CAN YOU PASS THE SALT?

"Can you pass the salt?" is a common question we hear at the breakfast, lunch, and dinner table each day. We shake a little here, a little extra there to get our food to taste just right before we dig in. And we do this in addition to eating processed foods and restaurant fare on a regular basis, which experts say is where most of our sodium intake comes from. But is all of this sodium we're eating really damaging our long-term cardiovascular health? Or is what we've heard thus far a bit of an exaggeration?

Recently, a media firestorm erupted over a July report in the *Cochrane Database of Systematic Reviews*, also appearing simultaneously in the *American Journal of Hypertension*, which seemed to call into question the basis for salt restriction recommendations. After researchers looked at the data of 6,500 participants, they concluded that the cardio-protective benefits of salt restriction couldn't be proven based on current evidence.

Shortly after this controversial meta-analysis hit the airwaves, two U.K. preventive medicine experts quickly countered these claims. They reanalyzed the same data and concluded in a comment in the July 30 issue of *The Lancet* that "the results of our reanalysis, contrary to the claims by Taylor and colleagues, support current public-health recommendations to reduce salt intake in the whole population."

Many in the medical community agree with the U.K. researchers' assessment.

Salt is a vital nutrient required for the body to function properly. Yet while essential in small amounts, consuming too much salt has led many Americans to associate the nutrient with an unfortunately all-too-common ailment: high blood pressure, a leading risk factor for heart disease.

High blood pressure is extraordinarily common in the United States, affecting approximately one-third of the adult population. Hypertension is a powerful and unequivocal independent risk factor for cardiovascular and renal diseases, including coronary heart disease, stroke, and renal failure. Despite major advances in the understanding and treatment of hypertension over the past several decades, the disease remains the most common primary diagnosis in the United States and is a major public health concern.

According to World Health Organization (WHO) estimates, hypertension causes 5 million premature deaths per year worldwide. And across WHO regions, research indicates that about 62% of strokes and 49% of heart attacks are caused by hypertension.

It's an issue that dietitians and doctors know well. Also well-known is part of the popular lifestyle prescription to help patients fight or prevent hypertension and heart disease: sodium restriction.

Irrefutable scientific evidence supports the fact that reducing sodium intake, as well as increasing potassium intake, lowers blood pressure. Myriad randomized controlled clinical trials collectively have demonstrated the benefits of sodium reduction for blood pressure control in both normotensive and hypertensive individuals. People with a blood pressure of greater than

or equal to 130/85 have a 1.5 to 2.5 times greater risk of experiencing a heart attack than those with a blood pressure value of less than 120/80.

So what's the real story? Such conflicting reports can create confusion, especially when we catch only half the story on the nightly news. Probably to the dismay of consumers, many dietitians and doctors overwhelmingly disagreed with the conclusions of the controversial Cochrane review findings. These findings are far out in left field and do not reflect the overwhelming amount of strong scientific evidence gathered over decades that supports the fact that reducing sodium intake reduces blood pressure, thereby reducing risk of cardiovascular disease, our nation's leading cause of death.

A recent study published in the April 2007 issue of **BMJ** concerning a group of individuals with borderline to high blood pressure found that cutting back on their salt intake slashed their risk of developing heart disease by 25% and of dying of the disease by up to 20%. The researchers surmised that sodium acts directly on blood vessel walls, stiffening them and making them more susceptible to atherosclerosis.

Another study, published in the February 2010 issue of **The New England Journal of Medicine**, concluded that if everyone cut salt intake by just a 1/2 tsp/day, there would be close to 100,000 fewer heart attacks each year and the number of deaths from CVD would drop by up to 92,000 annually.

In light of such findings, the recommendations are that all Americans aim for consuming less than 1,500 mg of sodium per day. This goal of less than 1,500 mg of sodium per day, while unrealistic for many Americans, is still something to strive for. Most Americans are unable to achieve this—but at least they'll be aware and headed in the right direction (i.e., dietary sodium reduction).

The evidence linking added dietary salt to higher blood pressure is overwhelming. The new U.S. Dietary Guidelines conclude that most middle-aged and older Americans should ideally consume no more than 1,500 mg of sodium per day. (The 2010 Dietary Guidelines for Americans list 2,300 mg as the upper limit for healthy individuals.). While sodium intake recommendations can help guide individuals trying to curtail the amount of salt in their diet, cutting back on processed foods will help more than eliminating the salt shaker at the dinner table. But to be successful you have to do both - cut back on refined processed foods and consume more natural foods, in addition to reading labels, to avoid high-sodium processed foods.

In addition, limit the days per week you eat out at restaurants, another culprit of excessive sodium. Avoiding salt in most restaurants today is like trying to avoid secondhand smoke in restaurants back in the 1970s. Solving the 'secondhand' salt problem in restaurants today is now very difficult; your options are limited.

Reading food labels is helpful, although preparing more meals at home, with fresh fruits and vegetables and lean protein sources, is your best bet at limiting sodium. While asking people to completely give up eating in restaurants and eating packaged food products just isn't realistic, RD's can educate about moderating the amount of food eaten in restaurants and from packages and about consuming smaller portions of these foods, to have them less often, and to appropriately read food labels to choose products lower in sodium.

The larger picture is that the more you can cook, the more control you have over your food. And many people who cook don't start by heavily salting their food. They start by creating food and adding salt at the end. You don't have that control if you don't want to cook, and you have to resort to eating out or buying packaged foods.

The only way we can be successful is to bring fresh food into the home and to develop the skills to be able to control what's coming in the door. This is the only way we can get around the packaged food or eating-out problem, which is where the sodium is coming from because it's a preservative. It helps to focus on basic cooking skills, and access to potassium-rich fresh produce. That's the road to meaningful salt restriction.

Source: **Juliann Schaeffer, *Today's Dietitian***

For an in-depth review of the scientific literature on salt toxicity and hypertension, visit Kenney's CPE course at *www.foodandhealth.com*