

# Small Salt Reduction Would Have Big Benefits

## VITALS

**Major Finding:** Reducing salt by 3 g daily may reduce the annual new cases of coronary heart disease in the United States by 60,000 to 120,000, annual new cases of stroke by 32,000 to 60,000, and annual new cases of myocardial infarction by 54,000 to 99,000.

**Data Source:** The Coronary Heart Disease Policy Model.

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BY HEIDI SPLETE

A reduction in salt intake of 3 g per day could have an impact on cardiovascular disease and reduce all-cause mortality in the United States by an estimated 44,000 to 99,000 deaths each year, based on a recent study.

"A reduction in dietary salt of 3 g per day would have approximately the same effect on rates of coronary heart disease

(CHD) events as a 50% reduction in tobacco use, a 5% reduction in body mass index among obese adults, or the use of statins to treat persons at low or intermediate risk for CHD events," the researchers wrote.

Dr. Kirsten Bibbins-Domingo of the University of California, San Francisco, and her colleagues used a computer simulation model to predict the effects of a population-wide reduction of salt intake on cardiovascular events in the United States (*N. Engl. J. Med.* 2010 Jan. 20 [Epub doi: 10.1056/NEJMoa0907355]).

Reducing daily dietary salt by 3 g would reduce the number of new cases of CHD per year by an estimated 60,000-120,000, according to the computer model. New cases of stroke would be reduced by 32,000-66,000, and new cases of MI would be reduced by 54,000-99,000.

The model predicted that, although all age groups would benefit, middle-aged and older populations would likely have larger relative reductions in CHD incidence and in rates of new and recurrent MI and stroke.

In adults aged 35-64 years, the relative reduction in mortality would be approximately 7%-11% for blacks and 3%-6% for nonblacks.

In addition, a nationwide 3 g per day decrease in salt consumption would save approximately \$10 billion to \$24 billion in health care costs annually and add approximately 194,000-392,000 quality-adjusted life years.

The researchers acknowledged that the results were limited by the uncertainty of the data used in the model, but added that, despite those limitations, their findings build on those from previous studies.

"Our findings underscore the need for an urgent call to action that will make it possible to achieve these readily attainable cardiovascular benefits," they said.

The results also showed positive, although less dramatic, improvements in all-cause mortality, CHD, stroke, and MI with reductions of daily salt intake by either 1 g or 2 g.

"As salt intake is reduced, people appear to prefer food with less salt, a phenomenon that is probably related to the accommodation of taste receptors over the course of weeks to months," the researchers noted.

The benefits seen in the study may be an underestimate, according to an accompanying editorial by Dr. Lawrence J. Appel and Cheryl A.M. Anderson, Ph.D., of Johns Hopkins University in Baltimore. The study did not factor in the impact of modest daily salt reduction on reducing blood pressure in children or mitigating age-related rise in blood pressure in adults, they wrote (*N. Engl. J. Med.* 2010 Jan. 20 [Epub doi: 10.1056/NEJMe09103.52]).

Also, results from previous studies suggest that reduced salt intake may reduce the risk of other conditions not included in the computer model: gastric cancer, end-stage kidney disease, congestive heart failure, osteoporosis, and left ventricular hypertrophy, they noted. ■

## It's never too early to have the "insulin talk"

Some conversations may be hard to initiate. Take the "insulin talk," for example. According to the American Diabetes Association, insulin is the most effective agent for lowering blood glucose.<sup>1</sup> It works as part of an overall diabetes treatment plan, which may include diet, exercise, and other diabetes medication. Having the "insulin talk" early may help patients accept insulin as a potential treatment option to help them achieve their A1C goals.<sup>2</sup>

The results of having a positive "insulin talk" can be impactful: in a survey, about 80% of patients with type 2 diabetes on OADs said they'd consider taking insulin if their doctor recommended it.<sup>3</sup> So by starting the dialogue now, you can help your patients have a better understanding of insulin as an effective treatment option for lowering blood glucose.

## Insulin—a chance for successful glycemic control, not a punishment for failure

Patients may focus on blaming themselves for their uncontrolled blood glucose, but you can help them focus on turning this negative mindset into positive action for managing their disease.<sup>2</sup> The United Kingdom Prospective Diabetes Study showed that by the time patients with type 2 diabetes are diagnosed, they may already have lost up to 50% of their beta-cell function, and this function may continue to decline.<sup>4</sup>

Because the disease is progressive, many patients with type 2 diabetes may eventually need insulin to achieve or maintain glycemic control.<sup>2,5</sup> But by the time patients with type 2 diabetes are prescribed insulin, they may have had diabetes for 10 to 15 years and may already have complications due to a prolonged period of uncontrolled blood glucose.<sup>6</sup> Starting insulin earlier in the disease continuum for appropriate patients can help improve glycemic control. Controlling blood glucose can reduce the risk of diabetes-related complications.<sup>5,6</sup>

Treatment plans and glycemic targets should be individualized for each patient.

Insulin is indicated to help improve glycemic control in patients with diabetes mellitus.

## Important Safety Information About Insulin

Possible side effects may include blood glucose levels that are too low, injection site reactions, and allergic reactions, including itching and rash. Other medications and supplements could change the way insulin works. Glucose monitoring is recommended for patients with diabetes.

## THE "INSULIN TALK"

### Have the talk early and as needed, to help destigmatize insulin<sup>2</sup>

- Reassure patients that using insulin doesn't mean failure and that insulin may help replace what the body is no longer adequately making
- Turn the negative mindset of failure into a positive opportunity to take personal control of A1C

### Put insulin therapy in context

- Explain the benefits of maintaining blood glucose goals and the risks associated with insulin therapy
- Talk about how insulin may be worth the effort—insulin is an effective treatment option that works as part of an overall treatment plan to lower blood glucose

### Identify patients' personal obstacles and help defuse the "scary" factor<sup>2</sup>

- Today's insulin injections generally cause little discomfort and are administered using small, thin needles<sup>2,6</sup>
- Insulin pens make insulin more convenient to administer and are discreet<sup>2</sup>
- Insulin dose may need to be adjusted up or down over the course of treatment depending on how a patient's body responds<sup>5</sup>

# INSULIN

IMPROVING BLOOD GLUCOSE CONTROL SHOULDN'T WAIT

Learn more at [www.RethinkInsulin.com](http://www.RethinkInsulin.com)

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