Aging can be pretty scary, and seeing blurry lines instead of fine print for the first time can leave us feeling helpless.

Our sight is one of the first senses to be affected by aging. The important thing to know, said Bethany Bray Markowitz, M.D., a USC Specialty Clinics ophthalmologist, is that most age-related changes are normal and do not cause blindness.

One of the first changes is presbyopia, or “the arm isn’t long enough” syndrome. About age 40, eye lenses begin to lose their flexibility, resulting in an inability to read small type, even when held at arm’s length. This is normal, and around age 70 it stops. In the meantime, over-the-counter reading glasses that magnify print usually suffice.
Most of us call it heartburn — the burning sensation caused by food or liquid in the stomach leaking backward into the esophagus. Physicians use a more complex clinical term — gastroesophageal reflux disease (GERD) — and employ straightforward medical and surgical procedures to correct the condition.

“Many GERD patients have high levels of stress and sometimes other factors such as being overweight or having a hiatal hernia,” said James M. Nottingham, M.D., a professor in the Department of Surgery at the School of Medicine. “We treat GERD mostly with medical therapy — prescription antacids and diet — as well as encouraging patients to stop smoking and to lose weight.”

The noninvasive approach usually works, but not always, Nottingham said, and some patients, particularly younger ones, often request surgery to avoid the expense of taking medications for the rest of their lives. The surgical procedure is called laparoscopic Nissen fundoplication, which involves wrapping the upper part of the stomach around the lower esophageal sphincter.

“Very few patients require open surgery,” he said. “I can remember only one in the 17 years I’ve been doing this procedure. With the laparoscopic technique, we use three to five small incisions, so the healing process is much faster.”

Some 92 to 94 percent of GERD patients who opt for surgery experience nearly immediate relief; they stop taking medications the same day. Best candidates for surgery are those who are getting some relief from medications, have stopped smoking and drinking, and have lost weight prior to surgery.

Patients who undergo GERD surgery sometimes experience minor difficulty in swallowing food.

“It might feel like food stops or hangs up at the wrap that we make at the end of the esophagus,” Nottingham said. “Usually, if you walk around a little bit, that will take care of it. That sensation usually disappears, if it happens, within a few weeks.”

While those suffering from chronic heartburn should seek medical attention, simple eating habit and lifestyle changes can help to alleviate the symptoms:

- don’t wear clothing or accessories that tightly girdle your waist
- tilt your bed or use a body wedge to elevate your head and chest by six inches when sleeping; avoid eating just before bedtime
- avoid exercise immediately after eating
- lose weight, quit smoking and reduce stress.
Before school starts, children are required to have vaccinations that are recommended by the Centers for Disease Control (CDC) and mandatory based on state law.

For some parents, this requirement poses no questions or concerns. Others are fearful that the vaccinations are linked to long-term illness or may have a negative effect on a child’s health.

A recent discussion with University Specialty Clinics Pediatrician Kathryn Stephenson, M.D., reveals that vaccinations, like other care for children, are safe and highly recommended. She explains that the risks of vaccinations are small compared with the health risks associated with the diseases they are intended to prevent.

“The alternative of no vaccination can actually be more dangerous,” said Stephenson, who is also an assistant professor in the Department of Pediatrics. “Although some of the vaccinations are for diseases that may not be prevalent in our society, it does exist in others. If a child crosses paths with someone carrying the disease, like polio or mumps, it can be detrimental.”

She also explained that newborns, babies and toddlers can be exposed to diseases without parents knowing, such as contracting diseases from other adults or siblings, on an airplane, or at day care centers, malls and grocery stores.

Immunization or vaccination is a way of creating immunity to certain diseases by using small amounts of a killed or weakened microorganism that causes the particular disease.

“Because the components of vaccines are weakened or killed, they are unlikely to cause any serious illness. Some vaccines may cause mild reactions, such as soreness where the shot was administered or fever, but serious reactions are rare,” Stephenson said.

“Many parents are concerned that there is a link between autism and immunizations. This is simply not true, and research and multiple studies have found no indication of a relationship between autism and vaccines.”

Although there are questions about vaccinations, the CDC reports that vaccinations have reduced or eliminated many infectious diseases that once routinely killed or severely harmed many infants, children and adults.

Here, Stephenson answers additional frequently asked questions to help you learn more about the safety of immunizations.

Most of the diseases that children receive are not prevalent in the United States. Why are vaccines still given for these diseases?

While there are few cases in the United States of certain diseases because of vaccinations, it could become an epidemic if we stop administering vaccinations. There have been cases of outbreaks of whooping cough, measles, chickenpox and other diseases when vaccination rates decrease. Children who are not vaccinated can become ill and spread it throughout the community. The measles outbreak in 2005 in Indiana is a good example of what happens when children are not immunized. That’s why it is critically important for parents to continue to have their children, as well as themselves, vaccinated.

Why does my baby receive two or more shots at once, and is it safe?

It is true that children are receiving more vaccines today than a few years ago. And it is also true that more vaccinations are administered at one time. This is primarily because scientists and physicians have discovered safe and effective methods to incorporate multiple vaccines, called combination vaccines, into a single shot to protect children. There have also been advances and discoveries in combating more diseases. Most vaccines require at least two doses, with each dose boosting immunity to the appropriate protective level.

