



Get Healthy No Matter What Your Age

A Publication of Newsmax Health

Vol. 7, Issue 6 / June 2017

Contents

- 4 Dr. Mehmet Oz and Dr. Michael Roizen Not all calories are equal
- 5 Cancer Lifestyle vs. genetic risk
- 6 Food Safety
 Hidden hazards of summer picnics
- 7 Natural Health 7 U.S. additives banned overseas
- 8 Ask the Doctor Plantar fasciitis
- 9 Mental Health Sleep aids do more harm than good
- 10 Wellness

 How to spot and treat summer allergies
- 11 Latest FDA Approvals Hep C, liver cancer, leukemia, genetic test
- 12 Breaking News
 Brussels sprouts:
 Treatment for dementia?
- **14 Dr. Maxfield**Colonoscopy alternatives
- **16 Breakthroughs**End to blood shortages?

Lessons From Senior Athletes: Age-Defying Fitness Secrets

By Lynn Allison

Some athletes, like vintage wines, improve with age. It's not that they run faster or throw the ball farther than they did in their heydays, but they are still challenging themselves despite the fact Father Time is ticking away. They have adapted to the changes in their bodies.

How do they do it?

In January of this year, 105-year-old Robert Marchand rode his bicycle 14.01 miles in one hour to set the world record for his age. He cycled 92 laps at the Velodrome National near Paris. As he completed his monumental ride, the fans gave him a standing ovation while dozens of TV crews and cameramen captured the moment.

Amazingly, Marchand, a former lumberjack in Canada, didn't start cycling until he returned to his native France at age 68. At age 81, he rode from Paris to Moscow. He lives a simple, austere life in a small Parisian apartment, rising at 6 a.m., and going to bed by 9 p.m., eating primarily a plant-based diet.

Canadian Ed Whitlock was the

first person over the age of 70 to run a marathon in less than three hours. He did it at age 73 — 12 years ago.

Last October, at age 85, he ran the Toronto Waterfront Marathon in 3 hours 56 minutes and 34 seconds to become the oldest person to ever run 26.2 miles in less than four hours.

Whitlock, who died in March 2017 at the age of 86, ran as a schoolboy in London, England, but gave it up until his 40s when he began running once again after years of inactivity.

"In my opinion, Robert Marchand is the most incredible senior athlete of all time, and Ed Whitlock was a close second," says Dr. Gabe Mirkin, author of "The Healthy Heart Miracle" and an incredible senior athlete himself.

At age 82, Mirkin cycles for 30 miles at 20 miles per hour three times a week. He spends the remaining four days riding 10 miles per hour for 30 miles to allow his muscles to recover.

Fitness: Key to Health and Longevity

Dr. Joseph Maroon, 76, the team neurosurgeon for the NFL's Pittsburgh Steelers and a renowned





Fit After 50 Fact

Fitness trackers have become very popular with the over-50 set. But it turns out some gadgets aren't very accurate when it comes to measuring heart rate. That's the upshot of a new study published in JAMA Cardiology. Researchers at the Miller Family Heart & Vascular Institute at Cleveland Clinic tested four fitness trackers (the Apple Watch, Mio Fuse, Fitbit Charge HR, and Basis Peak) on 50 volunteers. Study participants hit the treadmill at various speeds while wired to an electrocardiogram for accurate readings while they exercised. The Apple Watch and the Mio Fuse were the most accurate. The Fitbit Charge HR held its own, matching the EKG 84 percent of the time, and the Basis Peak was accurate 83 percent of the time. But during peak strain, the fitness trackers lost accuracy. The Fitbit tended to underestimate heart rate, while the Basis Peak overestimated it. "At rest, all of the monitors did an acceptable job," study co-author Gordon Blackburn said. "As the intensity of the exercise went up, we saw more variability in the accuracy."

expert on concussions has completed eight Ironman distance triathlons and more than 75 total triathlons of all distances. In 2016, he placed first in his age group in the Ironman 70.3 triathlon. His latest book, "Square One: A Simple Guide to a Balanced Life," chronicles his battles overcoming adversity and "burnout."

