

# NEWSLETTER - FALL 2005

## The Use of Nutritional Supplements and Your Eye Health By Drs. Fine, Hoffman and Packer



Many of our patients have questions and concerns regarding the role of nutrition and dietary supplements in relation to eye health. In this edition of Fine View, we have decided to print the report that we give to all patients who inquire about the role of dietary supplements. We hope you find this information helpful. There is no document that would address everybody's questions and concerns, so feel free to ask us for more information regarding your personal situation at the time of your next examination.

### **Vitamin & Mineral Supplements and Your Eyes**

#### **Background**

Scientists have long debated whether taking vitamin and/or mineral supplements could help prevent, treat or cure certain eye conditions. Some early scientific studies seemed to show that supplements had the potential to prevent or slow the progression of cataract and age-related macular degeneration (AMD), although more complete study was needed to answer some important questions:

- Which supplements are helpful for which condition(s)?
- Which patients will benefit from supplementation?
- What doses of supplements would benefit patients?
- What other effects might these supplements have on the body? A recent study, the Age-Related Eye Disease Study (AREDS), sought to address these questions, and seems to have given us some (but not all) of the answers to these questions.

#### **What is AREDS?**

The Age-Related Eye Disease Study (AREDS) is a major study sponsored by the

National Eye Institute (NEI) and conducted at 11 major medical center research facilities around the country.

In the study, scientists looked at the effects of zinc and antioxidants, and a combination of both, on patients with cataracts, and on those with varying stages and types of age-related macular degeneration (AMD). They also studied patients without evidence of cataract or AMD to determine if zinc and/or antioxidants can prevent the development of these conditions.

### **What Were the Results?**

The study showed a number of important things:

- High levels of antioxidants and zinc can reduce the risk of vision loss from advanced AMD by about 19% in high-risk patients (patients with intermediate AMD or advanced AMD in one eye but not the other).
- Supplements do not provide significant benefits to patients with minimal AMD.
- These nutritional supplements do not prevent the initial development of AMD, nor do they improve vision already lost to AMD.
- Nutritional supplements do not seem to prevent cataracts, or to keep them from getting worse over time.
- While most patients 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. The long-term effects of taking large doses of these supplements are still unknown.

### **Should I Take Nutritional Supplements?**

If you have intermediate or advanced AMD (in one eye only), talk to your physician about taking nutritional supplements. He or she can help you determine if they may be beneficial – and safe – for you, and what types and doses of supplements to take. The doses used in the study were:

- Vitamin C – 500 mg
- Vitamin E – 400 IU
- Beta-carotene – 15 mg
- Zinc, as zinc oxide – 80 mg
- Copper, as cupric oxide – 2 mg (copper should be taken with zinc, because high-dose zinc is associated with copper deficiency)

It is very important to talk with your physician before taking large-dose supplements, and to follow his/her dosage recommendations carefully. Some supplements may interfere with each other or other medications.

Smokers and ex-smokers probably should not take beta-carotene, as studies have shown a link between beta-carotene use and lung cancer among smokers.

### **Where Can I Get More Information?**

More information on AREDS is available from the National Eye Institute of the National Institutes of Health, [www.nei.nih.gov/amd](http://www.nei.nih.gov/amd). You can also get trustworthy information from the American Academy of Ophthalmology's partner web site, Medem, [www.medem.com/medlb/bufferpage\\_aao.cfm](http://www.medem.com/medlb/bufferpage_aao.cfm).

### **Flomax Complicates Cataract Surgery** **By Richard S. Hoffman, MD**



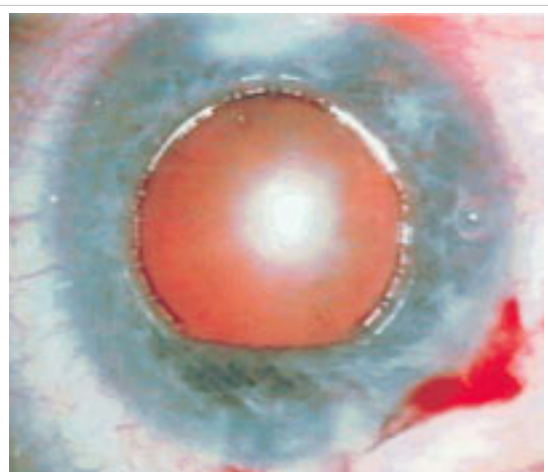
Richard S. Hoffman, M.D.

It is rare for an oral medication to affect the outcome of modern cataract surgery but a recent published observation has shed light on just such an occurrence. Flomax (Tamsulosin) is an oral medication used to help individuals with enlarged prostates from BPH (benign prostatic hypertrophy). Flomax relaxes tissues in the prostate and bladder, resulting in improved urine flow. Ophthalmologists in California noticed a tendency for complicated cataract cases in patients who were using Flomax and a recent study confirmed this observation.

During cataract surgery, the pupil is dilated in order to gain access to the cataractous lens of the eye. If the pupil does not dilate well or remains dilated during surgery, the procedure can become difficult with an increased chance of intraoperative complications. Patients who were taking Flomax prior to undergoing cataract surgery were found to have pupils that would not remain dilated during the cataract operation. In addition, the iris (colored portion of the eye) was found to be very floppy and prone to prolapse out of the incision during surgery further complicating the procedure.



