

ALMONDS SATISFY HEARTS AND WEIGHT-LOSS GOALS



Being overweight is a pathway to heart disease, according to the American Heart Association, and small nutrition choices can often make a big difference.

Almonds are considered a good fit with many popular weight loss plans. They offer key benefits to anyone trying to shed a few pounds, namely satiety, fewer calories for more nutrients, crunch, and taste.

In fact, a one-ounce serving of almonds has 3 grams of dietary fiber, 9 grams of monounsaturated fat, 3 grams of polyunsaturated fat and 6 grams of protein with only 1 gram of saturated fat.¹

SOME WEIGHT-Y RESEARCH

A study evaluated the dose response of almonds on coronary heart disease risk factors. The dose-response effects of whole

almonds, taken as snacks, were compared with low-saturated fat (<5% energy) whole-wheat muffins (control) in the therapeutic diets of hyperlipidemic subjects.²

THE PEOPLE

- 27 hyperlipidemic men and women

THE DIET

- Randomized crossover study
- Consumed 3 isoenergetic (mean 423 kcal/d) supplements (muffins and almonds) each for 1 month
- Supplements provided 22% of energy and consisted of: full-dose almonds (73 +/-3 g/d); half-dose almonds plus half-dose muffins; full-dose muffins (control)

THE RESULTS

- Mean body weights differed <300 g between treatments
- The full-dose almonds produced the greatest reduction in levels of blood lipids

- Half-dose almonds reduced: LDL cholesterol by 4.4 % +/-1.7%, P=0.018
LDL:HDL cholesterol 7.8% +/-2.2%, P=0.001
- Full-dose almonds reduced: LDL cholesterol 9.4% +/-1.9%, P<0.001
LDL:HDL cholesterol 12.0% +/-2.1%, P<0.001
Lipoprotein(a) 7.8% +/-3.5%, P=0.034
Oxidized LDL concentrations 14.0% +/-3.8%, P<0.001
- No significant reductions on the control diet
- Almonds used as snacks by hyperlipidemic subjects in this study significantly reduce coronary heart disease risk factors, in part, because of the protein, fiber, and monounsaturated fatty acid components of the nut³

Although this study demonstrates the potential heart health impact of almonds, people with high cholesterol levels should consult a dietitian or other health care professional before making changes to help support a healthy cholesterol level.

1. Research supporting the role of protein, fiber, and fat in satiety:

- Mattes RD. The energetics of nut consumption. *Asia Pacific Journal Clinical Nutrition*. 2008;17 Suppl 1:337-9.
- Marmonier, C; Chapelot, D; Louis-Sylvestre, J. Effects of Content and Energy Density on Snacks Consumed in a Satiety State on the Onset of the Next Meal. *Appetite*. 2000, 34:161-168.
- Williams, G; Noakes, M; Keogh, J; Foster, P; Clifton, P. High Protein, High Fibre Snack Bars Reduce Food Intake and Improve Short Term Glucose and Insulin Profile Compared with High Fat Snack Bars. *Asia Pacific Journal of Clinical Nutrition*. 2006, 15(4): 443-450.

2. Jenkins, DJ, et al. Dose Response of Almonds on Coronary Heart Disease Risk Factors: Blood Lipids, Oxidized Low-Density Lipoproteins, Lipoprotein(a), Homocysteine, and Pulmonary Nitric Oxide A Randomized, Controlled, Crossover Trial. *Circulation*. 2002 Sep 10; 106(11):1327-32.

3. The FDA issued a qualified health claim in 2003 that states: "Scientific evidence suggests, but does not prove, that eating 1.5 ounces per day of most nuts, such as almonds, as part of a diet low in saturated fat and cholesterol may reduce the risk of heart disease."