

**It Doesn't Take
A Strawberry To
Make It Healthy:**



The Story of Chocolate

We both know, Chocolate is not good for you – but maybe, just maybe, nobody really told you the truth. . .

Healthy Chocolate. Are You Serious?

So when you make hot chocolate on the stove, you heat up the milk, add some **cocoa** and some sugar. Then you pour it into a mug and take a seat next to the fireplace. Yummy.



Those are the basic ingredients in the chocolate we eat. I'm sure you don't consider hot **chocolate** to be healthy – but it sure is good.

If you substituted fat-free milk and Splenda®, would you consider your hot chocolate to be healthy or just “not so bad for you”?

That's what we're going to explore... can chocolate be healthy? Or is it already?

LET'S START WITH THE INGREDIENTS OF OUR FAVORITE CHOCOLATE THINGS...

In a typical Hersheys® Chocolate candy bar, you're eating:

sugar, cocoa butter, alkali, milkfat, soy, vanillin, artificial flavors and milk.



In chocolate cake:
sugar, flour, salt, butter, milk, eggs, and vanilla.

**But this isn't chocolate – these are
desserts.**

If you take out the sugar, the butter, the milkfat, the soy, the eggs, the flour and the milk – you're left with cocoa.

COCOA is real, healthy chocolate.

That's what we need to concentrate on.
Cocoa is fantastic for you, and as you know, it can taste heavenly.

GUESS WHAT?

Have you ever eaten **CELERY** for an entire week just because you knew you could?



I bet you haven't – where's the fun in that?

But would you do it if we replaced the word **CELERY** with **CHOCOLATE**?

Guess what would happen after that? The rice cake people would go out of business.

Salad would become a novelty item.

Hummus would just be a funny word.

And tofu . . . well that's always going to be weird.

SO WHAT'S GOOD ABOUT COCOA?

You may be surprised to learn that cocoa **is actually a FRUIT** - and even more surprised to learn that it is actually one of the healthiest fruits commonly eaten by man!

Cornell University food scientists discovered that cocoa powder has nearly **twice the antioxidants of red wine**, and up to three times the antioxidants found in green tea.

Cocoa was valued as a means to **heal colds and coughing attacks**, enhance mental acuity, fight inflammation, and improve overall nutrition.

Recent research studies have shown a link between cocoa and **cardiovascular health**, with reduced risk of blood clots, strokes, and heart attacks.

While **cocoa** was a celebrated and valued part of ancient Mesoamerican society, ancient records have also revealed more than 150 uses of cocoa for **medicinal purposes**.

Cocoa differs from tea and coffee in that it is rich in nutritious food, and having in it no tannin or other deleterious elements, its theobromine, or characteristic property, being connected with albumen – a muscle-making element.

Cocoa products were valuable as respiratory excitants. Ads in the late 1800's touted cocoa's **benefits for patients with asthma**, bronchial, and lung trouble.

Cocoa powder is rich in the polyphenols, mainly flavonoids. Cocoa is from the plant Theobroma cacao.

Even though we are taught that saturated fats are harmful to the cardiovascular system, the saturated stearic acid fat from the cocoa bean **does not elevate blood cholesterol** like other saturated fatty acids.

The cocoa bean also contains some insoluble and soluble fiber, which contributed to lower cholesterol levels.

Dark chocolate **contains magnesium, potassium and copper.**

Cocoa is loaded with a variety of phyto-nutrients like Resveratrol, making it very high in antioxidants. Pound-for-pound, dark chocolate has the highest concentration of these flavonoids of any food—even more than acai or blueberries.

Cocoa rates as one of the **highest whole foods on the ORAC scale**—even higher than green tea, acai, blueberry and red wine, which have all been shown to be very effective antioxidants.

If you now understand that **cocoa** is an amazingly healthy food, why did we screw it up?

Post-Industrial Chocolate: From Good to Bad

With the coming of the Industrial Revolution, chocolate manufacturers found themselves in regional and global competition for consumers.

At the same time that chocolate was being served in liquid form as a medicine for the sick, it was also being produced with added fats and sugars as a cheap **candy**.

The mid- to late-1800s saw the creation of a tremendous market for **chocolate penny candy**, as well as for fancy boxed chocolates that have since become synonymous with love and courtship.

By the 1950s, chocolate had completely lost its association with health and healing. Many of today's most famous chocolate companies got their start during the Great Depression.



“Chocolate candy was cheap to make and cheap to sell.”

**CONCLUSION: THE GREAT DEPRESSION
KILLED MEDICINAL CHOCOLATE!**

I'm sure you were young once and 'snuck' some **baking chocolate** from the cupboard AND got a big surprise.

Bitter

Bitter

Bitter

Cocoa IS BITTER.



So how do we turn bitter, and super healthy **cocoa into a tasty food?**

Let's Start With The Cocoa Bean

Strictly speaking, cocoa or cacao is a **nut**, the seed of a fruit, but is most commonly called **cocoa beans**, cocoa seeds, cocoa nuts, chocolate seeds, or chocolate beans. Commercial cocoa growers and processors refer to the dried cocoa beans as **cocoa nibs**. The term **cacao** often refers to the beans before they are fermented and dried.

