

Take FDA Salt Guidelines with a Grain of Salt

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On June 1, 2016, the U.S. Food and Drug Administration (FDA) issued draft “voluntary” guidelines for the food industry to reduce the salt content of processed foods. Since processed foods account for an estimated 75 percent of dietary salt intake, if these guidelines are followed, they would have a considerable effect on how much salt Americans consume. The current federal health recommendation for salt consumption is 2,300 milligrams (mg) per day, while the average dietary salt intake is estimated at 3,400 mg per day. The FDA seeks a reduction in salt in these foods in two steps, the first to be completed in two years and the second in 10 years. These steps are intended to reduce the average salt intake to 3,000 mg in two years, and to the federal guideline of 2,300 mg in 10 years. The voluntary nature of the guidelines does mitigate their impact on the food industry and on consumers; however, if compliance is considered inadequate, mandatory guidelines may follow.

The trend of scientific evidence is against the theory that less salt is good

The government is moving just as the medical and scientific basis for its action has come into question. As Consumers’ Research reported last September, recent scientific research on dietary salt is trending away from the simple conclusion that less salt is good. In February 2015, the Federal Dietary Guidelines Advisory Committee reviewed its salt intake recommendations and, while retaining the 2,300 mg daily limit for the general population, it recommended eliminating the lower 1,500 mg limit for African-Americans and for those over 50 years old.

Recent research indicates that, not only are the dietary salt guidelines too low, but also that overly low salt intake may actually be harmful. The most significant evidence of this change is the PURE study published in the August 2014 *New England Journal of Medicine*. This was a massive international research study with over 100,000 participants, which found, among other conclusions, that those who comply with the 2,300 mg (2.3 grams) recommended limit actually experience more heart trouble. This study reached the following conclusion as to the desirable level of salt intake:

“In conclusion, we investigated the association of estimated sodium and potassium excretion with the risk of death and cardiovascular events in a large, international, prospective cohort study. An estimated sodium intake between 3 g per day and 6 g per day was associated with a lower risk of death and cardiovascular events than either a higher or lower estimated level of sodium intake.”

The study also concluded that salt intakes of above 7,000 mg or below 3,000 mg are associated with greater risk of cardiovascular illness, whether resulting in death or not, and with greater overall risk of death. For the participants who already had hypertension when enrolled in the study, the risks increased with a salt intake above 6,000 mg.

As a possible explanation for the negative health effects of low salt intake, the researchers pointed to studies suggesting that low salt may stimulate the production of renin, a hormone that may have harmful effects on blood vessels. The PURE study received no food industry funding; it was funded by a large number of governmental, health research, university, and pharmaceutical company sources.

Even before the conclusion of the study, there had been growing doubt regarding the health value of dietary salt restrictions. In 2013, the Institute of Medicine had published a review of the evidence of a correlation between salt consumption and health. This review concluded that there was insufficient proof that following the government recommended limit of 2,300 mg of salt per day improved health outcomes.

The government fails to consider recent science

Despite the growing evidence that the conventional wisdom on salt restriction is not supported by scientific evidence, the governmental and medical establishments continue to hold firmly to the salt restriction doctrine. In a June press conference on the new salt guidelines, Dr. Tom Frieden, director of the Centers for Disease Control and Prevention stated:

“There is a direct dose-response relationship between sodium and blood pressure. Reducing sodium intake reduces both blood pressure and cardiovascular disease.”

While this theory is widely held, it has never been proven, and, as discussed above, the evidence is starting to show that the relationship is not so simple.

There are many things that are likely to be good for consumers, but for reasons of expense and/or the freedom of the citizen, government does not mandate them. Here, a voluntary mandate is proposed for something that may be expensive, may make food less tasty, and may be counterproductive to good health. The single hardest thing to understand about this new mandate is why it was initiated just when the scientific evidence for it has weakened, if not reversed, the scientific and medical basis for dietary salt restriction.

These guidelines cover a wide variety of foods, including bread, cereal, cold cuts, and snacks. Because they are voluntary and phased in over time, it is likely that compliance costs will initially be minimized, as the easier reductions are made first and those companies that face difficulty have the option of not complying. Currently, there are considerable differences in the amount of salt in the same product. For example, a slice of white bread may range from 80 to 230 mg of salt, and three ounces of turkey deli meat vary from 450 to 1,050 mg. Thus, it is clear that a fair amount of salt reduction could be accomplished fairly easily. A more subjective question (that is outside the scope of this article) is whether the lower-salt versions taste as good, and because of that, whether consumers will want to buy them over the higher-sodium versions.

Are the new FDA guidelines actually bad for consumer health?

The larger question is whether these draft guidelines are good for consumer health. If the PURE study is right that the optimum range of salt intake is 3,000 to 6,000 mg per day, then the American average salt intake of 3,400 mg is already in the lower portion of the optimum range. Accordingly, no further government action to reduce salt intake is needed, and any significant success in further reduction of average salt intake may, on balance, actually be harmful.

Since the FDA guidelines are only a draft proposal, not scheduled to be finalized for up to a year, there is still time for them to be modified in light of the uncertainty discussed herein. Given the changing scientific trends and the ambiguity of the evidence for restriction of dietary salt, a more prudent course of action may be to enhance disclosure of salt content in food, and defer any further push for the 2,300 mg dietary standard, until more research has been done to resolve the question of whether lower average salt intake is valuable for health.

In the short term, these draft guidelines are unlikely to affect consumers significantly, although they may open the door for more stringent regulation. But the most significant question consumers should be asking, is whether the government salt restriction orthodoxy is good for their health. That decision is something each consumer has to make. It would seem that, unless one is under a doctor's care for hypertension or heart disease and instructed to reduce salt, or unless one consumes far more than the average, one can take the advice to reduce salt with a grain of salt. ◀