

### What is an antioxidant?

- An antioxidant is a substance that stops a certain chemical reaction in the body.
- It prevents oxidation which is a chemical reaction enhanced by oxygen and peroxides.
- Many substances such as Vitamin A,E, C, Coenzymes Q 10, beta-carotene (in carrots), and alpha-lipoic acid are considered antioxidants.
- They protect the body from the bad effects of free radicals. The free radicals are caused from body reactions to toxins like smoking.

# Why are antioxidants important?

- They protect the body from damage from harmful molecules called free radicals.
- Free Radicals damage every organ system in the body and can cause disease as in, blood vessel plaquing disease (arthrosclerosis), cancer, coronary heart disease, and other medical conditions.

## Blueberries



- Blueberries have the highest content of antioxidants of all the fresh fruits.
- They have the highest multiple content and highest concentrations of antioxidants
- Anthocyanin, a pigment that causes the blue color in blueberries.
- Blueberries contain multiple antioxidants as in Alpha Lipoic
  Acid and Vitamin C.



#### Blueberries

- One study in 2013 in Sweden at the Linkoping University found that eating blueberries improved HDL cholesterol (which is good), cardio-metabolic, and fasting glucose numbers after eating the fruit.
- The British Journal of Nutrition at Cambridge published an article in 2013 that after eating blueberries even in a high carb. low fat breakfast reduced the oxidation. Blood levels of free radical oxidation were significantly reduced after the meal. This is the 1st report showing that eating only a cup or 75g of blueberries reduces free radicals in the body.

## Alpha-Lipoic Acid

- This is an antioxidant that also assists with certain metabolic processes in the body.
- It is located in the mitochondria, or the powerhouse of the cell.
- It is essential to breakdown carbs., proteins, and fats and converts it into energy.
- It is prescribed by physicians as a medicine to help regrow damaged nerves from the effects of diabetic polynueropathy and hypovitamiosis polynueropathy.
- There is no other known prescription medication that has this capability to counteract the free radical damage of these diseases or conditions.

#### Sources

- www.Webmd.com
- www.womenfitness.net
- www.health.howstuffworks.com
- www.journals.cambridge.org
- www.loyolauniversity.adam.com
- www.sciencedirect.com

Thanks for watching!!!!!