

ANTIOXIDANTS PROTECT

Over 100 diseases states are associated with free radicals:

CANCER

Epidemiological studies have shown that low antioxidant levels are associated with increased incidence of certain cancers. Anti-carcinogenic and anti-promoter activity of some antioxidants is thought to offer some protection against cancer. Total Antioxidant Status (TAS) may be used as an important screening tool for the identification of cancer risk patients and as a monitoring tool for the effect of drug treatment regimes.

CARDIOVASCULAR DISEASE

Cardiovascular disease is the single largest cause of mortality in the general population. Several epidemiological studies have shown a decrease in the incidence of cardiovascular disease in individuals supplemented with antioxidants.

DIABETES MELLITUS

Diabetes mellitus is a common disorder, occurring in many individuals where hyperglycaemia results from a deficiency in insulin secretion or action. Studies have shown that treatment with antioxidants, particularly vitamin C, restores all markers of oxidative stress to normal by reducing free radical activity and may help reduce the risk of developing diabetic complications.

INFERTILITY

Male infertility is generally caused by defective sperm function which accounts for up to 24% of couples attending infertility clinics.

INFLAMMATORY DISEASES

ROS and free radicals not only cause tissue damage, but then create inflammation that creates more free radicals.

RENAL DISEASE

Many pathological conditions have become associated with chronic renal failure, including accelerated ageing, cataract formation, atherosclerosis and platelet dysfunction. It is thought to be due to rapid consumption of the antioxidant component with elevated levels of ROS and increased lipid peroxidation.

CATARACTS

Cataracts are one of the major causes of blindness worldwide. The disease affects up to 50% of the population over 75 years of age in the USA, with a greater incidence in the developing nations. Many epidemiological studies have examined the association between cataract formation and antioxidant nutrition.

AGING/WRINKLES, ETC.

Ageing is a process which involves the accumulation of changes which can be attributed to genetic defects, the environment, disease and also the inborn ageing process. Antioxidant protection reportedly decreases

Natural pigments found in foods target to protect specific areas in the body:

Blue = Protects Brain

Purple grapes
Blueberries
Red wine

Green = Protects Eyesight

Spinach
Kale
Broccoli

Yellow = Reduces Hypertention

Corn
Bananas
Squash

Orange = Promotes Heart Health

Carrots
Yam
Pumpkin
Squash
Orange
Sweet potatoes

Red = Wards off Cancer

Pomegranate
Tomatoes/Tomato sause
Cherries
Prunes
Red peppers
Red/black beans
Dark Chocolate/cocoa

Try to eat every color every day!

with age and the TAS kit could monitor levels in supplemented individuals in an effort to minimise the risk of disease development.

NEUROLOGICAL DISEASE

Reactive Oxygen Species (ROS) have been implicated in the pathology of a number of neurological disorders.

LIVER DISEASE

The liver has a diverse range of important functions which can cause major physiological imbalance in the body, resulting in different pathological conditions.

LUNG DISEASE

Prolonged exposure to oxygen and environmental toxins stimulate phagocytic cells in the lung to generate ROS and free radicals which cause lipid peroxidation.

INFECTIOUS DISEASE

Recent research suggests that ROS may be involved in the pathogenesis of viral infections. The majority of research has centred on HIV.

Antioxidant Power of Foods

ORAC is a measurement relating to antioxidant power. The letters ORAC stand for "Oxygen Radical Absorbance Capacity," a reflection of the antioxidant ability of just about anything, including foods, to subdue harmful free radicals. Free radicals damage our cells and tissues and have been shown to trigger much of the aging process and also to be involved in degenerative diseases. This damage is done by a process called oxidation. Certain things cause a higher level of free radical activity in the body:

High blood sugar	Smoking
Eating high sugar, high fat foods (esp. fried foods)	Exercise
Exposure to radiation - from sun, microwaves, x-rays. etc.	Smog/Pollution
Stress	Drugs/medications
Exposure to chemicals- pesticides, herbicides,	Alcohol

Antioxidants defend against this "oxidation" process (for example, the way lemon juice prevents apple slices from browning when exposed to the air). That's why foods high in antioxidants are such an important component of healthy eating and in turn, foods with high ORAC ratings are extremely beneficial.

Oxygen Radicals (free radicals) are chemicals that are constantly inside our bodies. If our bodies can neutralize or cancel these oxygen radicals before they do damage, then they won't hurt us.

Why are Antioxidant-rich Foods Good for Us:

- * Protect against complications/tissue damage associated with high blood sugar.
- * Help slow the aging process in both body and brain.
- * Reduce loss of long-term memory and learning ability, maintain the ability of brain cells to respond to stimuli (thought to decrease with age)
- * Protect blood vessels against oxygen damage.
- * Protect the eyes from damage - cataracts, macular degeneration, glaucoma, etc.
- * Help prevent and reverse night blindness
- * Protect us from cancer of all kinds.

A higher ORAC rating is better than a lower one, and any high rating is potentially good, just be sure that are getting a variety of colors to cover all your health basis.

What are Some High ORAC Foods?

Plant foods have the highest ORAC scores! Plant foods are best at fighting disease. Plant foods are: fruits, vegetables, whole grains, beans, nuts, etc. Brightly colored foods are the ones with the highest ORAC scores. This means these are the foods that help fight disease the best by stopping oxygen radicals from causing damage in our bodies. Think bright reds, greens, oranges, blues, purples, yellows, and oranges. Nearly all of the ORAC protection is in the skin of these foods. Any brightly colored fruits and vegetables that you can think of are good for you to include in your diet EVERY DAY! As a matter of fact, research shows that people who eat more of these plant foods have lower risk of cancer. See the following chart for an understanding of the relative anti-aging protection of various foods:

ORAC Values of Common Fruits and Vegetables (per 100 grams -- approximately 3 ounces)

Prunes	5,700	Spinach	1,260	Red Grapes	739
Raisins	2,830	Raspberries	1,220	Red bell pepper	710
Blueberries	2,400	Brussels sprouts	980	Onion	450
Blackberries	2,036	Alfalfa sprouts	930		
Kale	1,770	Broccoli flowers	890		
Strawberries	1,540	Beets	840		