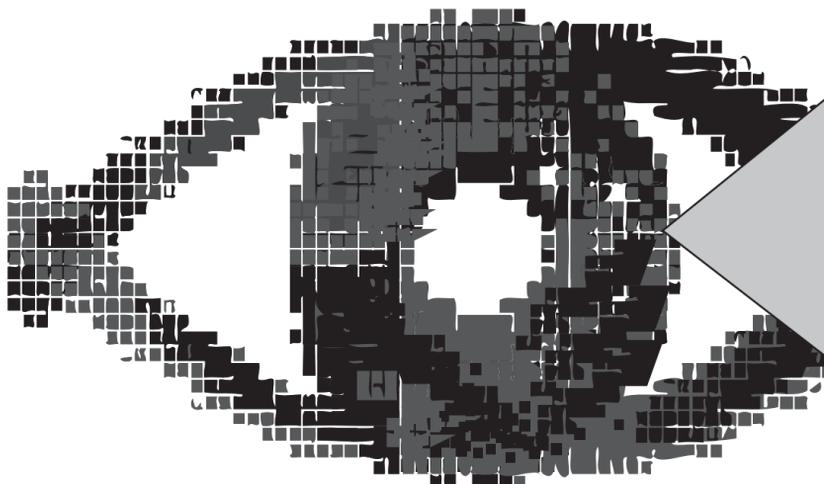


Living in a world without color



Eye Facts

- * In the United States, approximately 25,000 eye injuries result in complete blindness.
- * Your eyes blink over 10,000,000 times a year.
- * When you are looking at someone you love, your pupils dilate, and they do the same when you are looking at someone you hate.
- * Women blink twice as often as men.
- * The human eye can distinguish 500 shades of the gray.
- * People generally read 25 percent slower from a computer screen than from paper.
- * Men are able to read fine print better than women.

Sources: listlovers.com

Design by Cameron Ballentine/Index

BY SHANNON WALTER
Staff Reporter

Proper vision is very important to overall health, but not every person has the luxury of perfect vision.

Vision loss affects about 21.2 million American, meaning they wear glasses or contacts or are completely blind, according to the 2008 Census. About 1.3 million of these people are blind, according to the National Federation of the Blind Web site.

David Wohlers, professor of chemistry, has been completely blind since 1959. At age 3, doctors discovered that he had a congenital disease called bilateral retinal blastoma, causing a tumor to form in his right eye, Wohlers said. He was born without the gene that suppresses tumor growth, he said. The tumor was successfully removed to save his life and he underwent x-ray therapy to eradicate the cancer. At age 7, doctors discovered a cataract in his left eye, and an unsuccessful surgery rendered him completely blind, Wohlers said.

After all that, Wohlers said he is glad he was able to see until he was 7 years old.

"If the same surgery were done today, of course it would have been totally successful," Wohlers said. "And my vision would have been corrected, and I would have been able to see out of one eye. My condition occurs sporadically in one out of every 18,000 live births."

Wohlers said he attended a residential blind school, then the University of Iowa where he studied chemistry to become a professor.

"I had a guidance counselor while I was a junior in high school [who said] that it was too bad I was blind because he thought I would be pretty good at chemistry," Wohlers said.

His bookshelves are full of binders in Braille that only contain information from three textbooks. In the classroom and lab, Wohlers said he operates with help from a teaching assistant because reading and creating presentations is very time consuming.

"It's OK to let people make mistakes [in the lab] that aren't deadly of course," he said. "... Eighty or 90 percent of what is done in the laboratory generally is a failure, but you learn from that by refining it, modifying it and moving forward."

For now, his biggest frustration is with computer pro-

grams, he said. Every time he learns how to use something, it changes, he said.

"Blindness is a pretty big inconvenience," Wohlers said. "But obviously with proper training and adequate preparation, you can usually get the job done. For me, the frustration is that learning software — learning how to use the speech access programs to get the most out of software [is time consuming]."

Blindness is not the only type of vision loss that can greatly affect a person's life.

Sophomore Katherine Murphy has achromatopsia, which is an eye syndrome that results in the inability to perceive color and refract light. Only about one in 33,000 people in the United States is affected by achromatopsia, according to achromat.org.

