he colorful image on the screen resembled a topographic map of a storm brewing in the ocean. "That hurricane effect is actually what we're looking for," says Brad Vogel, an optometrist at Eyecare Associates, as he guides me through an intricate, layer-by-layer look at the different parts of my eyes on an ocular coherence tomography machine.

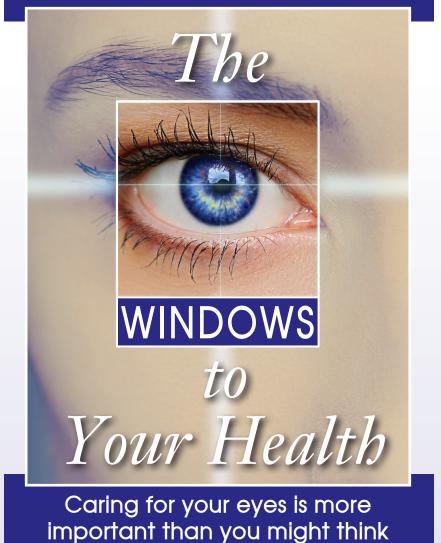
Using laser technology, the instrument gives eye care professionals a much more detailed view of areas of the eye than can be done during a visual exam or with photos, helping them spot potential signs of trouble. From more accurate evaluation tools to improved surgical techniques, eye care technology is advancing all the time. Yet many people assume that if they see fine and aren't experiencing any symptoms, their eyes must be healthy.

"If you ask people which sense they'd be most reluctant to give up, most will say their vision—it's such an important part of everyone's life and losing it can be pretty devastating," Vogel says. "Yet so many take it for granted—and what many

people don't realize is that a majority of eye conditions that can cause vision loss will go undetected in the early stages without a professional evaluation."

With glaucoma, for example, a serious eye disease that damages the nerve fiber layer of the retina—ultimately resulting in blind spots and vision loss—one can have 20/20 vision in the advanced stages of the disease and not notice a gradual loss taking place in their peripheral vision. Eye care professionals are also sometimes first to catch the onset of diseases like diabetes and high blood pressure.

"The eyes are one of the few places where you can see blood vessels easily, so diseases that affect the blood vessels, such as diabetes, high blood pressure and bleeding and clotting disorders, are often visible inside



by rhea maze

the eyes," says Patrick Arnold, an ophthalmologist at the Eye Center of Northern Colorado.

While certain changes can be attributed to the natural process of aging, such as increased sensitivity to light or not seeing as well in the dark, true vision loss is only the result of eye disease or injury. The most common eye diseases include age-related macular degeneration, which damages sharp vision, and cataracts, which is clouding of the eye's lens and the world's leading cause of blindness.

"We estimate that there are about 10,000 people in Larimer County who are experiencing vision loss," says Melody Glinsman, outreach coordinator with Ensight Skills Center. Access to affordable care is a big issue that keeps people from seeking treatment, as is transportation to appointments once symptoms have progressed.

The key to eye health is prevention or early detection. If conditions can be identified early, they are much more readily treatable than if they are found when further advanced, because by then there may already be permanent vision loss. "I see people in that

situation every day," Glinsman says. "It's surprisingly hard to convince people to be seen and to show them what resources are out there."

Beyond 20/20

You might think that your vision is fine and your eyes are healthy, but getting an exam from an eye care professional is the only way to be sure. Plus, eye health is much more than being able to read small letters on a chart.

A comprehensive exam thoroughly evaluates eye function and health, as well as visual acuity, and typically includes an in-depth look at all of

continued on page 6









wishes

COVER STORY continued from page 1

the parts of the eyes, a measurement of the pressure inside of the eyes, a series of vision tests and exercises that flex and assess the focusing system.

Regular eye exams should begin at birth and continue throughout one's life. "Primary care providers will screen an infant's vision at birth and at each subsequent well-child check," says Arnold. "There's no minimum age a child has to be for an eye exam—it can be done at any time."

Proper eye development is crucial in young children and eye exams also become increasingly important as we reach middle age and beyond.

Seeing into the future

Vision problems that occur when the shape of the eye causes focusing issues are known as refractive errors and are the most frequent eye problem in the U.S. This includes near-sightedness (myopia), far-sightedness (hyperopia), distorted vision at all distances (astigmatism) and loss of the ability to focus up close (presbyopia, which typically occurs in people 40-50 years old).

Stress on the visual system can cause everything from headaches to symptoms typically associated with attention deficit disorder,

Be kind to your eyes

Bright Eyes

"We get so much sun in Colorado," says Arnold. "Long-term UV exposure can damage many of the structures inside of the eye, from the surface all the way to the back of the eye." It can also accelerate the development of cataracts and macular degeneration. Protection doesn't always have to mean wearing sunglasses; clear lenses can also come with a UVprotective coating.





Cover Up

From activities such as mowing the lawn to construction and crafts projects, wearing safety protection for the eyes is crucial to avoid potentially devastating injuries.

Face Time

"All of the different devices we look at can create strain on our visual system," says Vogel. Anti-reflective coatings on lenses can help with glare issues and adjusting the power settings on computers, iPads and cell phones can also help your focusing system relax. If you work at a computer all day, try the 20-20 rule: Every 20 minutes, look away from the screen at least

20 feet in front of you for 20 seconds. "You have to take breaks and let your visual system recuperate," Vogel says.



Studies have shown that zeaxanthin and lutein, important nutrients found in leafy green vegetables and eggs, can help reduce the risk of chronic eye diseases. Zinc, omega-3

fatty acids and vitamins C and E also play a key role in eye health.

particularly in people who are far-sighted and have problems focusing

There are myriad, personalized options for vision correction and technology continues to develop and improve. "Some people have the misconception that if they get vision correction, they're going to become dependent on it and it will make their vision weaker," Vogel says. "It actually works the other way around—a lot of people don't realize how much better their vision quality could be."

Over the next 30 years, the population of adults with vision impairment and age-related eye diseases is estimated to double. Establish a comfortable, open dialogue with an eye care professional and don't ignore symptoms. "It's always better to be safe than sorry," Vogel says. "We have two eyes—but it's not like we use one and have a spare."



Fast Facts from the Centers for Disease Control and Prevention

- ► An estimated 61 million adults in the U.S. are at high risk for serious vision loss, but only half visited an eye doctor in the past 12 months.
- ➤ Vision disability is one of the top 10 disabilities among adults 18 years and older and one of the most prevalent disabling conditions among children.
- Data shows that more than half of adult Americans do not seek eye care because of lack of awareness or the cost.

Local Resources

The Fort Collins Lions Club

Provides low-income, uninsured Larimer County residents with eye exams and glasses. fortcollinslions.org • (970) 377-2282

Ensight Skills Center

Provides low-vision evaluations and visual rehabilitation programs. They also offer financial assistance to help folks without insurance or adequate income access services.

ensightskills.org • (970) 407-9999

Further Reading _____

American Academy of Ophthalmology, aao.org

American Optometric Association, aoa.org

American Association for Pediatric Ophthalmology and Strabismus, aapos.org

National Eye Institute, nei.nih.gov

Centers for Disease Control and Prevention, cdc.gov/visionhealth

Prevent Blindness America, visionproblemsus.org