

## **Antioxidants**

### **By Kim Balas**

One of the biggest medical discoveries of our time is the role that free radicals and antioxidants play in our health. When scientists first discovered free radicals over 100 years ago, they had no idea the devastation these previously unknown chemicals could cause in the human body. It wasn't until 1969 that scientists began to suspect that free radical damage may be the culprit in many common diseases.

Free radicals are chemically active atoms or compounds that either have extra electrons or lack electrons in their outer shell. This causes an imbalance, which the atoms attempt to correct by either stealing or giving an electron to neighboring atoms, thereby damaging cells, proteins, and altering DNA (genetic material). In the case of DNA, the damage caused by free radicals may become "encoded" in the genetics of the cell and may cause a reoccurring mutation that leads to disease. This damaging chain reaction continues to take place until a phytochemical called an antioxidant gives the unstable atoms the electrons they seek, neutralizing the free radical's effects. When our bodies have too many free radicals and not enough antioxidants to counter them, uncontrolled cellular damage occurs. This chemical reaction caused by free radicals is the root cause of many diseases such as heart disease, chronic inflammation, cancer, stroke, cataracts, Parkinson's, Alzheimer's, arthritis, and wrinkles. Even the signs of aging itself are linked to free radical damage.

Our bodies are bombarded with as many as 10,000 free radicals each day. Sources of free radicals include environmental toxins, processed food, overcooked food, household chemicals, pesticides, X-rays, smoking, alcohol, sunlight, even the air we breathe contains free radicals. In order to counter their effects, we must consume foods that are rich in antioxidants. Most fruits and vegetables contain these compounds, but all fruits and vegetables are not created equal. Fruits like noni, mangosteen, wolfberry, blueberries, and raspberries are loaded with extremely potent antioxidants that stop free radicals before they have a chance to cause significant damage.

Scientists have developed a method to estimate the overall antioxidant potential of fruits, vegetables, and nutritional supplements. This process yields a number that is known as the oxygen radical absorbency capacity (ORAC). Plants with higher ORAC values have greater antioxidant power and are therefore better able to protect your body from disease. This test is so valuable that many scientists agree that ORAC will eventually become the government standard for measurement of overall daily fruit and vegetable intake. Nature's Sunshine's line of nutritional supplements features several products that have high ORAC values.

The fruit of the Noni tree (*Morinda citrifolia*) has been used by traditional healers throughout the Polynesian islands for centuries. This exceptional fruit is prized not only for its nutritional value but for its ability to support the immune system, minimize the effects of aging, increase energy, and reduce free radicals in the body.

In the past few years scientists have increased their research on the phytonutrients in noni. Phytonutrients are special plant chemicals that can have powerful effects on the body. Noni's impressive array of these compounds include anthraquinones, specialized polysaccharides, and a variety of antioxidants. The antioxidant power of NSP's Nature's Noni is evident in its extremely high ORAC rating. Nature's Sunshine's scientists have recently published a study describing a new anthraquinone they found in noni. This phytochemical was found to actually stop cancer from spreading in cell cultures. This substance also activates enzymes that eliminate cancer-causing chemicals from the body. Nature's Noni® comes in both ready-to-drink liquid form and in a easy-to-swallow capsules.

Another antioxidant-rich Nature's Sunshine product is Zambroza. When we first formulated Zambroza, we told our research scientists to scour the globe to find the most healthful, life giving foods known to man. The results of this search have been incredible. Our scientists found 11 nutrient-rich foods, cherished for their nutritional value. With these fruits and natural extracts, they hand crafted a unique beverage that not only tastes terrific but provides what your body needs to feel healthy and have long-lasting energy.

One of the fruits responsible for Zambroza's exotic taste is mangosteen. Scientists at Nature's Sunshine found that although mangosteen does have amazing potential as a supplement, it does not have a complete complement of antioxidant compounds. They found that by adding additional fruits and plant extracts, they could increase Zambroza's antioxidant power by many times. Each of Zambroza's ingredients have extremely high levels of various types of antioxidants. The result is the most active free radical scavenging supplement on the market today. In an independent study conducted by Brunswick Laboratories, Zambroza was found to have a higher ORAC rating than any of its competitors. That translates into a better, more powerful supplement for those who desire antioxidant support.

Nature's Sunshine's Quality Assurance and cutting-edge technology allow us to offer the finest and purest products available in the world. We search the world for the best natural ingredients available, then we offer that quality at a competitive price. With Nature's Sunshine, you can always be sure that you are getting the best that nature has to offer.