The cocoa pods take five to six months to ripen. In the typical cocoa plantation, the growers harvest the pods from the cocoa tree at the time of perfect ripeness, then remove the cocoa beans from the pods (about 45 beans per pod) by cutting the pods open with a machete knife.

The beans are then covered with banana leaves and left for about five days to ferment, which reduces the bitterness and develops an enhanced chocolate flavor. When they have reached the proper level of fermentation, the beans are then left to dry in the sun, where the brown color and the chocolate flavor intensifies. Then the now-finished **cocoa beans** are shipped to the cocoa buyers and processors.



From Cocoa Bean to Cocoa Liquor

Chocolate is manufactured from **cocoa mass**, the base product produced by processing the cocoa/cacao beans or nibs by fermenting and then roasting them to produce a liquid called **chocolate liquor**, which is very "thick" or viscous.

You might expect the cocoa mass to be solid or a kind of powder, but it is a thick liquid or paste because cacao beans are nuts, and all nuts contain fat - in this case the fat known as cocoa butter, which has a very high viscosity at room temperature, like soft butter made from dairy cream.



What Can We Make From Cocoa Liquor?

The chocolate liquor can be molded and hardened into the bitter chocolate known as unsweetened **baking chocolate**. Most people would not like to eat this chocolate because it is quite bitter in taste. Those who acquire a taste for it are able to eat this kind of sugar-free dark chocolate which is more healthy than other forms of chocolate.

The chocolate liquor can also be machine pressed under great pressure to squeeze out most of the the fats known as **cocoa butter** and leave a flattened dry material called **cocoa cake**, also known as "cocoa solids". This cocoa cake can then be broken up or finely ground to produce a natural and unsweetened **cocoa powder**, which is used by chocolate manufacturers.



From Cocoa Powder to Edible Chocolate

To make a edible, tasty **chocolate** from the cocoa powder, a chocolate manufacturer will add some cocoa butter (the natural fat from the cocoa fruit) and some kind of sugar, usually refined white cane sugar. If you stop there, the result is a dark chocolate. If you add milk and dairy products, you get creamy milk chocolate. Chemicals, additives, stiffeners and fillers create a chocolate candy. And you already know the ingredients of cake, chocolate bars and hot chocolate.

But don't expect that eating ANY type of chocolate bar or chocolate candy is going to be good for your health

“CHOOSING THE RIGHT KIND OF

CHOCOLATE will provide many health benefits that make it not only "good for you" but **better for your body than most of the fruits and vegetables** your mother made you eat when you were a child.”

In general, the **healthiest kinds** of chocolates are determined by how it is grown, handled, and processed:

1. **raw, organic** (or non-organic if you can't find organic), unprocessed, unroasted cacao beans (called "nibs") or cocoa mass;
2. organic and **unroasted** cocoa powder not treated with alkalis;
3. organic dark chocolate with the highest percentage of cocoa liquor or **cocoa powder** and the lowest percentage of refined sugar (bitter or semi-sweet dark chocolate).
4. Unsweetened and dairy-free chocolate.

SO WHAT MAKES HEALTHY CHOCOLATE HEALTHY?

The truth is that cocoa is a complex food. There are over **300 different NUTRIENT** components found in **cocoa**.

- ⇒ **!! Resveratrol** (a super antioxidant!)
- ⇒ **Anandamide** (a neurotransmitter known as "the bliss chemical")
- ⇒ **Arginine** (nature's aphrodisiac)
- ⇒ **Dopamine** (a neurotransmitter)
- ⇒ **Epicatechins** (antiaging / anti-inflammatory properties)
- ⇒ **!! Magnesium** (for healthy heart function)
- ⇒ **!! Serotonin** (anti-stress neurotransmitter)
- ⇒ **!! Tryptophan** (anti-depressant amino acid)
- ⇒ **Phenylethylamine** (PEA) (controls the ability to focus attention and stay alert)
- ⇒ **Polyphenols** (a large class of compounds providing the antioxidant and anti-inflammatory benefits of fruits and veggies)
- ⇒ **Histamine**
- ⇒ **Tyramine**
- ⇒ **Salsolinol**
- ⇒ **!! Theobromine**
- ⇒ **!! Copper**
- ⇒ **MAO inhibitors** –
- ⇒ Allow serotonin and
- ⇒ other
- ⇒ neurotransmitters to
- ⇒ circulate in the
- ⇒ **Cocoa butter** (a neutral fat consisting of oleic, stearic, and palmitic fatty acids)
- ⇒ **Minerals** (potassium, iron, zinc, and calcium)
- ⇒ **Sulfur** (helps build strong nails and hair, promotes healthy and beautiful skin, helps detoxify the liver, and supports healthy functioning of the pancreas)
- ⇒ **Flavanols** (help make blood platelets less likely to stick together and cause blood clots, heart attacks, and strokes.)



21 Ways Chocolate Helps The Body

This information was gleaned from a report released this year entitled 'Healthy Chocolate Science Update 2009,' written by Dr. Steven Warren.

