

# SALT: HARD TO SHAKE



You're hungry! So you decide to head to a nearby McDonald's and order some chicken nuggets. Meanwhile, across the Atlantic Ocean, an equally famous English teen does the same.

What's the difference? Your chicken snack could contain two and a half times as much salt – and therefore sodium – as the nuggets consumed by the British youth. That's the conclusion of a new study published in April in the Canadian Medical Association Journal.

## CANADIAN FAST FOOD SALTIER

In the study, an international team of researchers compared the salt content of more than 2,100 fast food items found in Canada, Australia, New Zealand, France, the United Kingdom and the United States. They looked at products from six chains: McDonald's, Burger King, Domino's Pizza, Kentucky Fried Chicken, Pizza Hut and Subway. And they found that some products sold in different countries varied in their salt content.

In many cases, Canadian fast food had the highest amount of salt.

Salads and french fries were the most startling examples. Salads in Canada contained an average 320 milligrams (mg) of sodium per 100 gram (g) serving, far higher than any other country. In the U.S., Britain and Australia the average was 200 mg. As for french fries, in Canada they contained 560 mg of sodium per 100 g. In France the average was 200 mg, and in Britain it was 300 mg for the same 100 g serving.

"In every food category, if we weren't first, we were second from the top in the amount of salt," said study author Dr. Norm Campbell, a hypertension expert from the University of Calgary.

## SALT, SALT – EVERYWHERE

Why is that finding important? Because according to Health Canada, adults should consume no more than about 1,500 mg of sodium per day – the amount found in about half a teaspoon of table salt. Yet the average

### THE VALUE OF SALT

Before refrigerators and freezers were invented, salt was one of the most sought-after items because it could be used to preserve fish and meat.

Just how valuable was it?

- In ancient Greece, salt was exchanged for slaves, which gave rise to the expression, "not worth his salt."
- Roman soldiers were paid partly in salt. (Their *salarium* is the source of today's word "salary.")
- Caravans trekked across the Sahara desert trading salt ounce for ounce with gold.
- In China, money earned from salt helped build armies and defensive structures such as the Great Wall.

Canadian consumes about 3,400 mg daily. And most of this sodium comes from salt that has been added to fast food, packaged foods, and restaurant items.

## DEFINITIONS

**SODIUM:** an element found naturally in table salt and many other foods. (Salt is composed of 40 percent sodium and 60 percent chloride, so foods high in salt are also high in sodium.)

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Everything from Cheerios to canned beans, tomato sauce, canned soups, cheese – even whole grain bread – contains salt. Food companies have said they use it to enhance flavour. Consumers wouldn't like the taste of lower-salt food, and would stop buying and eating their products if levels were drastically cut, they claim. Also, salt acts as a preservative and adds to the texture and structure of foods. To reduce the amount currently used for these purposes, the industry has claimed it would need to come up with new manufacturing techniques and technologies – a process that would take a long time.

## NO MORE EXCUSES

Dr. Campbell, however, says that the study proves that these arguments no longer hold weight. Consumers' tastes in other countries adjusted to gradually lower salt contents in food products just fine. And as for the argument that it would take time and money to come up with lower-salt products? They already exist in other countries.

"What they found was great variation, and that seems to prove that it is possible in some cases to reduce the salt in food," said medical media commentator Dr. Karl Kabasele.

## DID YOU KNOW?

In the United States, approximately 80 per cent of people's sodium intake comes from salt that has been added to packaged foods.

## SHOULD THE GOVERNMENT REGULATE SALT?

So what is the real obstacle on the road to reducing the amount of sodium in Canadians' diets? According to Dr. Campbell, it's the federal government.

## SODIUM AND THE HUMAN BODY

In moderation, sodium is good for you; in fact, your body needs it. Sodium plays a role in maintaining the water balance within your cells. It also helps your nerves and muscles to function properly. But too much sodium can cause your body to retain water, which contributes to high blood pressure, or hypertension.

Blood pressure is the force of the blood on the walls of your arteries as the heart pumps it around your body. Extra water in the blood vessels can increase blood pressure because it forces the heart to pump harder.

High blood pressure damages the heart and blood vessels throughout the body. It can cause the muscles lining the arteries to harden and thicken. A heart attack can result from a blockage within these narrowed arteries that cuts off blood flow to the heart muscle. Similarly, a stroke is caused when vessels delivering blood to the brain burst or become blocked by a clot, depriving it of oxygen.

Kidneys remove extra sodium from the body. But too much sodium can damage the kidneys' ability to remove it. Meanwhile, high blood pressure can damage blood vessels in the kidneys, affecting their ability to remove extra fluid and waste. That can lead to kidney failure.

Experts estimate that as many as 15,000 Canadian lives could be saved each year if we reduced our salt intake to recommended levels.

Currently, Health Canada's approach to reducing Canadians' sodium intake is two-fold. First, the department is encouraging the food industry to make cuts to salt levels on its own accord. At the same time, it's working to raise public awareness about the dangers of too much salt so people can make informed food choices.

"The federal, provincial and territorial governments are committed to helping create conditions that make the healthier choice the easier choice," Health Canada stated.

But the report's authors say their study shows that this approach isn't working. They believe it's up to government to create a level playing field for the food industry by setting and enforcing targets that companies must follow. That way, Canadians won't have to rely on willpower alone to make healthier choices.

"We've been badgering people about salt for years, and it's not working,"

said Dr. Campbell. "They are out there in a sea of fast food and processed food.

"We really need to tackle this at a societal level." ★



SCIENCE, TECHNOLOGY AND THE ENVIRONMENT  
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**ON THE LINES**

Answer the following in complete sentences:

1. Explain what sodium is.

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2. Explain how sodium helps your body.

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3. How much sodium should the average adult consume?

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4. Explain what too much sodium can do to the human body.

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5. Why do many food companies add salt to their products?

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6. Describe Health Canada's approach to reducing sodium levels in Canada.

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7. Describe the sodium study that was recently published in the Canadian Medical Association Journal.

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8. What did this research conclude?

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**BETWEEN THE LINES**

**Making an inference:** An *inference* is a conclusion drawn from evidence. A plausible inference is supported by evidence in the article and is consistent with known facts outside of the article.

What inferences can you draw from the fact that most of the sodium Canadians consume comes from salt that has been added to fast food, packaged foods, and restaurant items?

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**JUST TALK ABOUT IT**

- a) For what reasons are you concerned about the amount of sodium you eat? For what reasons are you not concerned?
- b) Imagine that you are Canada's Health Minister. What position would you take on the issue of whether or not to force food companies to lower the amount of salt in their products? Give reasons to support your position.

**ONLINE**

Visit our student website at [www.news4youth.com](http://www.news4youth.com) and click on the *What in the World?* tab to:

1. Check out the Globe and Mail's Salt-o-Meter to find out how much sodium you need each day and how much sodium common fast foods and packaged foods contain (or visit <http://www.theglobeandmail.com/special-reports/hard-to-shake/salt-o-meter/article1187915/>).
2. View an animated graphic explaining how salt affects your body (or visit <http://www.theglobeandmail.com/special-reports/hard-to-shake/how-salt-affects-your-body/article1189693/>).
3. Find out how to reduce sodium in your diet (or visit <http://www.nhlbi.nih.gov/hbp/prevent/sodium/tips.htm>).

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Visit our student website at [www.news4youth.com](http://www.news4youth.com) and click on the *What in the World?* tab to vote in our monthly poll:

Given the option, would you choose to eat fast food with the current amount of salt or would you choose lower-salt products instead?

- I would choose to eat fast food with the current amount of salt. /*
- I would choose to eat lower-salt food products. ★*