Nutrition Update: Butter, Cream May Be Healthy; Dairy Protein Helps Cut Belly Fat

Southbank, Victoria, Australia— Breakfasts rich in cream and butter have been found to lower the levels of risk indicators for heart disease and diabetes, in a new Australian study.

Scientists from the Baker IDI Heart and Diabetes Institute in Melbourne examined the effect of breakfasts rich in certain dairy products that include cream, butter, cheese, yogurt or lowfat milk on markers which are indicators of heart disease and diabetes risk.

The research involved overweight or obese adults, who were given different dairy-rich breakfasts on different days over a two to three-week period.

The dairy products did not increase any of the markers. The creamy breakfast (containing nearly half a cup of cream), the buttery breakfast (containing over six individual packs of butter) and the milky breakfast (containing a glass-and-a-half of lowfat milk) actually lowered marker levels.

Researchers said the surprising fall in the concentrations of a number of biomarkers, especially after butter and cream were consumed, remain unexplained.

Glenys Zucco, dietitian at Dairy Australia, said it was previously thought that high-fat meals increased the levels of markers related to heart disease and diabetes, yet these study results suggest dairy fat has different effects than other types of fats.

"When it comes to heart disease and diabetes it is generally recommended people select reduced-fat milk, yogurt and cheese and limit consumption of cream and butter," Zucco said. "However, a growing body of evidence from observational studies suggests all types of dairy foods have a neutral or even beneficial effect on risk of heart disease and diabetes.

"While more research is required, this new evidence may help explain dairy's positive role in disease prevention," Zucco added.

This study was supported by the Dairy Health and Nutrition Consortium, which was formed in 2007 by Gardiner Foundation and its industry partners Bega Cheese/Tatura Milk Industries, Fonterra Australia, Murray Goulburn Cooperative, Lion (previously National Foods), Parmalat Australia and Warmambool Cheese and Butter Factory, Dairy Australia and Dairy Innovation Australia.

More Dairy Protein Means Better Body Composition

Separately, new research suggests a higher-protein, lower-carbohydrate energy-restricted diet has a major positive impact on body composition, trimming belly fat and increasing lean muscle, particularly when the proteins come from dairy products.

The study, published in the September issue of the *Journal of Nutrition*, compared three groups of overweight and obese, but otherwise healthy, premenopausal women. Each consumed either low, medium or high amounts of dairy products coupled with higher or lower amounts of protein and carbohydrates.

The women exercised seven days per week for four months, a routine that included five days of aerobic exercise and two days of circuit weightlifting.

Researchers found that there were identical total weight losses among the groups, but the higher-protein, high-dairy group experienced greater whole-body fat and abdomen fat losses, greater lean mass gains and greater increases in strength.

The tissue composition, exclusively fat, of the weight the women lost has profound implications for longer-term health, the researchers said.

"One hundred percent of the weight lost in the higher-protein, high-dairy group was fat. And the participants gained muscle mass, which is a major change in body composition," said Andrea Josse, lead author of the study and a graduate student in the kinesiology department at McMaster University.

Researchers found the lower-protein, low-dairy group lost about a pound and a half of muscle, whereas the lower-protein, medium dairy group lost almost no muscle.

By contrast, the higher-protein, high-dairy group actually gained a pound and a half of muscle, representing a three-pound difference between the low- and high-dairy groups.

On top of the muscle mass differences, the higher-protein, high-dairy group lost twice as much belly fat as the lower-protein, low-dairy group.

Dairy Intake Cuts Diabetes Risk

Additional new research has found that eating plenty of dairy foods as a teenager may reduce the risk of developing type 2 diabetes during adulthood.

Scientists from Harvard School of

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Public Health examined the relationship between dairy food consumption during adolescence and the incidence of type 2 diabetes in 37,038 adult women from the US Nurses' Health Study.

They found women who had a high intake of dairy foods in their mid-teens had a 38 percent lower risk of developing type 2 diabetes in middle age than those who had a low intake of dairy foods.

The positive effect of dairy foods was even greater for women who maintained the high dairy intake as adults. Women who consumed the highest quantity of dairy foods as a teenager and during middle age had a 43 percent lower risk of developing type 2 diabetes than those who consistently had a lower dairy intake.

Researchers also noted women who gained the least amount of weight during adulthood were the ones who had consumed the most dairy when they were a teenager.

These findings follow two new studies published in the *American Journal of Clinical Nutrition* and the *European Journal of Clinical Nutrition*, which showed eating the recommended three servings a day of dairy improves metabolic health and reduces the risk of type 2 diabetes.

Natural Trans Fats Are Beneficial

Not all trans fats are created equal and it's time for labels to reflect that reality, according to a University of Alberta nutrition expert.

A scientific review conducted by Spencer Proctor, along with Canadian and international colleagues, found that natural trans fats produced by ruminant animals such as dairy and beef cattle are not detrimental to health.

In fact, they show significant positive health effects and some evidence even links these natural trans fats to reduced risk of cardiovascular disease and cancer.

The review found that naturally occurring trans fat has a different fatty acid profile than industrial trans fat, which contributes to its different physiological effects. Ruminant trans fat is naturally occurring and found in dairy and meat products, while industrially produced trans fat is a component of partially hydrogenated vegetable oils, which have been strongly associated with cholesterol and coronary heart disease.

Quite often fat is the primary target of what consumers are told to avoid and trans fats in particular have a negative reputation.

"A change in how trans fat information is presented on nutrition labels would be a huge step forward," said Proctor, a researcher in the department of agricultural, food and nutritional science who is director of the Metabolic and Cardiovascular Diseases Laboratory at the University of Alberta.

"Right now, in Canada and the US, a substantial portion of natural trans fats content is included in the nutrition label trans fats calculation, which is misleading for the consumer," Proctor said. "We need a reset in our approach to reflect what the new science is telling us."

Spencer added that in some European countries, natural trans fat is not included in the nutrition label calculation.

Another approach may be to have separate listings for industrial trans fats and natural trans fats.

Calcium Needs Magnesium

Dr. Carolyn Dean, medical director of the Nutritional Magnesium Association, noted that the conventional wisdom for years was that bone loss is due to calcium deficiency, but "it has become clear that taking calcium alone does not stop or even slow bone loss and does not prevent osteoporosis."

The new wisdom now emerging is that magnesium is actually the key to the body's proper assimilation and use of calcium as well as vitamin D.

"If we consume too much calcium without sufficient magnesium, the excess calcium is not utilized correctly and may actually become toxic, causing painful conditions such as some forms of arthritis, kidney stones, osteoporosis and calcification of the arteries leading to heart attack and cardiovascular disease," Dean said.

"The effectiveness and benefits of calcium with respect to bone health and the prevention of osteoporosis are enormously impaired in the absence of adequate levels of magnesium in the body," Dean added. CR