

AMERICAN PISTACHIOS: WHAT THEIR HUES MEAN TO YOU

Pistachios can have many different colours, and there is a meaning behind each one.

CATECHIN CONTRIBUTES YELLOW HUES^{1,2}

Pistachios get their yellow hue from catechins (aflavonoid).

YELLOW & GREEN ARE FOR LUTEIN AND ZEAXANTHIN³

Pistachios are known for containing two carotenes called lutein and zeaxanthin, which contribute to their green and yellow hues (chlorophyll also contributes to the green colour).

Lutein and zeaxanthin are far higher in pistachios than in other nuts.

High amounts of these carotenoids are found in the retina of the eye, where they are thought to have a role in protecting the tissues from phototoxic damage. This may be important in age-related macular degeneration (vision loss).⁵

Pistachios are also a source of riboflavin and zinc, which contribute to the maintenance of normal vision.

References:

- 1 Tomaino A, et al. Antioxidant activity and phenolic profile of pistachio (*Pistacia vera* L., variety Bronte) seeds and skins. *Biochimie*. 2010;92(9):1115-22.
- 2 Mandalari G, et al. Bioaccessibility of pistachio polyphenols, xanthophylls, and tocopherols during simulated human digestion. *Nutr*. 2013;29:338-344
- 3 Dreher ML. Pistachio nuts: composition and potential health benefits. *Nutr Rev*. 2012;70(4):234-40.
- 4 Bolling BW, McKay DL, Blumberg JB (2010) The phytochemical composition and antioxidant actions of tree nuts. *Asia Pac J Clin Nutr*. 19; 117-23.
- 5 Bulló M, Juanola-Falgarona M, Hernández-Alonso P, Salas-Salvadó J (2015) Nutrition attributes and health effects of pistachio nuts. *British Journal of Nutrition*. 113; 879-893

THE DEEP PURPLE IN THE SKIN COMES FROM ANTHOCYANIN³

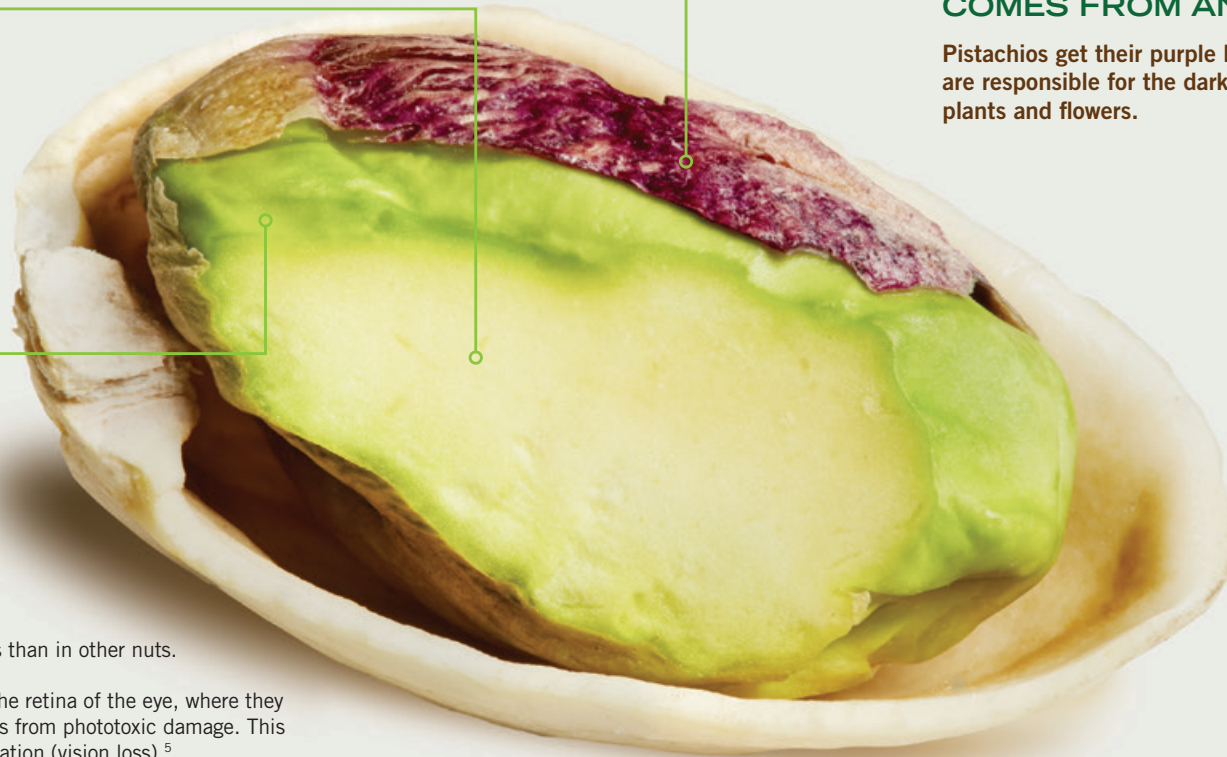
Pistachios get their purple hue from anthocyanins, which are responsible for the dark hue and skin colours of many plants and flowers.

PHYTOCHEMICALS AND HEALTH

Catechin and anthocyanin are types of polyphenol (a subgroup of phytochemicals) which have antioxidant functions⁴ so contribute to the whole food mix of essential nutrients that are bioactive, including anti-inflammatory, cardioprotective, vasoprotective and chemoprotective properties, for which much more research is needed.^{4,5}

We already know however that pistachios are a high source of copper and manganese, and a source of selenium, zinc, riboflavin and vitamin E, which are antioxidant nutrients that help protect cells from oxidative stress.

Pistachios are high in copper and vitamin B6, and contain selenium, zinc, iron and folate, which contribute to the normal function of the immune system.



Next time you munch on pistachios as a snack or add them as a crunchy topper on your salads, you'll have a new appreciation for their colours and what their hues mean to your health.

This infographic is written for use by health professionals, with nutritionists and dietitians in mind and it is not intended for consumers.



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