



New Science: Dairy Foods Associated With Reduced Risk of Cardiovascular Disease



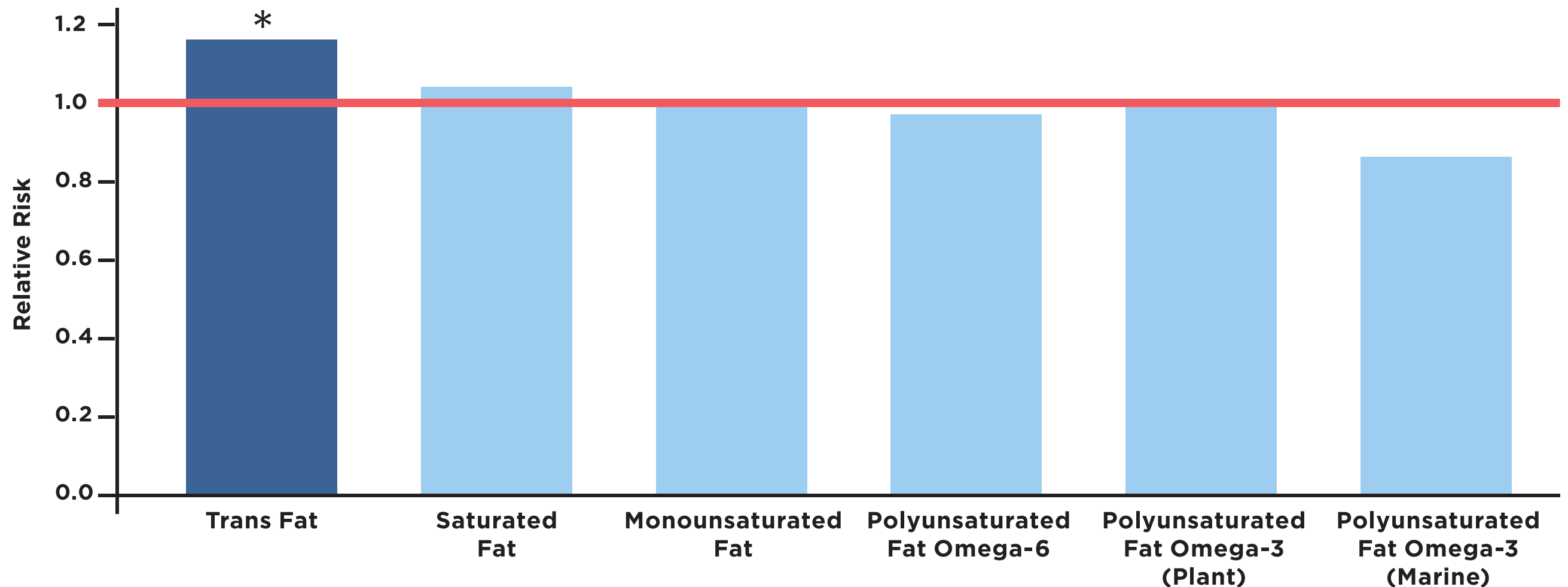
- **American Heart Association (AHA)**
- Diets low in dairy foods contribute to an increased risk of cardiovascular disease (CVD).¹
- **Department of Health and Human Services and USDA** - Dairy food consumption is associated with a lower risk of CVD.²
- **AHA and Dietary Guidelines for Americans** recommend low-fat and fat-free dairy foods as part of healthy eating patterns.^{1,3}

Saturated Fat Does Not Increase CVD Risk

- World Health Organization-funded meta-analysis of 61 prospective cohort studies (n > 500,000) in 2015 concluded:
 - Saturated fat is not associated with an increased risk of coronary heart disease, ischemic stroke or Type 2 diabetes.⁴

- Meta-analysis by Harvard, Cambridge and Oxford researchers, based on data from 32 studies (n > 500,000), in 2014 concluded:
 - Only trans fat was associated with increased coronary disease risk.⁵

Saturated fat intake does not increase risk of coronary disease



*Increased risk

Figure 1: Saturated fat intake does not increase risk of coronary disease

Dairy Foods Are Associated With Reduced Risk of CVD Events (PURE Study)

Landmark 2018 PURE study (21 countries, 5 continents, n > 136,000) concluded:

- Higher intakes of milk, cheese and yogurt are associated with a lower risk of major CVD events.⁶

**Higher dairy
food intake**



CVD event
risk by **22%**



Stroke risk
by **34%**

- Both lower-fat and whole-fat milk, cheese and yogurt are associated with a lower risk of major CVD events.

