

## OXIDATIVE STRESS AND INFLAMMATION

Oxidation is a chemical reaction where oxygen reacts with substances. Common examples include fire, browning, or rust or copper turning green.

In an oxidation reaction the molecule loses an electron.

A free radical is a molecule that is missing an electron.

It sets up a chain reaction by stealing an electron from another molecule causing it to become a free radical.

Free radicals damage the body's DNA.

Sources of free radicals include:

metabolism, UV light, ionizing radiation,  
smoking, environmental pollution, inflammation.

An antioxidant can stop the free radical cascade.

Oxidative stress occurs in diabetes when blood sugar and insulin levels are uncontrolled.

Oxidative stress is characterized by the overproduction of free radicals. This results in the body aging five times faster than the general population.

Oxidative stress causes inflammation.

Inflammation comes before diabetes and begins as oxidative stress in the fat cells.

To reduce oxidative stress we need to decrease our exposure to free radicals. Some sources we can control exposure to include:

Cigarette smoking , Environmental pollutants ,  
Pesticides , Super-heated oils , Meats .

Antioxidants help reduce oxidative stress by neutralizing free radicals.

Antioxidants are mainly present only in plant foods.

To deal with BARRIERS to your health goals you should:

- Identify the barriers
- Select one to work on
- Brainstorm for ways to remove the barrier
- Select your OPPORTUNITY TO IMPROVE
- Carry out your plan