



TrainSmarter

Should You Be Screened for Melanoma? Check Your Arm

If you have more than 11 moles on your right arm, you're at increased risk for melanoma, the deadliest form of skin cancer. It means that you likely have more than 100 moles over your entire body, a known risk factor. The arm check is a quick way to see if you need further screening. If your count is high, schedule regular full-body exams with a dermatologist. Early detection is a lifesaver when it comes to melanoma. Got fewer moles? Not all melanomas emerge from existing moles. It's important to know what's normal for your skin and to let your doctor know if you see any change in the size, shape, color or feel of a mole—or any other patch of skin.

Water Outperforms Sports Drinks for Young Athletes

Most youngsters don't exert themselves at an intensity or duration that requires the extra sugar and salt contained in sports drinks, said Dr. Matthew Silvis, director of primary care sports medicine at Penn State Health Medical Center. "Sports drinks can replenish some of what you lost during exercise, but you really need to be exercising for more than 45 minutes to an hour before you would consider that—many of our kids are not doing enough to warrant it." And giving children sports drinks with extra sugar puts them at risk for weight gain and tooth decay. Energy drinks that contain caffeine or other stimulants are also ill-advised for children. These beverages can boost blood pressure, cause heart palpitations and heart rhythm disorders, headaches and upset stomach. Some kids may also feel jittery or nervous after downing an energy drink. Coaches and parents should provide water to make sure children are properly hydrated during exercise. "If they are playing 30- or 45-minute halves, they should have a water break, and maybe add fresh orange slices or a granola bar to add a bit of sugar and/or protein at an appropriate level." After exercise, whole or low-fat chocolate milk works just as well -- if not better -- than recovery drinks. "Chocolate milk has the perfect combination of fat, proteins and carbohydrates that you want to get back into your system," Silvis added.

Walking vs. Running -- Which Is Better?

Research by the American Heart Association finds that walking is just as good as running when it comes to lowering your risk for heart disease. Researchers analyzed the health of some 48,000 runners and walkers mainly in 40s and 50s. They found that, mile for mile, brisk walking lowers the risk for diabetes, high cholesterol and high blood pressure as much as running does. The difference? You'll have to spend more time walking than you do running to get the same health benefits simply because it takes longer to walk than to run the same distance. A 15-minute jog burns about the same number of calories as a half-hour brisk walk. Keep in mind that you don't have to stick to either walking or running. You can stay motivated by mixing it up. What's more, adding short sprints to your walking routine will give you a bigger boost for your efforts.

Kids' Sun Safety Means 'Slip, Slap, Slop'

Much of a person's risk for melanoma -- the deadliest form of skin cancer -- comes from their sun exposure as a child. "Healthy sun-protection habits come in three forms -- sometimes referred to as slip, slap, slop," said Dr. Vernon Sondak, head of the skin cancer department at the Moffitt Cancer Center in Tampa, Fla. "Slip on protective clothing, like long-sleeve shirts and long pants with an adequate UV (ultraviolet radiation) protection factor," Sondak. Next, slap on a hat -- not just a baseball cap -- to protect your face, head, ears and neck. And don't forget to protect your eyes with sunglasses. Last, but not least, slop on sunscreen -- and use plenty of it to cover all your exposed skin. "Then reapply it every few hours and after swimming." Sunscreen comes third on this list for a reason. The best protection is staying out of the sun during peak UV hours (10 a.m. to 3 p.m.) and protecting skin with a big hat, sunglasses and protective clothing when you are outside. "Sunscreen should be your third line of defense, not your first." Schools should ensure that children are adequately protected from the sun during recess, gym classes and other outdoor activities, the skin-cancer specialist added.



Post-Menopausal? Give Exercise a Try

After menopause, moderate exercise can help women manage hot flashes, become more fit and feel better.

Researchers found that a 20-week exercise program helped women boost their fitness levels, lose a little weight and give higher ratings to their physical and mental well-being. That included a reduction in hot flashes and night sweats -- two of the most bothersome symptoms of menopause.

Researchers led by Debora Godoy-Izquierdo, of the University of Grenada in Spain, reported the findings online Feb. 15 in the journal *Menopause*. The study offers good news to women who want alternatives to hormones for managing menopause symptoms, according to Dr. JoAnn Pinkerton, executive director of the North American Menopause Society.

Hot flashes and night sweats are the most common reasons that women seek treatment for menopause symptoms, said Pinkerton, who was not involved in the study. For some, she said, the problems are severe enough to warrant hormone therapy. But most women can find relief in other ways.

"Exercise, stress reduction and adequate sleep are very important for women who are becoming menopausal," Pinkerton said. "For a majority of women, lifestyle changes may be enough to get the hot flashes to be less bothersome, as well as help prevent the weight gain and mood changes common during this time."

