The Power of Your Gut

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CANCER SIGNS YOU CAN’T IGNORE

ARE YOU MISSING OUT ON WARNINGS? HERE’S WHAT A JOHNS HOPKINS EXPERT WANTS YOU TO KNOW.

WE’RE ALL (RIGHTLY) fearful of getting cancer. Yet not all of us are alert to cancer’s earliest telltale signs. Early diagnosis gives you the best chance at successful treatment, so be aware of changes in your health that may signal cancer, says surgical oncologist Nita Ahuja, M.D. “By 2030, cancer will be the No. 1 cause of death in the U.S., mostly because the population is aging,” she says. Don’t have a family history of cancer? That’s great—but it doesn’t mean you shouldn’t educate yourself about cancer signs and get the recommended screenings.

So what should you be looking for (without panicking)? Ahuja says to keep an eye out for any unusual—and inexplicable—changes.

These three health changes are definite call-the-doctor situations:

1. **UNEXPLAINED WEIGHT LOSS**
   A loss of 10 pounds or more when you’re not trying or haven’t changed your eating or exercise habits can be an early sign of pancreatic, stomach, lung or esophageal cancer.

2. **BLOOD IN THE STOOL**
   It could point to rectal or colon cancer.

3. **MOLE CHANGES**
   Any change in color, symmetry or size might signal skin cancer.

LEARN MORE ON APRIL 30

Cancer specialists Nita Ahuja, M.D., and Anne Marie Lennon, M.D., will spell out the often-missed early warning signs of many cancers in the 7 p.m. (EST) webinar “10 Cancer Symptoms You Can’t Ignore.” To register: hopkinsmedicine.org/healthseminars

SHOULD YOU CONSIDER SINUS SURGERY?

THE PAIN, THE PRESSURE, the congestion, the misery. If you’ve been diagnosed with chronic sinusitis—the kind that never seems to totally go away—sinus surgeon Andrew Lane, M.D., wants you to know that you don’t have to keep suffering. You could be a candidate for symptom-easing surgery.

WHAT ARE MY OPTIONS?

Johns Hopkins surgeons have a full range of state-of-the-art surgical options to clear and enlarge those small openings in your sinuses. No one operation is right for all sinus sufferers.

WHAT CAN I EXPECT?

Relief! Most surgical patients (80 to 90 percent) see improvement, though those with underlying problems (allergies, for instance, or an inflammatory disease) will still have to manage those issues medically. “Some sinusitis sufferers essentially have a plumbing problem,” says Lane. Repair that, and it’s cured.

GET THE FULL SCOOP

Sinus expert Jean Kim, M.D., will discuss treatment options for sinus issues during a free online seminar on May 19. To register: hopkinsmedicine.org/healthseminars
SIP WISELY
FOLLOW THE JOHNS HOPKINS GUIDE TO PICKING YOUR DRINKS.

Cafeterias and vending machines at Johns Hopkins have been outfitted with red, yellow and green stickers. No, it’s not part of some interior-design overhaul—it’s our way of helping people make smarter drink choices, explains Richard Safeer, M.D., medical director of employee health for Johns Hopkins HealthCare. Take a cue from our easy-to-follow traffic light system (left).

**GREEN LIGHT**
- WATER, Seltzer,
- Unsweetened Iced Tea,
- Fruit-Infused Water

**YELLOW LIGHT**
- Lower-Calorie
- Juices, Vitamin-Infused Water

**RED LIGHT**
- Sugary Sodas,
- Juice Drinks,
- Flavored Tea

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Get the latest news on health and wellness topics important to you and your family delivered straight to your inbox. All from experts at Johns Hopkins Medicine. Visit hopkinsmedicine.org/yourhealth for your free email subscription to Your Health.

WHAT’S ONE MEDICAL MYSTERY WITH ESPECIALLY INTRIGUING RESEARCH?

**PANCREATIC CANCER VACCINE**
“Different signals in pancreatic cancer cells have now been identified. We also know that certain mutations happen before the formation of an actual cancer. With this information, we’re working [in clinical trials] on a vaccine to activate the immune system and prevent the progression of premalignant changes.”

ELIZABETH JAFFEE, M.D.
Medical Director, Johns Hopkins Oncology Center Cell Processing and Gene Therapy Facility

**GENE-ENVIRONMENT INTERACTION**
“We know that most diseases have a strong environmental component in addition to genetics. The new field of epigenetics allows us to understand how genes and the environment interact to cause diseases, opening the door to new diagnostics and risk assessment, as well as eventual therapies to mitigate the environmental effects on disease.”

ANDREW FEINBERG, M.D., M.P.H.
Director, Center for Epigenetics, Johns Hopkins Institute for Basic Biomedical Sciences

**AORTIC ANEURYSM TREATMENTS**
“What we’ve learned from our research into Marfan syndrome [a rare genetic disorder that can cause aortic aneurysms] has potential implications for more common presentations of aortic aneurysm. We’ve identified points of vulnerability along signaling pathways that could lead to powerful, life-extending treatments for a variety of vascular conditions.”

HARRY “HAL” DIETZ, M.D.
Director, William S. Smilow Center for Marfan Syndrome Research
Sure, we know that the brain we carry around in our head controls what goes on in the body. But we also have a second brain—located deep in our guts—and this one plays a larger role in our overall health than previously thought.

“Your gut contains within its walls more nerve cells than the entire spinal cord,” says neurogastroenterologist Jay Pasricha, M.D., whose research on the enteric nervous system (known informally as the second brain) has reached international acclaim in the medical community. “This [second brain] is capable of acting independently and making complex [health] decisions. Both of our brains act independently but talk to each other.”

