



Barley and Wheat Foods: Influence on Plasma Cholesterol Concentrations in Hypercholesterolemic Men

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Abstract

For 2 periods of 4 weeks, 21 mildly hypercholesterolaemic men 30 to 59 years old were provided with similar barley and wheat foods in a crossover-designed experiment. The purpose was to examine the influence of 2 sources of dietary fibre (non-starch polysaccharides) on blood lipids and glucose concentrations. Barley contains beta - glucan as a source of soluble dietary fibre (DF) whereas wheat contains the largely insoluble cellulose and hemicellulose fibre. Total dietary fibre increased from a previous intake of 21 to 38 g/day during the period of study for the 2 groups. Consumption of barley relative to wheat foods was associated with a fall in plasma total cholesterol (6%, $P < 0.05$) and in low-density lipoprotein cholesterol (7%, $P < 0.02$) whereas triacylglycerol and glucose concentrations did not change significantly. It is concluded that barley dietary fibre is more effective than wheat dietary fibre at lowering blood cholesterol in hypercholesterolaemic men.