

# EYE HEALTH & SAFETY NEWSLETTER

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## Healthy Eyes Fact

Many Americans (48%) still believe that carrots are the best food for eye health, when, in fact, spinach and other dark leafy greens are the healthiest foods for the eyes because they naturally contain large amounts of lutein and zeaxanthin.

## Eye Safety Fact

Eye injuries of all types occur at a rate of more than 2,000 per day. In particular, an estimated 1,000 eye injuries occur in American workplaces alone. The Bureau of Labor Statistics (BLS) found that almost 70% of the eye injuries studied occur from falling or flying objects, or sparks striking the eye.

## How Your Eyes Work

<http://www.aoa.org/x6024.xml>  
(a schematic illustration)

## Myth Buster

**Myth:** *Computers do not harm your eyes.*

**Facts:** Computers are the number 1 cause of eyestrain in the United States. Also see Ocular Migraine.

**Overview:** According to OSHA on November 19, 1999, "Computer vision syndrome (CVS), defined as a complex of eye and vision problems that are experienced during and related to computer use, is a repetitive strain disorder that appears to be growing rapidly, with some studies estimating that 90 percent of the 70 million U.S. workers using computers for more than 3 hours per day experience it (CVS) in some form." The use of computers in the United States and the world is growing exponentially. The amount of time one spends looking at a computer screen is also increasing similarly. Humans evolved biologically as hunters and gatherers. Our vision developed primarily for seeing distance (98% of all humans are born farsighted). Our eye muscle systems are in their most relaxed state when we use our vision for distance objects and space. In similar fashion, our bodies were designed for movement. Maintaining a sitting posture for long periods of time is unnatural for us. As a result, working at a computer for a long period of time without breaks can cause unnatural strain on us that can result in a condition called computer fatigue syndrome. Computer users have shown to have a reduced average blinking time while using computers, which, according to Japanese investigators, causes a major risk of developing transient, or short-term dry eyes. Over a period of time, excessive computer use can have cumulative negative effects on the user including the worsening of farsightedness, nearsightedness, astigmatism, eye-focusing disorders and poor eye coordination. In addition, constant working from a set position can cause neck and shoulder stiffness, as well as stress headaches, which can then cause pain in the jaw (referred to TMJ or temporomandibular joint).

## Nutrients of the Month

### Lutein & Zeaxanthin

**What are they?** Lutein (LOO-teen) and zeaxanthin are important nutrients found in green leafy vegetables as well as other foods such as eggs.

**Why are they essential?** Many studies have shown that lutein and zeaxanthin reduce the risk of chronic eye diseases, including age-related macular degeneration (AMD) and cataracts. AMD is the leading cause of blindness in people over age 55 in the Western world.

**What are the benefits?** Lutein and zeaxanthin are carotenoids that filter harmful high-energy blue wavelengths of light and act as antioxidants in the eye, helping protect and maintain healthy cells. Of the 600 carotenoids found in nature, only two are deposited in high quantities in the retina (macula) of the eye: lutein and zeaxanthin. A recent study demonstrated that higher dietary intakes of lutein and zeaxanthin and vitamin E were associated with a significantly decreased risk of cataract formation.

## Recipe for Healthy Eyes

### Whole Wheat Penne with Spinach and Gorgonzola

#### Ingredients

10 oz. uncooked whole wheat penne pasta  
Olive oil cooking spray  
1 1/2 cup yellow onion, diced (~ 1 medium onion)  
3 large clove garlic, minced  
1/2 cup chicken broth  
3 Roma tomatoes, chopped (~2 cups)  
1 (6-ounce) bag fresh baby spinach  
1/3 cup fresh basil, chopped or 1 teaspoon dried basil  
Salt and pepper to taste  
2/3 cup crumbled gorgonzola cheese  
1/3 cup pine nuts (optional)

**Directions:** Cook pasta according to package directions, without salting water. While pasta is cooking, spray a large, non-stick frying pan with cooking spray. Heat over medium-high heat. Add onions, then stir and cook until slightly transparent, approximately 5 minutes. Add garlic, stir and cook for another minute. Add broth and let simmer for 3 minutes. Add tomatoes, toss, and simmer for 2 minutes. Add spinach and basil, cook and stir for approximately 2 minutes, or until leaves wilt. Remove from heat and salt/pepper to taste. Drain pasta and add to spinach mixture. Thoroughly toss. Serve on a platter and top with gorgonzola and pine nuts.

**Rich in:** lutein, zeaxanthin, folate, and zinc, with modest amounts of vitamin C, omega-3s, iron, fiber, B vitamins, calcium, potassium, and copper.

**Nutritional Information** (per serving): Makes 6 servings. 300 Calories; 25% fat (8.3 g total, 2.8 g saturated), 57% carbohydrate (43 g), 18% protein (13.5 g), 8 mg cholesterol, 8.6 g fiber, 27 mg vitamin C, 1.33 mg vitamin E, 271 mg sodium.

Sources: <http://www.aoa.org/x11815.xml> , <http://www.aoa.org/documents/nutrition/Nutrition-Fact-Sheet.pdf> , <http://www.foh.dhhs.gov/Public/NYCU/eyeinjury.asp> , <http://www.aoa.org/x11819.xml> , [http://www.naturaleyecare.com/diseases.asp?d\\_num=14](http://www.naturaleyecare.com/diseases.asp?d_num=14)