**Higher whole-fat
dairy intake**



CVD event
risk by **32%**

Cheese Is Associated With Lower Risk of CHD and Stroke

- Meta-analysis of 15 studies (n > 340,000) in 2017 concluded that consuming more cheese daily is associated with a lower risk of CHD and stroke.⁷

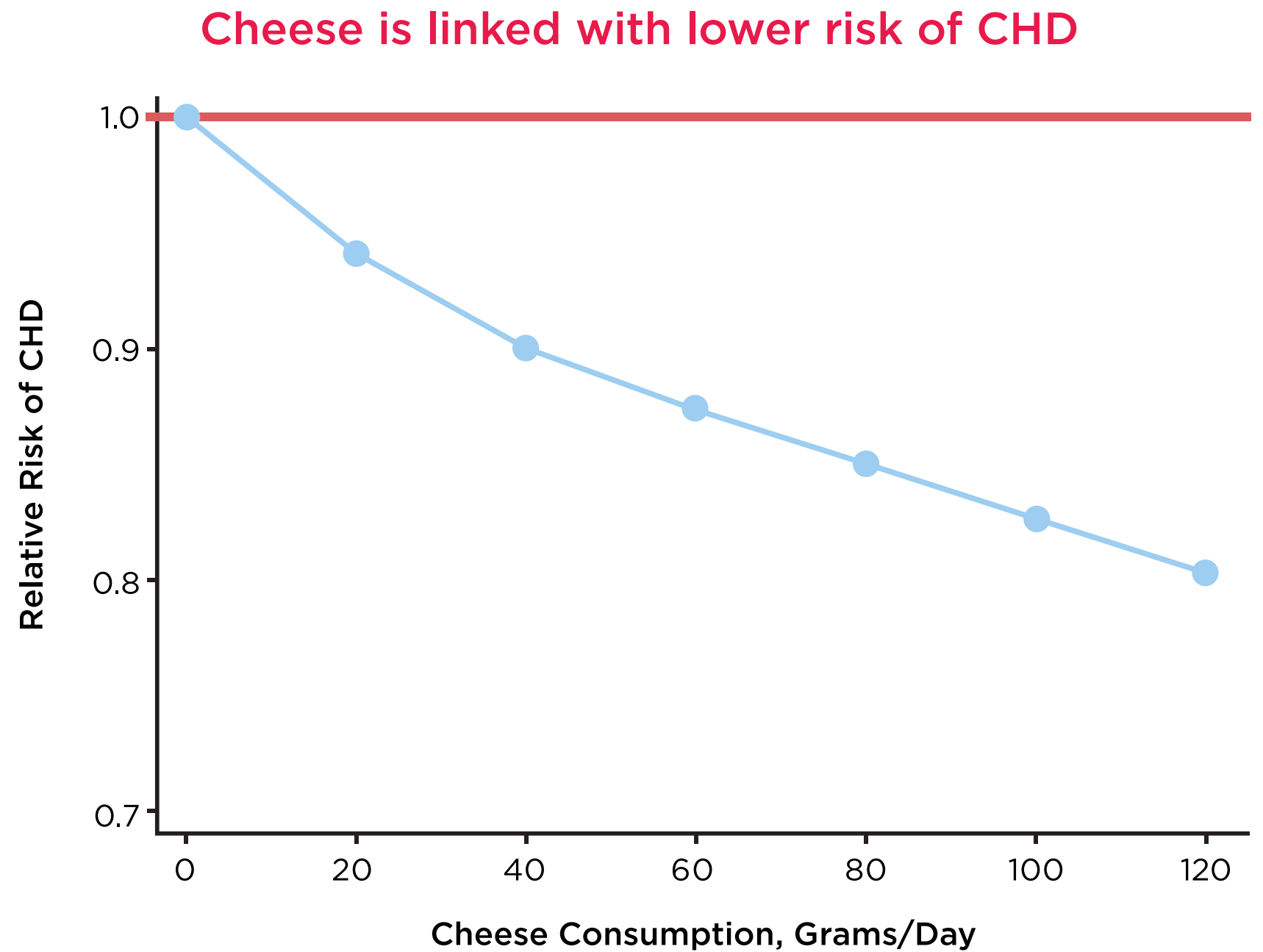
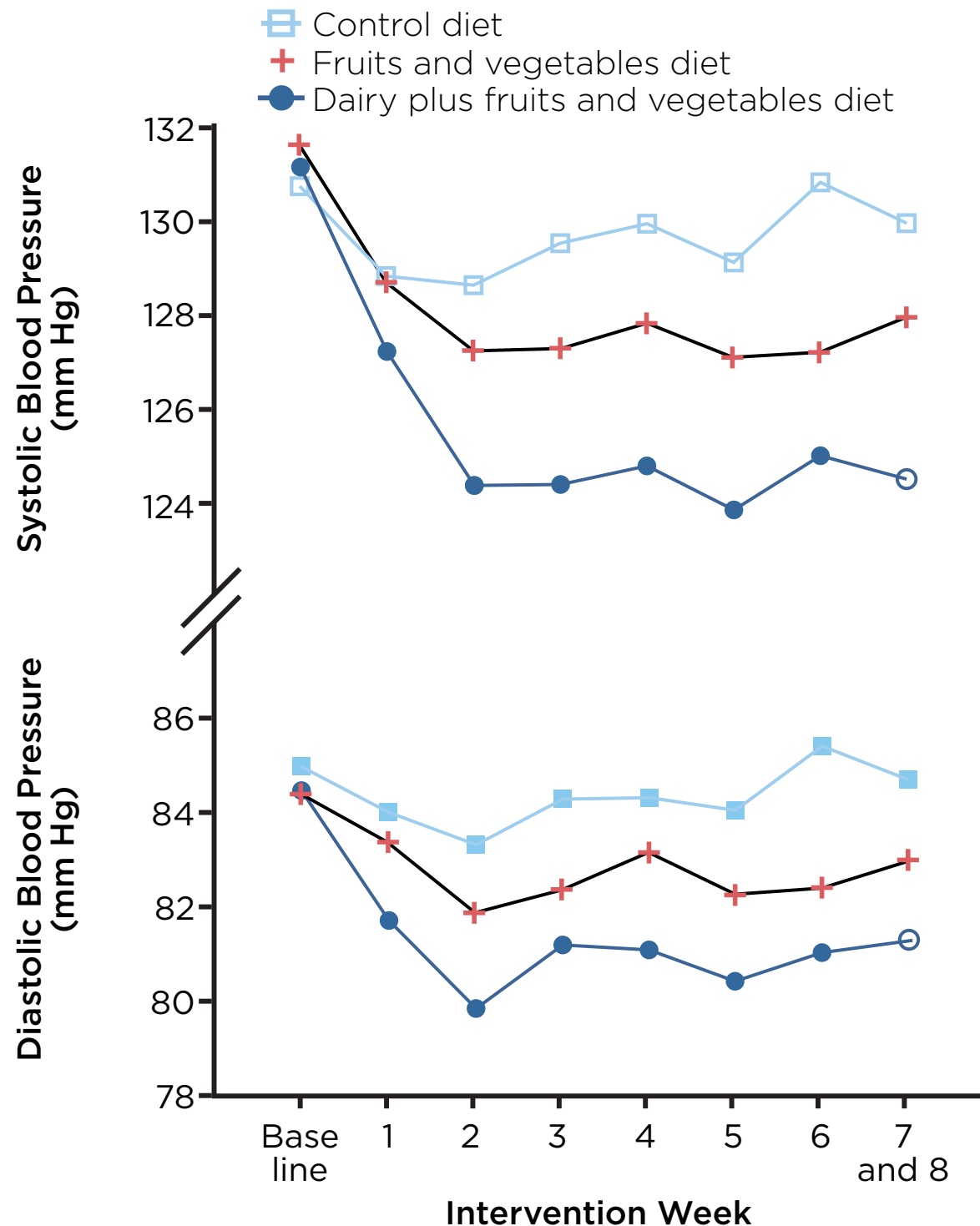


