

BETALAINS

What Are Betalains

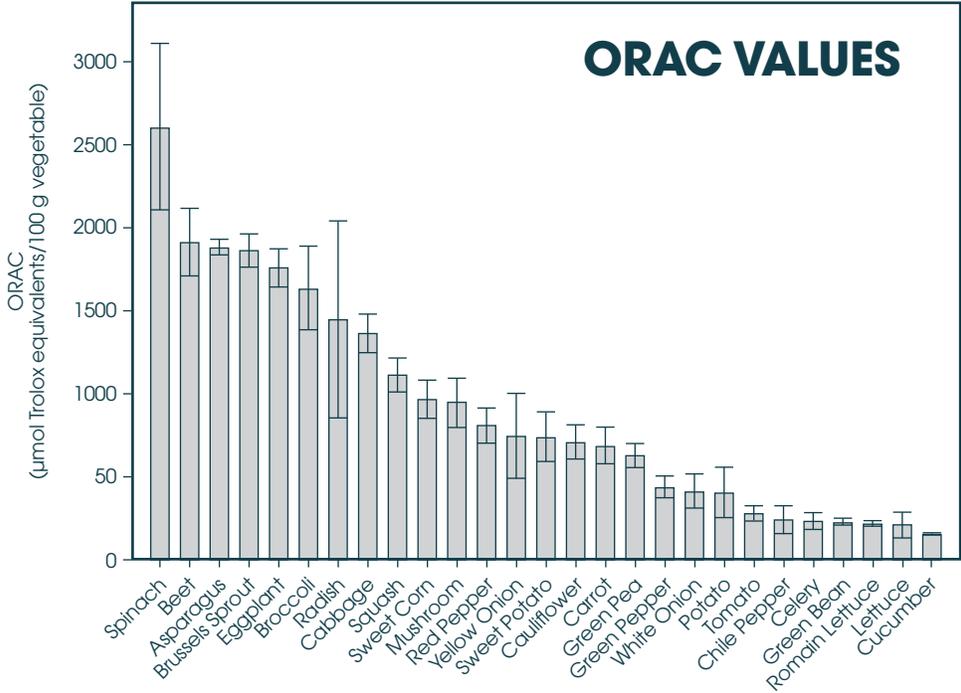
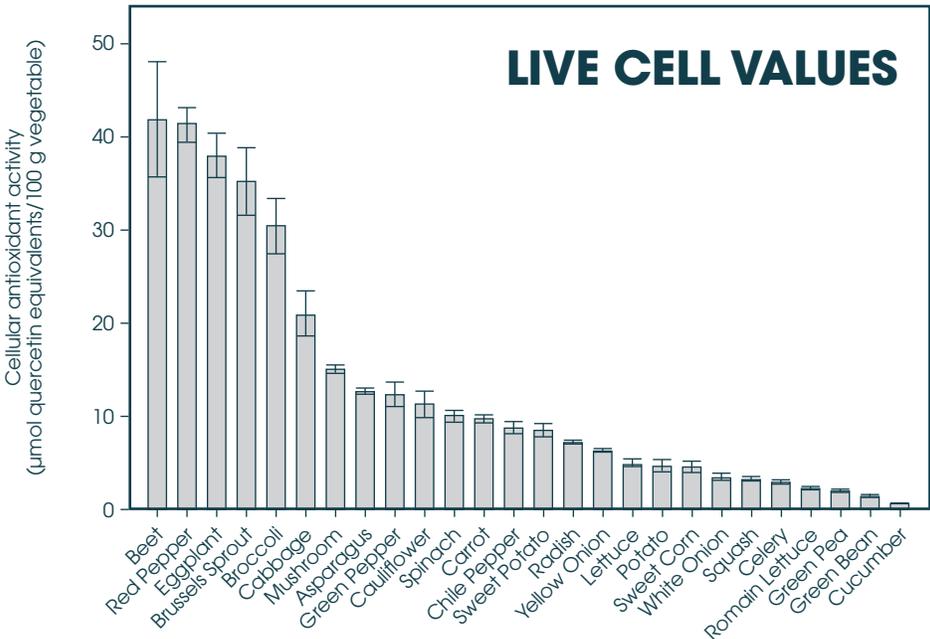
- The name betalain comes from the Latin name of the common beet (*Beta Vulgaris*). Beets have a higher content of betalains than any other food or plant.
- Betalains are the molecules in the beetroot that demonstrate a variety of health promoting biological activities that include their powerful antioxidant (free radical scavenging) ability, the prevention of DNA damage, the induction of detoxifying enzymes, gene regulation, and their ability to reduce the bio markers of chronic inflammation.
- Betalains been shown to support healthy cholesterol levels, blood, sugar levels, blood pressure, brain function, digestion, and circulation.
- Betalains, like other plant pigments called polyphenols, serve a critical role in gut health. Their powerful antioxidant effects protect healthy gut bacteria from excessive free radical damage while their strong anti-inflammatory effects can protect your gut from an overgrowth of bad bacteria.

