

Voluntary sodium reductions far from “uncharted”

Published at www.cmaj.ca on Aug. 5

The voluntary approach to sodium reduction has proved effective in the past, but one size may not fit all, say health advocates.

While a growing number of countries are implementing salt reduction programs in response to increasing evidence of the potential health and economic gains of cutting back salt in the food supply, experts point out that the voluntary method only works so far as industry is willing to make it work.

In Canada, the food industry has been quick to qualify their commitment to new recommendations for voluntary reductions, warning that the implementation of a national sodium reduction strategy will be a foray into “uncharted” waters (www.cmaj.ca/cgi/doi/10.1503/cmaj.109-3326).

But while Canada worries about getting its toes wet, nations such as Finland and the United Kingdom have been immersed in the task of population-wide sodium reduction for years and, in some cases, decades.

“Food companies will continue to say they can’t reduce the salt in their products and will emphasize the technical obstacles to reducing salt, but the truth is they can do it quite easily and have done it in the UK and other countries,” says Katharine Jenner, a spokeswoman for World Action on Salt and Health (WASH), an international salt-reduction advocacy group. “There turned out to be very, very few technical reasons why salt couldn’t be reduced [in the UK], outside some specific product categories like cheese.”

People have been misled to believe salt is necessary as a preservative, says Jenner. “But that’s what a fridge or the canning process is for. Preserving things in salt is actually really inefficient. Ultimately, using salt is just a cheap way to make foods that don’t taste very nice more palatable.”

A recent WASH survey revealed



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National efforts to cut the amount of salt used to prepare foods are best served with industry cooperation, say health advocates.

wide variations in the salt content of more than 260 food products sold internationally by manufacturers such as Nestle, KFC and Kellogg’s. Kellogg’s All Bran, for example, contains 2.15 g of salt per 100 g in Canada, but only 0.65 g of salt per 100 g just over the border in the United States, less than a third of the Canadian level (www.worldactiononsalt.com/media/international_products_survey_2009.xls).

“If international food manufacturers can sell a product with high sodium content in one country, and the same product with less salt in another, there’s obviously no functional barrier to the change,” says Jenner.

Finland was one of the first nations to take a systematic approach to decreasing its average salt intake in 1979. At the time, the average Finn consumed an estimated 12 g of salt or 4800 mg of sodium per day. That’s double the present maximum daily intake recommended by the World Health Organization (WHO). Over the next decade, Finland’s National Nutrition Council collaborated with the food industry to

develop reduced-salt products and raise consumer awareness of the harmful effects of salt on health. In 1993, the country also imposed labelling legislation requiring foods that are high in sodium to carry a “high salt content” warning, and allowing foods that are low in sodium to make “low salt” claims (www.iom.edu/Reports/2010/Strategies-to-Reduce-Sodium-Intake-in-the-United-States.aspx).

Since the 1980s, many food companies have reduced the sodium content of products sold in Finland. The country’s average salt intake has dropped from 12 g per day in 1979 to less than 9 g per day in 2002. The drop in salt consumption was accompanied by a 75%–80% decrease in mortality from stroke and coronary heart disease, as well as an increase of five to six years in life expectancy.

Similar sodium reduction efforts in Japan during the late 1950s and 1960s saw that nation’s average salt intake drop from 13.5 g to 12.1 g per day, with decreases from 18 g to 14 g per day in some regions. Paralleling this

reduction was a fall in blood pressure both in adult and children, and an 80% reduction in stroke mortality.

These early initiatives laid the ground work for the UK's sodium reduction campaign, one of the most successful to date, according to WASH. Following a 2003 report from an expert panel recommending the UK's average salt intake be reduced from 9.5 g to 6 g per day (www.sacn.gov.uk/pdfs/sacn_salt_final.pdf), the Food Standards Agency and Department of Health launched a campaign to raise consumer awareness, and encourage industry to voluntarily improve sodium levels and labelling of food products. In 2006, the agency set voluntary targets for more than 80 categories of processed food to be met by 2010, and according to the agency, food manufacturers have since reduced the amount of salt used in their UK products by up to 60%.

"Most people in the UK are not aware in the slightest that their foods have been reduced by this amount, because the reductions were made gradually and across the board," says Jenner. "The average salt intake has come down from about 9.5 to 8.5 g per day. That doesn't seem like a lot, but it's a downward trend where previously salt intake levels were going up."

Jenner estimates the reductions achieved so far amount to saving 6000 lives per year from stroke and heart attack.

Because of the success of voluntary measures in the UK, many other countries are now stepping up their own sodium reduction efforts. Ireland, France and Sweden are all in the midst of implementing voluntary reduction initiatives, and in 2008 the European Union had member states commit to a 16% reduction in their population's average sodium intake by 2012. The first monitoring report of that initiative is scheduled for release this year.

The linchpin of a successful voluntary approach is industry cooperation,

says Jenner. "The threat of regulation is always there, but in reality it would be a real challenge to implement. You'd need a body in place to enforce the regulations, and monitoring the entire food supply is just too big a job for most countries. We've been fortunate that we haven't had to take that approach in the UK, but the voluntary method isn't necessarily one-size-fits-all, either."

What's less clear is how to proceed when the voluntary method fails. Portugal and other nations have imposed limits on the amount of salt that can be used in specific, high-sodium products, such as bread. However, those regulations are usually limited to one product category. Other regulatory efforts, such as those in Finland, have only tackled food labelling, which is easier to monitor for compliance.

But these examples don't offer much guidance for countries like the United States, where decades of voluntary efforts to reduce population-wide sodium intake have failed, in part because of an emphasis on public education over industry reductions.

"Unless industry is engaged, there's no level playing field, and because salt is central to the taste of a lot of products, those companies that do make the changes are shortchanged when others don't," says Dr. Jane Henney of the University of Cincinnati College of Medicine in Ohio and chair of the US Institute of Medicine advisory panel.

The institute recently released a report calling for the US Food and Drug Administration (FDA) to "expediently undertake regulatory activities to establish conditions of use for salt in processed food."

While opponents to sodium reduction are few, the institute recommendations for regulation have sparked strong criticism from members of the scientific community who say the evidence of the efficacy and safety of salt-reduction efforts is unclear.

"The argument seems to have moved beyond whether or not salt reduction's a good idea, and onto how to do it," says Dr. Michael Alderman of the Albert Einstein College of Medicine in New York, a former consultant to the US Salt Institute. "It's no longer questioning does this make sense, has anyone done it before, does anyone know how it will turn out if we miraculously managed to reduce our sodium intake to 1500 mg per day?"

Alderman calls population-wide reductions an "experiment," and says more randomized clinical trials should be conducted on the health effects of salt reduction before regulatory action is taken. He cites the trans fats debacle as a cautionary tale. "Asking industry to reduce the sodium content of foods doesn't mean they're going to throw out the taste and shelf-life benefit of salt, it just means they're going to replace salt with something that delivers the same benefits. What that replacement will be, I don't know. Industry doesn't want to hurt the public, but like with replacing saturated fats with trans fats, there's always the potential for something harmful to take the place of salt in our diet."

For now, the FDA is deliberating on the US Institute of Medicine's recommendations, and like Canada, has not set a deadline for the completion of those deliberations.

The delay comes as a disappointment for health advocates.

"There's no need for Canada to take 30 years to make reductions or admit failure," says Jenner. "If you get industry cooperation, you can implement changes immediately and see health gains in two to three years."

Calgary, Alberta, will host an upcoming WHO meeting on sodium reduction strategies in October. — Lauren Vogel, *CMAJ*

DOI:10.1503/cmaj.109-3328