The actions of the second brain could have a big effect on the body, even in people who do not have gastrointestinal conditions. It’s now thought that the enteric nervous system could contribute to conditions like depression, anxiety, memory loss, hypertension, obesity and type 2 diabetes. There may also be brain-gut connections in the origins of some autoimmune diseases, like rheumatoid arthritis.

“The gut is the barrier for entry not only for food but for opportunistic bacteria and other potentially harmful elements in our environment,” says Pasricha. When that barrier breaks down, it could give rise to autoimmune conditions.

More immediately, Pasricha says that knowing more about the brain-gut connection has led to a better understanding of irritable bowel syndrome (IBS) and other known functional bowel problems. For example, doctors now have an explanation for why people with those conditions have higher-than-normal odds of developing depression and anxiety. And that’s why, in some cases, patients at Johns Hopkins with those conditions will be prescribed antidepressants, cognitive behavioral therapy and behavioral hypnotherapy.

“Eventually,” he says, “it all comes back to the gut and its brain.”

**YOUR SECOND BRAIN**

**IT’S A TWO-WAY STREET BETWEEN THE HEAD AND THE GUT. JOHNS HOPKINS EXPERT JAY PASRICHA, M.D., SHOWS HOW THE PATH AFFECTS YOUR HEALTH.**

**THE GUT AT A GLANCE**

- **10 to 20** The percentage of Americans who experience functional bowel problems.
- **100 million** The number of neurons that make up the enteric nervous system (aka your second brain).
- **50 to 90** The percentage of IBS patients who also experience depression or anxiety.

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**DISCOVER HEALTHY AGING!**

Learn more about the brain-gut connection, plus find head-to-toe insights and tips from Johns Hopkins experts in our online guide to living longer, healthier and better. Visit hopkinsmedicine.org/healthyaging
10 CANCER SYMPTOMS YOU CAN’T IGNORE
Early detection of cancer symptoms is vital to early diagnosis and treatment. There are many symptoms that signal a serious health issue, and learning to identify them is key to successful treatment. In this interactive webinar, surgical oncologist Nita Ahuja, M.D., and gastroenterologist Anne Marie Lennon, M.D., Ph.D., will discuss symptoms such as bleeding, gastrointestinal issues and unexplained changes in weight.

Thu., April 30, 7–8 P.M. (EST)

LIVER TRANSPLANT: GIVING THE GIFT OF LIFE THROUGH LIVING DONATION
In the United States, more than 17,500 people are on the waiting list to receive a liver transplant. Living donation liver transplantation is an option that not only saves the life of a recipient but also frees up a liver for someone on the waiting list. If you or a loved one is on the waiting list for a liver transplant, join this interactive webinar with transplant surgeon Nabil Dagher, M.D. He will discuss the benefits of living donation, the evaluation process, and what to expect as a donor. Following the presentation, there will also be a 30-minute Q-and-A session with Dagher.

Wed., May 6, 7–8 P.M. (EST)

THINKING OF SINUS SURGERY?
Those with chronic sinus problems can join sinus surgeon Jean Kim, M.D., to learn more about who the best candidates for surgery are and what it involves. Kim will also answer viewer questions.

Tue., May 19, 7–8 P.M. (EST)

BREAST RECONSTRUCTION
Women facing breast cancer have many decisions regarding their treatment and care. This webinar will discuss all options for breast reconstruction, including considerations for women thinking about delayed reconstruction.

Mon., April 20, 7–8 P.M. (EST)

BE HEART SMARTER
Our new Healthy Heart online site is filled with need-to-know information and resources—including exclusive insight from Johns Hopkins experts—to help you follow a heart-healthy lifestyle.

BOOKMARK US AT hopkinsmedicine.org/healthyheart

SIGN UP
Johns Hopkins Medicine is pleased to offer a variety of online health education events featuring medical experts from across our health care system. All events are free unless otherwise noted.

TO REGISTER
hopkinsmedicine.org/healthseminars or 877-546-1009

EDUCATIONAL EVENTS ONLINE SEMINARS
**FIRST PERSON**

**CHAIN REACTION**

When Johns Hopkins surgeons put Mary Tompkins on a paired donor chain, she got back to her full—and healthy—life.

For years, Mary Tompkins’ kidney disease meant she had to experience life’s special everyday moments from the sidelines. “I could go to work, but that was just about all I had the energy to do,” says Tompkins, a pharmacist in Alexandria, La.

In 2011, when told she’d have to wait six years for a kidney, Tompkins says, “I begged for more options. And that’s when I was led to Dr. Montgomery at Johns Hopkins.”

That Dr. Montgomery is transplant surgeon Robert Montgomery, M.D., an expert in the field of complex live donor kidney transplantation. “Mary was somewhat unique because she had a willing donor,” he says. “Even though her donor wasn’t a match, we were able to place her in the living donor chain.” Here’s how it works: The kidney of Tompkins’ willing donor, a co-worker, was given to a patient who was a match, and the kidney of an altruistic donor went to Tompkins. “The paired donation allows those donors to fulfill their desire to give a kidney and to ensure their loved one receives a kidney,” says Montgomery.

“I was so full of energy when I got back from my transplant, I woke up at 3 in the morning and cleaned my kitchen cabinets,” says Tompkins. Even better, since her surgery in 2012, she’s been able to play with her grandchildren. She’s even made room at family events for both of her donors—“because they’re family to me. Life is absolutely wonderful. I’m blessed.”