

Nutrition and Health Fact Sheet: **PHYTOCHEMICALS**

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Using the colors of fruits and vegetables can be a useful way to incorporate more into the diet.

What are phytochemicals?

Phytochemicals are natural plant chemicals and are found in fruits, vegetables, whole grains, and drinks such as tea and wine. These chemicals are important because they may help prevent chronic diseases. Flavonoids are the largest group of phytochemicals,¹ and have been shown to slow the development of certain diseases such as colon cancer, which is the third most common cancer.²

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What does it mean to eat the rainbow?

"Eat the rainbow" is a simple reminder to eat a variety of fruits and vegetables based on their color. They are usually grouped as green, red, orange/yellow, blue/purple, and white. Fruits and vegetables have many vitamins, minerals, and phytochemicals that allow our bodies to function well. Eating the rainbow is a great way to get as many of those as possible.

How do phytochemicals benefit me?

Phytochemicals in the diet benefit us by helping to prevent disease. What we know is that a diet high in fruits and vegetables lowers risk for developing chronic diseases such as high blood pressure, heart disease, and stroke.³ There is also evidence showing that phytochemicals may help prevent cancer⁴ and type 2 diabetes.⁵

Phytochemicals in the diet benefit us by contributing to disease prevention.

What food groups have phytochemicals?

Fruits, vegetables, and whole grains contain phytochemicals. Keep in mind that there is no most important single phytochemical or food group. What is important is to eat a variety of nutrient-rich fruits, vegetables, and whole grains to make it more likely that phytochemicals will benefit you.

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What is the French Paradox?

Cigarette smoking and high levels of saturated fat in the diet increase a person's risk for heart disease. In France and other parts of Europe where cigarette smoking and high levels of saturated fat in the diet are common, heart disease rates are lower than expected. This surprised scientists who then pointed to a phytochemical called resveratrol. Resveratrol is a phytochemical found in red wine and chocolate and is thought to be beneficial for human health. However, there is no clear evidence that suggests this is the case.



Make smoothies to get more fruits and vegetables.

Should I take a phytochemical supplement?

There is little evidence that phytochemicals by themselves are beneficial. Rather, it is the combination of phytochemicals and nutrients from whole food that is most likely to protect against disease⁵. The American Cancer Society states that, "No evidence has shown that phytochemicals taken as supplements are as good for your long-term health as the vegetables, fruits, beans, and grains from which they are extracted."⁶



Everything the plants have that you want.

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