"[Achromatopsia] basically means that I don't have cones in my eyes," Murphy said. "And cones are the cells in your eyes that refract light and block light. So I can't see color because I don't have those cones, and I also am blinded by light because I don't have anything to block the light."

Murphy said achromatopsia is a genetic disorder carried on the X chromosome. She said she never has been able to see colors because she has had the disorder since she was a baby.

"When you're born with something like that, it's the only thing you know," Murphy said. "I don't know what seeing color looks like. If I had been born where I could be able to see color and this happened to me, I think it would suck a lot more."

She said her grade school teachers taught her to read early so she could use the labels on crayons while coloring.

One of the most common questions Murphy said she is asked is how she manages to match her clothes.

"Well, I have this rule that I don't ever go shopping alone," she said.

Murphy said she doesn't attach labels to identify her clothes because she doesn't want to be too reliant on the labels and that her friends might switch them because they think it's funny.

Achromatopsia technically is considered a disability by the state of Missouri and the University. Murphy said she

doesn't use all the services Truman offers her, but her professors are required to enlarge tests and worksheets and make copies of PowerPoints for her.

"I don't take a whole lot of advantage of what the University can offer," Murphy said. "I could have note takers, but it's something that I can do on my own, and if I need help then I'll ask for it."

Senior Kevin Frey was born color-blind, which causes him to mix up reds, blues and greens. Approximately 3.5 million Americans are color-blind, according to the 2008 Census.

"Shades of colors are somewhat difficult to distinguish," Frey said. "There are actually different types of color-blindness. I do not know what type I am because I fail all of the [tests distinguishing each type]."

Frey said when he was young, he learned his colors the same way all children did. However, his brain does not differentiate between blue and purple or red and yellow correctly.

"From what I understand ... the light still goes into my eyes the same way that it does with every other person but my brain is just not able to distinguish the colors as well," Frey said.

Because color-blindness is carried on the X chromosome it predominately affects males.

Frey said it never has caused problems for him. He said his mom, sisters and girlfriends have always helped him match his clothes.

"I have been told what things work together, so I know which of my clothes I should wear with [each other] so that I don't [look] like I have no sense of fashion," Frey said. "It definitely can be a problem because purple and blue to me are totally the same color."

Frey said his childhood friends enjoyed testing him on colors.

"Back in kindergarten and grade school when kids would find out I was color-blind, they would try and test me because they thought it was funny when I got it wrong," he said. "They would always hold up the crayola markers and say, 'What color is this?' But they'd always hold the marker so that the spelled out color was facing me."

"When you're born with something like that, it's the only thing you know."

Katherine Murphy
Sophomore

Spice, lime dominate Mexico

Believe it or not, I have pretty strong Mexican roots.

Although Mexico constitutes a small part of my heritage, I lack one major ability that is necessary to be classified as truly Mexican — the capacity to handle spicy food.

It has become painful for me to respond "No, gracias" to the question "With spice?" every time I order food. It shames me not only because they even have to ask the question but also because I always answer the way they think I will — clearly, with just one look at me, they know I can't take the heat. Honestly, though, the spice here can get a bit out of control. Sure, there is a rainbow of salsas that can be added separately to any dish, but a strong, fiery flavor is inherent in almost every food before the sauce is even added.

In addition to the salsa or spicy peppers that frequently are smothered over any dinner dish, I've found traces of chili in some pretty unexpected places. The powder is exceedingly popular alongside fruit, where it coats the inside of cups filled with fruit ice cream or is sprinkled generously over a snack of melon or mango. It is the main draw for a variety of candies as well. One afternoon my housemate offered me a pineapple lollipop. Did I say pineapple? I meant pineapple-chili swirl. But the place I was most surprised to see it was in beer. One

of the most popular drinks here is called a "Michelada," in which beer is poured over a combination of lime, salt and a mildly spiced tomato salsa. It seems like absolutely nothing is free from chili's grip.

Potentially tying with the obsession with spice is an obsession with lime. As a rule, food automatically is accompanied by a few lime wedges or some lime mayonnaise, the only essential condiment besides salsa. The type of food doesn't matter — the juice is sprinkled liberally into drinks or over salad, sandwiches, tacos, vegetables, rice and just about everything else. In fact, the lime is so dominant that lemons are obsolete here. There is limeade but no lemonade, and the way to refer to a lemon, should it ever come up, is to call it a "yellow lime."

