



December 20, 2007

Food and Drug Administration
5100 Paint Branch Parkway
College Park, MD 20740

Re: Docket No. 2006N-0168
Food Labeling: Revision of Reference values and Mandatory Nutrients

Dear Sir or Madam:

The Salt Institute submits these comments to the Food and Drug Administration in reference to Docket No. 2006N-0168, Food Labeling: Revision of Reference values and Mandatory Nutrients; Request for Comments.

The Salt Institute is the trade association representing the major United States food salt producers. For many years, the Salt Institute has closely monitored developments in food labeling as well as the scientific quality of the information given to consumers.

We strongly support the provision of objective scientific information to consumers, particularly in a manner that will be fully understood so that consumers can make informed choices about the foods they consume. Unfortunately, the considerable number of reference values on nutrients directed towards consumers are somewhat confusing and can lead to opportunities for misinformation.

As an example, the Continuing Professional Education course, "Diet, Hypertension and Salt Toxicity," prepared by Dr. James J. Kenney, PhD, RD, LD, FACN (Food & Health Communications, Inc©2006) and approved by the American Dietetic Association, states that the IOM report, Dietary Reference Intakes: Water, Potassium, Sodium, Chloride, and Sulfate, 2004, "...sets a toxic Upper Limit (UL) for sodium at 2300mg per day." This gives the impression that the IOM stated that a level of consumption of sodium above 2300mg per day is toxic. This is certainly not the case and constitutes a clear case of misinformation. Indeed, certain Mediterranean countries that appear to have better cardiovascular performance than we do consume above 4000mg sodium per day as part of their overall diet. Thus, it is critically important that the reference values used to inform consumers not be confusing and open to subjective interpretation.

Up until the present time, the approach to the consideration of Daily Values (DV) and the corresponding listing of nutrients on food labels has been to regard each individual nutrient in isolation. The sole tie-in of these nutrients with the total diet is their relationship to the consumption of a total daily caloric intake – the basis upon which the DVs are established. This approach results from the substantial history of nutritional research related to the study of individual nutrients in isolation to determine their specific role and contribution to our diets.

While placing the impact of individual nutrients into context with our “whole diet” is a complicated task, this is how nutrients are metabolized on an ongoing basis. Lacking a complete knowledge of how individual nutrients impact upon each other in the overall diet, the question remains as to whether the consideration of nutrients in isolation for the purposes of informing consumers is truly a functional benefit to them. Does the concept of an individual DV provide consumers an inclusive understanding of the impact of their diet upon their well-being? While no one doubts that this data provides information, it can compromise perspective by taking nutrients out of their dietetic context. It also opens the door for opportunistic marketers to focus on the specific benefits of one nutrient or another, further distorting the notion of the whole diet.

The DRI of sodium (2300mg or precisely 100 mmols) is an estimate produced by the IOM, based upon the daily requirement and highly influenced by the impact of sodium on blood pressure in inadequate diets. However, this influence has been overstated because the DASH and DASH-sodium trials have shown that, in the presence of a balanced diet, the impact of sodium on blood pressure is minimal. This is a clear instance of a single nutrient taken out of the context of the whole diet.

Most of the natural sodium we consume comes from meats (including poultry and fish), grains and dairy products. These three food groups also are the main sources of dietary calcium, iron, magnesium and vitamin B-6. Thus, any recommendations to restrict foods that are primary sources of sodium will also result in a reduced access to other key nutrients.

The case with sodium is further complicated by the unique role of sodium chloride in the diet. While sodium is an essential nutrient, sodium chloride (the main source of sodium in the diet) is our most common and applied flavor enhancer. In particular, it makes many of our foods which carry other essential nutrients more palatable. For example, most cruciferous vegetables, which supply a wide array of essential nutrients, are bitter and much more palatable with salt added. The same can be said for many whole grain and protein foods. Another example is magnesium. The best sources of magnesium are nuts, beans, seeds, legumes, fish and green vegetables (e.g. spinach, artichoke and okra) all foods to which salt is traditionally added to improve their taste. Without added salt, a lack of palatability may limit the consumption of these products and the consequent access to the nutrients they contain. Pomerleau et al¹ have published reports indicating that the burden of disease in Europe is dependent upon access to fruits and vegetables. Palatability will have a significant impact upon consumption patterns and salt restriction may have the unintended consequence of reducing the intake of beneficial vegetables.

The use of salt to make foods more palatable is a millennia-old phenomenon and not the result of commercial promotion, nor does it result from low cost and ready availability. The high esteem for salt as a flavoring ingredient was evident even during periods when it was a rare and very costly commodity.

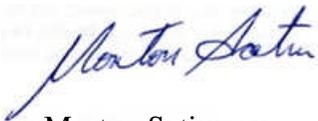
Thus, sodium should not only be evaluated on the basis of its specific metabolic requirements, but also upon its influence on promoting the delivery of other essential nutrients to the overall diet.

Leclercq and Ferro-Luzzi of the World Health Organization Collaborating Centre for Nutrition, at the National Institute of Nutrition in Rome, Italy reported in that Italian males consume 4400mg sodium per day based upon 24 hr urinary excretion, equivalent to 11 grams of salt per day² and that the discretionary intake of salt for adults varied from 36% (males) to 39% (females) of the total intake. The discretionary intake of salt alone in Italy amounts to almost 75% of the total RDI of sodium in the US (2300mg). Since many of the Mediterranean foods are normally well salted (cheeses, olives, salted fish (cod, anchovies), fish eggs, etc., it is natural to expect that a majority of the discretionary salt is used to improve the palatability of the variety of vegetables that are such a conspicuous and essential part of the Mediterranean diet. Indeed, we should question whether 2300 mg sodium per day is sufficient to get people to eat all the vegetables we would like them to in a well balanced diet.

Based upon the results of the DASH diet and the most recent results on the positive impact of vegetables on the diet, we are not certain that the establishment and dissemination of a DV is of particular benefit to consumers. Salt consumption is self limiting because of taste and despite the outcry regarding our current levels of consumption, our cardiovascular performance is significantly better than that of Finland - the only country that has significantly reduced its salt consumption by 40-50% in the last 30 years. If a DV is felt to be absolutely necessary, it is certainly not in anyone's interest to reduce it any further than its current level.

The Salt Institute is grateful to the Food and Drug Administration for the opportunity to comment upon this matter.

Sincerely,



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¹ Pomerleau, Joceline, McKeel, Martin, Lobstein, Tim and Knai, Ce'cile, The burden of disease attributable to nutrition in Europe, *Public Health Nutrition* 6(5), 453-461, (2002).

² C. Leclercq and A. Ferro-Luzzi, Total and domestic consumption of salt and their determinants in three regions of Italy, *Eur J Clin Nutr.* 1991 Mar;45(3):151-9.