Comments of the American Council on Science and Health to the Food Advisory Committee on Olestra

By ACSH Staff — June 12, 1998

New York, NY June 12, 1998. Olestra underwent one of the most extensive premarket testing programs of any food additive ever reviewed by the FDA. Since its approval in 1996, there has also been detailed post-marketing surveillance. This surveillance has demonstrated that the major objections to the use of olestra in salty snacks were without merit as detailed below with respect to two health-related aspects of olestra use.

Consumer Choice

Olestra provides consumers with additional choices of decreased calorie foods. Snacks containing olestra are safe and enjoyable. Olestra provides an effective means by which consumers can decrease both the fat and the calorie content of their diets. No other fat substitute currently on the market can withstand the high temperatures used for frying snack foods. Thus olestra provides a unique choice to Americans who include fried snack foods in their diets.

Possible gastrointestinal effects

Gastrointestinal (GI) disturbances are a common occurrence among the American populace. In a national sample of over 5,000 individuals, 69 percent reported having some degree of gastrointestinal distress in the previous three month period.1 Some consumers who sampled snacks made with olestra and then experienced some degree of gastrointestinal effects attributed their symptoms to olestra. It is more likely, however, that the connection was due more to widespread adverse media coverage than to any effect of olestra itself.

A recent study examined the effects of olestra snacks on the occurrence of GI symptoms in a placebo-controlled, double-blind test. There was no difference in the frequency of such symptoms in those who ate olestra snacks compared to those who ate indistinguishable full-fat snacks.2 While it is true that olestra, like any bulking agent (e.g. fiber), may alter stool consistency, it does not cause diarrhea or pathological changes in bowel function.3

Effects on blood carotenoid levels

Opponents of olestra use have cited the fact that the fat substitute interferes with absorption of some fat-soluble nutrients as a reason to forbid its use. In particular, the effects of olestra on blood carotene levels been grossly exaggerated; public pronouncements often are misleading and based on a distortion of the scientific data. Published research reports that people consuming 8 grams of olestra (about the amount in an ounce of olestra-containing chips) did indeed have decreased levels of carotenes in their blood. But the people in the study ate olestra at every meal, every day for eight weeks. 4 This is not the typical pattern of consumption of salty snacks the only foods in
which olestra may be used. Further, there is no broad scientific consensus that carotenoids will prevent cancer or heart disease. The only large intervention studies to date on beta-carotene, for example, failed to show any benefit (and perhaps some harm) in people taking this compound in supplements.5,6,7 It may well be that blood levels of carotenoids are simply a marker for intake of fruits and vegetables and there is a consensus that diets with ample supplies of such items are protective.

It is worth emphasizing here that no matter how much olestra is consumed, it can only affect absorption of nutrients present in the GI tract at the same time. Olestra could in no way deplete previously existing blood levels of carotenoids, or of other fat-soluble nutrients.

**Obesity in America**

Over the past two decades, the prevalence of obesity in the United States has increased at an alarming rate. Researchers attribute this increase to both a decrease in physical activity and a concomitant increase in calorie intake. Olestra could be a useful tool in the fight against obesity. Replacing all or some of the fat in foods with non-caloric olestra can substantially decrease caloric content. Consumers should have access to any such tools which are safe and effective. Olestra has been shown to be both.

**Conclusions**

* The concern that olestra produces severe gastrointestinal effects has been demonstrated to be without merit.
* While consumption of olestra with every meal for extended periods may affect blood carotene levels, normal consumption of salty snacks would not have such an effect.
* Olestra is a potentially valuable tool in consumers’ fight against overconsumption and obesity.

**References**


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