

Effect of Almond Consumption On Stool Weight and Stool Fat

Janine Zemaitis, Joan Sabaté: Loma Linda University, School of Public Health, Loma Linda, California 92350

The aim of this study was to examine the effect of a diet rich in almonds on stool weight and stool fat content in healthy subjects. Following a 2-week adaptation period, 9 subjects (5 females, 4 males) were fed a diet free of nuts (control diet), a low almond diet (10% energy from almonds) and a high almond diet (20% energy from almonds) each for a period of 4 weeks in a cross-over fashion. The control, low almond and high almond diets supplied, respectively, 31%, 35 % and 40% of the energy from fat. A 48-hour stool collection was given during the last week of each dietary period. The results are given in the table below.

Stool	Diets		
	Control	Low Almond	High Almond
Weight (g)	277 ± 133	290 ± 89	274 ± 149
Frequency (per/wk)	8 ± 3	8 ± 3	8 ± 3
Total Fat (g)	4.4 ± 2	9.0 ± 4*	10.3 ± 4*
% Fat	1.7 ± 1	3.2 ± 1*	4.1 ± 1*

*Significantly different from control diet (one way ANOVA), $P < 0.001$; mean ± SD.

The absolute and relative increase excretion of stool fat while on the almond diets may have resulted from lower levels of fat absorption due to the structure of lipid storing granules in nuts or to various nut fiber components.