

HEALTH BY CHOCOLATE

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It's been several months since most of us made our 2009 resolutions to be healthier and integrate more superfoods into our diet. Some of us probably even declared cutting back on chocolate for nutritious reasons; but did you know that chocolate is actually beneficial? Raw cacao (pronounced Ka-cow) boasts the hearthealthy, feel-good benefits of dark chocolate, but with an even higher concentration of antioxidants. The Aztecs thought it gave their warriors strength. Early doctors used to prescribe it to cure ailments. Throughout history, chocolate has been revered more for its medicinal qualities than its delightful taste.

For centuries, chocolate was not eaten in the bar form as we know today, but consumed as a drink. To the Mayans, Aztecs and early Europeans, this frothy brew made from the cacao bean was a phenomenon of nature. These early chocolate-lovers were likely impressed by chocolate because of its mild stimulant value — it made



them feel awake, alert and strong. Chocolate quickly gained a reputation as food vital for health. "Chocolate nourishes and preserves health entire, yet causes a pleasant and natural sleep and rest," wrote Dr. William Hughes, an English physician in 1672. "Drunk twice a day, a man may very well subsist therewith, not taking anything else at all." One of the oldest super centenarians Jeanne Calment (1875-1997) was passionately fond of her chocolate. Jeanne habitually ate two pounds of chocolate per week until her physician recommended her to give up sweets at the age of 119; three years before her death at 122 years young.

The kinds of antioxidants found in chocolate are called polyphenols, a large group of molecules found in fruits and vegetables like oranges, soybeans and berries. Consider this: More than 10 percent of the weight of the dry raw cacao beans consists of polyphenols alone. In fact, ounce for ounce, dark chocolate and cacao have more antioxidants than foods like blueberries, green tea and red wine. "Scientists are rediscovering what ancient Mesoamericans knew centuries ago," said Dr. Steven E. Warren regarding his new healthy Xocai™ chocolate bar. "Chocolate can be very good for you. It may have been cultivated for over two thousand years, but in the last five years science has finally begun to discover the actual health benefits of cocoa. Research is just beginning and is especially promising in the area of phytonutrients, polyphenols, and flavonoids."

Researchers at UC Davis have found that dark chocolate contained a number of flavonoids, compounds which retard the oxidation of fats preventing low density lipoproteins (LDL) from creating plaque and clogging arteries. Romina di Giuseppe from the Laboratory of Genetic and Environmental Epidemiology at Catholic University in Campobasso, Italy and colleagues evaluated the anti-inflammatory properties of dark chocolate in a group of 5.000 study participants in generally good health. Researchers collected the subjects' dietary habits via food surveys and measured serum levels of C-reactive protein (CRP), a blood marker of inflammation. The team determined that CRP levels were 17% lower in the study subjects who consumed dark chocolate as compared to those who did not consume any at all. The findings suggest that regular consumption of small doses of dark chocolate may reduce inflammation according to the team. These reductions in CRP translate into a 33 percent risk reduction of cardiovascular

disease in women and a 26 percent risk reduction for men.

A sign of chocolate's growing reputation occurred when Swedish naturalist Carolus Linnaeus named the cacao tree *Theobroma*, which means "food of the gods" in 1753 when he published his taxonomic binomial system, officially naming all the plants. Surprised? Many people are because they forget that chocolate is a plant-based food.

In Hawai'i, you can find the cacao pods at farmers markets, grocery stores and growing wild on the cacao tree. What makes this tree unique is that the pods are attached directly to the trunk. The pods have a yellow-orange shell with irregular ridges and contain about 40 to 50 beans in a mucilage pulp that looks and tastes nothing like chocolate.

There is only one chocolate company that grows, harvests, processes and packages the chocolate right here in Hawai'i—The Original Hawaiian Chocolate Factory in Kailua-Kona. Owners Bob and Pam Cooper inform customers not to be misled by other chocolate distributors who claim to be made with Hawaiian cacao when the beans were actually imported here from foreign countries; or labeling the chocolate products "Made in Hawaii" when it is just processed or packaged here. They are serious cacao farmers, busy getting legislation in place that will both protect the name "Hawaiian Chocolate" and prevent the possible diseases and insects that could attack all Hawai'i's crops. The goal is to achieve what the Kona Coffee farmers finally did in protecting the name and the product, which established that the name guarantees quality coffee grown only in Kona.

Much like wine production, high quality chocolate depends on a number of factors: the quality and degree of acidity of the beans, the proper fermentation, the manufacturer's proprietary blend of beans, and the roasting and refining process. And The Original Hawaiian Chocolate Factory does it right! It's better to opt for higher quality where the cocoa solids are higher (60%) and the sugar content is lower—this will have the added bonus of controlling your blood sugar.

Yes, you read this correctly--chocolate in itself isn't bad for your diet, unless, of course, you're going through a family-sized bar every day. It actually triggers the release of your brain's pleasure chemicals known as endorphins, which will improve your mood and strengthen your immunity. Endorphins probably contribute



to the warm inner glow induced in susceptible chocoholics. This sensation explains why chocolate gifts are a great way to bring joy to a loved one. Each cacao bean contains up to two percent phenylethylamine, the "love & sex" chemical, as well as neurotransmitters and other compounds that enhance mood, joy, creativity and imagination. Due to chocolate's luscious flavor and pleasurable effect, it is adequately added to the list of aphrodisiacs properly named after the Greek goddess of love, Aphrodite.

Pure raw chocolate is still used in places like the jungles of the Yucatan Peninsula for celebrations, medicine and worship. Unfortunately, not all chocolate is created equal. Most candy bars and chocolate foods commonly found in grocery stores are not of the beneficial kind; these typically are high in refined (white) sugar, milk fats, and hydrogenated oils—ingredients that replace the truly healthful nutrients found in cacao.

Learn more at The Original Hawaiian Chocolate Factory (808) 322-2626 or www.originalhawaiianchocolatefactory.com.

Chocolate Facts:

- Cacao beans were used as a major currency in pre-Columbian Mesoamerican civilizations and used instead of small coins as late as the 1840s in the Yucatán.
- Chocolate was prescribed for medicinal purposes by early doctors.
- Like wine, chocolate reflects the flavors of the region in which it is grown.
- Around 50 million people globally depend on cocoa as a source of livelihood, according to the World Cocoa Foundation.
- · Cacao trees cannot tolerate temperatures below 59° Fahrenheit.
- Americans cat an average of about 12 pounds of chocolate per person per year well behind Switzerland who averages around 22 lbs per person per year.
- Hawaii is the only state in America that grows cacao beans commercially.