

Cheese added to a low fat diet does not affect serum lipids

Colquhoun DM^{1*}, Somerset S², Irish K¹, Leontjew LM¹

¹ Core Research Group and University of Queensland, ² Griffith University

Background: Dietary fat is the major macronutrient that modifies lipids and lipoproteins. Saturated fat increases LDL, HDL with minimal effect on triglycerides. Part of the *French Paradox* is high intake of cheeses and low rates of CHD. The effect of cheeses on serum lipids has not been investigated.

Method: 20 patients had baseline cholesterol, 4 week low fat (LF) diet (<25% of calories as fat) followed by 4 week cheese diet (100g of camembert daily, 32-35% of calories of fat). Plasma Lipids were measured at baseline, after LF, and after cheese diet. Patients had dietary counseling at LF and cheese. Food intake was assessed by 3 day dietary diaries at the end of each diet period.

Results: During LF compared to baseline, Total cholesterol, HDL and LDL (Friedewald calculation) dropped significantly (p=0.001, p=0.0001 and p=0.008). No other changes were detected.

	Baseline	Low Fat	Cheese
TC mmol/L	5.44	5.14	5.31
Triglycerides mmol/L	1.30	1.45	1.58
HDL mmol/L	1.47	1.32	1.39
LDL mmol/L	3.38	3.16	3.20
Weight kg	78.1	77.6	77.6

Conclusion: On the background of a LF diet, including cheese is not associated with adverse effects on serum lipids. Fermentation presumably is responsible for these favorable effects.