Apart from these two star flavors, I have found some amazing tastes here. Puebla is known around the world for its mole sauce, which is made from a unique and very tasty mixture of chili and chocolate. I'm a fan of another Pueblan dish called cemitas, which are sandwiches made of a thin layer of meat, avocado, onion, optional spicy peppers and an herb similar to mint on crunchy bread.

And of course, there are the enchiladas, which I could possibly eat every day without the flavor getting old.

I've seen the American influence on the cuisine as well, and I am proud to be from a country that makes international waves, although I'm sad that they're unhealthy and ruin local culture. I was surprised to find myself explaining what a burrito is — apparently, it is just a yummy American invention that only has made it as far south as northern Mexico. Other fine dishes from the homeland line the streets daily. In the afternoon, potato chips (covered in chili powder, of course) are deep-fried and sold on the corners, and at night, hot dog and hamburger stands pop up on every block, selling the classic American taste with a Mexican twist of lime mayonnaise and jalapeño carrots.

Needless to say, I have enjoyed eating in this country. Some of the flavor combinations have been striking, but they almost never have been disappointing. Although it's not hard to find a good Mexican restaurant at home, I still get the feeling I'll be missing a little piece of Mexico once I'm back.

I've found some traces of chili in some pretty unexpected places.



Kelly Schute



Heart knowledge vital for life

Good heart health requires a combination of diet, exercise and knowing your risk factors for heart disease, as well as recognizing the signs of a heart attack. A heart attack rarely happens without warning — it's up to us to identify the signals and act in time. Do your heart a favor: Learn the facts about how to keep you and your loved ones' hearts healthy and strong.

We've all heard about the differences between Mars and Venus when it comes to matters of the heart. These differences hold true when it comes to heart health as well. Knowing how to recognize the early symptoms of a possible heart attack can help men, women and their doctors to prevent it, or intervene in time to minimize the damaging effects on the heart.

Men usually experience what we know as the classic signs of a heart attack: heavy squeezing or chest pain, discomfort in areas of

the upper body (arms, back, neck, jaw or stomach), shortness of breath, a cold sweat or nausea.

Women suffering a heart attack sometimes experience chest pain, but not as frequently as men. They also experience other symptoms that people don't generally link to heart trouble: shortness of breath, nausea or vomiting and back or jaw pain. Women also experience symptoms earlier than men, whose symptoms come either right before or during a heart attack.

Research by the National Institutes of Health indicates that women experience different physical symptoms as long as a month or more before experiencing a heart attack. In a 2007 study of more than 500 women, 95 percent of participants reported experiencing new symptoms at least a month before their heart attack, including unusual fatigue, sleep disturbance and shortness of breath. Less

than 30 percent of women studied experienced chest pain prior to the attack, and 43 percent had no chest pain during the attack. Other symptoms included indigestion and anxiety. The study was one of the first to examine the differences in the way men and women experience a heart attack.

Knowing the differences is important for many reasons. Women who experienced these non-traditional symptoms did not identify them as a heart attack and put off seeking medical attention — thereby decreasing their chances for preventing or surviving the attack. The American Heart Association estimates that about 95 percent of sudden cardiac arrest victims die before reaching the hospital.

Remember that symptoms may come and go. Even if you're not sure if it's a heart attack, it's important to be examined by a doctor. New medications and treat-

Health Talk

with Charles Pritchard, DO

Northeast Regional Medical Center
www.nermc.com

ments are now available that can stop some heart attacks in progress and save lives, but these drugs must be administered at the first sign of heart attack symptoms for maximum effectiveness.

The bottom line is that the best medicine for heart disease is prevention. Inflammation is the driving force behind atherosclerosis, the disease process that causes the arteries to become clogged. Here are some take-home points to reduce inflammation:

- 1) Ask your doctor to check your C Reactive Protein level, a measure of inflammation. If it is high,

- you may need to take a statin drug.
- 2) Take fish oil.
- 3) Get your vitamin D level tested.
- 4) Take a multivitamin, one with 100 percent value for essential nutrients. Mega-dose vitamins are not needed and may be dangerous.

Talk to your doctor today about steps you can take to educate yourself about heart health and any recommended health screenings based on your individual profile. For more information on heart health, contact Dr. Pritchard at 626-2235.