For the new study, the researchers recruited 234 women who were at least one year past menopause. Overall, 166 women were sedentary, and half of them were assigned to stick with their usual lifestyle, while the other half started the 20-week exercise program.

The rest of the women were already physically active, and they served as a second comparison group.

The exercise program consisted of three one-hour workouts per week. Each session was supervised and involved moderate aerobic exercise, like fast walking, along with strength training. The women in this program also received psychological counseling, aimed at helping them with "self-regulation" and behavior changes.

After 20 weeks, the study found, women in the exercise program had lost a small amount of weight, on average. But the bigger changes were seen in their fitness levels, blood pressure and "health-related quality of life."

In general, the women gave higher ratings to their physical and mental health, and said they were less bothered by hot flashes and other menopause symptoms. Those benefits were still apparent at the one-year mark. At that point, the researchers said, the women looked more like the group that had been active all along, rather than those who'd remained sedentary. There was one exception: After initially losing a little weight, women in the program typically went back to their starting weight.

But regardless of weight, improvements in fitness levels are critical, according to Dr. Chip Lavie, medical director of cardiac rehabilitation and prevention at the John Ochsner Heart and Vascular Institute in New Orleans.

"Improving fitness is one of the most important things that any person, including a postmenopausal woman, can do to reduce their mortality and mortality from cardiovascular disease," said Lavie, who was not involved in the study.

In this study, the women's fitness levels were gauged by, among other things, their resting heart rate and how fast they could walk 1 kilometer. Those measures reflect how well the heart and blood vessels are working. But, Lavie said, studies have tied fitness to other health benefits, too -- including improvements in stress and depression symptoms. "And only small improvements in fitness are needed to induce these benefits," Lavie said.

As for why exercise might help with hot flashes, Pinkerton pointed to a couple reasons.

Exercise, she said, is thought to boost levels of certain brain chemicals, such as dopamine and serotonin -- which are important for mood, sleep and other functions. And those chemicals are sometimes lower during the hormonal fluctuations that come with menopause. And one study, Pinkerton said, found that women who exercised were better able to "regulate their body heat." The program in this study did involve psychological and behavioral counseling -- which may also have helped the women manage their menopause symptoms, according to Pinkerton.

But that does not necessarily mean women need such a comprehensive program.

Other research, Pinkerton said, has found that simpler exercise routines can help women manage hot flashes. It took only 30 minutes of any aerobic exercise -- like walking, jogging, bicycling or swimming -- three or more times per week, she noted.

Get Up, Stand Up



“There are **about three dozen chronic diseases and conditions associated with excess sitting,**” says James Levine, an endocrinologist at the Mayo Clinic. People who report sitting for the most hours per day have a higher risk of type 2 diabetes, heart attack, and stroke. And their insulin becomes less effective (which may explain their higher diabetes risk). In one study, **“the day after 14 young healthy adults sat for nearly 17 hours, their insulin was roughly 40% less effective in lowering their blood sugar than it was after a day with lots of standing and moving about and just six hours of sitting,”** says study author Barry Braun, professor and head of the department of health and exercise science at Colorado State University. **Hitting the gym may not make up for a day at your desk. On four days when 18 sedentary young adults broke up a 14-hour period of sitting with standing (for 2 hours) and leisurely walking (for 4 hours), their triglycerides were lower—and they needed less insulin to handle a sugar-laden drink—than on the four days when they sat for 14 hours. But when they replaced one of the 14 hours of sitting with an hour of vigorous exercise, their insulin and triglycerides were no better than when they sat all day. “Think of it this way. Why would you expect that something you do for 60 minutes a day would offset the harm of something you do for 13 or 14 hours a day?”**

Two more reasons not to act like there’s glue on the seat of your chair:

Artery function. After 12 young men sat without moving their legs for three hours, their blood vessels were less able to respond to increases in blood flow than when they took a 5-minute walk during each of the three hours.

Mood, fatigue, hunger. When 30 adults sat for 6 hours, they reported feeling less energetic later in the day than when they broke up the sitting with either one 30-minute brisk walk or one 5-minute brisk walk every hour. But only when they took the 5-minute hourly walks did they report fewer food cravings before lunch and better mood all day.

What to do: Stuck in an office without a standing or treadmill desk? “There are many options that don’t require fancy equipment,” says Levine. **Try walk-and-talk meetings. Or stand and pace when you answer the phone. Or walk to a co-worker’s office instead of sending an e-mail. Or take the stairs. Or park at the back of the parking lot. Your goal, according to an expert panel in Britain: spend half your workday upright or moving around.** “We want to develop the best catalogue of approaches that individuals and companies can use to get moving,” says Levine, who has worked with several companies that market standing desks and other gadgets that nudge people to move more.

