

Best Sources of Theobromine



Brewed Cocoa

(pictured above) brewed cocoa is a coffee alternative that is made from ground cacao beans and brewed like coffee). A few brands are Crio Bru and Choffy, For many, it helps with alertness and focus without the jittery effects and sleep disturbances of coffee.

Unsweetened Cocoa Powder

Baking Chocolate

Dark Chocolate

Brewed Black Tea

Theobromine

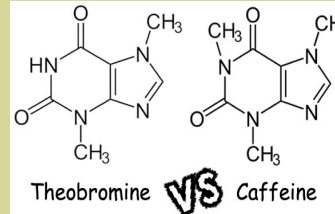
What is it? A phytonutrient and bitter alkaloid. Despite its name, the compound contains no bromine—*theobromine* is derived from *Theobroma*, the name of the genus of the cacao tree, (which itself is made up of the Greek roots *theo* ("God") and *broma* ("food"), meaning "food of the gods")^[3] with the suffix *-ine* given to alkaloids and other basic nitrogen-containing compounds

Where is it? It's found primarily in cacao (chocolate.) It is found in lesser amounts in tea leaves, guarana berries, yerba mate, and kola nuts. Darker chocolate forms and cocoa powder and beans contain more. A 1 oz sample of milk chocolate may contain roughly 60 mg whereas the same amount of dark chocolate may contain 200 mg. The more concentrated the form of the chocolate with fewer added ingredients (milk, sugar, preservatives, etc. will be a better choice and contain higher amounts)

Why it's worth seeking out? Theobromine has some of the positive effects associated with caffeine without the strong central nervous system effect many seek to avoid. It can be stimulating without effecting sleep patterns. Theobromine relaxes smooth muscles and acts a vasodilator (relaxes and widens blood vessels).

An Urban Myth

Likely you have heard that chocolate contains caffeine. It does not. Theobromine and caffeine are chemically very similar though. The only difference is that theobromine trades one methyl group for a hydrogen atom. This also explains why the effects are similar. (Clegg)



Sources:

- Clegg, Brian (2014) Chemistry in It's Element: Theobromine, *Royal Society of Chemistry*. Retrieved from: <http://www.rsc.org/chemistryworld/podcast/CIIEcompounds/transcripts/theobromine.asp>
- Wikipedia (2014) Theobromine, *Wikipedia*. Retrieved from: <http://en.wikipedia.org/wiki/Theobromine>
- Murray, M. (2005) *The Encyclopedia of Healing Foods*. New York: Atria Books
- SELF: Nutrition Data (2014). Foods Highest in Theobromine. *SELF*. Retrieved from: <http://nutritiondata.self.com/foods-00013200000000000000-1.html>

Not for your best friend!

Theobromine is the compound found in chocolate that makes chocolate poisonous for dogs. Unlike us, their bodies cannot digest it adequately. Chocolate, in any form, should never be given to a dog (and many other animals as well.)



Therapeutic Uses and Effects

Heart & Circulatory System
Lowers blood pressure and reduces edema

Respiratory System
Relaxes bronchial tubes to aid in asthma relief
Reduces coughing

Central Nervous System
Gentle stimulant

Although there are some pharmaceuticals under development that use theobromine to treat some of the above ailments, there is no recommendation at this time to isolate theobromine from food and use it as a supplement. In high doses, it can have some detrimental effects.

For those who tolerate it well, the amount afforded in whole foods is plenty to provide beneficial health effects.

Consuming chocolate provides more benefits than those that come just from theobromine. Cacao also packs a punch of other phytonutrients, antioxidants and plant sterols that have positive effects on cardiovascular health in particular. (Murray, 2005)

Prepared by Kirsten Serrano
Small Wonder Nutrition
smallwonder@tds.net