Written by W.J.Pais

Walnuts are rounded, single-seeded <u>stone fruits</u> of the walnut tree commonly used for the meat after fully ripening. Following full ripening, the removal of the husk reveals the wrinkly walnut shell, which is usually commercially found in two segments (three segment shells can also form). During the ripening process the husk will become brittle and the shell hard and encloses the kernel or meat, which is usually made up of two halves separated by a partition. The seed kernels — commonly available as shelled walnuts — are enclosed in a brown seed coat which contains antioxidants. The antioxidants protect the oil-rich seed from atmospheric oxygen thereby preventing rancidity

The two most common major species of walnuts are grown for their seeds — the Persian or English Walnut and the Black Walnut. The English Walnut (*J. regia*) originated in Persia, and the Black Walnut (*J. nigra*) is native to eastern North America. The Black walnut is of high flavor, but due to its hard shell and poor hulling characteristics it is not grown commercially for nut production. The commercially produced walnut varieties are nearly all hybrids of the English walnut.

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Other species include <u>J. californica</u>, the California Black Walnut (often used as a root stock for commercial breeding of J. regia), J. cinerea (butternuts), and J. major, the Arizona Walnut.

Walnuts are late to grow leaves, typically not until more than halfway through the spring. They also secrete chemicals into the soil to prevent competing vegetation from growing. Because of this, flowers or vegetable gardens should not be planted too close to them.

Walnuts, like other tree nuts, must be processed and stored properly. Poor storage makes walnuts susceptible to insect and fungal mold infestations; the latter produces <u>aflatoxin</u>—a potent carcinogen. A mold infested walnut batch should not be screened and then consumed;

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the entire batch should be discarded

Walnut meats are available in two forms; in their shells or shelled. The meats can be as large as halves or any smaller portions that may happen during processing, candied or as an ingredient in other foodstuffs. Pickled walnuts that are the whole fruit can be savory or sweet depending on the preserving solution. All walnuts can be eaten on their own (raw, toasted or pickled) or as part of a mix such as <u>museli</u>, or as an ingredient of a <u>dish</u>.

Walnut Whip, coffee and walnut cake and pickled walnuts are three disparate examples.

Walnut oilis available commercially and is used chiefly used as a food ingredient particularlyinsalad dressings. It has a lowsmoke pointsmoke point, which limits its use forfryin

Black walnut has been promoted as a potential cancer cure, on the basis it kills a "parasite" responsible for the disease. However, according to the <u>American Cancer</u> <u>Society</u>,

"available scientific evidence does not support claims that hulls from black walnuts remove parasites from the intestinal tract or that they are effective in treating cancer or any other disease"