

Diets with a lower glycaemic load associated with higher HDL-cholesterol in secondary cardiovascular disease

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Background: Glycaemic load has been related to high density lipoprotein cholesterol (HDL-C) levels in the general population, indicating that a low glycaemic index diet may protect against cardiovascular disease (CVD) (1).

Objective: To determine whether a significant relationship exists between glycaemic load or glycaemic index and HDL-C in patients with existing CVD.

Design: The LIPID study recruited 9,014 patients with existing CVD to receive either pravastatin (40mg/day) or placebo over a 5-year period. Complete food frequency questionnaires were completed by 1,077 of these patients at baseline. Foods containing carbohydrate were allocated glycaemic index values, and the dietary glycaemic index and glycaemic load were compared to serum HDL-C concentrations.

Outcomes: Dietary glycaemic index ($P < 0.001$) and glycaemic load ($P < 0.001$) were significantly inversely related to plasma HDL-C concentrations.

Conclusions: Nutrition education of CVD patients should include recommendations to consume low glycaemic index foods as part of a well-balanced and varied low-saturated fat diet.

1. Liu S, Manson JE, Stampfer M, Holmes MD, Hu FB, Hankinson SE, Willett WC. Dietary glycaemic load assessed by food-frequency questionnaire in relation to plasma high-density lipoprotein cholesterol and fasting triacylglycerols in postmenopausal women. *Am J Clin Nutr* 2001;73:560-566.