

Omega-3 offers little benefit for eye disease

14/09/2004 - Taking supplements of the omega-3 fatty acid DHA in combination with vitamin A can initially slow the progression of the eye disease retinitis pigmentosa, report researchers, but for those already on vitamin A therapy, adding DHA offers no benefit.

Retinitis pigmentosa is a group of inherited eye diseases that affect the retina. It causes the degeneration of photoreceptor cells in the retina, bringing progressive vision loss to about one in 4,000 people worldwide. Previous studies had found that taking vitamin A slows the decline in retinal function and vision loss.

Other studies have found that patients with retinitis pigmentosa tend to have lower blood levels of docosahexaenoic acid (DHA), an omega-3 fatty acid found in the photoreceptor cells. Harvard Medical School researchers therefore tested whether giving oral DHA to patients already receiving vitamin A treatment could halt or slow the course of their retinitis pigmentosa.

Their results, reported in the September issue of the *Archives of Ophthalmology* (122:1297-1305), show no such benefit. A group of 221 people with the disease had taken either 1,200 milligrams of DHA or a placebo each day for four years, in addition to a daily dose of 15,000 international units of vitamin A.

Progression of the eye disease had not slowed in any of the patients.

In a separate analysis (pp1306-1314) however, the researchers did find an impact on patients who were not taking vitamin A before the study (30 per cent of study subjects).

"Among patients not taking vitamin A prior to entry, those in the DHA+A group (30 patients) had a slower decline in (vision loss) than those in the control +A group (35 patients) over the first two years," write the authors. But they add that *"these differences were not observed in years three and four of follow-up or among patients taking vitamin A prior to entry"*.

The study findings support *"a previous recommendation that most adults with the typical forms of retinitis pigmentosa should continue to take 15,000 IU/d of vitamin A palmitate under medical supervision to slow the course of their condition,"* the authors concluded.

Scientists from Dartmouth Medical School recently reported that zinc plays an important role in the normal function of rhodopsin, a protein in the eye implicated in retinitis pigmentosa.

Their study in the August issue of the *Journal of Biological Chemistry* suggests that too little zinc in the body could make rhodopsin function abnormally, resulting in degeneration of the retina and eventually blindness.