Yes, it is safe. Thousands of studies have been done to look at potential risk factors. Based on more than 50 years experience and millions of administered doses of vaccines, the Centers for Disease Control determined that the likelihood that a vaccine will cause unanticipated long-term problems is extremely low. Children’s bodies can handle many shots at once. Having more than one vaccine at once is safe even for newborns.

Is it safe for children to get catch-up vaccinations?

It is suggested that parents stay on schedule to provide the best protection for their child(ren). However, if you miss a scheduled immunization, simply make an appointment as soon as possible and pick up where you left off.

For more information about immunizations and to obtain a recommended schedule, visit the Centers for Disease Control online at www.cdc.gov or make an appointment with a pediatrician at the University Specialty Clinics by calling (803) 434-7950.
Gestational Diabetes: Screening can prevent major complications for mother and child

It comes as no surprise when a pregnant woman reports decreased energy and frequent urination. But if increased thirst is added to the mix — and the symptoms are present around the sixth month of pregnancy — then the alarm for gestational diabetes starts to sound. It’s a condition that affects about 5 percent of pregnant mothers, and if left untreated, the consequences can be dire.

“All women are at risk for gestational diabetes,” said Allison Giddings, M.D., clinical instructor in the University of South Carolina School of Medicine’s Department of Obstetrics and Gynecology. “Unfortunately, there are no measures to prevent the condition, but keeping a healthy diet and lifestyle may reduce your risk.”

Gestational diabetes is a temporary condition brought on by increased levels of certain hormones during pregnancy. Those hormones interfere with the body’s ability to react normally to insulin, which regulates blood sugar levels.

All expecting mothers should be screened for gestational diabetes. A glucose tolerance test is often administered between weeks 24 and 28 of the pregnancy. Giddings said the standard of care today is to screen any expecting mother for gestational diabetes whether they present symptoms or not.

If the tests confirm a diagnosis, then expecting mothers should take steps to manage the disease. Nutritional counselors will work with women to develop a healthy diet. Mothers should check their blood sugar levels after eating. Often these measures prove effective for patients, but in some cases medications are prescribed to keep blood sugar levels within normal limits.

“We have a number of treatment options to control the disease,” Giddings said. “But we cannot control the disease if we do not have a diagnosis. An expecting mother must receive routine prenatal care and be tested for gestational diabetes to make sure she and her baby remain healthy throughout the pregnancy.”

If gestational diabetes goes undiagnosed, the mother is at risk of developing pre-eclampsia, a high blood pressure condition. She is also at a higher risk for pre-term labor, may experience difficulties with her delivery and the baby will be at a higher risk for stillbirth.

Giddings said recent findings also suggest that children born to mothers with unregulated high sugar levels during pregnancy are at higher risk for developing diabetes and becoming obese later in life.

The good news for expecting mothers is that gestational diabetes is usually a temporary condition.

“Gestational diabetes often goes away after pregnancy,” Giddings said. “New mothers can expect to be screened six weeks after delivery to make sure it is resolved.”
Other normal changes in the eyes include:

- dryness, the result of poor tear production or tears that evaporate quickly. Dry eyes can cause burning, itching and a sensation of grit in the eye. Your ophthalmologist might recommend scrubbing your lids with baby shampoo or applying warm compresses. An antibiotic ointment might also be prescribed.

- excessive tearing caused by blocked tear ducts. Treatment can range from antibiotic eye drops to surgery to reopen the ducts.

- eyelid changes that occur when muscles in the lids weaken and lose flexibility, resulting in lower and upper lids that droop or turn inward or outward. When this condition affects vision, surgery might be recommended.

- floaters; if you’ve thought you were seeing tiny bugs, chances are you’ve had floaters. Floaters are normal condensations of the vitreous jelly inside your eye. They are normal and harmless, unless accompanied by a sudden onset of floaters with persistent flashes. If this happens, see your doctor right away for a thorough eye exam.

Abnormal changes in the eye include:

- glaucoma, which affects about 4 million Americans and is usually caused by too much fluid pressure in the eye. In most cases it can be treated with eye drops. It can be detected only during a routine eye exam by simple, painless tests.

- macular degeneration, the most common cause of legal blindness in people over 55 in the United States, according to Markowitz. Symptoms include blurry vision and a “smudge in the central vision.” The dry form of macular degeneration is treated with eye vitamins, and the wet type is treated with medications injected into the eye.

- cataracts, the leading cause of blindness in the world. Symptoms include cloudy, blurred and dim vision and a pronounced glare and halos from bright lights. Cataracts are easily treated with surgery.

Aging vision can be maintained by following a few steps, Markowitz said. These include routine eye exams; maintaining normal levels of blood pressure, blood sugar, cholesterol and weight; a diet high in antioxidants; and protecting the eyes from sunlight.

“With innovative medical and surgical eye treatments, we are not only able to preserve vision as we age; we might be able to improve on what Mother Nature had intended,” Markowitz said.
A long-distance runner since she was a teen, Blair Heinke, M.D., hopes to lead the pack in providing health care for women athletes.

