

What doctors wish patients knew about sodium consumption

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While sodium is an essential nutrient, most people consume too much and are not even aware they are doing so. The body needs a small amount of sodium to work properly, but in excess it can increase a person's risk for developing high blood pressure, which can lead to heart disease and stroke. That is why it is important to understand where most salt intake is coming from and how to lower it.

The AMA's What Doctors Wish Patients Knew™ series provides physicians with a platform to share what they want patients to understand about today's health care headlines, especially throughout the COVID-19 pandemic.

For this installment, Brent M. Egan, MD, an internist and vice president of cardiovascular health at the AMA, took time to discuss what patients need to know about sodium consumption and how to lower their salt intake.

Americans consume too much salt

In the United States, the average consumption of sodium is around 3,400 milligrams a day, said Dr. Egan, which is on the high side.

What is alarming is that "many may not realize they consume too much sodium," he said. "It would take us about a little over 1,000 milligrams a day to get from where we are to where the recommendation would be for the upper limit.

"And if we did that, we'd probably see a significant reduction in blood pressure, heart attack and stroke," Dr. Egan added.

Discover seven myths about salt that patients might believe.

There's a recommended limit

For people who “are interested in trying to minimize chronic disease,” their sodium intake should be about “2,300 milligrams a day,” said Dr. Egan. “What we do recommend though—for higher risk individuals—is to limit that to 1,500 milligrams of sodium a day.”

“If someone has high blood pressure, heart disease, that type of thing, 1,500 milligrams is probably a better target, but for the general population that’s really interested in limiting the burden of chronic disease, 2,300 milligrams is generally what is recommended,” he emphasized.

Sodium increases blood pressure

“With about half of the people with high blood pressure, increasing the sodium intake significantly raises blood pressure,” said Dr. Egan. “And for people without high blood pressure, about one in four will have a significant increase in blood pressure when they go from a sort of normal or low sodium diet to a higher sodium diet.

“There's also data to suggest that if our blood pressure is sensitive to salt, that further increases our risk for heart attack and stroke,” he added, noting “there may be some effects beyond the blood pressure alone” such as “oxidative stress.”

Processed foods are high in sodium

“A lot of the snacks we like—any processed meats, lunch meats—and shellfish, are high in salt,” said Dr. Egan, adding that “fast food is common for a lot of folks and is high in sodium as well.”

“A general principle is if you can eat less processed food—fruits, vegetables, whole grains, most meat—it is better for you,” he said. “If it hasn’t had salt added to it, it leaves people with a lot of good choices. But it doesn’t leave a lot of snack foods and fast foods, unfortunately.”

Potassium offers protection

Another issue, less often understood by patients, is that “processed foods are lower in potassium,” said Dr. Egan, adding that “potassium actually helps protect us against some of the bad effects of sodium.”

“When we eat unhealthy foods, not only are we getting more sodium, but typically we're getting less potassium,” he said. “So, lower potassium with high sodium consumption increases health risk beyond sodium content alone.”

That is why it is important to choose natural foods.

“Fruit and vegetables tend to have significantly more potassium than sodium,” said Dr. Egan. “But when we process those items, we typically add sodium and we may lose some potassium, unfortunately.”

Certain breads can have high sodium

Some of the different breads bought in the grocery store can have more sodium added than others, said Dr. Egan. That means, “if folks are getting quite a bit of bread, they can get a fair amount of sodium that way.

That is why “it’s just good to take a look at the nutrient label for how much sodium is in your bread,” said Dr. Egan. “But remember, whole grains are low in sodium.”

Shellfish are high in sodium

“It’s not all seafood, but shellfish in particular can be pretty high in sodium,” said Dr. Egan, noting that shellfish have about “five to eight times more sodium than other meats of similar calorie content.”

For example, while shrimp contain high levels of protein, their saltwater habitat can contribute to high sodium levels. Fresh-caught shrimp are also soaked in a salty brine to reduce their temperature and prevent ice crystals from forming during the freezing process, which adds to the sodium levels.

“Watch those food labels because we sometimes are surprised that things that we didn’t think tasted salty can have a lot of sodium in them,” said Dr. Egan.

Rinse sodium-containing canned foods

For canned foods, some people turn to sodium rinse. This means rinsing off sodium-containing canned foods such as beans, tuna and vegetables before eating.