"I began competing approximately 35 years ago after a personal catastrophic event sent me into a serious depression," he tells *Health Radar*. "It was running and subsequently swimming, biking, prayer, and getting back into balance that saved my life and led to the most productive part of my career."

Maroon devotes at least an hour daily to aerobic activity — jogging, biking, swimming, and using resistance bands for strength training.

He follows a Mediterranean diet emphasizing healthy fats and lower carbohydrates and protein, while consuming specific vitamins and minerals to fuel his body, especially when training for competitions.

"The grueling length and harsh conditions of Ironman triathlons cannot be performed without attention to these details," he says.

Practical Tips for Senior Athletes

Mirkin maintains that a regular exercise program can help prevent disease, prolong life, and improve quality of life in later years.

"Everyone should do some form of exercise every day, unless there is a compelling reason not to do so," he tells *Health Radar*.

He offers these tips for senior athletes:

- Try to go a little faster or more intensely on one day of exercise, and slower on the next day.
- It is normal to feel soreness when you get up in the morning, but if the stiffness doesn't dissipate after 5 to 10 minutes of warming up, take the day off.
- If you feel increasing pain or discomfort in one part of your body during exercise, stop exercising immediately. Your body is telling you that you're headed for an injury.
- Normally your muscles feel

Health Radar

To renew or subscribe to Health Radar go to: NewsmaxHealth.com/Newsletters or call 1-800-485-4350

Health Radar* is a monthly publication of Newsmax Media, Inc., and Newsmax.com. It is published at a charge of \$39.95 per year, and is offered online and in print through Newsmax.com and NewsmaxHealth.com.

The owner, publisher, and editor are not responsible for errors and omissions. Rights of reproduction and distribution of this newsletter are reserved.

Any unauthorized reproduction or distribution of information contained herein, including storage in retrieval systems or posting on the Internet, is expressly forbidden without the consent of Newsmax Media, Inc.

For rights and permissions contact Newsmax Media, Inc. at PO Box 20989, West Palm Beach, Florida 33416 or copyright@newsmax.com.

Nick Tate

Art/Production Director Phil Aron

Editor

For Subscription/Customer Service inquiries, call 1-800-485-4350 or e-mail healthradar@newsmax.com.
Send email address changes to healthradar@newsmax.com

© 2017 Newsmax Media, Inc. All rights reserved. Newsmax and Health Radar are registered trademarks of Newsmax Media, Inc.

Newsmax health • Newsmax

Please note: All information presented in Health Radar (including answers to reader questions) is for informational purposes only, and is not specifically applicable to any individual's medical problem(s), concerns, and/or needs. No content is intended to be a substitute for professional medical advice, diagnosis, or treatment. All information presented in Health Radar should not be construed as medical consultation or instruction. You should take no action solely on the basis of this publication's contents. Readers are advised to consult a health professional about any issue regarding their health and well-being. Any action you take on the basis of the information provided is solely at your own risk and expense. The opinions expressed in Health Radar do not necessarily reflect those of Newsmax Media, Inc.



fresh after they have warmed up and when you are moving through a workout. When your muscles start to feel tight and heavy, stop for the day.

How Famous Athletes Stay Fit

Mirkin points out that training and competing at the high levels of professional or Olympiccaliber athletes can take a toll on a person both physically and psychologically.

"Most serious athletes do not plan for the future because they are forced to base their self-worth on success within their chosen sport, and limit everything outside their sport including friends, jobs, income, and other interests," he says. "Most have to retire in their early 30s because of agerelated decline in performance or injuries. Some are able to stay in their sport as coaches and executives, but for others retirement can lead to serious depression and even suicide.

"Australian Olympic swimming champion Ian Thorpe and Dame Kelly Holmes, a double gold medal winner in distance running, both suffered debilitating depression after being forced to retire. "On the other hand, basketball immortal Kareem Abdul-Jabbar puts the same energy in his writing, and tennis great Martina Navratilova is the fitness ambassador for the AARP."

Here are some other famous athletes who have successfully made the transition to senior success.

Bobby Orr

Born in 1948, hockey legend Bobby Orr has often been referred to as one of the greatest hockey players of all time. He played 12 great seasons in the National Hockey League, and at 31 was inducted into the Hockey Hall of Fame.

