

Celebrating a World of Vision

**PATIENT NEWSLETTER** 

**SEPTEMBER 2016** 



INSIGHTS



## The Scary Truth about Halloween Contact Lenses

Thinking of making your Lord Voldemort costume scarier or your Kim Kardashian more fun with decorative or colored contact lenses this Halloween? Think again. Contact lenses that are purchased without a prescription can fit improperly. Without the right care, wearing contact lenses can lead to corneal abrasions. ulcers, infections, impaired vision, and even blindness. Now that's scary.

Though contact lenses are often sold in pop-up Halloween stores, beauty supply shops, convenience stores—and sometimes, even from high school lockersthey are not accessories. Rather, they are medical devices that are regulated by the U.S. Food and Drug Administration. Yet according to a survey by the American Optometric Association, more than half of people who have worn decorative contact lenses as part of a costume or for other cosmetic purposes bought them without a prescription.

Like most other medical devices, contact lenses should be properly evaluated by a trained healthcare professional before use. This is because our eyes come in different sizes with different curvatures that require different types of contact lenses.

Only your optometrist can ensure that you receive the right prescription contacts for you—whether they're Voldemort gray, Kardashian blue, or just plain clear—by measuring your cornea, pupil, and the curvature of the eye. He or she can also teach you how to handle,

clean, and store your contact lenses to help avoid serious eye infections and permanent eye damage.

One way to prevent complications is to care for your contacts lenses properly. Be sure to follow your optometrist's guidelines for wearing and removing contacts. Wear only contacts provided by your optometrist, and avoid sleeping in them. Get annual eye exams, and follow up with your eye-care provider after a contact lens evaluation.

Left untreated, eve infections can lead to vision loss. Contact your doctor right away if you have the following symptoms: redness and itching, persistent pain, a feeling that something is in your eye, sensitivity to light, a watery or yellow discharge, crusting on the eyelids, excessive tears, involuntary blinking, or decreased vision.





### What Big Eyes You Have



The largest eyeball on the planet is 18 inches wide—about the size of a honeydew melon. My what big eyes you have, giant squid!

You might think that moms have eyes in the back of their heads, but check out what the chameleon can do. Its eyes can look in different directions at the same time, giving it a full 360-degree view.

The head of a **dragonfly** is almost completely taken up by its eyes, which can see a wider spectrum of colors than humans can see.

**Dolphins** sleep with one eye open, monitoring their surroundings with half the brain still awake. If you slept near sharks, you would too!

The world's largest bird, the ostrich, has eyes bigger than its brain. They may have tiny bird-brains, but they can see as far as 2.2 miles.

Hamsters can blink just one eye at a time. Or maybe they're just winking at us so we'll refill the food bowl.



EYE-Q

Q: How many shades of gray can the human eve see?

(See answer on back.)



# Fall Allergies or Dry Eye Disease?



Ah, autumn. The bright, colorful leaves. The apple cider. The crisp, chilly air. The itchy, teary, burning eyes.

Wait, what?

For many people, fall brings with it uncomfortable eye symptoms. But can you tell whether yours are caused by fall allergies or dry eye disease? Both conditions can cause itchy, dry eyes, and both can make contact lenses uncomfortable to wear. Yet they each can have different risk factors, symptoms, and treatments.

#### What are fall allergies?

More than 50 million Americans suffer from allergies each year. They occur when your immune system overreacts to allergens such as pollens from trees and grass. In autumn, the most common allergens are ragweed pollen, mold spores, and dust mites. If you live in the "pollen belt" that stretches from the southern Midwest to the Southeast, your area has some of the highest pollen counts in the country.

Fall allergies can cause watery, red, and swollen eyes, runny nose, sneezing, and coughing.

#### What is dry eye disease?

This condition occurs when the eye doesn't produce enough tears or when tears evaporate too quickly. It tends to affect the elderly and women over the age of 50. It can be exacerbated by the autumn's drier air, blowing air from heaters, and treatments for allergies such as antihistamines and decongestants, which can often reduce fluid production in the eye.

People with this condition may experience a burning, stinging, or scratchy sensation in their eyes, sensitivity to light, and tired eyes.

Your optometrist can help determine whether your symptoms are caused by fall allergies or dry eye disease—or both—and can recommend over-the-counter lubricant drops or provide a prescription medication.

You can lessen symptoms of fall allergies by staying indoors whenever possible, closing windows, changing your clothes, washing your hands and face when you come indoors, and showering to remove pollen from your skin and hair before bedtime.

