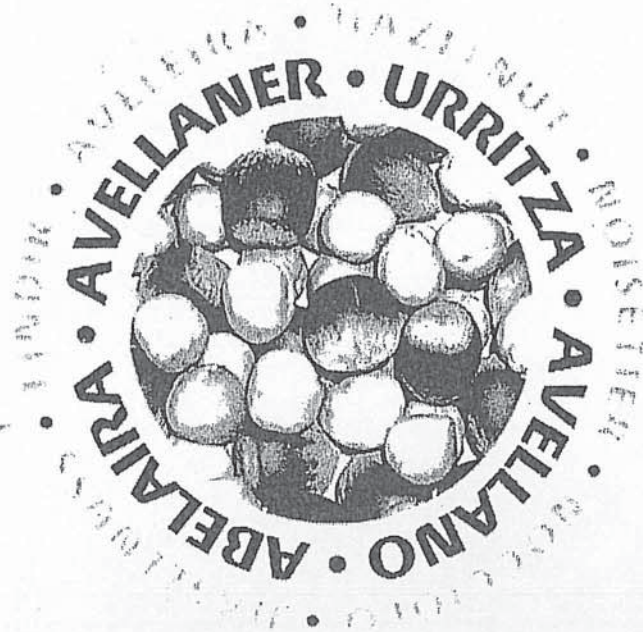


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NUTRITIONAL VALUE AND FATTY ACID COMPOSITION OF HAZELNUT VARIETIES HARVESTED IN PORTUGAL

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Nuts are an important part of the Mediterranean diet, which is regarded as healthy. There is a growing interest in evaluating the nut's role in a heart-healthy diet and several studies have been carried out supporting a role for nuts in reducing coronary heart disease risk. In fact, although total fat intake is certainly related to health risks, there is general agreement that the most important issue is the type of fatty acids which are consumed.

Hazelnuts are consumed as a fruit, as an ingredient in confectionery products and as raw materials for the pastry and chocolate industry. Nineteen hazelnut cultivars from the same orchard in Vila Real, Portugal, were studied. Chemical composition, including moisture, total oil content, crude protein, ash and carbohydrates and nutritional value were evaluated. Fatty acid composition was determined by gas-liquid chromatography coupled to a flame ionization detector. Total oil content ranged from 59.3 % in cv. 'Merveille de Bollwiller' and 69.0 % in cv. 'Negret'. Seventeen different fatty acids were identified and quantified. Mono-unsaturated fatty acids were the predominant group, with oleic acid being the major fatty acid in all cultivars, ranging from 76.71 % in cv. 'Gunsbert' to 82.81 % in cv. 'Campanica'. Hazelnuts present a favourable lipid profile that may possibly explain the attributed health benefits.