

TO YOUR HEALTH

Volume 13, Number 3

March 2008

CARROTS FOR HEALTHY EYES?

By Barbara Chenoweth, NP

Most of us grew up believing that if we ate carrots our eyes would be healthy *and bright*. And while yellow vegetables like carrots are a good source of vitamin A, essential for healthy vision, green leafy vegetables such as kale, spinach, collards and other leafy greens have moved into 1st Place! They are being found to protect the eyes from macular degeneration, cataracts and dry eyes.

Macular degeneration is the most common cause of blindness in older people. It causes the tissue in the macular of the eye, located in retina, to deteriorate, resulting in loss of central vision. Glaucoma, another cause of vision loss, produces increased pressure in the eyeball and loss of side vision. Cataracts affect 50% of older people, causing blurry vision and decreased acuity of colors. Fortunately, cataracts are successfully treated with surgery.

As many new treatments offer hope for cures and improvements in eye conditions, having regular, annual medical examinations by an ophthalmologist is essential. For those with a family history of macular degeneration or glaucoma, eye examinations may be needed more frequently. Any sudden change in vision or eye pain requires an immediate medical evaluation. Identifying and treating eye conditions is of primary importance in preventing loss of vision.

With age, the eyes undergo some normal changes (as we all know):

- Decreased sensitivity to light: more light is needed
- Decreased acuity of colors: colors

seem dim and dull

- Decreased ability to read small print: or is the print just smaller?
- Dry eyes

Many people are bothered by dry eyes. Dry eyes can be caused by an imbalance in the three layers that make up tears — oil, water and mucus. When the eye glands that produce fatty oils, the outermost tear layer, are clogged, the watery layer evaporates too quickly. Water, the middle layer of tears, is 90% of the composition of tears. If the tear glands produce inadequate amounts of water, the oil and mucous layers can touch and cause a stringy discharge. Loss of mucous, the third and inner layer of tears, causes dry spots on the eye.

Dry eyes also can be caused by poor eyelid functioning such as out-turning or in-turning of the eyelids or by Blepharitis, an inflammation along the edge of the eyelids. Medicines, both prescription and over-the-counter, can contribute to dry eyes. Medicines, such as diuretics used to treat high blood pressure, sleeping pills, antihistamines and decongestants, and pain medicines, can be culprits. Environmental conditions like wind, high altitude, and dry air on airplanes can cause dry eyes, (www.mayoclinic.com).

For those who suffer with dry eyes, the symptoms of stinging, burning and eye fatigue are very familiar. Often the symptoms are worse at the end of day after a long session of reading or computer use when the eyes have blinked less than usual.

The care of dry eyes includes:

- Avoid rubbing the eyes



- Wear eyeglasses on windy days, and goggles when swimming
- Avoid air blowing into the eyes (hair dryer and fans)
- Keep humidity between 30–50%
- Use eye drops to moisturize the eyes

Since some eye conditions may be related to high blood pressure, control of blood pressure is especially important. In fact the same life-style preventive measures for heart disease are important for prevention of eye disorders. These include avoiding smoking, keeping cholesterol and blood pressure low and maintaining a normal weight.

This brings us back to diet: new Tufts research has confirmed a link between dietary glycemic index and the risk of macular degeneration. Foods like white rice, pasta and bread have a high glycemic index, associated with a faster rise and subsequent drop in blood sugar. Brown rice and whole-wheat versions of pasta and bread have a low glycemic index and have less of a rollercoaster effect on blood sugar, (*Tufts Health & Nutrition Letter*, October 2007). Because this research is just beginning to emerge, more study is necessary to confirm this relationship. However, it is reasonable to assume that a low glycemic diet along with one low in saturated fats and high in omega-3 fatty acids (salmon, sardines, tuna and other cold water fish) makes a perfect accompaniment to those green leafy vegetables!

HEALTH EDUCATION LECTURE

The March Health Education Lecture *Shortness of Breath: What Does It Mean?* will be presented by Dr. Peter Barkin, a lung specialist at Emerson Hospital. Please join us Wednesday morning, March 5, 10:30 –11:30 in Auditorium Center.

A VISION OF BALANCE

By Muire Lindahl

Visual input is one of the three types of sensory information the brain uses when directing the body's motor system to move through space. Vision provides information on proximity of the body to surrounding objects and gives warning of potential dangers in the environment.

The vestibular system receives information from the inner ear mechanism and is activated when the head moves. It helps to determine if the individual is moving or the surrounding environment is moving.

The somatosensory system provides information from specialized receptor cells found in the skin, muscles, joints and tendons called proprioceptors. These receptors are primarily located in the weight bearing joints of the knee, ankle and foot.

Upright balance is impaired when one or all of these systems is no longer a reliable source of information. Age related visual and auditory disorders distort the information, while lack of sensation or feeling in the skin or injury to the muscular structures results in unreliable proprioception. Strengthening the proprioceptors to improve balance is the most trainable system for compensation.

Impaired balance may require intervention by a physical therapist to either prevent a fall or recover from one. Exercise classes such as aerobic dance, yoga, Pilates and Tai Chi also improve balance, as do strength training and water exercise.

Understanding the dynamics of balance and the means to improve balance provides a "vision" to prevent falls.