For dry eye disease, wear eyeglasses instead of contacts when symptoms flare, use a humidifier to add moisture to the air, and rest your eyes frequently when you use the computer or read for long periods of time.

#### Ready for the Fall?

For many people, autumn means uncomfortable eye symptoms. But do you know whether yours are caused by fall allergies or by dry eye disease?





### **Bifocal vs. Multifocal**



Do you often wear reading glasses over your contact lenses? You're not alone. Presbyopia, the loss of the ability to see nearby objects clearly—which occurs with aging—affects more than a billion people worldwide. But eyeglasses aren't necessarily the answer. Bifocal and multifocal contact lenses can help you see near and far without having to wear glasses.

#### **Bifocal contacts**

 Two prescriptions in the same contact lens, one for seeing nearby objects and one for farther distances.

#### **Multifocal contacts**

 A range of prescriptions in the same contact lens that provides a seamless progression of lens powers, much like progressive eyeglasses.

They can work in different ways:

Alternating vision: Your eye alternates between the two prescriptions as it looks upward toward distances or downward to see close up.

**Simultaneous vision:** Your eye looks through both the distance and near prescriptions at the same time. Your visual system learns to adjust, selecting the correct prescription depending on where you're looking.



## A Feast for the Eyes

Eggs and spinach are good sources of antioxidants that can protect the eye from disease. They are rich in lutein and zeaxanthin, carotenoids that are stored in the macula, which shields the eye from harmful light. A food blogger from northern Kentucky shares her favorite recipes featuring these helpful eye-health nutrients.





#### **Huevos Rancheros**

(Serves 4)

#### **Ingredients:**

4 eight-inch whole-wheat tortillas1 15 oz. can black beans

Salsa

4 large organic eggs, over-easy Shredded organic cheese

#### **Directions:**

- Spread butter on both sides of the tortillas and toast them in a skillet over medium-high heat until golden brown. Transfer to a plate.
- 2. Heat up beans in a pot and put a layer on top of each tortilla.
- 3. Drizzle salsa over the beans.
- **4.** Fry eggs until done (to your liking) and gently place them on top of beans/salsa mixture.
- **5.** Sprinkle cheese on top of egg and beans.

Healthy recipes and photos reprinted with permission by Katie S. of www.TheLittleThingsJournal.com.

### **Mini Egg Frittatas**

(Serves 4)

#### **Ingredients:**

8 large organic eggs 1/4 cup half & half 1/4 tsp. salt 1/2 cup chopped spinach

Extra virgin olive oil

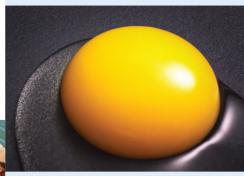
**Mix-Ins:** Add whatever you like in your scrambled eggs or omelets, such as goat cheese, shredded Swiss chard, or chopped vegetables.

#### **Directions:**

- 1. Brush muffin tin with olive oil.
- 2. Mix eggs, half & half, and salt in a bowl and then distribute evenly in muffin tin.
- **3.** Add mix-ins by sprinkling a little bit of each over the egg mixture.
- **4.** Bake at 350° until they are golden, about 20 to 25 minutes.

If the frittatas stick to the pan, use a knife or fork around the edges to loosen them for removal. You can eat them from the oven, or freeze and defrost for an easy breakfast on a busy morning. Just microwave them for 30 seconds or until heated through.





#### One Good Egg for the Eyes

Your mother may have told you that eating carrots can help improve your eyesight, but did you know that adding eggs to your diet can be good for your eyes, too?

The egg yolk is a good source of lutein and zeaxanthin—protective pigments called carotenoids—as well as zinc. These pigments accumulate in the macula, the area in the center of the retina that provides clear central vision, to form a shield that can protect the eye from damaging blue light. Together, these substances can help preserve good eyesight and reduce your risk for conditions such as age-related macular degeneration and cataracts, leading causes of vision loss.

Researchers have found that eating one egg per day for five weeks increases concentrations of lutein and zeaxanthin—without raising cholesterol levels. A single large egg has 166 micrograms of lutein and zeaxanthin and provides a healthy dose of zinc, too.

Maybe your mom didn't know that an egg a day could help protect your eyesight and safeguard your eyes from disease.



## **Blurry Vision: What Does it Mean?**

If your vision gets blurry, do you assume that you just need stronger glasses? You might, but blurry vision can also be a sign of a serious medical condition that requires an accurate diagnosis and an appropriate treatment.

