

[\[back\]](#)

Chocolate lovers take good news on nutrition to heart

By PAUL BONNER, The Herald-Sun

June 28, 2006 7:39 pm

DURHAM -- Let's face it, chocolate is one of those foods that almost everyone loves but feels he should avoid.

It's too fattening, too cholesterol-laden and, most of all, too good for anyone to consume in moderation.

Or so says that angel on your shoulder.

The moderation part will have to be between you and the devil on your other shoulder.

But a Duke University chapter of Sigma Xi, a scientific research society, has been spreading the good news: Chocolate might not be as bad for you as you think and, in some ways, it's beneficial.

Maybe the first Europeans to encounter it among the indigenous people of the New World were right. They dubbed chocolate "the food of the gods," says nutritionist Lisa Richardson.

In a recent talk at Duke's Levine Science Research Center, Richardson told about 100 people how chocolate is harvested commercially and processed from tree to wrapper. She also outlined research on its nutritional properties.

The non-biochemists gamely took in the discussion of flavinols, C18 saturated fatty acids and the like to get to the main event: a Willy Wonka-esque happy hour, with a chance to sample a variety of premium chocolate bars and even chocolate wine and beer.

Not that Richardson is dispassionate about chocolate.

She introduced the crowd to ways of appreciating and describing the subtleties of chocolate. The lexicon of chocolate lovers, it turns out, is every bit as rhapsodic as that of wine tasters.

"Normally, I'm not a big fan of dark chocolate, but this tastes very nutty to me," Esther Tristani said during the tasting.

She nibbled a chunk of "extra-strong dark" Chocolove, a Belgian chocolate with 77 percent cocoa.

"And normally, dark chocolate tastes very bitter to me, but this one tastes very good," she said.

Not everyone was into nuttiness, however -- as when Lynne Hunt tried a bit of Dagoba Organic bittersweet.

"That one says it's bittersweet," she said. "Actually it is kind of bitter to me, and it does have kind of a nutty flavor, so I don't think I'm a big fan of that one."

"I never had the single-origin before," said Sara Schutt, employing another bit of newfound expertise as she

sampled Santander, from Colombia. "I didn't know you could taste the difference. I'm not sure exactly how to describe it. It tastes definitely like coffee. It has that very, very rich, very smoky, kind of roasted, cooked flavor."

The history of chocolate is a tale of love, war and science, Richardson said.

"Chocolate, sugar, coffee and tea is what drove slavery," she said.

Chocolate, along with gold, also was high on Spanish conquistador Hernando Cortez's list of assets to appropriate from the Aztecs.

His host, Montezuma, drank a golden flagon full of "chocolatl" several times a day -- the better, the Aztec king informed the Spaniards, to entertain his harem. Cortez described chocolate's stimulant properties in more soldierly terms.

"A cup of this precious drink permits a man to walk for a whole day without food," he wrote in 1519.

Other claims for chocolate followed.

It is "most excellent, in nourishing and preserving health entire, purging by expectorations, and especially by the sweat-vents of the body, preventing unnatural fumes ascending to the head," William Hughes wrote in 1672.

"[Nowadays] we usually think about fat, right?" Richardson said. "For many years, people thought that chocolate was bad for that reason."

The fat comes from cocoa butter, which is separated from cocoa, the chocolatey part of chocolate, and added back in various amounts. White chocolate is mostly cocoa butter, and milk chocolate contains more of it than dark chocolate.

But even that fat is mostly stearic acid, which also is in waxy compounds such as those in candles and soaps.

In chocolate, it's less likely to raise levels of the "bad" low-density cholesterol than other saturated fats from sources such as dairy butter. And chocolate can raise levels of the "good" high-density cholesterol, Richardson said.

Chocolate also is extremely high in flavinols, a category of antioxidant. Antioxidants block molecules called free radicals, which are implicated in cellular damage.

Theobroma, as the cacao tree is known, is Latin for "food of the gods," Richardson said.

It's an oddity among trees, producing fleshy pods on its trunk and main branches.

"It's that sweet pulp [inside the pods] that first drove critters, then people, to wonder about those hard things in the middle of it," Richardson said.

The hard things, or cacao seeds, must germinate before they are fermented, dried and ground to make cocoa. Until 1847, when the English company Fry & Sons developed the bar we know today, chocolate was only drunk, not eaten.

In 1865, Domingo Ghirardelli accidentally discovered a process for separating cocoa butter. Following Cortez's tradition, Ghirardelli pursued the twin lusts of gold and chocolate, establishing himself in San Francisco in the height of California's gold rush.

His name remains that of a popular brand, as does that of Rudolphe Lindt, who developed a kneading process called conching.

After the lecture, outside in the science center courtyard, people sipped Bison Chocolate Stout and a chocolate wine.

"It just tastes very strong," one of them said.

Be choco-savvy

Here's how to assess a chocolate bar's quality, according to Lisa Richardson, a nutrition consultant with the state Division of Public Health, and www.cocoatree.org:

First, the label should tell how much cocoa the chocolate contains. It may also indicate whether the chocolate is single-origin, that is, whether its beans come from a particular area or are of the same variety.

Criollo beans, from Central America and the Caribbean, are highly prized. More common varieties are Foresterio, from Brazil and Africa, and Trinitario, a hybrid of the two.

Next, examine its "presentation": Is the surface of the bar glossy? A lackluster surface indicates staleness, as does lack of a crisp snap when you break off a piece. A whitish cast, called "bloom," indicates temperature fluctuations in storage. The bar should have a deep aroma.

How is its "mouthfeel"? Is it rich and smooth on the tongue?

Words to describe flavor overtones: spicy, nutty, roasted, flowery, fruity, herbs, honey, vanilla.

Richardson's starter picks for the budding connoisseur: Valor, a Spanish brand, with a 70 percent cocoa; Valrhona, from France; and Santander, from Colombia.

Other things to look for: Organically grown, fair trade.

The ultimate? Amedei Toscano Black, from Tuscany, Italy.

"One of the most amazing things I've ever eaten," Richardson said. \$11.95 per 3.5-ounce bar from www.chocosphere.com.

Links related to this article:

Cocoa Tree: www.cocoatree.org

Chocosphere: www.chocosphere.com.

URL for this article: <http://www.heraldsun.com/durham/4-748405.html>

© Copyright 2006. All rights reserved. All material on heraldsun.com is copyrighted by The Durham Herald Company and may not be reproduced or redistributed in any medium except as provided in the site's Terms of Use.

[\[back\]](#)