

What are Polyphenol's?

Question: I keep reading articles that refer to the polyphenol content of superfoods. Are polyphenols simply antioxidants?

Answer: In a word, yes, but since polyphenols seem to be powerful antioxidants, it's worth understanding them better. **Phenol** is an organic compound that contains an aromatic ring. **Polyphenols**, which are compounds found in plants, are distinguished by the presence of more than one phenol. Many polyphenols are powerful antioxidants that can remove free radicals from the body and reduce inflammation.

You may also have heard polyphenols referred to as **phytochemicals**. These are chemical compounds—occurring naturally in plants—that may have biological significance for us but are not essential nutrients like vitamins. You can think of phytochemicals as bonus health promoters found in fruits, vegetables and grains. All polyphenols act as a natural defense for plants and, as such, foods high in these compounds tend to be astringent. The drying effect of grapes and pomegranate seeds is an example of astringency in foods high in polyphenols. Rich sources of polyphenols in the diet are fruits (grapes, pomegranates), vegetables (spinach, chicory) and beverages (tea, wine and coffee).

There are several classes of polyphenols. **Flavonoids**, organic compounds that occur as red/ blue pigments in plants, are the major source in the average diet. Therefore, look for fruits and vegetables with dark-colored skins, and notice astringency as a cue for polyphenol content.

Terms to Know

- **Antioxidants:** substances that remove potentially oxidizing agents in a living organism.
- **Phytochemicals** (*phyto* means “plant” in Greek): bioactive chemical compounds that are found naturally in plants and considered beneficial to human health but are not essential nutrients.

- Polyphenols: a group of phytochemicals classified as antioxidants.