Saturated Fats In Dairy Products May Be Good For Your Heart Health

By Chuck Dinerstein, MD, MBA — February 6, 2019

The nutritional dogma identifies saturated fatty acids (SFA) as slightly better than those natural born killers, trans-fats, but not as good as unsaturated fats regarding heart health. You know where I am going with this, once again the dogma is wrong, painting and condemning SFAs with too broad a brush.

The Dogma

“A diet rich in saturated fats can drive up total cholesterol, and tip the balance toward more harmful LDL cholesterol, which prompts blockages to form in arteries in the heart and elsewhere in the body. For that reason, most nutrition experts recommend limiting saturated fat to under 10% of calories a day.” [1]

That article, from Harvard Health Publishing, goes on with this statement.

“A handful of recent reports have muddied the link between saturated fat and heart disease.”

Muddied is such an interesting word choice, suggesting confusion with a conspiratorial tone, could this confusion be sowed by Big Fat? And consider the primary sources of those SFAs, dairy products, and red meat; for some just the words alone are cringe-worthy, to be replaced by
almond “milk,” Tofutti or an Impossible Burger [2]

**Saturated Fats are not one big group**

Saturated fat molecules consist of chains of carbon where all the chemical bonds are saturated with hydrogen, and there are no “double bonds” between the carbon atoms. But SFAs have various subtypes based on the number of carbon molecules present. The range in the foods we eat has anywhere from 4 to 18 carbon molecules. It turns out that the number of carbon molecules present alters the effect on our cholesterol; those with fewer carbon molecules, associated with dairy products may reduce our heart risk; yes, ice cream may not only taste good but be good for you.

A report in the International Journal of Cardiology looked at two populations, one in the UK and another in Denmark, followed for 18+ years and of course made use of food surveys. The results are a hot mess. Ingesting smaller carbon chain length SFAs was protective of heart health, measured by heart attacks, and replacing that longer chain, red meat associated, SFAs with plant-based proteins was also protective, at least for the Danes. The Brits trended like the Danes but were not statistically significant – so perhaps this is a genetic component “muddying” the data. Damn genes. And it could also, in part, reflect lifestyle, while the Danes smoked more they were more physically active.

The authors go on to cite four more observational studies where ingesting SFAs yielded “divergent and sometimes conflicting results.” They concluded that shorter chain SFAs had a protective or neutral impact on heart health and that the longer chain SFAs were harmful; when plant-based protein were substituted in their place, they have little effect. So it seems that the previous studies were not so much muddied as mistakenly aggregating different compounds into one group – an error in definition rather than an evil conflict of intellectual interests.

Precision in science is often an incremental improvement, in the methods of measurement and how we aggregate or disaggregate the data we have. The broad definitional brush for SFAs must give way to a more “pointillist” [3] approach; we need to reconsider our dietary advice in light of new data. Ice cream may not be all bad. And one more thought, given how difficult it is to separate diet, lifestyle, and genetics, shouldn’t we be a bit less confident in the “truth” of our recommendations? If not, we will continue to be often wrong, never in doubt, continuing to reinforce the poor reputation nutritional research has concerning reproducibility.


[2] That last choice may be “bad” too because of concerns that it may be concealing a GMO food coloring [3].

[3] The pointillists were a group of painters that created images using only points of color, George Seurat’s *A Sunday Afternoon on the Island of La Grande Jatte* [4] is a frequently cited example.