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**Antioxidant activity of plant extracts containing phenolic compounds**

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**Abstract**

The antioxidative activity of a total of 92 phenolic extracts from edible and nonedible plant materials (berries, fruits, vegetables, herbs, cereals, tree materials, plant sprouts, and seeds) was examined by autoxidation of methyl linoleate. The content of total phenolics in the extracts was determined spectrometrically according to the Folin-Ciocalteu procedure and calculated as gallic acid equivalents (GAE). Among edible plant materials, remarkable high antioxidant activity and high total phenolic content (GAE > 20 mg/g) were found in berries, especially aronia and crowberry. Apple extracts (two varieties) showed also strong antioxidant activity even though the total phenolic contents were low (GAE < 12.1 mg/g). Among nonedible plant materials, high activities were found in tree materials, especially in willow bark, spruce needles, pine bark and cork, and birch phloem, and in some medicinal plants including heather, bog-rosemary, willow herb, and meadowsweet. In addition, potato peel and beetroot peel extracts showed strong antioxidant effects. To utilize these significant sources of natural antioxidants, further characterization of the phenolic composition is needed.