Figure 2: Cheese is linked with lower risk of CHD
*1 serving of cheese = 1.5 ounces / 42.5 grams

DASH Diet High in Dairy Foods Helps Manage CVD Risk Factors

Milk, cheese and yogurt are an important part of the DASH diet.⁸



AHA / American College of Cardiology guidelines recommend the DASH diet to reduce CVD risk.⁹

A Higher-Fat DASH Diet¹⁰

An RCT on a higher-fat DASH diet in 2016 that replaced low-fat dairy foods with whole-fat milk, cheese and yogurt:

- Did not raise total or LDL-cholesterol
- Lowered blood pressure just as effectively as a standard lower-fat DASH diet

Figure 3: Milk, cheese and yogurt are an important part of the DASH diet

Based On Current Evidence

1. AHA – Diets low in dairy foods contribute to an increased risk of CVD.
2. Saturated fat intake does not increase risk of CVD.
3. Higher dairy consumption is associated with reduced risk of CVD events.



Find more dairy science at DairyMAX.org

References:

1. American Heart Association. Scientific Statement: Recommended dietary pattern to achieve adherence to the American Heart Association/American College of Cardiology (AHA/ACC) guidelines. *Circulation*, 2016; 134:e505–e529. **2.** Dietary Guidelines Advisory Committee. 2020. Scientific Report of the 2020 Dietary Guidelines Advisory Committee: Advisory Report to the Secretary of Agriculture and the Secretary of Health and Human Services. U.S. Department of Agriculture, Agricultural Research Service, Washington, DC. **3.** U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2020-2025. 9th Edition. December 2020. Available at DietaryGuidelines.gov. **4.** De Souza RJ et al. Intake of saturated and trans unsaturated fatty acids and risk of all cause mortality, cardiovascular disease, and type 2 diabetes: systematic review and meta-analysis of observational studies. *BMJ* 2015; 351:h3978. **5.** Chowdhury R et al. Associations of dietary, circulating and supplement fatty acids with coronary risk. *Ann Intern Med* 2014; 160:398-406. **6.** Dehghan M et al. Association of dairy intake with cardiovascular disease and mortality in 21 countries from five continents (PURE): a prospective cohort study. *The Lancet* 2018; 392:2288-2297. **7.** Chen GC et al. Cheese consumption and risk of cardiovascular disease: a meta-analysis of prospective studies. *Eur J Nutr* 2017; 56:2565-2575. **8.** Appel LJ et al. A clinical trial of the effects of dietary patterns on blood pressure. *NEJM* 1997; 336:1117-1124. **9.** Eckel R et al. 2013 AHA/ACC Guideline on lifestyle management to reduce cardiovascular risk. A report of the American College of Cardiology/American Heart Association task force on practice guidelines. *Circulation* 2014; 129:S76–S99. **10.** Chiu S et al. Comparison of the DASH (Dietary Approaches to Stop Hypertension) diet and a higher-fat DASH diet on blood pressure and lipids and lipoproteins: a randomized controlled trial. *Am J Clin Nutr* 2016; 103:341-347.

Figures:

1. Developed by Dairy Farmers of Canada based on the study by Chowdhury R et al. Associations of dietary, circulating and supplement fatty acids with coronary risk. *Ann Intern Med* 2014; 160:398-406. **2.** Graph developed by Dairy Farmers of Canada based on the study by Chen GC et al. Cheese consumption and risk of cardiovascular disease: a meta-analysis of prospective studies. *Eur J Nutr* 2017; 56:2565-2575. **3.** From the *New England Journal of Medicine*, Appel LJ et al. A clinical trial of the effects of dietary patterns on blood pressure, Volume 336, Page 1122. Copyright © (1997) Massachusetts Medical Society. Reprinted with permission from Massachusetts Medical Society.