Just make sure you don’t sit around and wait for his results. Nutrition Action

Exercise: It's What the Doctor Ordered

The Weill Cornell seminar, a required class for students, is co-directed by Dr. Jordan Metzl and Dr. Marci Goolsby, both sports medicine physicians at the Hospital for Special Surgery in New York with faculty appointments at Cornell. The seminar teaches medical students **how to counsel their patients to exercise, one of the most effective forms of preventive medicine.** According to Metzl, medicine often just gives “lip service” to prevention, but if you look at the way money is allocated, most is spent on treatment -- not prevention. Metzl points out that **type 2 diabetes, which is largely a preventable disease, ranks among the most expensive disease in the US. Since treating diabetes and all of its complications costs billions of dollars each year, it is time we give more attention to how this chronic disease can be prevented. The far-reaching effects of exercise work for almost every body system from the brain to the heart, said Metzl, who noted that exercise can also improve memory, concentration and mood while helping lower high blood pressure and cholesterol. Further evidence suggests that exercise has positive effects for many cancer patients and helps control type 2 diabetes. Exercise is “available to every single person, has zero side effects and works in some capacity for everybody who takes it,” Metzl said. “And no drug fits that safety profile with that efficacy.”** The US national physical activity guidelines recommend 150 minutes of moderate activity, or 75 minutes of vigorous activity, each week for adults and 60 minutes a day for kids, explains Adrian Hutber, vice president of Exercise as Medicine at the American College of Sports Medicine. **“It's not so much how much a day you need to get but how much a week,”** Hutber said, though most people break it down to 30 minutes a day. **“That's the so-called dosage you would need to prevent or manage many of the common chronic diseases that we have, from hypertension, type 2 diabetes, cardiovascular disease and others as well.”**



The Best Exercise for Aging Muscles

The toll that aging takes on a body extends all the way down to the cellular level. But the damage accrued by cells in older muscles is especially severe, because they do not regenerate easily and they become weaker as their mitochondria, which produce energy, diminish in vigor and number. A study published this month in *Cell Metabolism*, however, suggests that certain sorts of workouts may undo some of what the years can do to our mitochondria. Exercise is good for people, as everyone knows. But scientists have surprisingly little understanding of its cellular impacts and how those might vary by activity and the age of the exerciser. So researchers at the Mayo Clinic in Rochester, Minn., recently conducted an experiment on the cells of 72 healthy but sedentary men and women who were 30 or younger or older than 64. After baseline measures were established for their aerobic fitness, their blood-sugar levels and the gene activity and mitochondrial health in their muscle cells, the volunteers were randomly assigned to a particular exercise regimen. **Some of them did vigorous weight training several times a week; some did brief interval training three times a week on stationary bicycles (pedaling hard for four minutes, resting for three and then repeating that sequence three more times); some rode stationary bikes at a moderate pace for 30 minutes a few times a week and lifted weights lightly on other days. A fourth group, the control, did not exercise.** After 12 weeks, the lab tests were repeated. In general, everyone experienced improvements in fitness and an ability to regulate blood sugar. **There were some unsurprising differences: The gains in muscle mass and strength were greater for those who exercised only with weights, while interval training had the strongest influence on endurance. But more unexpected results were found in the biopsied muscle cells. Among the younger subjects who went through interval training, the activity levels had changed in 274 genes, compared with 170 genes for those who exercised more moderately and 74 for the weight lifters. Among the older cohort, almost 400 genes were working differently now, compared with 33 for the weight lifters and only 19 for the moderate exercisers.** Many of these affected genes, especially in the cells of the interval trainers, are believed to influence the ability of mitochondria to produce energy for muscle cells; **the subjects who did the interval workouts showed increases in the number and health of their mitochondria — an impact that was particularly pronounced among the older cyclists. It seems as if the decline in the cellular health of muscles associated with aging was “corrected” with exercise, especially if it was intense, says Dr. Sreekumaran Nair, a professor of medicine and an endocrinologist at the Mayo Clinic. In fact, older people’s cells responded in some ways more robustly to intense exercise than the cells of the young did — suggesting, he says, that it is never too late to benefit from exercise. *NY Times***

Sleepless Nights, Unhealthy Hearts?

More worrisome news for people who toss and turn all night: **Insomnia appears to be linked to a heightened risk for heart attack or stroke, a research review from China suggests. "We found that difficulty initiating sleep, difficulty maintaining sleep, or non-restorative sleep were associated with 27%, 11%, and 18% higher risks of cardiovascular and stroke events, respectively,"** said study co-author Qiao He. The reasons why aren't fully understood, said He, a graduate student at China Medical University in Shenyang. However, the study doesn't establish a cause-and-effect relationship. Sleep specialists say millions of Americans get too little sleep. "In modern society, more and more people complain of insomnia," He said. Evidence of insomnia's harmful effects on overall health has accumulated in recent years. **"Previous studies have shown that insomnia may change metabolism and endocrine function, increase [nervous system] activation, raise blood pressure,"** He said. It also can spark a rise in levels of certain inflammation-related proteins. **All of these are risk factors for heart disease and stroke, she explained.** For this report, the investigators looked at 15 studies that enlisted nearly 161,000 participants in all. The studies variously explored potential links between insomnia and a range of heart disease concerns, including heart attack, stroke and heart failure. **The association between insomnia and heart attack and stroke risk might even be slightly stronger among women.** But that finding did not reach "statistical significance," He's team said in a news release from the European Society of Cardiology.

