

# THE ANTIOXIDANT POWER OF PISTACHIOS



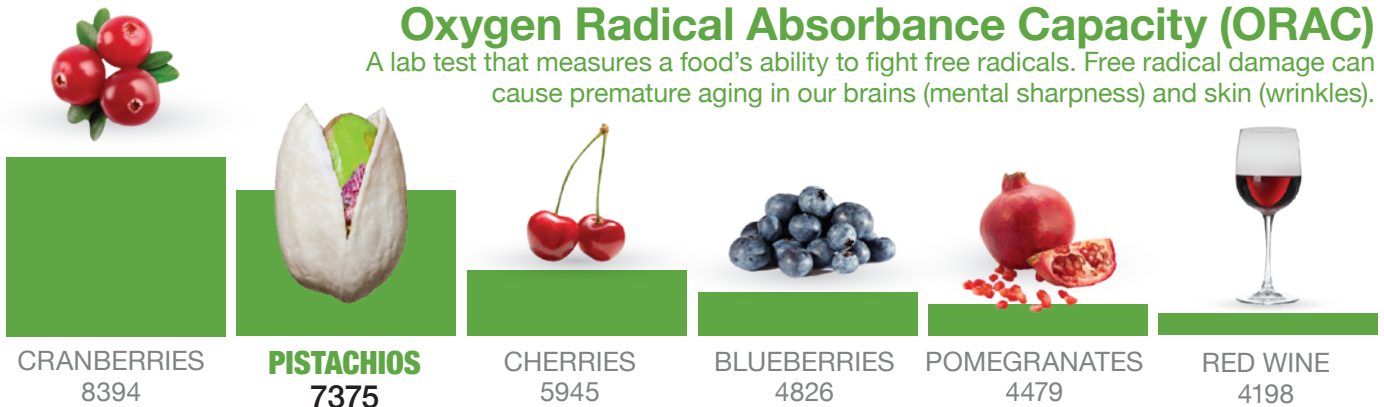
Pistachios have a high antioxidant capacity that rivals that of popular antioxidant-containing foods<sup>1</sup>.



## ANTIOXIDANT ACTIVITY OF COMMON FOODS<sup>2,3</sup>

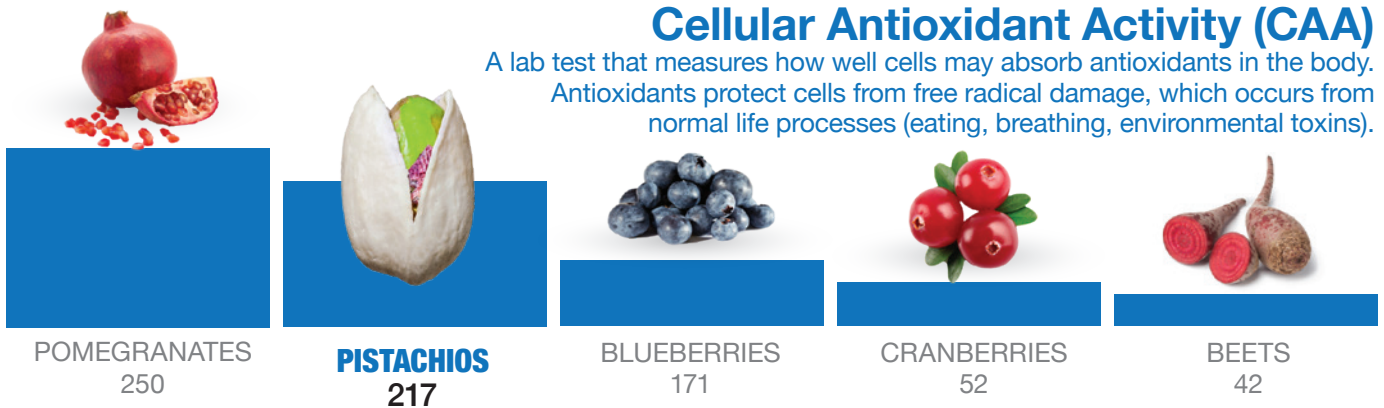
### Oxygen Radical Absorbance Capacity (ORAC)

A lab test that measures a food's ability to fight free radicals. Free radical damage can cause premature aging in our brains (mental sharpness) and skin (wrinkles).



### Cellular Antioxidant Activity (CAA)

A lab test that measures how well cells may absorb antioxidants in the body. Antioxidants protect cells from free radical damage, which occurs from normal life processes (eating, breathing, environmental toxins).



### Oxygen Radical Absorbance Capacity (ORAC) of Complete Proteins ( $\mu\text{g TE}/100\text{ g}$ )

Compares common types of complete protein foods and their ability to fight free radicals (in a lab test).



<sup>1</sup> Yuan W, Zheng B, Li T, Liu RH. "Quantification of Phytochemicals, Cellular Antioxidant Activities and Antiproliferative Activities of Raw and Roasted American Pistachios (Pistacia vera L)." *Nutrients* (2022): 14 (15): 302. <https://doi.org/10.3390/nu14153002>.

<sup>2</sup> Wolfe KL, et al. "Cellular Antioxidant Activity (CAA) Assay for Assessing Antioxidants, Foods, and Dietary Supplements." *Journal of Agriculture and Food Chemistry*. (2007): 55:8896-8907.

<sup>3</sup> Song W, et al. "Cellular Antioxidant Activity of Common Vegetables." *Journal of Agriculture and Food Chemistry*. (2010): 58, 6621-6629. DOI: 10.1021/jf9035832.

# ANTIOXIDANTS



Can protect from free radical damage by preventing the oxidation of cells. Free radical damage occurs from normal life processes (eating, breathing, exercising, environmental toxins).



## HOW TO BOOST YOUR ANTIOXIDANT INTAKE AT EVERY MEAL!

Top oatmeal or a yogurt parfait with chopped pistachios.



Make your own plant-based bento box with pistachios as the main source of protein.



<sup>4</sup> Poles J, Karhu E, McGill M, McDaniel HR, Lewis JE. "The Effects of Twenty-Four Nutrients and Phytonutrients on Immune System Function and Inflammation: A Narrative Review." *J Clin Transl Res.* (2021, May 27): PMID:34239993.

<sup>5</sup> Velmurugan B, Rathinasamy B, Lohanathan B, Thiagarajan V, Weng CF. "Neuroprotective Role of Phytochemicals." *Molecules.* (2018); 23, (10) 2485. DOI: 10.3390/molecules23102485.

<sup>6</sup> Luo J, Si H, Jia Z, Liu D. "Dietary Anti-Aging Polyphenols and Potential Mechanisms." *Antioxidants* (Basel). (2021, Feb 13): DOI: 10.3390/antiox10020283. PMID: 33668470; PMCID: PMC7918214.

<sup>7</sup> Jayedi A, Rashidy-Pour A, Parohan M, Zargar MS, Shab-Bidar S. "Dietary Antioxidants, Circulating Antioxidant Concentrations, Total Antioxidant Capacity, and Risk of All-Cause Mortality: A Systematic Review and Dose-Response Meta-Analysis of Prospective Observational Studies." *Adv Nutr.* (2018, Nov 1): 9 (6):701-716. DOI: 10.1093/advances/nmy040. PMID: 30239557; PMCID: PMC6247336.



**PISTACHIOS ARE A COMPLETE PROTEIN**

Add pistachios to your favorite smoothie recipe or enjoy them straight out of the shell.



Blend pistachios into your favorite pesto recipe or use chopped pistachios as a crust for fish.

