

## September 2008 WWURA Newsletter

### **Health Notes by Evelyn Ames** Age-Related Eye Disease Study on Vitamin & Mineral Supplements

AREDS, a major study sponsored by the National Eye Institute (NEI), was conducted at 11 major medical center research facilities around the country. "Scientists looked at the effects of zinc and antioxidants, and a combination of both, on people with cataracts and those with varying stages and types of age-related macular degeneration (AMD)" (<http://www.nei.nih.gov/amd/faqs.asp>). People without evidence of cataract or AMD were also studied.

#### **Results?** Important findings:

- High doses of antioxidants and zinc can reduce the risk of vision loss from advanced AMD by about 19 percent in high-risk patients (patients with intermediate AMD or advanced AMD in only one eye).
- Supplements do not appear to provide significant benefits to people with mild AMD.
- The supplements do not prevent development of AMD nor restore vision already lost to AMD.
- Nutritional supplements do not seem to prevent cataracts or to keep them from getting worse over time.
- The results for reduction in vision loss from advanced AMD were statistically significant only for the combination of zinc and antioxidant treatment" ([www.eyecareamerica.org/eyecare/treatment/alternative-therapies/antioxidant-supplements-amd.cfm](http://www.eyecareamerica.org/eyecare/treatment/alternative-therapies/antioxidant-supplements-amd.cfm) ).

**Side Effects:** "While most people in the study experienced no serious side effects from the doses of zinc and antioxidants used, a few taking zinc alone had urinary tract problems that required hospitalization. Some patients taking large doses of antioxidants experienced some yellowing of the skin. Smokers and ex-smokers probably should not take beta-carotene, as studies have shown an association between beta-carotene use and lung cancer. The long-term effects of taking large doses of these supplements are still unknown. ([www.medem.com/medlb/article\\_detaillb.cfm?article\\_ID=ZZZPH27OH4C&sub\\_cat=2013](http://www.medem.com/medlb/article_detaillb.cfm?article_ID=ZZZPH27OH4C&sub_cat=2013)). Other side effects included kidney stones, incontinence, and enlarged prostate. "Participants in the two groups that took zinc also reported anemia at a slightly higher rate; however, testing of all patients for this disorder showed no difference among treatment groups" NEI-NIH, December 2006).

**Where antioxidants are naturally found.** The antioxidants include vitamin C (ascorbic acid), vitamin E (alpha-tocopherol), carotenoids, anthocyanidins, selenium, and zinc. "Carotenoids, nutrients that are not classified as vitamins, include beta-carotene, alpha-carotene, the lycopenes, lutein, and zeaxanthin. The carotenoids are found in leafy green vegetables, corn, kiwi, and many other green, red, or yellow fruits and vegetables. The anthocyanidins are responsible for the blue color of blueberries and bilberries. Antioxidants neutralize the damage to cells caused by free radicals, and may be relevant to AMD if oxidative damage to the retina leads to AMD" (NEI).

**Web Sites for references** included the National Eye Institute (<http://www.nei.nih.gov/amd/> ), and the Medical Library (posted information from American Academy of Ophthalmology ([http://www.medem.com/medlb/article\\_detaillb.cfm?article\\_ID=ZZZPH27OH4C&sub\\_cat=2013](http://www.medem.com/medlb/article_detaillb.cfm?article_ID=ZZZPH27OH4C&sub_cat=2013) )