Blurry vision can make objects appear out of focus or hazy. Many times, the cause of blurry vision is refractive errors, changes in the cornea or lens of the eye that help you focus. These include nearsightedness, farsightedness, presbyopia, which is an age-related inability to focus on close objects, or astigmatism, a focusing problem caused by an irregularly shaped cornea or lens.

If you have minor blurring that comes and goes, you may have eye strain, overexposure to sunlight, migraines, or fatigue. But sometimes, blurry vision can be a symptom of more serious eye problems, such as:

#### **Cataracts**

A cataract is a clouding of the lens of your eye that is associated with aging. Cataracts are the leading cause of blindness in the world. In this condition, a buildup of protein reduces the sharpness of images that reach the retina, the light-sensitive lining in the back of the eye.

#### Glaucoma

Glaucoma is associated with elevated eye pressure, which can cause damage to the optic nerve that carries information from the eye to the brain. Most people don't know they have glaucoma until noticeable vision loss occurs. It's more common in people over the age of 60.

#### **Age-Related Macular Degeneration**

The leading cause of vision loss among Americans over age 65, age-related macular degeneration is caused by the deterioration of the central portion of the retina, or macula, which is responsible for sharp, central vision. Over 15 million Americans suffer from macular degeneration.

#### **Diabetic Retinopathy**

This complication of diabetes is caused by damage to blood vessels in the retina which can lead to swelling and leaking. If blood sugar levels stay high, the condition worsens.

To determine the cause of blurry vision, it's important to have a medical eye examination in addition to a vision screening, which tests your eyesight. In a medical eye exam, an optometrist dilates the pupil to see the retina, macula, and optic nerve, and checks the eye's pressure and peripheral vision.

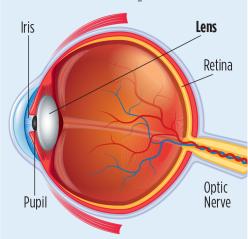
#### If it's All a Blui

Blurry vision can mean you need a new eyeglass prescription, but it also may be a sign of serious disease. If your vision is blurry, visit your optometrist for a comprehensive medical eye exam.





### What Is the Eye's Lens?



If you've ever focused the lens of a camera, you have a sense of how the lens of the eye works—by shortening and lengthening to focus light rays. The lens of the eye is a clear, curved disk behind the iris that focuses light entering through the pupil to make an image on the retina, the light-sensitive lining in the back of the eye.

The lens helps the eye adjust to near or far vision through a process called accommodation, which occurs when the ciliary muscles that hold the lens relax or contract. By relaxing, they flatten the lens, allowing the eye to see objects that are in the distance. By contracting, they thicken the lens, allowing the eye to see close-up objects.

With aging, the lens may begin to stiffen, making it more difficult to focus on objects that are near. This is called presbyopia, a condition that affects many people over the age of 40.

Sometimes, protein can build up in the lens, clouding it—a condition called cataracts, which causes blurry vision and makes it difficult to see at night.





## **Who Should You Buy Your Contact Lenses From?**

Do you know where your contact lenses came from? If you buy them directly from your optometrist, you can be sure that your contacts come from an authorized distributor of the brand you wear—always fresh and pure, never expired. This is important because contact lenses are medical devices that are regulated by the U.S. Food and Drug Administration to ensure your eye health and safety.

What's more, your optometrist can often compete with online contact lens-seller prices. Association of Leaseholding Lenscrafters Doctors (ALLDocs) optometrists are usually available seven days a week to answer any questions and address any concerns you may have.

#### Here are some reasons why you should buy contact lenses from your optometrist:

- You get the correct lenses and prescription guaranteed. If your lenses don't perform properly, your optometrist will correct the problem.\*
- Your optometrist's prices are competitive with most online suppliers. Plus, you get manufacturers' rebates and any available instant and annual discounts.
- Torn or defective contact lens? Your optometrist typically provides a replacement free of charge.
- You get the maximum value from your insurance plan when you buy contact lenses through your optometrist.
- You can usually use your flexible spending account (FSA) for your eye care and contact lenses all year long.
- If you purchase an annual supply of contacts, shipping is usually free (except for overnight delivery).
- At your yearly visit, you may be able to exchange any unopened boxes purchased at your optometrist's office, as long as they aren't expired and the package is in its original condition.
- 8 You are covered by your optometrist's Trusted Guarantee.

\*The most common cause of lens-related eye problems is skipping regular checkups. To ensure that your prescription continues to be right for you, it's important to visit your optometrist for annual eye examinations and to make an appointment if you experience any changes, such as blurry vision, eye pain, or an infection.



