## Cacao Profile

#### Also known as

Theobroma cacao, Cocoa beans, Cocoa pods, and Cacao.

## Introduction

Is chocolate good for you? Numerous studies have suggested that the guilty pleasures of chocolate may not be quite so guilty after all. Cacao beans and nibs, the raw materials for making chocolate, are high in flavonoids, contain more antioxidants than most fruits and appear to lower cholesterol in people with high cholesterol. In fact, the whole cacao fruit was used medicinally among the Maya, Olmec and Aztecs, and was spread from there to Europe after the Spanish conquest of those peoples. From the 16th through the 20th centuries, medical texts reported no less than 100 medicinal uses of cacao. Most commonly, the uses were to encourage weight gain, stimulate appetite, stimulate the nervous system and improve digestion and elimination. Of course, we know cacao as the source of chocolate, the decadently delicious, luxurious guilty pleasure. There are, however, some very good reasons that chocolate is a worldwide favorite food and flavoring, and scientists are discovering more of them every day. Among their discoveries: - Dark chocolate, which contains more cacao and less fats and sugars, can positively benefit the cholesterol profile - Cacao provides the same amount of antioxidant polyphenols as a glass of red wine - Cacao beans are rich in magnesium, calcium, iron, zinc, copper, manganese and potassium. They are also a good source of vitamins A, B1, B2, B3, C, E and pantothenic acid

# Constituents

Caffeine, flavonoids, phenylethylalamine, anandamide, magnesium, sulfur, oleic acid, theobromine, tryptophan, Cacao beans and nibs contain more flavonoid antioxidants than most other vegetables and fruits \* up to four times as much concentrated antioxidants as green tea. Cacao stimulates the production of serotonin and endorphins, and contains phenylethylalamine and anandamide, two chemicals that elevate the mood and help increase focus.

#### Parts Used

Beans, either whole or broken into nibs

#### **Typical Preparations**

Eaten raw-as is, or roasted, brewed, and powdered into tea. Used abundantly in food and other consumables. Sometimes found in extract form.

#### Summary

Cacao beans and nibs contain a number of constituents that have been proven beneficial healthwise, but it?s worth noting that many of these constituents are destroyed or lessened by processing. Health practitioners recommend that anyone interested in eating cacao for its health benefits use raw, unprocessed cacao beans and nibs rather than processed chocolate.

## Precautions

Anyone with a sensitivity to chocolate should avoid eating cacao beans or nibs. The active polyphenols and other substances in cacao can trigger migraines and cause other allergic reactions in sensitive people.

Botanical: Theobroma cacao (LINN.) Family: N.O. Sterculiaceae

- Description and History
- <u>Constituents</u>
- Medicinal Action and Uses
- Dosage

---Synonyms---Cocoa. Chocolate Tree.

---Part Used----The seeds.

---Habitat---Topical America. Cultivated in Ceylon. Java. etc.

---Description and History---Cacao was named *Theobroma* by Linnaeus, the word meaning 'food of the gods,' so called from the goodness of its seeds. Mexicans named the pounded seeds 'Chocolate.' The tree is handsome, 12 to 16 feet high; trunk about 5 feet long; wood light and white coloured; bark brown; leaves lanceolate, bright green, entire; flowers small reddish, almost odourless; fruit yellowy red, smooth; rind fleshcoloured; pulp white; when seeds are ripe they rattle in the capsule when shaken; each capsule contains about twenty-five seeds; if separated from the capsule they soon become infertile, but if kept therein they retain their fertility for a long time. The tree bears its leaves, flowers and fruit (like the orange tree) all the year round, but the usual season for gathering the fruit is June and December. In Mexico during the time of the Aztec kings the small seeds were utilized as coins twelve approximating to the value of 1*d*., the smallest actual coin in use then being worth about 6*d*. The seeds were necessary for small transactions. The method is still in use in some parts of Mexico. The tree is generally cultivated on large estates under the shade of other trees, such as the banana and develops the pods continuously. When ripe they are cut open and the beans or nuts surrounded by their sweetish acid pulp are allowed to ferment so that they may be more easily separated from the shell. The beans are then usually dried in the sun, though sometimes in a steam drying shed.

---Constituents---The seeds contain about 2 per cent. of theobromine and 40 to 60 per cent of solid fat. The shells contain about 1 per cent of theobromine, together with mucilage, etc.

---Medicinal Action and Uses---Cocoa is prepared by grinding the beans into a paste between hot rollers and mixing it with sugar and starch, part of the fat being removed. Chocolate is prepared in much the same way, but the fat is retained. Oil of Theobroma or cacao butter is a yellowish white solid, with an odour resembling that of cocoa, taste bland and agreeable; generally extracted by expression. It is used as an ingredient in cosmetic ointments and in pharmacy for coating pills and preparing suppositories. It has excellent emollient properties and is used to soften and protect chapped hands and lips. Theobromine, the alkaloid contained in the beans, resembles caffeine in its action, but its effect on the central nervous system is less powerful. Its action on muscle, the kidneys and the heart is more pronounced. It is used principally for its diuretic effect due to stimulation of the renal epithelium; it is especially useful when there is an accumulation of fluid in the body resulting from cardiac failure, when it is often given with digitalis to relieve dilatation. It is also employed in high blood pressure as it dilates the blood-vessels. It is best administered in powders or cachets.

---Dosage---Theobromine, 5 to 10 grains.