

Enjoy your vices, round 37: The salt controversy

This article originally appeared on Vitality 101 with Dr. Jacob Teitelbaum.

Three new studies came out this week shedding more light on the salt controversy. As we've noted for many years, the current fad of salt restriction is ill advised. Though it may create one side benefit – one study[1] showed that people who restricted their salt intake to the American Heart Association recommended guideline of 1.5 gm of sodium a day died at twice the rate of those who didn't – not so good for them, but a nifty cost “benefit” to our over-burdened Social Security system!

Unless there is good reason to do so, salt restriction is a bad idea. This is especially so in people with fibromyalgia, adrenal fatigue and/or autonomic dysfunction (POTS, NMH), where salt restriction will cause you to crash and burn. So my recommendation? Get a good quality sea salt, such as Celtic Sea Salt or even the pink sea salt grinders at Costco, and let your taste buds be your guide.

So let's look at some background information:

- The American Heart Association (AHA) continues to recommend a 1.5 gram per day (g/d) limit on sodium intake.[1]
- In 2013, the Institute of Medicine (IOM) reviewed the evidence and reported that there was no evidence to support the 1.5 g/d limit.[2]

Fast forward now to the August 14, 2014 issue of the *New England Journal of Medicine*, which published 3 major papers on sodium intake.[3-5]

The studies report the results from 2 study groups: the Prospective Urban Rural Epidemiology (PURE) group[4] and the Global Burden of Diseases Nutrition and Chronic Diseases Expert Group (NutriCoDE) group.[5]

The PURE study showed the relationship between blood pressure (BP) and salt intake that we have said for decades. Basically, salt only causes blood pressure to go up at high intakes (about 4 gm sodium a day) and only drops with severe levels of salt restriction that are not maintainable for most people. So basically, having a diet with all the taste squeezed out to avoid salt has largely been a waste of pleasure for most people (with the exception of those with heart failure).

Even more telling? The NutriCoDE study looked at sodium's effect on overall cardiovascular mortality. What it found was stunning (well not to us). Following the government guidelines for salt restriction was associated with a 200% higher risk of dying of heart disease! To put this in perspective, treating for high cholesterol with statin medications (in the absence of diabetes and heart disease) was associated with only a 2-10% drop in heart attack death.

Here is what the data showed in graph form:



Figure. Data from Mente A, et al.[4]

["Odds Ratio" meant odds of dying or having a heart attack/event. Sodium excretion

was used to reflect sodium intake (what goes in must come out).]

These were large studies, and these data are from 101,945 individuals in 17 countries in 66 studies.

So perhaps it is time for people to listen to their bodies to see what feels and works best, rather than to experts who have a really bad track record. As Dr Topol, editor of Medscape, notes in his article "I think there's a big lesson here about guidelines without adequate evidence: They can do harm. Hopefully this lesson will prove to be impactful, because that certainly has not been the case to date (as in cholesterol/LDL, BP, PSA, mammography, and a very long list of poorly conceived, nonanchored guidelines)."

Isn't it about time to recognize that there shouldn't be rules for populations? Some people are exquisitely sensitive to salt intake, while others are remarkably resistant. Average is over [6].

With so many people having adrenal fatigue, another area which medicine is totally missing, salt restriction is downright dangerous.

Basically, when people ask me whether they should change a habit they enjoy, a key question is "How is what you are doing working out for you?" Most often, if it is working well, feels good to them to do it, and is giving them pleasure, I leave it be.

Perhaps it is sometimes OK to *Enjoy Your Vices!*

Enough said. I think I'll go have a Margarita now ... and no need to hold the salt!

(Also see "Topol on Salt: Time to Shake the Sodium Guidelines?")

References

- [1] Sodium and Salt. American Heart Association. Accessed August 25, 2014.
- [2] Sodium Intake in Populations: Assessment of Evidence. Institute of Medicine of the National Academies. Accessed August 25, 2014.
- [3] Mente A, O'Donnell MJ, Rangarajan S, et al. Association of urinary sodium and potassium excretion with blood pressure. *N Engl J Med*. 2014;371:601-661.
- [4] Mente A, O'Donnell MJ, Rangarajan S, et al. Urinary sodium and potassium excretion, mortality, and cardiovascular events. *N Engl J Med*. 2014;371:612-623.
- [5] Mozaffarian D, Fahimi S, Singh GM, et al. global sodium consumption and death from cardiovascular causes. *N Engl J Med*. 2014;371:624-634.
- [6] Topol,E. Topol on Salt: Time to Shake the Sodium Guidelines? Last accessed 8-27-14