"However, we do know that women are more prone to insomnia because of differences in genetics, sex hormones, stress, and reaction to stress," said He. **"It may therefore be prudent to pay more attention to women's sleep health."**

She added that "health education is needed to increase public awareness of insomnia symptoms and the potential risks, so that people with sleep problems are encouraged to seek help."

Strength Myths: “Weightlifting Is Bad For Your Knees”

One of my favorite parts of being involved in a strength sport is hearing all the ridiculous nonsense that comes out of people’s mouths. Apparently weightlifting is terrible because it’s “so bad for your knees.” Well, so is being obese, but no one really wants to go there. I am also assuming the “bad for your knees” rumor was invented when some old football strength coach realized he could squat a lot more weight in a quarter squat than he could going full depth. Regardless, this myth continues to stick, even in major college football programs and athletic training rooms. I don’t think it’s valid, but what does science have to say?

I looked at a study conducted by B. Fitzgerald and G. R. McLatchie in a Brit. J. Sports Medical Journal called, “Degenerative Joint Disease in Weight-Lifters. Fact or Fiction?” The study used both Olympic Weightlifting and powerlifting subjects and explains, “The group we studied are competitive weight-lifters who handle several tons in the course of an intensive training session. The cumulative stress on their joints is therefore considerable and might be expected to cause marked degenerative changes after a number of years training. However, our findings do not support the assumption.” The study looked at 25 competitive weightlifters and graded degeneration of the joints on a scale of 1-4 (4 being the worst). The study states that, “We found that only one lifter had significant degenerative change (Grade 3) in an upper body limb joint, (the right acromio-clavicular joint) which had been injured during rugby.” (I told you not to blame weightlifting.)

In addition, the same study reported, “The hips were almost completely spared. Only seven hip (14%) had doubtful evidence of degenerative change (Grade 1). All other hips were normal.”(PS: Grade 1 is basically nothing.)

In the knees, this study found only three cases of Grade 3 changes, rounding out to a whopping 6%. The Grade 3 changes in the “femoro-tibial articulation were found bilaterally in one of the oldest subjects and in the other lifter with a history of injury to the right knee (from football) and subsequent surgical intervention. The latter is at present in a National Olympic Champion.”

(You can thank football for injuring our weightlifters.)

The study concluded by saying, “Osteoarthritis of Grade 2 to 4 in at least one joint in males of age 35-44 years old has been found in 38.3% of the population. (Lawrence et al 1966). In this study only five weight-lifters (20%) exhibited degenerative joint changes of Grade 2 or 3, i.e. only half the number found in a sample of the general population.”

Okay, so now we know that degeneration isn’t really an issue, but what does squatting below parallel do to your knees?

An article from Biomechanics, “3 Squatting Myths that Refuse to Die,” from 2012 says, “The knees of those who regularly squat deep are more stable than [the knees of] distance runners and basketball players...the forces on the ACL are reduced as the knee is flexed beyond 60 degrees, and forces on the PCL are reduced as the knee flexes past 120 degrees.” The article continues, “Powerlifters who are squatting over twice their body weight experience shearing forces on the knee that approximate only 25% of the maximal tensile strength of the ACL, and 50% of the maximum strength of the PCL.” In basic terminology, this author is saying that even with an athlete squatting 2x their body weight, they are only using half of the knees’ biomechanical strength capacity. The forces on the knee actually reduce as the knee flexes more. Therefore, squatting below parallel may help strengthen the athlete and prevent ACL tears from occurring during participation in other sports. As with all training exercises, safety should come first in the squat, so proper form should be considered when it comes to the depth of the squat. But keep in mind, “squatting below parallel has the additional benefit of significantly increased activation of the gluteal muscles. The deeper you squat, the greater the glute activation.”Squatting: Helping to prevent ACL tears and growing strong butts. I call that a win!

Samantha Poeth

Sam Poeth won her first USAW National title in 2005 at the Junior National Championships. She has 4 University National Titles (2010-2012, 2014) and is the 2013 USAW National Champion. She also owns the title of 2011 and 2012 American Open Champion, is a 4x University World Team Member, and competed in the 2012 Olympic Trials. Sam has a Masters Degree in Exercise Science from the University of South Alabama. She currently resides in Tuscaloosa, AL and is a coach for Alabama Weightlifting. You can follow her on Instagram @sam_poeth and on Twitter @sampoeth.