“Female athletes make up half of the student-athletes in college athletics departments,” said Heinke, an assistant professor in family and preventive medicine at USC’s School of Medicine. “They’re going through all sorts of things that male athletes don’t have to deal with, especially surrounding things like reproductive health.”

Heinke started running competitively when she was 14 after someone mentioned that she ran like her father, an accomplished long-distance runner. She’s been running ever since, competing in the New York City Marathon and the Boston Marathon.

Heinke attended college in Maryland and medical school in Brooklyn, N.Y., completing the Beth Israel Residency Program in Urban Family Practice. After those years up north, she was looking for warmer weather and the opportunity to work more closely with athletes. She found both after completing a one-year primary care sports medicine fellowship at Palmetto Health Richland. She joined the USC School of Medicine family in 2011.

“The people are just awesome to work with,” Heinke said, “and I happened to come in the midst of an upswing with some of [USC’s] sports programs. That made it more intoxicating, but it came down to warm weather and a really good program.”

Health care for women athletes is fertile ground for those interested in tackling new issues, and Heinke is up for the challenge. She credits her colleagues and the opportunities in Columbia with helping her pursue her career goals.

During her fellowship year, Heinke started taking care of athletes at Benedict College to get more hands-on experience. She’s stayed on with the program, supervising two current fellows. She’s also working with Columbia College student-athletes.

“That was something we sought out,” she said. “It’s an almost all-women Division III school right down the road, and I thought, ‘What better population will I find?’”

Heinke is interested in writing about the positive effects of running during pregnancy and is using resources around her to become a better sports medicine doctor “by continuing to work with the doctors here who have taught me, and then trying to make connections and build on medicine in the women’s sports world,” she said.
**Q** I exercise five days a week. Am I at risk for a blood clot in my leg (deep venous thrombosis) or in my lung (pulmonary embolism)? What are the symptoms and treatments?

**A** First, it is important to realize that a blood clot in superficial varicose veins (phlebitis) is much less serious than a deep venous thrombosis. There are clotting disorders that can be inherited and predispose one to develop blood clots; fortunately, these are not very common.

It is unusual to be active and develop a deep venous thrombosis or a pulmonary embolism without having underlying risk factors. These risk factors include advanced age, prolonged immobility, surgery, trauma, malignancy, estrogenic medications (e.g. birth control pills), pregnancy and congestive heart failure. The symptoms of a deep venous thrombosis include unequal extremity swelling, pain and discoloration.

The symptoms of a pulmonary embolism include shortness of breath, palpitations, chest pain and anxiety. The risk of a deep venous thrombosis is that it can lead to a pulmonary embolism, which can be fatal if untreated. Treatment of either a deep venous thrombosis or a pulmonary embolism is a blood thinner.

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**Q** I am experiencing pain in my left breast. I do not feel any lumps. Could this be breast cancer, or are there more common causes of breast pain?

**A** Breast pain, or mastalgia, is not usually an indicator of breast cancer. In fact, most breast cancers will present as a firm isolated lump or mass that feels different than the surrounding glandular breast tissue. Breast cancer is most often discovered by examination of the breast or with breast imaging. Breast pain is usually related to fluctuations in the hormones of the menstrual cycle. Progesterone is the main culprit, leading to pain and sensitivity in the second half of the menstrual cycle after ovulation has occurred and just prior to the onset of menses, as progesterone is highest at this time. In cases like this the pain would follow a cyclic pattern, though it may be noncyclic as well. Infection, other medical illnesses not specific to the breast, and malignancy can present as breast pain, though less often, so the symptoms could be followed for a menstrual cycle or two but should prompt a visit to your physician to rule out the more concerning causes.
University of South Carolina School of Medicine Dean Richard Hoppmann recently announced the appointment of two new department chairs. Judith Burgis, M.D., has been named Chair of the Department of Obstetrics and Gynecology, and Meera Narasimhan, M.D., has been appointed Chair of the Department of Neuropsychiatry and Behavioral Science.

Burgis maintains strong ties to the School of Medicine. She earned her medical degree from the School of Medicine in 1989, and completed an internship and residency in Obstetrics and Gynecology at Richland Memorial Hospital. After an active clinical affiliation, she joined the faculty as an assistant professor at the School of Medicine in 2004. She previously served as president of the USC School of Medicine Alumni Association from 2010 to 2011.

Burgis has earned numerous honors, including the USC School of Medicine Distinguished Physician Alumni of the Year Award in 2008 and 2010.

Narasimhan joined the School of Medicine in 2004. She is nationally recognized for her work on a statewide telehealth initiative to improve access, quality and affordable care. She is credited with launching a highly productive research division that has obtained federal and industry funding in the areas of mood disorders, schizophrenia, medical illness, substance use and telehealth.

Narasimhan has been the recipient of several regional and national honors for her contributions to research, education and clinical service and is actively involved in global health projects. She received her medical degree from Gandhi Medical College Bhopal in India and completed her psychiatry residency and psychopharmacology fellowship at Yale University.