

2001 - The role of almonds on factors of hemostasis and implications for cardiovascular disease

Title:

The role of almonds on factors of hemostasis and implications for cardiovascular disease

Summary:

Frequent consumption of nuts lower the risk of coronary heart disease (CHD). While lowering blood lipids is one of the mechanisms for cardio-protection, this study sought to determine if monounsaturated fat rich almonds also influences other CHD risk factors such as inflammation and hemostasis. This was a randomized, controlled, crossover feeding study with 25 healthy adults (11 men; 14 women), age 22-53 y. Following a 2 week run-in phase (34% energy from fat), subjects were assigned in random order to 3 diets for 4 weeks each: a heart healthy control diet with no nuts (<30% energy from fat), low almond diet and high almond diet (10% or 20% isoenergetic replacement of control diet with almonds respectively). Serum E-selectin was significantly lower on both the almond diets compared to the control diet. E-selectin decreased as the percentage of energy from almonds increased ($P < 0.0001$) in a dose dependent manner. C-reactive protein was lower in both the almond diets compared to the control diet but there was no dose response. There was no effect of diet on interleukin-6 or fibrinogen. Tissue plasminogen activator antigen was significantly lower on the control and high almond diets compared to the low almond diet, although the values were within normal range. In conclusion, consumption of almonds influenced a few but not all of the markers of inflammation and hemostasis. A clear dose response was observed only for serum E-selectin.

Publications

Rajaram S, Connell KM, Sabaté J. Effect of almond-enriched high monounsaturated fat diet on selected markers of inflammation: a randomized, controlled, crossover study. *Br J Nutr* 2010;103:907-912. [full text](#)

Presentations:

Connell K, Sabaté J, Rajaram S. Effect of monounsaturated rich almonds on factors of inflammation in healthy adults. Experimental Biology 2002, New Orleans, LA. [abstract](#)

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