Population Advice on Salt Restriction: The Social Issues

Professor Swales’ exploration of the Public Health implications of the controversy about salt restriction is a dazzling analysis of the specific issues and focuses on how public policy is formulated.

Advice on human behavior emanates from a variety of sources. Theologians counsel on matters of faith and ethics. Courts interpret the law. Physicians rely on authority and experience, and increasingly, recommendations from formally constituted bodies using predetermined rules to generate “consensus” documents. However, successive national and international bodies, addressing the clinical management of blood pressure, despite overlapping memberships reviewing the same data, have produced inconsistent recommendations. Clinical guidelines are intended to be applied to one patient at a time; thoughtful medical scholars have wisely cautioned against uncritical universal application of “Guidelines.”

Professor Swales has taken the matter of advice a quantum leap further. He points out that even less attention has been paid to deriving population-wide advice, than for guiding the care of individual patients. In examining the particular issue of sodium restriction, Swales establishes a set of five criteria by which to assess the suitability of a recommendation for “Public Health” application, and then examines how the salt restriction story measures up. He deftly shows that salt restriction produces only a modest change in blood pressure, even in protected situations whose results are not likely to be reproduced in the general population. Moreover, he identifies issues of cost, in dollars, and in the real possibility that the reversal of an ill-founded recommendation may debase the currency of future public health recommendations. It is clear that influences other than a careful read of all the data seem to be responsible for current public policy.

Professor Swales’ analysis is compelling. I have only one suggestion for fine tuning his criteria to determine public health policy. Swales notes that a population policy producing small impact for the individual might translate into substantial population-wide effects. He points out that adequate data upon which to compare harm and benefit are rarely available. In my mind, the case against a universal recommendation to limit salt intake does not rest on its limited blood pressure effect, nor on the potential harm that might come from the demonstrated adverse physiologic effects of sodium restriction, nor from the published data showing an inverse association of sodium intake to morbidity or mortality. Instead, the most critical issue is the absence of any evidence that persons consuming, naturally, or by design, a diet limited in sodium content are better off in terms of the quality or duration of their life. Blood pressure reduction, even if it could be produced, is not a suitable surrogate for our real interest in the length and quality of life. Indeed, there are strategies for reducing blood pressure in which harm exceeds benefit.

An analogous case is to be found in the widespread effort, a generation ago, to limit weight gain in pregnancy. That recommendation was based on the very reasonable expectation that it would reduce the risk of increased blood pressure. Unfortunately, despite the fact that limited weight gain did blunt blood pressure elevation, it also unexpectedly turned out to adversely effect fetal outcomes. Clearly, logical extrapolation from intermediate physiologic measures to health outcomes has its limitations.

In short, I believe that the bar to introducing a population wide recommendation, aimed at the unsuspecting and the innocent, must be far higher than the bar required to offer treatment to an individual patient who has sought the help of a physician. I would contend that convincing evidence that the proposed intervention is at least associated with a health benefit—a longer or a better life—must be the sine qua non for adoption of a population-wide recommendation. In the absence of such empiric data, no amount of logical extrapolation justifies promoting a course of action that will effect millions of otherwise healthy people who had not sought the advice. Therefore, in areas of uncertainty, it is best to make no recommendation.

Michael H. Alderman
Albert Einstein College of Medicine
Bronx, NY 10461

“Salt”: A Commentary

In his recent article “Population advice on salt restriction: the social issues (Am J Hypertens.), John Swales takes objection to our statement that there is a scientific consensus in favor of a population reduction in dietary salt. Swales misunderstands the meaning of “consensus.” It does not imply unanimity. Consensus