Exercise: It's What the Doctor Ordered (cont'd)

He emphasizes the fact that **this is really "physical activity and not exercise."** For some patients, "exercise" connotes a gym, and though some people love that idea, others don't. You can get physical activity by walking the dog, gardening or taking a dance class and anything you like to do, you will continue to do. "Your body doesn't care whether you go to the gym or walk the dog or whatever," Hutber said. "It doesn't know the difference." Hearing this message from our family physician as opposed to, say, a trainer at the gym is significant, Hutber said. Metzl agrees.

Always an avid athlete, Metzl learned the benefits of exercise firsthand when he developed arthritic pains in his knee as a result of an old injury. Having figured out which exercises improved his pain and mobility, he developed a program, Ironstrength, that is a combination of cardiopulmonary fitness and strength training. He then began teaching others, usually a dozen or so enthusiasts, in basement rooms for free. Today, Metzl's listserv has grown to more than 32,000 people, and so these days he hosts his (still free) classes for hundreds of people at a shot: children, grandparents, people of all sizes and physical conditions. Based on how he is received, Metzl said, **the simple message that "exercise is good for your overall health" seems to carry more weight coming from a doctor.** Another issue is that "physicians traditionally have not been trained in lifestyle medicine, nutrition (or) physical activity in medical school," observed Hutber. So **there's a small proportion of doctors with the necessary skills to prescribe exercise, while even fewer have developed a communication style effective enough to help newly inspired patients commit to daily physical activity.**

"Right from the beginning, we taught exercise physiology and exercise as medicine across all four years as a requirement for all medical students," said Jennifer Trilk, assistant professor, physiology and exercise science at the University of South Carolina School of Medicine Greenville, which opened its doors in 2012. Within the program Trilk pioneered at in South Carolina, medical students not only learn the mechanistic aspects of prescribing exercise -- such as how skeletal muscle quality and quantity changes and improves health factors or how exercise effects each of the organ systems -- they're taught behavior change, as well. The lessons are based on well-known standardized models and are adapted to increasing physical activity levels: moving patients from one stage to the next. "We model it within the curriculum as a requirement from day one," said Trilk, who **tells her students: "You are your first patient. You have to stay healthy in order to keep your patient healthy."** Additionally, Trilk has created a classroom-community model by partnering with the Greenville Health System, a health care delivery system with eight hospitals and more than 150 physician offices, and adding US physical activity guidelines into the electronic health records of the system. This means **doctors are required to ask patients, for example, how many minutes a day or how many days a week they exercise,** to enter into their electronic medical records. Greenville doctors and medical students track exercise along with chronic, lifestyle-related disease markers and electronically refer patients, when necessary, to "exercise as medicine care coordinators" -- essentially exercise physiologists or other professionals who work with patients on improving their physical activity, explains Trilk. "I always say to them, 'I'm not teaching you to be exercise physiologists/ I'm teaching you to be good doctors who know how to use your referrals,' " said Trilk, who uses sports metaphors to reach her students. "You are the quarterback, and you're taking the patient, and you're passing that patient onto a qualified individual who can help with behavior change."

Movement is joy, exercise is medicine

In his Cornell seminar, Metzl teaches medical students to be aware of individual patients; prescribing exercise as medicine is not only about the underlying physiology and delivering the message, but about the singularity of each case. One person may be under 30 and obese, another may be a 70-year old heart patient, and many have no access to a gym. "How do we think about those people differently?" is a key question Metzl asks his students. Meanwhile, he remains focused on the fact that fixing someone's arthritic knee may also be a "gateway to their physical activity" and so presents an opportunity to use exercise to fix the reason why this knee may have become bothersome in the first place -- and prevent it from happening again in the future. Still, Metzl acknowledges that exercise is not the only remedy and not the only preventive technique necessary to ensuring good health. "I'm a Western-trained doctor. I practice Western medicine. I use all the different tools," Metzl said, adding that his kit includes everything from diagnostic tools to pharmaceutical injections. "I don't want to be so far out on the limb that I don't recognize myself." Trilk also sees prescription drugs as important, necessary and ethically correct in many cases. "If you've got a patient with uncontrolled hypertension, you may use that medication to start them out for safety reasons," Trilk said, "but you're still counseling them on the benefits of physical activity." Trik adds that though Hippocrates had his therapies, he also knew the benefits of exercise and diet. Walking is man's best medicine, he's thought to have said. "We knew historically that nutrition and exercise were what kept the body well," Trilk added, "and we're finding our way back to that." *CNN*

Quiz: Big Belly vs. Weight

Who is more likely to die early?

- A. An overweight person with a flat belly.
- B. A normal-weight person with a big belly.

Answer: B.

