

Cacao

The Powerhouse

Indigenous to Central and South America, the cacao tree is the commonly called “chocolate tree,” and is now grown in tropical climates worldwide. Without cacao beans, which are the seeds of the cacao fruit, there is no chocolate. The wide range of associations with chocolate goes back to the cacao bean itself. The universal love of chocolate, for example, is well founded in its remarkable properties. Consider that the cacao tree’s scientific name *Theobroma cacao* literally means “the food of the gods.” This gives an idea why the cacao bean is known as the most revered food in all the rainforest. It has a biochemical and pharmacological complexity unmatched by any other food source in the jungle. Ancient Central American cultures, most notably the Aztecs, used raw cacao beans as a form of money. It was often consumed in the form of a foamy drink containing corn, achiote, ground zapote seeds, chiles, vanilla beans, anise seeds, and almonds.

Cacao is now recognized as a superfood in its own right. It is a powerhouse of nutrients, ranging from carbohydrates (at 40%), protein (average 14%), free amino acids, fats (about 1/3 fats – help provide stamina) and fatty acids (extracted as cocoa butter), bioflavonoids, minerals (2-4%), to a variety of compounds with well-known pleasant, enhancing pharmacological properties. Regarding minerals, it is high in sulfur, magnesium, and calcium. In fact, cacao is considered to be one of the higher absorbable sources of magnesium (at .5%) in all of nature. Magnesium is a mineral that has important functions throughout the body, supporting both the heart and brain, both muscles and bones. Magnesium’s soothing effect in menstruation is thought to be one reason why women crave chocolate at certain times. Cacao is also surprisingly rich in the antioxidant bioflavonoids, at the high level of 10%. Studies have shown it to have higher levels of polyphenol flavonoids than either red wine or green tea. In the ORAC scale used to measure the antioxidant levels of fruits and vegetables, cacao came out very high. It is considered, in fact, to be one of the richest sources of antioxidants of any food. Flavonoid properties include improvement of microcirculation and the flexibility of blood vessels, helping in collagen and connective tissue formation, and being anti-inflammatory and antimicrobial. The antioxidants in cacao have been shown to reduce LDL (“bad cholesterol”) oxidation.

The pharmacology of cacao is extraordinary. Chocolate is of course well-known for its mood enhancing, mildly stimulating properties, being associated with romance and love, feelings of well-being, pleasure, and bliss. A few of the substances identified in it that produce these effects are: anandamide, arginine, dopamine, histamine, serotonin, tryptophan, phenethylamine, and theobromine. A number of these biochemicals—anandamide, dopamine, histamine, serotonin—are neurotransmitters, one of which, anandamide, is known as the “bliss chemical.” Phenethylamine is a precursor to neurotransmitters that control attention, alertness, and that elevated feeling of well-being. Tryptophan, an amino acid, is another of cacao’s mood-enhancing components, being important in the production of serotonin, considered our primary neurotransmitter, in addition to others, such as melatonin, which is beneficial for sleep. Chocolate is known for its anti-depressant effect because of its high levels of natural serotonin, dopamine, and phenethylamine. The natural aphrodisiac property of chocolate has its source in cacao’s amino acid arginine.

Cacao is of course the base of all chocolate products and chocolate desserts, and is used in hot cocoa drinks, coffee drinks, and liquors. Cacao beans, chopped as nibs, are now available as a product with many uses. Cacao nibs provide nutrient concentration and are now used in a wide variety of natural treats, desserts, teas, and beverages. They can be ground up and used in smoothies. Used appropriately, cacao is a restorative to the body. A little bit goes a long way. Cacao nibs are used in our **Cacao Berry Clarity** chocolates, and we use cacao butter in many of our recipes. Available are raw, grade #1, shelled, Sun-dried Criollo cacao “nibs,” certified organically grown from either Peru or Venezuela.