



The Skinny on Saturated Fats



Summary: Dietary Fat



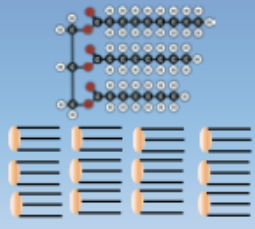
The current evidence as of 2018 with respect to dietary fat and cardiovascular disease indicates that:

- ➔ The consumption of **trans fats** increases CVD. Trans fats are not safe and should be removed from the food supply¹
- ➔ There is no increase in CVD from eating **cholesterol rich foods**, including eggs and butter
- ➔ There is no reduction in CVD by reducing **overall fat**
- ➔ The literature is unclear if reducing **saturated fat** has an impact on CVD

1. Food and Drug Administration. Final determination regarding partially hydrogenated oils. Health and Human Services Federal Register, June 17, 2018, 83 FR 24850-24875.


Saturated Fat (Hard Fat)

Fatty acid tails have single bonds between all carbons (saturated with hydrogen atoms)



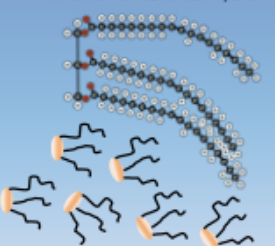
Hard fat at room temperature

Animal fats




Unsaturated Fat (Oils)

Fatty acid tails have one or more double bonds between carbon atom pairs



Liquid at room temperature

Vegetable Oils



By Kaitlyn Gisler

Saturated fat has been vilified for decades, but Dr. Andrew Samis, a Staff Intensivist, General Surgeon, and Physician Stroke Champion at Quinte Health Care in Belleville, Ontario, presented an altogether different message to the BC Dairy Industry Conference attendees.

"All of you are in an industry that makes saturated fat," he said. "Fat is a third of our diet and it's an important nutrient." Dr. Samis has researched diet and cardiovascular disease (CVD) as well as stroke care. He was a member of the expert panel that helped create the Heart and Stroke Foundation Position Statement on Saturated Fat. Foods have a mix of different fat types. Meat, eggs and dairy contain saturated fats. Saturated fats come from foods that are derived from animals, with the exception of industrial trans fat. When unsaturated fats are subjected to an industrial process of hydrogenation, trans fat is created. This process of hydrogenation is used in manufacturing – predominately to lengthen shelf life of food – but is associated with poorer health outcomes. **Trans fat should not be grouped with natural saturated fats.**

The Lipid Hypothesis, and later the Diet-Heart Hypothesis, were theories developed by scientists decades ago which blamed cholesterol and saturated fats as detrimental to health. These

theories, although flawed and not sufficiently researched, were adopted by the American political system and resulted in the Dietary Goals for the United States. The American public was told to increase carbohydrate consumption, reduce overall fat, saturated fat and cholesterol based on theories rather than proven science. "I am not going to stand up here and say there aren't studies that show that [saturated fat] is harmful, or [studies] that it has no harm, or that it's beneficial. These studies can't decide," explained Dr. Samis.

A similar stance can be found with the 'Dairy Paradox,' which appears to suggest through high-quality scientific studies that dairy not only has no association to heart disease, but it may actually have a positive effect with strokes. "There is not enough science to make a guideline supporting [dairy], but evidence also suggests you shouldn't be making a guideline against it."

Butter always generates its own special interest and has a hold on many people's hearts. A 2016 study has shown that butter consumption is not associated with heart disease or stroke. "I am, as a doctor, more interested in what you're putting the butter on: is it a cinnamon bun – which would be bad – or fresh vegetables, which would be healthy?" questions Dr. Samis. "Since 1977 we have incorrectly said meat and dairy are bad and not to eat them, but we didn't tell people what to eat. Many are worried

that people started eating processed carbohydrates instead of eating a whole food like piece of cheese. Interestingly, when we started telling people to eat less fat is also the time that the obesity epidemic started."

A key concern that Dr. Samis shared is industry influencing the Canadian Food Guide. He warns that industry – dairy or otherwise – should not have influence over the Food Guide, but neither should ethical or religious positions. "The Food Guide

needs to have rigorous science. We can't issue guidelines that are not scientifically based," he warned, "We hurt people if there isn't science behind it."

Dr. Samis' final tidbit of advice: "Macronutrient-restrictive thinking, that is focussing on reducing fat, is an outdated way of thinking. And it hurts your industry, dairy, without adequate science behind it. People don't eat fat. People eat a diet. We need to look at the entire diet."

Graphics Courtesy of Dr. Samis

Dairy, Diversity and Food for Thought A Milk Shake Up

By Kash Cheema

Feeding current Canadians, newcomers and future arrivals is a responsibility for Canadian food producers; it is also a huge opportunity.

Bobbi Saini and Howard Davidson, commissioned by BCDA to study multicultural markets, presented their findings and a compelling rationale at the Dairy Conference, to see dairy opportunities in the changing face of Canada. One fifth of Canadians are foreign born, 320 thousand immigrants arrive every year in addition to 495 thousand students and 330 thousand

Cultural celebrations, religious holidays and family events are major dairy-drivers. Weddings alone are responsible for the consumption of crates of butter, vats of milk, sour cream, buttermilk and yogurt to produce specialty sweets and celebratory feasts that go on for days. Similarly, special holidays like Diwali, Ramadan and Eid all have associated dairy-based food items for sweets, fast-breaking and puddings. Grocers have responded with special flyers featuring ethnic items for these cultural events.

Milk consumption in China (the world's third highest producer of dairy) has