Prevention and management of chronic inflammation is important because it can impact the development of various chronic diseases like cardiovascular disease and type 2 diabetes. Nearly 25% of American adults who want health benefits from foods look for lower inflammatory foods. Many wonder how dairy foods impact inflammation. This systematic review of 27 randomized controlled trials reported that dairy foods (e.g., milk, cheese, and yogurt) have neutral to beneficial effects on biomarkers of inflammation.

In addition to examining the impact of dairy foods on biomarkers of inflammation, the review also examined the role of dairy proteins, casein and whey, on biomarkers of inflammation and found no adverse effects. While some studies have suggested animal protein intake may be associated with increased cardiovascular disease and mortality, all 8 trials in this review that investigated consumption of dairy protein on biomarkers of inflammation reported no effect.

This review adds to a growing body of scientific evidence that finds adequate dairy consumption as part of a nutrient-rich, balanced diet is not adversely linked to chronic inflammation, but rather has potential beneficial effects on inflammation. *This review focused on trials including adults who were 1) healthy, 2) overweight/obese, but otherwise healthy and 3) overweight/obese with chronic disease, but not with any diagnosis of severe inflammatory-related disorders. It also included dietary interventions with a minimum 2-week duration and a non-dairy or low-dairy control group.*

**Healthy Eating Pattern Including Low-Fat Dairy Foods (e.g., low-fat milk, cheese, yogurt)**

**Lower Chronic Inflammation**

**Reduced Chronic Disease Risk**

**Why is inflammation important?**

Chronic inflammation is considered a symptom of a continuous, out-of-balance immune system with higher amounts of pro-inflammatory signaling molecules. It is a key contributor to chronic disease risk – including metabolic diseases such as cardiovascular disease and type 2 diabetes. Diet impacts the body’s inflammatory state.

Not surprisingly, over the past decade, a robust body of literature has revealed a significant link between the consumption of dairy foods and reduced risk of metabolic diseases associated with chronic inflammation.

**Does the saturated fat in dairy products cause inflammation?**

No. The anti-inflammatory effects of dairy products have been seen in dairy products regardless of their fat level. Clinical trials comparing low-fat and full-fat dairy have shown no differences in blood inflammatory biomarkers.

**Does the lactose in dairy products cause inflammation?**

No. The evidence shows dairy foods, including those which contain lactose have neutral (no effect) or beneficial (anti-inflammatory) effects on biomarkers of inflammation.

A National Institute of Health expert panel on lactose intolerance (LI) suggests that even individuals with LI can include dairy foods in their diet. There are many strategies, including lactose free milk, natural cheeses and yogurt, that can help these individuals enjoy dairy foods and avoid nutrient shortfalls.
Helping Manage Inflammation Through Lifestyle Habits

There are several ways to help chronic inflammation, including eating a healthy diet, getting regular exercise, managing stress levels and smoking cessation for those who smoke.

Healthy eating patterns that include low-fat dairy foods, like milk, cheese and yogurt, as well as fruits, vegetables, whole grains and lean proteins can have anti-inflammatory effects.

Specific foods can contribute (i.e., inflammatory) or reduce (i.e., anti-inflammatory) inflammation. Researchers have developed validated approaches to assess whole foods impact on inflammation.

Foods with Anti-Inflammatory Effects

The following foods have been found to reduce inflammatory biomarkers.9

- Tomatoes
- Apples and berries
- Deep yellow and orange fruits and vegetables
- Poultry
- Nuts
- Coffee and tea
- Other fruits and vegetables
- Dairy Foods (e.g., whole and low-fat milk, cheese, yogurt)
- Leafy greens and cruciferous vegetables
- Fish
- Legumes

References: