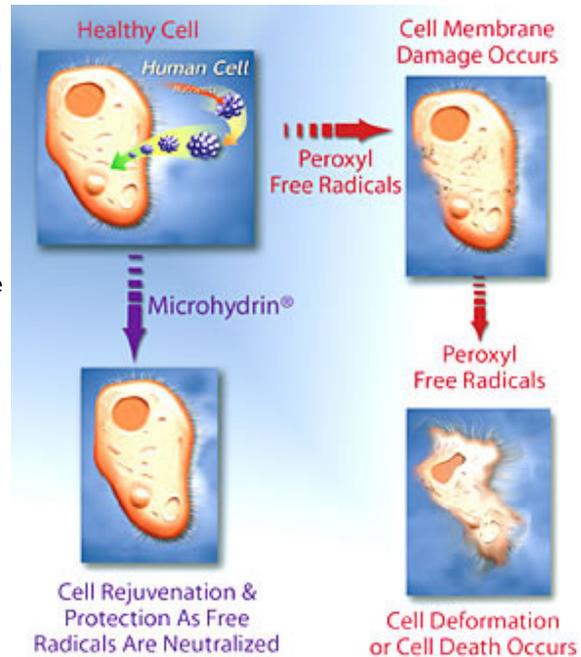


New Microhydrin® has been proven to provide electrons at the Nanocluster™ surface that have the power to prevent peroxy radical formation. The ORAC test specifically measures for the peroxy free radical. Finding a test to measure peroxy free radicals is highly relevant because they are the most abundant type present in biological systems and potentially the most harmful.

How Does the Peroxy Radical Damage Cells?

The peroxy free radical is the type formed within the delicate cellular membrane. If a free radical within or on the outside of a cell attacks the fatty acid cell membrane structures, they create peroxy free radicals. Once one peroxy free radical forms, and an appropriate antioxidant is not available to stop the process, the chain of events keeps occurring until the cell membrane literally collapses. If this series of damaging breaks in the cellular membrane can be prevented, then the cell can remain intact. If a cell membrane collapses, the cell dies.

Although there are many types of free radicals and various tests to measure them, presently the ORAC has become of primary importance and is the one recommended by antioxidant experts and biologists. The validity and evaluation of this test has been supported by the U.S. Department of Agriculture where it is the primary test now used to evaluate the antioxidant potential in various fruits and vegetables.



Why Are Electrons and Hydride Ions in Microhydrin® Important?

New Microhydrin® provides electrons at various potentials.

Some electrons are strong enough to prevent the damage of peroxy free radicals, superoxide free radicals, hydroxyl free radicals or replenish electrons on important energetic cofactors. Many enzymes within the cells carry electrons via hydrogen atoms or by transfer of electrons from hydrogen. These enzymes are called dehydrogenases (take away hydrogen) or hydrogenases (add hydrogen). Some reactions require H⁻ (a hydrogen proton with two electrons), some require a hydrogen proton with one electron and some require simply a single electron or a pair of electrons. Enzymes within the cell transfer hydride ions or electrons from hydrogen very carefully from one molecule to the next when needed. The mitochondria (the energy storehouse) in cells requires H⁻ and electrons carried by NAD(H⁻) to increase and support ATP (the main energy molecule) for the cells. All of these functions of electrons are important.

Other electrons provided by New Microhydrin® as shown by the low ORP readings of -780 mV (oxidation/reduction meters) show billions of electrons available to quench numerous types of radicals in the body. Years of research in various fields including biology, environmental technology, water chemistry and physics have revealed the universal importance of negative ions and electrons available to supply energy, similar to energy stored in a battery. We now understand the molecules in the body

and cellular compounds that can benefit from these types of energy electrons that help replenish and repair the body.

Free Radical Damage is now recognized as one of the primary causes of biological aging. Some damage however can be reversed or repaired with the use of antioxidants.

Antioxidants have been shown to provide:

- | | |
|--|--|
| <ul style="list-style-type: none">• blood vessel strength and protection• memory and learning function• healthy lung function• bone and joint flexibility | <ul style="list-style-type: none">• protection of cell membranes• DNA protection• cardiovascular support |
|--|--|