## What Is Pachymetry?

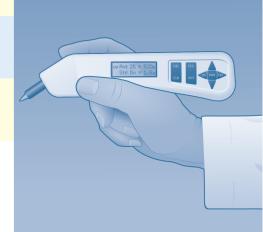
A pachymetry test measures the thickness of the cornea, the transparent layer covering the iris and pupil which directs light into the eye. Pachymetry is a quick, painless, and important test that optometrists use to diagnose and manage conditions that affect the cornea, such as glaucoma. It's also used to determine if the thickness of your cornea is suitable for LASIK surgery to correct vision problems, such as nearsightedness.

#### **Conventional Pachymetry**

Before this test, your optometrist applies numbing drops to the eyes. Next, a small ultrasound probe is gently and briefly held against the cornea to measure its thickness. You will be asked to look straight ahead without blinking.

#### **New Generation Pachymetry**

This test uses an ultra-high definition camera to create a 3D map of the cornea. This helps your optometrist to determine the cornea's thickness at various points. In this brief test, you look straight ahead at a green light while a special rotating camera photographs your cornea from several angles.







**Dr. Jeff Geisert Guest Optometrist** 

Q: I'd like my daughter to get contact lenses to wear during sports this fall. How do I know if she's ready for them?

A: The eye can tolerate a contact lens at a very young age. Even toddlers can—and do—wear contact lenses under special circumstances. But I tell parents that the patient has to be motivated to wear contacts, because they require more work than glasses do. If your child isn't motivated, contact lenses may wind up sitting in a drawer.

If your daughter wants to wear contact lenses, consider if she's ready for the responsibility. I rely on parents to determine if their kids are good about brushing teeth, washing hands, and taking care of everyday chores and responsibilities. If they are, they'll do fine with contacts.

But rules should be set in place to make sure your daughter cares for her lenses properly. That way, she won't rip or lose them and she can avoid eye infections. Here are my top rules:

- · Always wash your hands before handling contact lenses.
- Use the cleaning and storing solutions properly.
- Rub your contact lenses to clean them, even if you have a "no rub" solution, because it's a more effective way to remove dirt and other deposits, such as protein.

Yet not all lenses require cleaning. I generally recommend one-day lenses that are removed and discarded at the end of each day. They never get old or dirty, they feel brand new every day, and they cause fewer complications.

If your daughter notices red eyes or discharge, or if the lenses don't feel comfortable, visit your eye-care professional. Otherwise, I recommend annual eye exams to make sure her prescription still suits her. But growth spurts can change vision in the eyes, so she may need an eye exam sooner.

When school starts, your daughter may have a problem with dry eyes. This is because we blink less when we stare at computer screens and books. I usually recommend an over-the-counter contact lens rewetting drop to help keep her eyes comfortable.

Also, it's not a good idea to sleep in contact lenses. I tell my patients that your dreams are not any clearer with contacts! So take them out at night.

#### **Sporting Contact Lenses**

Optometrists may recommend contact lenses as a good choice for responsible kids.



### FYE DROPS

#### **Longer Lashes: Are Treatments** Like Latisse Safe?

Do you wish your eyelashes could be long and lush? They can be with Latisse®, a prescription treatment for thinning lashes. But is it safe?

In 2008, the U.S. Food and Drug Administration approved Latisse to help grow eyelashes in people with inadequate or not enough lashes. Latisse is a cosmetic formulation of Lumigan®, a prescription medication to help treat high eye pressure caused by glaucoma that has a unique side effect: longer, lusher, darker evelashes.

Doctors aren't sure how Latisse works, but applying it to your upper lash line each night with a supplied sterile applicator causes noticeable hair growth in about two months. With regular use, eyelashes can appear thicker and fuller, and some darken as well. A one-month supply costs about \$120.

But it isn't risk-free. Four percent of patients report experiencing itchy, irritated eyes, redness, dry eyes, and skin darkening. It can also cause a permanent brown pigmentation of the iris.

To determine if treatments like Latisse are right for you, be sure to ask your optometrist.

#### Answer to Eye-Q (from page 1)

A: The human eye can see 500 shades of gray-more than 10 times the grays you'll find in the average paint store.

#### CONTACT

#### ALLDocs

Heather Kreidler 3509 Haworth Drive Suite 208 Raleigh, NC 27609 hkreidler@foxeyecare.com 919.763.7522 919.263.2020

Eyedeaz LLC

zierler@comcast.net 908.447.1562

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