# WALNUTS & HEART HEALTH

**SINCE 1993,** published research has been investigating how eating walnuts affects various heart health biomarkers and risk markers including:

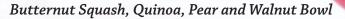
- LDL and HDL cholesterol
- Apolipoprotein B and non-HDL cholesterol
- Blood pressure
- Inflammation
- Endothelial function
- Plaque formation

### WALNUTS ARE CERTIFIED BY THE AMERICAN HEART Association with the heart-check mark



# PER 1 OZ. Serving

Please note that the Heart-Check Food Certification does not apply to scientific research by an organization other than the AHA unless expressly stated. For more information, see the AHA nutrition guidelines at: heartcheckmark.org/guidelines.







#### A RANDOMIZED CONTROLLED TRIAL FOUND that

people in their 60s and 70s who regularly consume walnuts may have reduced inflammation, a factor associated with a lower risk of heart disease, compared to those who do not eat walnuts.<sup>1</sup> The research was part of the Walnuts and Healthy Aging (WAHA) study – the largest and longest trial to date exploring the benefits of daily walnut consumption.

In the study, more than 600 healthy older adults consumed 30 to 60 grams of walnuts per day as part of their typical diet or followed their standard diet (without walnuts) for two years. Those who consumed walnuts had a significant reduction in inflammation, measured by the concentration of known inflammatory markers in the blood, which were reduced by up to 11.5%. The study's conclusion is that the anti-inflammatory effects of walnuts provide a mechanistic explanation for cardiovascular disease reduction beyond cholesterol lowering.

#### **RESEARCH FROM THE PREVENCIÓN CON DIETA**

**MEDITERRÁNEA (PREDIMED)** study further demonstrated the potential heart health benefits of walnuts. The study was conducted among more than 7,000 Spanish individuals (ages 55-80) at high risk for cardiovascular disease and found that a Mediterranean diet supplemented with mixed tree nuts (primarily walnuts), was associated with a lower risk of cardiovascular events, including cardiovascular death, myocardial infarction (heart attack), and stroke, when compared to a low-fat control diet.<sup>2</sup> Larger and longer-term studies, as well as studies in more diverse populations, are needed to clarify population-wide effects.<sup>1,2</sup> In the PREDIMED study, it is difficult to precisely define what part of the Mediterranean diet was associated with cardiovascular benefits.<sup>2</sup>

Due to the evidence supporting the cardiovascular benefits of walnuts, the U.S. Food and Drug Administration approved one of the first qualified health claims for a whole food in March of 2004: "Supportive but not conclusive research shows that eating 1.5 ounces of walnuts per day, as part of a low saturated fat and low cholesterol diet, and not resulting in increased caloric intake may reduce the risk of coronary heart disease."<sup>3</sup>

<sup>1</sup>Cofán M, Rajaram S, Sala-Vila A, et al. Effects of 2-Year Walnut-Supplemented Diet on Inflammatory Biomarkers. *J Am Coll Cardiol*. 2020 Nov, 76 (19) 2282–2284. <sup>2</sup>Estruch R, Ros E, Salas-Salvadó J, et al. Primary Prevention of Cardiovascular Disease with a Mediterranean Diet Supplemented with Extra-Virgin Olive Oil or Nuts. *N Engl J Med*. 2018;378(25):e34. <sup>3</sup>One ounce of walnuts provides 18g of total fat, 2.5g of monounsaturated fat, 13g of polyunsaturated fat, including 2.5g of alpha-linolenic acid, the plant-based omega-3.



## CALIFORNIA WALNUT Board & Commission

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