Regular, healthy consumption of cocoa's nutrients will. . .

- **Increase HDL** (good) cholesterol by 9 percent, and reduce LDL (bad) cholesterol by 6 percent, within two week!
- Helps blood vessels dilate, thus increases blood flow to heart
- Within four weeks can **reduce** both diastolic and systolic **blood pressure** readings by 8.2 percent
- Improves body's ability to use insulin, and restricts insulin resistance that leads to diabetes
- Lowers risk of diabetes
- Repairs cells in the liver, especially following long-term alcohol abuse
- Improves **mental acuity** and memory
- Reduces cardiovascular mortality rate
- **Protects heart muscles** following heart attacks
- Improves pancreatic functions

- Greatly increases antioxidants in the body, compounds that neutralize free radicals that many doctors now are suspecting as a cause of cancer and some heart diseases
- Decreases the risk of dementia, stroke, and other vascular cognitive impairment
- Blocks the production of lipoxygenase, a contributor to asthma
- **Fights depression** and elevate moods
- Because flavonols in cocoa generate increased production of the protein adiponectin, which regulates blood sugar and breaks down fat, threats of diabetes, obesity, atherosclerosis, and nonalcoholic fatty liver disease are decreased
- Reduces dental cavities, plaque, and gum disease
- Suppression of toxic effects caused by dioxins (environmental poisons)
- Substantially increases a person's **energy level**, since it contains two stimulating *methylxanthines* - a significant amount of *theobromine* and a small amount of *caffeine*.
- The flavanols in cocoa make blood platelets less likely to stick together and cause blood clots.
- Dark chocolate can help you **lose weight!** Because it has appetite-suppressant properties, cocoa is often added to weight loss products to help control hunger.
- Cocoa flavanols positively influence the immune system and decrease inflammation, promoting healing in the body



AND THAT'S JUST THE TIP OF THE ICEBERG. . . .

This fun report about chocolate is provided free for your enjoyment courtesy of
<http://Benefits-Of-Resveratrol.com>

The Truth About Dark Chocolate, Dutch Chocolate, Milk Chocolate, White Chocolate and the Healthiest Chocolate!

Dark Chocolate – The Good Stuff

Dark chocolate contains the three elements of cacao liquor or cocoa mass (cocoa cake), cocoa butter, and sugar. A bittersweet dark chocolate bar contains about 70% chocolate liquor*; while a semisweet dark chocolate contains about 60%. A dark chocolate can be "bittersweet" or "semisweet" or "sweetened", depending on how much sugar is added to the cocoa powder and cocoa butter.



Next to raw and unprocessed organic cocoa, organic dark chocolate is the healthiest form of chocolate - especially when it contains more of the nutritious cocoa mass and less of the fattening cocoa butter and sugar.

The dark chocolate is "healthier" when it is unsweetened or bittersweet dark chocolate. Any sweetened dark chocolate is a little less "healthy" when it is sweetened with refined white sugar (sucrose) instead of raw cane sugar or dehydrated cane juice.

*(*Note: that this chocolate or cocoa "liquor" does NOT refer to alcohol, but is a term used by cocoa processors to describe the viscous liquid made from roasted cacao beans.)*

Milk Chocolate

Milk chocolate contains the same ingredients of cocoa mass, cocoa butter and sugar as dark chocolate, but to these three are added milk solids and milk fats. Milk chocolate will typically contain about 20% milk fat - which does not make milk chocolate a "healthy" chocolate choice. Aside from adding extra fat, dairy products also inhibit the body's absorption of the powerful antioxidants naturally found in raw cocoa and dark chocolate.



Dutch Chocolate

Cocoa powder usually has a slightly bitter and acidic taste. In the 19th century Dutch chocolate makers learned that they could treat the cocoa powder with alkaline salts to reduce the bitter taste - a process now known as the "Dutching process".

Dutch cocoa provides less antioxidants than natural cocoa because the alkali process destroys some of the *flavanols* (the powerful antioxidants found in cocoa). You can tell a cocoa or chocolate is Dutch Chocolate when the label indicates "Dutch process" or "alkali added" or "European style".

White Chocolate



Remember, so-called "white chocolate" is not really a "chocolate" - and certainly not a "healthy chocolate". It is "white" because it does NOT contain any of the dark brown cocoa powder found in dark chocolate and milk chocolate, and provides none of the healthy *nutrients*.

White chocolate should be considered a high-sugar and high-fat candy - not a health food. And it does not really deserve the name of "chocolate" at all. It doesn't even taste like cocoa or chocolate! "Cocoa butter candy" would be a more accurate name than "white chocolate".

Since it does NOT contain real cocoa beans and the many healthy nutrients which are naturally present in the cocoa beans, and since it has a high content of fats from both cocoa butter and milk fat, white chocolate is by far the LEAST healthy choice among the three common types of manufactured chocolate.

The Bottom Line Is: Dark Chocolate is a Great Source of Resveratrol – so don't feel so bad next time you get a chocolate craving. Just make sure you buy the right kind!