

## A Salty Red Herring

Fruits and vegetables are vital elements in a balanced diet, yet the proportion of people who consume 5–10 servings/day remains pitifully low, according to CDC (2005). Not one state in the United States is close to achieving this national target. Fruits and vegetables pack a considerable nutritional punch and have fewer calories, which helps people keep their weight down. A diet high in fruit and vegetables leads to a much lower incidence of chronic disease and a decline in the majority of risk factors associated with cardiac disease and stroke.

Pomerleau et al. (2002) demonstrates that fruit and vegetable availability decreases the burden of disease throughout Europe. Mediterranean people, who consume twice the amount of fruit and vegetables as their Northern European neighbors, have half the death rate from ischemic heart disease—20 instead of 40/100,000—despite the fact that their diet is 15–20% higher in salt.

Hypertension is one of the 11 risk factors for cardiac disease enumerated by the American Heart Association. The Dietary Approaches to Stop Hypertension (DASH) diet high in fruits, vegetables, and low-fat dairy products demonstrated that hypertension can easily be reduced, even in salt-sensitive people (Appel et al., 1997). However, with a diet high in fruits and

vegetables, not only is hypertension dramatically reduced, but all other cardiovascular risk factors are reduced as well.

A subsequent DASH II diet study (Sachs et al., 2001), added the dimension of salt reduction for a highly salt-sensitive population. It involved three levels of sodium in the diet:

### *Why ... push salt reduction ... and say so little about [increasing] consumption of fruits and vegetables ...?*

a high (control) level of 150 mmol, an intermediate level of 100 mmol, and a low level of 50 mmol. The high level is based on the level of salt we typically consume in the U.S., while the intermediate level is equivalent to the 2,300 mg of sodium/day recommended by the American Medical Association (AMA), the UK Food Standards Agency (FSA), and Center for Science in the Public Interest (CSPI).

Moving from the current high level to the intermediate level dropped the systolic pressure by an average of 2.1 mm Hg. Moving from the high level to the DASH diet without any change at all in sodium consumption, the systolic blood pressure dropped by 5.9 mm Hg, almost three times the drop resulting from the recommended reduction in sodium intake. It is clear that with a proper DASH-type diet, the impact of sodium on the blood pressure of hypertensives is minimal (and of no significance to normotensive people).

Moving from the intermediate level to the low level of 50 mmol is nearly impossible: after five years of intense anti-salt campaigning in the UK, FSA just announced that per capita salt consumption has been reduced from 3,800 mg of sodium to 3,600 mg. At this rate, it will take at least another 32 years

of aggressive campaigning just to get to 2,300 mg, let alone the tasteless level of 1,200 mg. What would happen if this level could actually be achieved?

Moving from the intermediate level to the low level resulted in a mean drop in systolic pressure of 4.6 mm Hg. However, staying at the intermediate level but going to the DASH diet dropped the blood pressure by 5 mm Hg. Again, more is accomplished with the DASH diet than with salt reduction.

Consumption of the DASH diet coupled with a 3-fold reduction of sodium consumption ultimately dropped another 3 mm Hg in systolic blood pressure. The problem with significantly lowering sodium levels in the highly effective DASH diet is that the bitter, cruciferous vegetables that have so much nutrition to offer become less palatable. A small amount of salt is the most effective way to make these vegetables palatable for adults and even more so for children.

Considering the hierarchy of positive impacts, maintaining the DASH diet is far more significant than reducing sodium intake.

The old expression “to chase a red herring” refers to blindly pursuing a diversion rather than the true object. Why do AMA, FSA, and CSPI continue to aggressively push salt reduction (partially reducing one cardiovascular risk factor in a small proportion of the population) and say so little about dramatically increasing the consumption of fruits and vegetables (reducing the impact of all risk factors for the total population)? Why do they insist on chasing the salted red herring when a much more meaningful and beneficial resolution to so many diet-related health problems is so obvious?

Based on all the scientific evidence we have available, fruits and vegetables are the cheapest, most readily available, and most beneficial foods we can consume to give a significant degree of protection from the modern health challenges we face.

It's time we stopped chasing the red herring and get back on the real track of quality nutrition. **FT**

*References for the studies mentioned above are available from the author.*

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