduction for white meat chicken. Unfortunately, the National Livestock and Meat Board survey did not specify skin-on or skin-off when asking consumers to estimate the fat content of poultry products. Figures 3 and 4 illustrate the percentages for each cut of chicken and turkey, respectively — the

average consumer estimate of fat content, the actual without skin, and the actual with skin. Perceptions of the fat content in turkey are high relative to actual content, with or without skin. The perceived level of fat in chicken, however, is approximately in line with the actual level for chicken with the skin on.

Overall, the survey indicates that consumer perceptions of fat content are substantially higher than the actual content. The misperception is substantially more pronounced for pork than for beef. With the possible exception of dark meat chicken, perceptions exceed actual fat content.

Consequences of Inaccurate Fat Perceptions

Given the evidence that consumers try to limit their fat intake from meat products, beef and pork producer groups and processors could benefit from educating consumers about the fat content in beef and pork products. However, while producer groups and processors have an economic incentive to educate consumers, they also have an incentive to convince consumers their products are as "lean" as possible to gain market share. Knowing this, con-

sumers may greet educational efforts by producer groups with skepticism.

The other primary beneficiary of improved knowledge regarding the fat content of meat is the consumer. A more informed consumer can make better, potentially healthier choices. Given that many consumers are likely to eat some meat despite nutrition advice, food and nutrition extension specialists may do well to provide consumers with the information they need to choose well.

Before implementing any consumer education program, it would be prudent to determine that the benefits to consumers of improved fat perceptions would exceed the costs of the educational programs. As the medical research community continues to generate and disseminate advice for consumers, it will be increasingly important for empirical economists to reflect the behavioral consequences of that advice in policy analysis.

For More Information

Peterson, E.B., E. Van Eenoo, Jr., A.M. McGuirk, and P.V. Preckel. "Perceptions of Fat Content in Meat Products." *Agribusiness: An International Journal*, 17(4, Autumn 2001): In Press.