ANTIOXIDANT PROTECTION

STUDY OBJECTIVE The comparative antioxidant strength of PRO-HEAL® SERUM ADVANCE+ was evaluated against other products in the market.

STUDY DESIGN The Oxygen Radical Absorption Capacity (ORAC) was used as the measure of antioxidant effectiveness. Five products were compared with this assay - PRO-HEAL® SERUM ADVANCE+, product containing vitamins C and E plus Ferulic acid, product containing CoffeeBerry, product containing 10 percent vitamin C and product containing 1 percent Idebenone.

SIGNIFICANCE OF STUDY Many products are advertised as having antioxidant ability and protection against free radical damage. This study provided an actual comparison of five products in the marketplace using the same chemical assay.

The ORAC analysis provides a measure of the scavenging capacity of antioxidants against the reactive oxygen species (ROS) found in the body. ORAChydro reflects water-soluble antioxidant capacity and the ORAClipo is the lipid soluble antioxidant capacity. ORAC TOTAL is the sum of the ORAChydro and the ORAClipo. Trolox, a water-soluble vitamin E analog, is used as a calibration standard and the ORAC result is expressed as micromole Trolox equivalent (TE) per gram or per liter.

The ORAC assay is advantageous over many other methods. The mechanism of the ORAC is based upon sound chemical principles and the uniqueness of the ORAC lies in the quantitation technique. Indeed, many other methods have been developed for antioxidant activity, such as TEAC (Trolox Equivalent Antioxidant Capacity), TOSC (Total Oxyradical Scavenging Capacity), FRAP (Ferric Reducing Antioxidant Power), and DPPH method. However, the fatal drawback of these methods is either lack of oxygen radical or lack of complete quantitation technique. Therefore, only the ORAC provides antioxidant activity mechanistically and physiologically.

RESULTS AND CONCLUSIONS PRO-HEAL® SERUM ADVANCE+ provided superior antioxidant protection when compared to 4 other products in the marketplace.

COMPARATIVE ANTIOXIDANT STRENGTH

iS CLINICAL®
PRO-HEAL® ADVANCE+

Product containing C, E, and Ferulic

Product containing CoffeeBerry

Leading Product containing 10% vitamin C

Product containing 1% Idebenone

ORAC (Oxygen Radical Absorption Capacity) measures total lipophilic and hydrophilic antioxidant capacity
Testing independently performed by Brunswick Labs.