What is so special about beets?

Green, leafy vegetables have long been identified as the most antioxidant rich foods. That's primarily due to lab testing results using such popular essays as ORAC, TRAP, TEAK, and FRAP. ORAC testing for example, shows spinach number one and cucumber last of 27 popular vegetables tested. But, again, ORAC is a chemical essay measuring how these vegetables, slow down oxidation reaction in a test tube, a reaction that doesn't even occur in nature. But, that was the best information we had until now. For the first time, scientist at Cornell University took those same 27 vegetables and measured their cellular antioxidant activity in cultures of live human liver cells. After all, if the nutrients in these foods can't get into your cells, their test tube results are meaningless. When tested in live cells, beets jumped up to number one and spinach dropped out of the top 10. This lead scientists to examine what compounds in beets accounted for their powerful cellular antioxidant effect. They determined that the broad range of health benefits came primarily from a unique class of red pigment molecules in the beet called betalains.

What is Prolain?

Prolain is a proprietary beetroot extract that contains a standardized level of 25% betalains. By comparison, the typical beetroot supplement or beetroot powder products contains one percent or less of betalains. The proprietary extraction process used to make Prolain remove the sugars that naturally occur in the beetroot. Approximately 50% of the calories in other beetroot products are pro-inflammatory sugars. This extraction process also increases the bioavailability of these betalains by 1000%, which is critical in getting them into your bloodstream and then into your cells.



How does Prolain compare to other well-known plant extracts like curcumin?

Curcumin, found in the spice Turmeric, may be the most researched anti-inflammatory plant extract. It is in a family of over 10,000 unique compounds called polyphenols. Polyphenols, as a whole, have very poor bio availability, on average about 10%, with curcumin coming in on the low end at about 2 to 3%. Betalains are water soluble, and therefore are naturally more bioavailable than polyphenols. However, through our proprietary extraction process, the bio-availability of the betalains are even higher. In test tube studies, curcumin shows to be a very powerful anti-inflammatory ingredient, but that efficacy drops dramatically in humans due to their poor bioavailability. Purified betalains showed a 48% reduction in the biomarkers of inflammation in human research, which distinguishes them from the better known polyphenols. Ready to make a huge quality of life shift? The opportunities are Limitless.

What is Inflammaging and How Can I best Defend Myself from its Ravaging Health Consequences?

Inflammaging refers to the age-related increase in systemic inflammation. Acute inflammation is the immune systems initial response to bodily damage or infection and is necessary to start the bodies normal mechanisms of healing. Once healing occurs, the immune system shuts down those pro-inflammatory biomarkers and begins up-regulating its anti-inflammatory functions. But, as we age, our bodies mechanism as defense and repair become compromised and those pro-inflammatory biomarkers do not shut down appropriately resulting in a persistent low grade inflammation that cause our immune systems to begin attacking healthy cells, tissues, and organs. This phenomena is known as autoimmunity. Persistent low grade inflammation is now recognized as a root cause of almost every chronic disease condition including cancer, diabetes, cardiovascular disease, and cognitive decline. Studies have shown that about 80% of adults over the age of 65 have at least one chronic disease and over 50% have at least two or more. Unfortunately, inflammaging can be accelerated in younger people by their constant exposure to stress, toxicity, and poor nutrition. This is why over 60% of our total adult population is now having to live with one or more chronic or autoimmune conditions that modern medicine has no sustainable solutions for. According to a growing group of researchers, its no longer a question of if you are chronically inflamed it is now a question of how much. You can help reduce your risk of this inflammaging through a life style change that includes better nutrition and exercise. However, our world is now full of processed and compromised food products, toxic chemicals in almost everything we eat, drink, and breathe, and fast passed stressful living conditions. So the need for advanced, evidence based nutritional technologies that can optimize your immune systems response to what the world throws at us, can help your body more effectively deal with toxins and stress and can support healthier inflammatory modulation has never been greater.