“Not only are you getting rid of that fluid that they were in—which was high in sodium—but you do get rid of some of the sodium as well,” said Dr. Egan. “Now, if you could select fresh or frozen, that would be preferable.”

“But sometimes—because fresh may be more expensive—folks may go with a canned option,” he added, noting that “rinsing those will reduce the amount of sodium that we take in.”

Try to cook at home more

When a person cooks their meals at home, it can help reduce sodium intake “because then we have control over how much sodium goes in,” said Dr. Egan, noting that “for people who are accustomed to eating quite a bit of salt, the food initially will taste very bland, almost like they’re chewing on cardboard or something.”

“But interestingly, the taste buds adapt pretty well, so if they’re willing to put up with that for a few days, the taste buds readjust,” he added. “And in a few days, they’re appreciating flavors in food that they hadn’t recognized before because the sodium was actually dulling or numbing the taste buds so that they really didn’t taste some of the wonderful flavors that are in food.”

Sodium affects the immune system

“Many of our cells in the body—including our immune system—have sodium channels,” said Dr. Egan. “When we eat more salt, more of that sodium gets inside our cells and it even affects our immune system.”

“A lot of folks are just not aware of that,” he added. “It’s been suggested that some of those immune effects may in fact contribute to the elevation to high blood pressure, heart disease and stroke.”

You can get by with little sodium

“Obviously we need some sodium—it’s essential for life,” said Dr. Egan. But there are some people who can “get by on about 250 milligrams of sodium and here we are with an average intake of 3,400 milligrams.”

“Now the body has to make a lot of adjustments, but we can get by with very little sodium,” he said, noting “there’s very little danger in this country that most people won’t get enough sodium, even if

they're eating those fresh foods and not processed foods.

“They'll still—for the most part—get more than sufficient sodium that the body needs,” said Dr. Egan. “We live in a state of pretty much constant excess.”

Blood pressure medicine is affected

“Some people may not be aware that when they eat more sodium, a lot of their blood pressure medications don't work as well,” said Dr. Egan, emphasizing that “several blood pressure medications work better when we have less salt in the diet.

“So even though they're taking blood pressure medications, they may not work as well and a lot of folks would like to not take more medications,” he added. “One way to help not require more medications is to reduce the sodium in the diet so the medications they're on work better.”

Salt can increase protein in the urine

“A high salt diet can also increase protein in the urine,” said Dr. Egan. Similarly, “some of the medications that we give for blood pressure reduce protein in the urine too.”

These medications “also don't work as well in reducing that protein unless we restrict our salt,” he said. “That is something that folks may not be aware of because certainly people with diabetes and kidney disease a lot of times have extra protein in the urine and high salt drives that.

“And even the medication we use to reduce it doesn't work as well when there's extra salt in the diet,” Dr. Egan added.

Pay attention to the food label

“Soy sauce and a lot of the ketchups that we use have higher levels of sodium,” said Dr. Egan. “Tomato-based products also have quite a bit of sodium added as well.”

That is why “it's always good to read food labels and to aim to get no more than 2,300 milligrams of sodium a day,” he said. “And, quite honestly, it's probably important to shoot for lower than that because we're going to get sodium that we didn't read on the label in some way.”

“The thing we need to watch for is sometimes it looks like a one serving package, but it may be two or four servings,” said Dr. Egan. “And so, then we need to multiply that sodium by the number of servings.”

Restaurants heavily season foods

While some restaurants list nutritional information, it is important to be mindful of what you’re ordering.

“I’d be fairly comfortable that most salads don’t have much sodium added, but the salad dressing that is put on there could be relatively high,” said Dr. Egan. “But in its vinegar and oil, you can be confident there’s probably not a lot of sodium added to the dressing.”

“If you know where you’re going, a lot of times you can find more detail by checking the menu before you go in,” he said. “Some restaurants will have those items that are designated healthier and have an American Heart Association label next to it. Those have been intentionally prepared to fit nutritional guidelines.

“So, if there are healthy options on the menu, sometimes those are flagged or noted and it makes it a little easier to choose those healthy foods,” Dr. Egan added.

The AMA has developed online tools and resources created using the latest evidence-based information to support physicians to help manage their patients’ high BP. These resources are available to all physicians and health systems as part of Target: BP™, a national initiative co-led by the AMA and American Heart Association.