

Dairy and Health: Good News Abounds

September 2023

Volume of Recently Published Dairy Nutrition Studies is High

Most weeks I peruse the health/nutrition literature and select a few of the more interesting sounding studies to review in-depth. Last week, for no reason in particular, I took a step back and looked at the sheer volume of studies that were published over the past couple of weeks. Many (>15) dealt with dairy and various health/disease conditions directly; others looked more generally at the impact of animal sourced foods and diets on health. Still others reported on the impact of fats and proteins on health; or the implications of food-derived micronutrients. Over 40 studies in all, published very recently, which dealt directly or indirectly with the health effects of dairy food consumption. And almost all of them produced positive or, in some instances, neutral, results. Hardly anything I reviewed would dissuade someone from consuming dairy products based on health concerns. An impressive finding in and of itself.

Various Health Conditions Assessed

Typical among the studies published this past month was <u>a case-control project in Thailand</u>, a country where lactase non-persistence is very high, on milk consumption frequency and the risk of diabetes mellitus. In short, while the researchers found no difference in the amount of milk consumed between those with or without lactase non-persistence, they did note an association between higher milk consumption and an attenuation of metabolic syndrome and hyperglycemia, leading to the conclusion that higher milk consumption is associated with a lower risk of diabetes mellitus.

A systematic review and meta-analysis conducted by <u>a research group in China</u> found no correlation between consumption of dairy products and a reduced risk of asthma in children younger than 18 years. However, in non-Asian populations elevated milk and dairy consumption was significantly correlated with a reduced asthma risk. Among other things, the authors suggested that historically limited dairy consumption among Asian children may have affected results, and that more high-quality studies in Asian children were required. The researchers posited that it is reasonable to assume that with greater access and an increased consumption of dairy by Asian children, results comparable to those seen in non-Asian populations may not be achieved as well.

<u>Researchers in Italy</u> assessed the relationship between pizza intake and its key ingredients (refined grain, mozzarella cheese, olive oil) on symptoms in rheumatoid arthritis in over 300 patients with documented RA. Data demonstrated that overall pizza consumption was associated with beneficial effects on RA symptoms, and that two pizza ingredients-mozzarella cheese and olive oil were apparently responsible for these effects.



Another <u>study conducted in China</u> looked at emotional responses (collectively referred to as executive function) in children in rural regions, demonstrating that milk and dairy consumption was positively correlated with executive function, and that dairy consumption in rural areas of China, where consumption is low, should be increased in order to promote healthy physical and mental development.

Not All Studies Positive

Not every published study we reviewed showed positive outcomes for dairy. In a study of fruit, vegetable, and <u>dairy intake in subjects in Iran</u>, only fruit consumption as negatively correlated with hypertension in Iranian adults. Vegetable and dairy intake were not associated with hypertension risk, contradicting earlier data cited by the authors that did show an inverse relationship between dairy and risk of hypertension.

Similarly, a study of fatty acid biomarkers indicative of dairy consumption, and markers of metabolic syndrome in <u>adolescent children in Mexico</u> demonstrated contradictory findings between genders. Females who displayed an increase in blood borne markers indicative of increased dairy intake displayed fewer markers of metabolic syndrome, while males who consumed more dairy showed a higher risk of developing metabolic syndrome. No solid rationale for these apparently contradictory findings was provided.

What Does it All Mean?

As with most scientific constructs, deciphering what the sum of all studies published on a particular issue means is difficult. Few scientific findings, particularly in a field like nutrition, are absolute. If you conducted multiple studies on the impact of a food or nutrient on a health or disease metric, the odds of all findings pointing in the same direction would be slim.

That said, based on a review of studies published on dairy over a brief (two week) timeframe in reputable nutrition journals, a couple of conclusions that can be reached:

- a. Milk and dairy products are among the most researched food items in the world and are constantly being studied in various demographic groups in both developed and undeveloped countries.
- b. The study of dairy in diverse health and disease conditions, including several metabolic disorders, cardiovascular diseases, gut health, immunity, mental health and acuity, and others are constantly being conducted, and results updated.

The preponderance of evidence regarding dairy's impact on health and disease is overwhelmingly positive. In a given month, a review of scores of articles demonstrates positive outcomes and/or relationships between dairy and several health outcomes.