Surprisingly, a normal-weight man or woman who has a big belly is more likely to die early from heart disease than an overweight or even obese man or woman who has a flat stomach. You could call it the **Big Belly Paradox**. Mayo Clinic researchers examined data on about 15,000 adult men and women who were followed over 14 years. They had data not only on overweight/obesity as measured by the body mass index (BMI), but also waist-to-hip ratio, which measures how big your stomach is compared with your waist. The healthiest combo, of course, was a normal weight and a flat stomach. But it's also possible for a normal weight man or woman to have a paunch—and some folks who are heavy carry their excess weight more on their backsides than on their bellies. They found:

- Normal-weight men with big bellies had twice the mortality risk of men who were overweight or obese but had flat bellies.
- For women, those with normal weights but big bellies were 40% more likely to die than overweight woman with flat bellies—and 32% more likely to die than obese women with flat bellies.

What's so bad about big bellies? A waist-to-hip ratio that's 0.85 or higher (for women) or 0.90 or higher (for men) is a sign of "central obesity"—the kind of fat that's inside the abdomen and other internal organs rather than just under the skin. This "visceral" fat accumulates around the pancreas, heart and other organs that aren't designed to store fat. That can lead to excess insulin, high blood sugar, high cholesterol and problems in the functioning of the heart. The result is an increased risk for heart disease, diabetes and other metabolic diseases. Researchers have known about these increased risks of a big belly for a long time. But they thought it primarily a problem only if you were already overweight or obese. The new research suggests that a big belly is a serious problem whatever your weight. To be sure, **having a high waist-to-hip ratio is more likely if you are overweight or obese. Only 3% of women and 11% of men who were normal weight had central obesity, for example, compared to rates among the overweight of 12% (women) and 37% (men). But it's clear that this is a risk factor that everyone who wants to live a long healthy life should pay attention to.**

HOW TO MEASURE YOUR WAIST-TO-HIP RATIO

While medical facilities have sophisticated methods of measuring central obesity precisely, measuring your waist-to-hip ratio is proven to be accurate, and it's something you can do yourself...

- First, find your true waist—it's not necessarily where your belt falls. Locate your hip bone on one side, and then move upward until you can feel the bones of your bottom rib. Halfway between your hip and that first rib bone is your waist. For most people, it's where the belly button is.
 - Measure your waist with a tape measure.
 - Measure your hip with a tape measure.
 - Divide the waist measure by the hip measure. For example, if your waist is 28 and your hip is 36, you'd divide 28/36 to get a ratio of 0.78.
- Here's a shortcut: **For most women, a waist of 35 inches or above, and for most men 40 inches and above, is a good quick indicator of central obesity, according to the American Heart Association. If you do have a big belly, you know what to do—lose weight. The good news is that belly fat is the easiest to lose. It's the first to come off when you start to lose weight by changing your diet and exercise habits. *Bottom Line***



Noisy Knees? Arthritis May Be in Your Future

For many of us, developing grinding, popping or creaking sounds in our knees can seem almost like a rite of passage into middle age. Tens of millions of people over the age of 40 report that they at least occasionally hear **noises in their knees, a condition that in medical circles goes by the ominous name of crepitus**. So for the new study, a group of researchers from the Baylor College of Medicine in Houston and other institutions decided to focus on the long-term health and creakiness of the knees of almost 3,500 participants in the ongoing Osteoarthritis Initiative. This large-scale, national study has enrolled thousands of adults at risk of developing arthritis because of their age, body mass or other factors. (Being older than 45 or overweight greatly increases the likelihood of knee arthritis.) These men and women have visited a lab annually for at least four years for a knee X-ray and an exam that includes questionnaires about joint pain and how often, if ever, their knees creak, grind and pop. The researchers now chose records about people who had not yet developed full-on knee arthritis, which the scientists defined as having both frequent knee pain and an X-ray showing bone spurs. The researchers also checked to see whether these people reported instances of crepitus sometimes or often. Finally, they gathered the same information for a year after someone first had joined the original study and again at the end of four years. Then they compared the state of people's knees over that time and looked at the associations, if any, with crepitus. **Overall, most people's knees did not worsen significantly, especially during the first year that someone was in the study. About 18% of the studied joints progressed from showing suggestions of arthritis to having the full spectrum of both aches and a spur-ridden X-ray. Many of the people in that 18% also had reported having crepitus at the start of the study. The instance was especially large among people whose knees had shown X-ray evidence of arthritis but who had not reported much joint pain. In that group, crepitus was a clanging alarm; the creaks and pops strongly indicated that they would develop more severe knee disease after a year or four. But that was not true for everyone with crepitus. For some, their knees stayed stable over the years. It still is not clear what produces those sounds in the joint.** But in general, popping and creaking merit an appointment with your physician, she says, since there was clearly an association in this study between the acoustics of crepitus and the silent, even insidious start of arthritis, which was visible on an X-ray but not yet causing someone pain. **Crepitus suggested that there were problems in the joint, even though it did not ache. The good news about crepitus is that by indicating that arthritis may be starting, it can allow for early intervention.** "There is no cure" for knee arthritis, she says, but weight loss and exercise often slow the disease's progression. *NY Times*

