Oxygen Radical Absorbance Capacity

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What is Oxygen Radical Absorbance capacity?

- It's a lab test that attempts to quantify the "total antioxidant capacity" (TAC) of a food by placing a sample of the food in a test tube, along with certain molecules that generate free radical activity and certain other molecules that are vulnerable to oxidation
- In other words, Oxygen Radical Absorbance Capacity, is a test tube analysis that measures the total antioxidant power of foods and other chemical substances.
- Foods with higher ORAC scores have greater antioxidant capacity, and more effectively neutralise harmful free radicals.

Free radicals

They are oxygen-containing molecules with an uneven number of electrons. The uneven number allows them to easily react with other molecules. Free radicals can cause large chain chemical reactions in one's body because they react so easily with other molecules. These reactions are called oxidation.

- Scientists state that the body can effectively use 3000-5000 antioxidant or ORAC units per day. Any more than this (i.e. mega-dosing in supplement form) seems to be of no added benefit and "excess" is most likely excreted by the kidneys.

Fruits and vegetables with high ORAC

Top-Scoring Fruits & Vegetables

ORAC units per 100 grams (about 3 ½ ounces)

Fruits		Vegetables	
Prunes	5770	Kale	1770
Raisins	2830	Spinach	1260
Blueberries	2400	Brussels sprouts	980
Blackberries	2036	Alfalfa sprouts	930
Strawberries	1540	Broccoli flowers	890
Raspberries	1220	Beets	840
Plums	949	Red bell pepper	710
Oranges	750	Onion	450
Red grapes	739	Corn	400
Cherries	670	Eggplant	390
Kiwi fruit	602		
Grapefruit, pink	483		