

## Tea and Cacao Flavanols and Heart Health

### Cocoa & Tea

Helps maintain normal blood flow

May have beneficial effects on blood pressure

**Flavanols**  
Active antioxidants

**Get benefits from:**

- 2.5 g cocoa powder
- 10 g dark chocolate
- 200 mg cocoa extract

**Get benefits from:**

- Green tea
- Black tea



Photo taken in Los Navalucillos, Spain

Kent L. Bradley M.D., MBA, MPH, Herbalife Nutrition Chief Health and Nutrition Officer

According to the World Health Organization, an estimated 1.13 billion people worldwide have hypertension, and only about 1 in 4 people have the problem under control. Elevated blood pressure is a serious medical condition because it increases the risks of heart disease, stroke, and other health problems.

A balanced diet and regular physical activity are the paramount recommendations to keep a healthy heart and low blood pressure. Flavanols, which are naturally occurring compounds found in plants, can also support cardiovascular health.



## What Are Flavanols and How Do They Benefit Heart Health?

When you eat a diet rich in fruits and vegetables, the heart health benefits you receive are in part due to flavanols. Flavanols are rich in antioxidants that help fight inflammation, which contributes to cardiovascular diseases.

Here are some additional ways in which flavanols support heart health:

### 1. Flavanols may lower blood pressure.

A recent study analyzed the diet of more than 25,000 people and compared what they ate with their blood pressure. Scientists found that the difference in blood pressure between those with the lowest 10 percent of flavanol intake and those with the highest 10 percent of intake was between 2 and 4 mmHg, the unit that measures the pressure in blood vessels. These statistics are comparable to meaningful changes in blood pressure observed in those following a Dietary Approaches to Stop Hypertension (DASH) diet.

## **2. Flavanols support Nitric Oxide production.**

The blood-pressure-lowering effect of flavanols has been correlated with an improvement in Nitric Oxide. Nitric Oxide is a biological regulator that protects our cardiovascular system against damage and aging. Its purpose is to maintain the health of our heart and blood vessels, and they mainly do so by maintaining arterial elasticity. Sufficient Nitric Oxide availability is associated with normal vasodilation and healthy blood pressure.

## **3. Flavanols can improve arterial function.**

As we age, our arteries lose flexibility and become less able to expand to let blood flow and circulate normally, which increase the risk of hypertension. Two studies published in the journals *Age* and the *British Journal of Nutrition* found that consuming flavanols for four weeks significantly increased flow-mediated vasodilation by 21 percent. Increased flow-mediated vasodilation is a sign of improved endothelial function and is associated with decreased risk of developing cardiovascular disease. In addition, taking flavanols improved the blood cholesterol profile, which reduces the risk of clogged arteries.

## **Which Foods Are Rich in Flavanols?**

Now that you know the benefits of flavanols, where do you find them? The good news is that it's really easy for you to consume this highly beneficial nutrient, since flavanols are found in foods like berries, cocoa (dark chocolate), kale, and tea to name a few sources of high concentration of this important nutrient. Let's discuss two: cocoa and tea.

### **Flavanols from Cocoa**

To profit from flavanols found in cocoa, the European Food Safety Authority recommends that cocoa flavanols be consumed daily from sources such as cocoa powder (2.5 g), dark chocolate (10 g), and/or cocoa extract (200 mg).

Of course, when choosing ways to consume cocoa flavanols to promote heart health, it is important to maximize this benefit while avoiding excessive fat and sugar found in chocolate products.

### **Flavanols from Tea**

Like cocoa, tea (whether green, oolong or black) is rich in flavanols. Studies have shown that drinking green or black tea may have beneficial effects on blood pressure in people with pre- and hypertensive ranges. Furthermore, increased tea consumption has been associated with a lower risk of diabetes, which contributes to heart disease and stroke. Also, substances in tea may help to improve cholesterol.

At Herbalife Nutrition, we are looking at new ways to use the flavanols from cocoa and tea to promote heart health by formulating effective and safe amounts from extracts into functional foods, beverages, and supplements. Nonetheless, it is important to remember that no one should substitute consumption of tea or cocoa for well-understood heart-health habits of diet and exercise.