Forget Steroid Shots for Long-Term Relief of Arthritic Knees

Knee osteoarthritis patients who got steroid injections every three months for two years had no less pain than those taking a placebo treatment. And they had greater loss of cartilage, the rubbery tissue that acts as a cushion between the bones of joints. "This research will change how I talk to patients," said Dr. Seth Leopold, a professor of orthopedics and sports medicine at the University of Washington School of Medicine. "I will tell patients that the **best information we now have suggests that these injections may not help, and extended use may thin your cartilage.**" **"We should only try them in someone who doesn't have alternatives, and we should only give them to someone whose knee is already arthritic."** Osteoarthritis is the wear-and-tear form of the joint disease, characterized by pain, swelling and stiffness. Knee arthritis is a major cause of disability, affecting more than 9 million Americans. Steroid shots in the knee joint are commonly given as a short-term treatment for pain flare-ups, and they can be useful for that purpose, said study lead author Dr. Timothy McAlindon, chief of rheumatology at Tufts Medical Center in Boston. **But their effectiveness when given regularly over months or years has been the subject of debate for more than a decade. "The trend is toward studies saying they didn't do as much as we thought to reduce pain,"** Leopold said. Researchers tracked 140 patients, age 45 and older, who had arthritic knees with inflammation of the synovial membrane -- a thin membrane lining the joint. The patients were randomly assigned to receive injections with either a steroid or saline. Injections were given every 12 weeks from 2013 to 2015. Patients also underwent MRI scans and answered questionnaires about their pain. At the end of the study, pain levels didn't differ significantly between the two groups. **"It did not have an effect on long-term pain, and it didn't reduce the progression of the disease,"** McAlindon said. **But patients in the injection group lost significantly more cartilage thickness than those in the saline group.** Leopold, however, said the thinning of cartilage is less important for older patients whose knees are already severely arthritic. For them, he said, "it probably doesn't matter." The new study Leopold said. But in other patients, he said, the risk of harm seems low -- as does the likelihood of benefit.

The researchers noted that their study has limitations. It didn't measure pain relief within the first month after an injection when patients often do get relief. Also, patients were able to continue taking medications such as over-the-counter painkillers,

Return of the Curd—The One Superfood Your Diet is Missing

Cottage cheese has acquired somewhat of a bad rap over the years. Many think of it as the begrudged diet food their mom would snack on with canned fruit back in the 80's. Always taking a back seat to Greek yogurt, it wasn't until recently that we started noticing an unforeseen comeback of the curds. In a society that is now starting to embrace dairy fat, we can look to brands like Good Culture for thick and creamy cottage cheese made from grass-fed cows—whose taste and texture is a far cry from the watered-down, fat-free, highly processed curds responsible for our initial distaste for cottage cheese. **The thing that most people may not realize is that cottage cheese is actually quite the nutrition powerhouse. It contains more protein per ounce than Greek yogurt (14g per ½ cup), and is made of about 90% casein and 10% whey. In terms of milk proteins, whey is digested faster and causes a quick release of circulating amino acids; whereas casein is digested more slowly and provides a more consistent release. The slow release of amino acids can help promote satiety and control appetite, hence why cottage cheese was stamped with the “diet food” star. Cottage cheese is also low in sugar, containing about 3 to 5g of natural milk sugars per serving. Although it contains calcium, much of it is lost in the separation of whey. Some brands fortify their product with calcium, so you can expect most varieties to offer between 10-20% DV calcium. Although cottage cheese does not inherently contain probiotics, some brands add active cultures to their curds to offer some gut health appeal.** *Cooking Light*

Eating Gluten-Free Without a Medical Reason?

Eating "gluten-free" when there's no medical need to do so won't boost your heart health -- and might even harm it. Gluten-free diets have soared in popularity in recent years. But, **shunning gluten has no heart benefits for people without celiac disease, and it may mean consuming a diet lacking heart-healthy whole grains,** according to the quarter-century study. **"For the vast majority of people who can tolerate it, restricting gluten to improve your overall health is likely not to be a beneficial strategy,"** said study leader Dr. Andrew Chan. Gluten is a protein found in wheat, rye and barley. People with celiac disease -- less than 1% of the U.S. population -- have an immune system reaction when they eat gluten, triggering inflammation and intestinal damage. They also have an increased risk of heart disease, but that declines after they begin eating a gluten-free diet, according to background information in the study. Recently, researchers have reported that some people may have what's known as non-celiac gluten sensitivity, a condition that's not totally understood. **"I don't want to dismiss the fact that there are people who have the sensitivity,"** said Chan, an associate professor of medicine at Harvard Medical School. But, the rest of the population should not think that going gluten-free will help their health -- at least not their heart health, he said.