Recognition of patients taking Flomax and at risk for this “floppy iris” allows the ophthalmologist to plan ahead and make changes in the surgical procedure to decrease the risk of problems during cataract extractions. One device that we have found extremely helpful in dealing with patients taking Flomax has been a pupil expansion ring.



Pupil Expansion Ring in place around the pupil. The pupil remains dilated throughout the cataract procedure.

The ring is made out of an acrylic polymer and inserted around the rim of the pupil at the beginning of surgery in order to keep the pupil dilated. Once the cataract has been removed and the intraocular lens implanted, the expansion ring is then removed from the eye. We have found the ring to be a valuable tool that has helped keep cataract surgery safe and effective even in these difficult cases.

If you are taking Flomax or any other medication for BPH, please let your ophthalmologist know at the time of your examination.

## Dr. Fine Delivers Inaugural Kelman Lecture

I. Howard Fine, MD was delighted to give the inaugural lecture in honor of the late Charles D. Kelman, MD, at the most recent meeting of the American Academy of Ophthalmology (AAO) in October. According to the AAO, the Charles D. Kelman Lecture will be given by “renowned surgeons who improve cataract surgery through education or innovation” – a fitting tribute considering Dr. Kelman’s body of work.



Dr. Fine with the late  
Dr. Charles D. Kelman

Dr. Kelman, who was known as the “father of phacoemulsification,” passed away in June of 2004. He was a pioneer of cataract surgery and was the first to realize that a cataract could be removed using ultrasonic energy to emulsify the cataract and extract the material through a small incision. Dr. Kelman’s phacoemulsification procedure revolutionized cataract surgery. In addition to restoring sight, Dr. Kelman’s ideas and achievements have also helped to save lives. Neurosurgeons have adapted his phacoemulsification procedure to remove tumors from the surrounding, delicate brain tissue and spinal cords of children. Dr. Kelman received many awards for his achievements throughout his career. For the revolutionary vision of phacoemulsification, Dr. Kelman was awarded the Nation Medal of Technology by President George H. W. Bush in 1992.

Dr. Kelman was one of Dr. Fine’s personal heroes so Dr. Fine was particularly honored and thrilled to be chosen as the inaugural Charles D. Kelman Lecturer. Shortly after Dr. Kelman’s passing, Dr. Fine offered his thoughts on Dr. Kelman’s legacy:

“I think the important thing for everyone to remember when thinking about all of his many accomplishments and achievements is the fact that Charlie was also the role model for an entire generation of ophthalmologists who wished to, as he had done, combine clinical research and teaching with patient care.”

Named one of the 25 most influential ophthalmologists of the Twentieth Century by a vote of 16,000 ophthalmologists worldwide, Dr. Fine has served as a Core Clinical Investigator for nearly every phacoemulsification system and intraocular lens developed in recent years and has developed techniques and instruments that have further revolutionized eye surgery.

### **Honors and Awards** **By Sherrie Brunell, MS**

Drs. Fine and Packer were thrilled to learn that they were both named one of the top 50 opinion leaders in ophthalmology, according to a poll of ophthalmologists conducted for *Cataract and Refractive Surgery Today*. The magazine honored the individuals for outstanding contribution and leadership in the fields of cataract and refractive surgery. Results were based upon votes submitted by the worldwide readers of the publication.

Dr. Packer was greatly honored to be inducted into the prestigious International Intraocular Implant Club (IIIC) at their recent membership meeting during the congress of the European Society of Cataract and Refractive Surgeons in Lisbon. Dr. Fine is a long time member of the IIIC, is currently treasurer, and is scheduled to become president in three years. The IIIC was founded in 1966 with the purpose of promoting world-wide research and free exchange of ideas regarding intraocular implants and implantation surgery. According to their web site, membership is limited to 250 physicians world-wide and to be considered for membership, a physician must have “extensive personal, practical experience of intraocular lens implantation; shall be recognized as an outstanding surgeon and teacher in his/her country; shall attend and teach at recognized intraocular implant courses or meetings; and shall publish scientific research in recognized journals.” Dr. Packer was also pleased to be invited to become a member of the editorial advisory board for *Review of Ophthalmology*, an ophthalmic journal.

Dr. Hoffman was delighted to be approved as a regular member of the Cornea Society. The Cornea Society was founded in 1975 and its purpose is to “promote knowledge and exchange of scientific ideas relating to the cornea and the anterior segment of the eye.” Regular membership is reserved for board certified ophthalmologists who have completed a fellowship of no less than one year in cornea and external diseases. Dr. Hoffman is the only board certified ophthalmologist who has completed a fellowship in cornea and external diseases in Lane County.

Congratulations to all!

## New Faces



Please help us welcome two new additions to our team. Jon Cassidy, COMT, recently moved to Eugene from West Virginia along with his wife, Cindy, a professor at the University of Oregon. Jon was the head technician of the cornea and refractive surgery clinic at the West Virginia University Eye Institute. An avid cyclist, Jon is enjoying exploring Eugene and Lane County.



Kris Belt, our new Front Office Assistant, is originally from Eugene and she just returned after 15 years away. She ran the medical records department for a large orthopedic group in Minneapolis and worked at Virginia Mason Medical Center in Seattle as a medical secretary for a urology surgeon. Most of her family is here in Eugene so she is very happy to be home. Welcome to Jon and Kris!