

chocolate 101

WHY DO WE CRAVE IT?

There is a definite connection between food and emotions. Chocolate is a food commonly craved. However, science can't pinpoint exactly why we'd brave a snowstorm for a chocolate bar, but never for asparagus.

Obviously, chocolate's appealing taste is a big factor. And while you enjoy your chocolate Easter egg, consider the several other theories behind chocolate cravings.

Caffeine: Chocolate contains caffeine that, with other elements in chocolate, can affect mood. However, its caffeine content alone isn't substantial. An average chocolate bar has 10-20 milligrams of caffeine, while six ounces of coffee can supply as much as 175 mg.

Phenylethylamine (PEA) is a substance in chocolate that occurs naturally in the brain, and may have a role in emotional arousal. Experts suspect it's the PEA in chocolate that causes certain people to crave the treat when they're depressed. The theory is still being researched.

Theobromine, another stimulant in chocolate, may also elevate mood, claim some researchers – but only mildly, say others. This theory also needs more research. Theobromine has similar effects on the body as caffeine; increased heart rate and energy level.

Nutritional deficiencies: When hormones are changing or out of balance, such as insulin or estrogen, cravings are strongest. For example, many women experience food cravings just before menstruation. Some experts suspect people who crave certain foods are trying to correct a chemical or nutritional imbalance. Cocoa is a rich source of magnesium, making some researchers wonder if chocolate bingers could be magnesium-deficient. But devils' advocates point out, if magnesium deficiency is the cause of the craving, why doesn't the body crave other magnesium-rich foods – like wheat germ?

Allergies: Some health experts believe people often crave foods they are allergic or sensitive to. Chocolate, or cocoa, is a common allergen, triggering migraine headaches in some people. Allergic reactions from chocolate can also be caused by its other ingredients; dairy products, nuts, fruits, liquors or other additives, flavorings and preservatives. Those allergic to chocolate



can try substituting with products made from carob (a bean that's caffeine-free) or white chocolate. White chocolate is really not chocolate at all. It's made from sugar, cocoa butter, milk solids and vanilla. It has no caffeine, because it doesn't contain any chocolate liquor – the thick dark paste left after cocoa butter is extracted from the cocoa bean. Unfortunately, white chocolate has the same amount of calories, fat and sugar as brown chocolate.

Anandamide: A recent study found chocolate contains small amounts of anandamide, which is produced naturally in the brain. This chemical activates the same areas in the brain that marijuana does. Combined with other chemicals, like caffeine, anandamide can mimic the effects of marijuana. However, researchers at the Neuro-sciences Institute of San Diego stress the effects are much milder than those caused by marijuana. Researcher Daniele Piomelli says his work doesn't imply chocolate is as stimulating as marijuana: An average-sized adult would have to inject the equivalent of about five pounds of chocolate, at one time, to get the marijuana-like effects.

Carbohydrates: Chocolate treats contain sugar, a simple carbohydrate. Carbohydrates

release serotonin from the brain, a hormone that has a calming effect. This theory seems to make sense because food cravers most often want high-carbohydrate or sugar-rich foods; no one has fantasized about eating unsweetened chocolate.

Psychologically soothing: For many people, chocolate can simply be a comfort food, associated with happy childhood memories. However, using the food as an escape from stress or depression isn't getting to the root of the real problem. If foods like chocolate become a regular coping tool, find other ways to relieve stress or improve your mood. If you can't control the craving, talk about it or get counselling.

There is one other theory about food cravings that has been proven: Getting a hug from your "Easter bunny" is just as mood-lifting as a chocolate egg! ■

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