For the study, Chan and his colleagues analyzed data on nearly 65,000 women and more than 45,000 men, all U.S. health professionals without a history of heart disease when the study started. The study participants completed a detailed food questionnaire beginning in 1986 and updated it every four years until 2010. The researchers looked at gluten intake, dividing participants into five groups from low to high, then calculated how likely they were to develop heart disease over roughly 26 years. When the researchers compared the highest-intake gluten group with the lowest, the rates of heart disease were not very different.

However, people with restricted gluten intake often eat a diet low in fiber-rich whole grains -- which are tied to lower heart risk -- and higher in refined grains, Chan said. So, the researchers then adjusted their findings for intake of refined grains. **"It appeared that those individuals who consumed the lowest levels of dietary gluten had a 15% higher risk of heart disease,"** Chan said. Because the study was observational, however, **"we can't say with certainty that this is a cause-and-effect association,"** Chan said. Dr. Ravi Dave is a cardiologist and professor of medicine at the University of California, Los Angeles Geffen School of Medicine. **"Eating gluten-free is a big fad right now,"** said Dave, who wasn't involved in the study. **"There is a lot of hype about how gluten produces inflammation and can lead to giving you diabetes, heart disease, dementia, a lot of things."** Although he finds this new study inconclusive, Dave agreed with the researchers: **"We should not recommend people who don't have gluten sensitivity or celiac disease go on a gluten-free diet,"** he said.

Dave also said the study left some questions unanswered. For instance, it doesn't reveal what the people who avoided gluten substituted. **"Were they picking a more unhealthy choice that put them at risk for heart disease?"** he wondered.

For people who still want or need to steer clear of gluten, Chan said **it's important to obtain adequate amounts of fiber. Oats and brown rice are good sources of gluten-free fiber,** he noted.

Zesty Shrimp & Black Bean Salad

¼ cup cider vinegar
3 tablespoons extra-virgin olive oil
1 tablespoon minced chipotle chile in adobo, or more to taste
1 teaspoon ground cumin
¼ teaspoon salt
1 pound peeled and deveined cooked shrimp cut into ½-inch pieces
1 15-ounce can black beans, rinsed
1 cup quartered cherry tomatoes
1 large poblano pepper or bell pepper, chopped
¼ cup chopped scallions
¼ cup chopped fresh cilantro



Whisk vinegar, oil, chipotle, cumin and salt in a large bowl. Add shrimp, beans, tomatoes, poblano (or bell pepper), scallions and cilantro; toss to coat. Serve room temperature or cold. Cooking Light Serves 6 235 calories
Eating Well

Whole-Grain Foods May Help You Stay Slim

Switching to whole-grain foods might help keep your weight in check as much as a brisk 30-minute daily walk would. Whole grains seem to both lower the number of calories your body absorbs during digestion and speed metabolism, explained study author J. Philip Karl, a nutrition scientist who did the research while a Ph.D. student in nutrition at Tufts University in Boston. While other studies have found that people who eat whole grains are slimmer and have lower body fat than those who do not, Karl said it has been hard to separate the effects of whole grains from regular exercise and a healthier diet overall. So, for the new study, "we strictly controlled diet. We didn't let them lose weight," he said. The researchers did that by pinpointing the specific caloric needs of each of the 81 men and women, aged 40 to 65, in the study. For the first two weeks of the study, everyone ate the same types of food and the researchers computed their individual calorie needs to maintain their weights. After that, the researchers randomly assigned people to eat either a whole-grain or refined-grain diet. The men and women were told to eat only the food provided and to continue their usual physical activity. Those on the whole-grain diet absorbed fewer calories and had greater fecal output. Their resting metabolic rate (calories burned at rest) was also higher. The fiber content of whole-grain foods, about twice that of refined-grain foods, is believed to play a major role in those results, Karl said. "The energy deficit in those eating whole grains compared to refined grains would be equivalent to the calories you would burn if you were to walk about a mile [in] about 20 or 30 minutes," he said. But the study did not prove that whole grains cause weight loss. "We don't know over the long term if it would translate to weight loss," Karl said, but his team suspects it would. "This would translate to about 5 pounds in a year," Karl estimated.

The study is solid, said Connie Diekman, director of university nutrition at Washington University in St. Louis.

"It provides good evidence that consumption of whole grains is an important part of a healthful eating plan," Diekman said. The study documents how whole grains contribute to feelings of fullness and appear to increase metabolism, she added. The study was published online Feb. 8 in the American Journal of Clinical Nutrition.

In a related study in the same issue of the journal, the same group of researchers found that people who ate whole grains had modest improvements in healthy gut environment and certain immune responses. Whole-grain intake has also been linked with a reduced risk of heart disease, type 2 diabetes and some cancers, the researchers noted.

When shopping, how do you find whole-grain products?

Look on the label for "100% whole grains," Karl said. "Just because something is made with whole grains doesn't mean there has to be much in there," he explained. "Look to see if the first ingredient is whole grain, and 100%" *Nutrition Action*