Boyd S, Gary K, Koepke CM, et al. An open-label pilot study of the antioxidant effect in healthy people of Ambrotose AO™. *GlycoScience & Nutrition* 4, 1-6 (2003).

ABSTRACT

An imbalance between reactive free radical species and the body's ability to defend against them results in oxidative stress, a condition that has been linked to the ageing process. Control of an individual's oxidative stress is crucial to preserving health. This study examines the effects of increasing amounts of an antioxidant glyconutritional supplement, Ambrotose AO™, on a population of 12 healthy adults. Whole serum $ORAC_{\beta\text{-PE}}$ values, indicators of oxidative protection, and urine lipid hydroperoxide, alkenals and 8-OHdG levels, markers of oxidative damage to lipids and DNA, were measured. Evaluations were made after a two-week washout period and at the end of two weeks on each of three incremental amounts of supplement. The mean of the percent change from baseline in serum $ORAC_{\beta\text{-PE}}$ levels was positive for all time periods: 19.1% at 500 mg per day, 37.4% at 1.0 g per day, and 14.3% at 1.5 g per day. Compared with baseline values, decreases in urine lipid hydroperoxide levels of 12.2% at 500 mg per day, 15.0% at 1.0 g per day, and 17.0% at 1.5 g per day were also found. No significant changes in urine alkenals or 8-OHdG were noted. A published study in healthy adults examining the effects of increasing fruit and vegetable intake from the usual five to an experimental ten servings per day over two weeks showed a significant increase in serum $ORAC_{\beta\text{-PE}}$ values up to approximately 13%. Over twice this increase, 37.4%, was found using 1.0 g (2 capsules) of Ambrotose AO™.