

Title	Functional claims: antioxidants and juices
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Abstract

Antioxidants take part of the defence system of the human body against free radicals. Antioxidant compounds present in juices and processed fruits and vegetables are:

- Carotenoids: carotenes and xanthophylls,
- Polyphenols: phenolic acids and flavonoids,
- Vitamins: C, E and B9 (Folic acid).

Antioxidant capacity is measured with the ORAC value (Oxygen Radical Absorbance Capacity). This method is the reference for the measurement of the overall antioxidant capacity. Orange, apple, grape, grapefruit, lemon, apricot, pineapple, exotic fruits, passion fruits, mango, tomato and carrot juices are important because of their antioxidant capacity.

By studying results of epidemiological studies, one can estimate that plasma concentration of 60 mol/L of vitamin C is optimal to ensure the maximum protection of individuals against the development of degenerative diseases (cardiovascular diseases, cancers, cataract, neurodegenerative diseases). This plasma concentration can be reached with an intake of 110 mg per day of vitamin C. Principal dietary sources for vitamin E are vegetal oils and derivatives (50-70%). Fruits and vegetables, despite of their low content (0.8 to 2 mg per 100 g), are the second source (12-18%).

This study contains the subtitles at the below;

1. Antioxidants and oxidation mechanism
2. Antioxidants groups,
3. Antioxidant – health relationship, case control and epidemiological studies,
4. Antioxidant capacity measuring methods,
5. Antioxidants contents in fruit juice, processed fruit and vegetables,
6. Bioavailability of antioxidant in fruit juice
7. Health claims