

ONE SMALL CHANGE

POWER UP WITH POLYPHENOLS

Found in all kinds of plant foods, these clever compounds have a remarkable ability to protect your body and brain

What do coffee, tea, dark chocolate and extra virgin olive oil have in common? Aside from making our lives immeasurably more delicious, they're all rich in polyphenols. These health-boosting compounds are also found in many other foods, including fruit, vegetables, herbs and spices – and there's growing evidence that they play a key role in helping to prevent a range of chronic conditions we'd all like to avoid.

WORDS ANITA BEAN





POLYPHENOL

POLY-FEENOL [NOUN]

1. A BENEFICIAL PLANT COMPOUND WITH ANTIOXIDANT PROPERTIES
2. A KEY TO HELPING YOU BE HEALTHIER THIS YEAR...

“In simple terms, polyphenols are natural compounds found in a wide array of plant foods,” says Dr Emily Leeming, microbiome scientist, dietitian and author of *Genius Gut: The Life-changing Science of Eating for Your Second Brain*. “They act as antioxidants and help protect the plant from disease and sun damage. In humans, they play a protective role too, helping to reduce inflammation and oxidative stress, which can contribute to chronic diseases.”

Research links these compounds to numerous health benefits, from heart health to improving depressive symptoms. One study found that people who consumed the most polyphenols had a 46% lower risk of cardiovascular disease than those who reported the lowest polyphenol intake.

Polyphenols are also good for your gut health. “You can only absorb 5-10% of polyphenols by yourself. The other 90-95%

land in your large intestine, where they act as food for ‘good’ gut bacteria, which in turn produce molecules that help regulate the immune system and lower inflammation,” explains Emily.

Polyphenols may also play a role in protecting the brain from ageing and neurodegenerative diseases such as Alzheimer’s. In a study published in the journal *Neurology*, those with the highest intake of polyphenols were found to be 19% less likely to report difficulties with memory and thinking compared to people with the lowest intakes. Polyphenols are connected to longevity, too. Other researchers have found a link between high polyphenol consumption and a 30% decrease in mortality in over-65s.

So how to maximise the benefits of polyphenols? It’s about incorporating as diverse a range of fruit, vegetables, legumes, »

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'THE DARKER THE FRUIT OR VEGETABLE THE MORE POLYPHENOLS IT CONTAINS'

nuts, seeds, herbs and spices into your diet as possible. While there's no recommended daily intake, most people eat only 600-1000mg polyphenols a day, largely from tea, coffee and chocolate. While you'll find polyphenols in all of these (even red wine counts), "many of the best sources are herbs, spices, beans, berries and nuts", says Emily. Particularly polyphenol-rich foods include cocoa powder, black beans, lentils, chestnuts, walnuts, blackcurrants, blueberries, blackberries, plums, red onions and olives. See overleaf for some storecupboard examples.

The new Waitrose 'Plant Varieties' logo, which you'll find on products that pack in a healthy mix of plants, is a helpful place to start. You can also use colour to guide you: aim to include a range of different-coloured foods in your day, including greens, oranges, reds and purples. As a rule of thumb, the darker the fruit or vegetable – or the more vibrant the colour – the more polyphenols it contains. (Red onions, for example, are more polyphenol-potent than yellow varieties.)

Remember, too, that these tiny compounds are found in all parts of plants: in fact, the peel or skin is often higher in polyphenols than the flesh, so don't automatically throw it away when prepping meals (the peel of an apple, for example, could contain up to five times more polyphenols than the rest of the fruit).

With just a little bit more nutritional knowledge, it's easy to unlock the power of plants – and hopefully reap the rewards well into a healthy old age.

POLYPHENOLS: THE LOWDOWN

There are thousands of different types of polyphenols, each with their own unique properties and benefits.

The four main categories are:

FLAVONOIDS

This is the largest category and includes quercetin, anthocyanins and catechins, which are found in foods including berries, apples, onions, tea, dark chocolate and wine. Flavonoids are associated with reduced inflammation and improved heart health.

PHENOLIC ACIDS

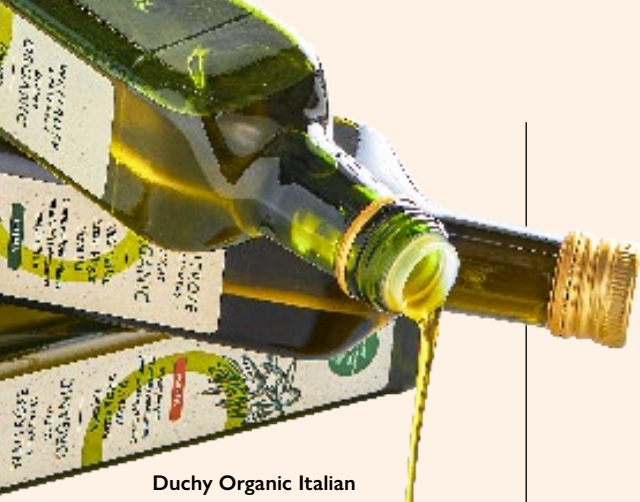
These are in the seeds, skins and leaves of fruits and vegetables. Phenolic acids are known for their anti-inflammatory and antioxidant properties, helping to protect the body from chronic diseases.

LIGNANS

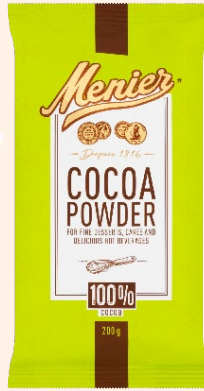
Found in wholegrains, nuts and seeds. These polyphenols have been studied for their positive effects on heart health and hormone balance.

STILBENES

You can get these from foods such as peanuts, grapes and berries. They're known for their antioxidant, anti-inflammatory and anti-carcinogenic effects. »



**Duchy Organic Italian
Extra Virgin Olive Oil**
(£7.75/500g)



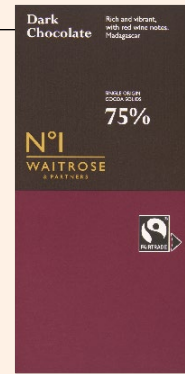
**Menier 100% Cocoa
Powder** (£4.45/200g)



Frozen British Blackberries
(£3.20/300g)

POLYPHENOL PANTRY

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Linwoods Flaxseed
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Clipper Organic Pure Green Tea
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**Cooks' Ingredients
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