

ORAC VALUE OF FOODS AND SUPPLEMENTS

James H. Carraway, M.D.
Eastern Virginia Medical School

In the last issue of *Tidewater Women*, my column centered on a discussion of oxidative stress with an emphasis on the danger posed by excess free radicals in the body. As we now know from science-based work which has been done, these free radicals can damage your body's DNA and can lead to earlier aging and disease. Because of this, it is really important to know how various foods and supplements will improve your body's ability to "scavenge" free radicals and reduce these in your system.

ORAC is the "oxygen radical absorbance capacity" and measures the overall antioxidant power of food or supplements, providing us with an index about which of these are the most desirable to eat or take. Antioxidants are extremely essential to good health with regard to aging and the age-related diseases, so learning which foods fit into the higher category helps all of us approach this in a more objective manner.

The ideal diet for any of us includes the right amount of caloric intake for our activity level and an adequate amount of nutrient-based food with adequate quantities of antioxidants, which will neutralize the free radicals constantly being produced. While excessive caloric intake is unhealthy, slightly reduced caloric intake with a nutrient-rich diet is the pathway to better health and longevity. Your diet must include carbohydrates, proteins, and fat each meal so that your body can process these foods efficiently.

How can you determine which foods or supplements have a high ORAC value? This information is present in many different books and research studies and is also available online through multiple sites which define these areas. You have to be a little careful in looking at these bits of information because a lot of times it comes from advertising sites for green foods or supplements. However, if you look at several of the "green food" supplement ads, you will note that the ORAC value of some of these supplements per teaspoon is higher than blueberries, strawberries, oranges, or green vegetables. There has been a lot of discussion about various food sources and supplement sources in terms of how much antioxidant capacity they possess, and it is possible to determine the amount in every single food that you eat. First of all, it's good to know how many ORAC units every day are generally required by the average person. This number is about 3,000 to 5,000, but sadly the average person in this country only gets about 1,200 units per day. One tablespoon of dark chocolate has about 600, two blackberries have 100, and the same quantity of blueberries would have about 120. Beets, broccoli, and spinach are in the range of 40-50 units per teaspoon, while one-half cup of broccoli yields about 450 ORAC units. Ideally, four to six fresh fruits and vegetables should be eaten every day, and this will help sustain the normal antioxidant levels needed for the body to function well. If you read some of the information from the companies which furnish antioxidant supplements and concentrated food supplements, you will note that they really emphasize complete nutrition, optimal digestion, and antioxidant protection and

body efficiency. Some companies have taken this to a high level and market condensed green foods. These supplements provide core nutrients, herbal blends, and processed fruits and vegetables which all have high ORAC value. Many of these companies are passionate about producing a product which gives complete nutrition on a daily basis to help support body functions. If you are diligent in terms of eliminating “empty calories” and concentrate on foods and supplements with a high ORAC value, you will stay leaner, fitter, and also healthier and your tissues will age better. I see patients who have been on the caloric-restricted, high ORAC value diet for years and who in their ‘60s appear to be in their mid- or late-40s. On the other hand, those who are exposed to high oxidative stress products such as cigarettes, alcohol, and toxic chemicals may age very quickly and experience an earlier aging and disease because of the overwhelming oxidative stress load.

How can we as caring and motivated people pursue the kind of diet which gives us adequate antioxidant potential? The answer is not simple, and as we all know, discipline about food intake is probably the hardest area of our existence to perfect.

While all this is not really complicated, it is so important in keeping up our health that we really need to pursue the pathway which will allow us to “think ORAC.” If you understand the value of antioxidants and you know the ORAC values of foods and supplements, then you stay healthier with a better immune system. Also, you should be familiar with the “green food” supplements which are available both in the vitamin stores and health food stores. A trip to The Heritage Store to spend a couple of hours shopping and looking at these various foods will give you insight into how you can use these food supplements in your daily dietary intake. All of us want to accomplish our goals of better fitness, more energy, better aging, and a healthier body weight. Think green, purple, and other multi colors and stay healthier!

Suggested web sites:

www.antioxidants-guide.com/

<http://www.foodprocessing.com/>

www.naturalproductsassoc.org