When he stopped playing hockey he became a well-known scout for several professional teams. Today, Orr remains active by coaching hockey.

Greg Louganis

The 57-year-old Olympic diver and author won two gold medals at the both the 1984 and 1988 Olympic Games for springboard and platform diving.

Today, he stays in shape by rising at 4 a.m., practicing daily yoga, and cross-training with weights. He says he's only near a pool these days when he's mentoring young swimmers.

George Foreman

The imposing 68-year-old former professional boxer who was a two-time heavyweight champion and an Olympic gold medalist stays in shape by exercising in a 3,000-square-foot gym in his Houston home. "Big George" still lifts weight and uses a treadmill-like device at the bottom of his pool.

"I look at it this way," he says. "If I want to eat, I have to work out. The only fights I have these days are walking away from dessert bars and staying away from gravy."

Elaine Tanner

Born in 1951 in Vancouver, Canada, Tanner is a former competitive swimmer who won three medals at the 1968 Summer Olympics held in Mexico City.

She now writes children's

Fit After 50 Fact

Sitting is the new smoking, in terms of health. New research shows that sitting for long periods of time every day boosts your health risks, no matter how much time you spend at the gym. But incorporating simple activities into your everyday life can make a world of difference, notes Mayo Clinic researcher Dr. James Levine, who has developed the NEAT lifestyle short for "Non-Exercise Activity Thermogenesis." Something as simple as ditching the electric toothbrush and brushing your teeth by hand can make a big difference in how much energy your body uses. Other ways to incorporate small movements into your day:

- Stand when you answer the phone and walk as you talk.
- If you work at an office desk for long periods of time, get out of your chair every half-hour, stretch, and walk around.
- Park at the far end of the parking lot or a couple of blocks away and walk to work.
- Use stairs instead of elevators and escalators.
- Move your alarm clock to the opposite side of the room from your bed.
- Put on your favorite music and dance while you're getting dressed.
- Keep moving whenever you're sitting. Swing your foot, tap your toes, or drum your fingers.

books and credits exercise as the reason she remains physically and mentally healthy. Although Tanner rarely swims these days, she hits the gym three times a week to keep fit, and takes every chance to stay active, from walking to taking the stairs.

□





Making **YOU** Live Healthier

with Mehmet Oz, M.D. & Michael Roizen, M.D.

Not All Calories Are Equal

After Lulu Hunt Peters earned her medical degree from the University of California, Berkeley, in 1908, she decided to use calorie counting and self-control to cure her lifelong struggle with obesity. Her solution helped her shed 70.5 pounds — and America's hard-to-shake belief that a calorie is a calorie is a calorie was launched.

In 1918, when Peters published her bestselling book, "Diet and Health: With Key to the Calories," she was offering American women her personal solution to being overweight.

For decades, nutritionists said that to lose weight and keep it off, you must take in fewer calories daily than you burn. While that is somewhat true, recently we've begun to unravel the more complex ways that different nutrients affect metabolism, appetite, blood sugar, gut biome, immunity, and inflammation level.

As a result, we now know that the source of calories — and when you eat them — influences many aspects of health and well-being, including weight, cognition, mood, cardiovascular health, digestion, microbiome, longevity, and even your sex life.

What '100' Really Means

A hundred calories of different nutrients exert wildly different effects on the body. Here's how:

- 100 calories of lean protein. Found in fish and skinless poultry, legumes, nonfat dairy, tofu, nuts, egg whites, and whole grains, lean proteins help control appetite and weight, steady blood sugar levels, and reduce risk of heart disease and Type 2 diabetes. They also build muscle.
- 100 calories of red or processed meat. These boost inflammation, damage weight-controlling gut bacteria, increase risk of heart disease and some cancers, and can contribute to dementia and sexual dysfunction.
- 100 calories of complex unrefined carbohydrates. Found in 100 percent whole grains and fresh produce, complex carbs and the fiber they contain

support "good" gut bacteria. That helps you control weight, protects mood-influencing neurotransmitters like serotonin, reduces bodywide inflammation that triggers heart disease, bolsters immunity, helps protect the digestive system from inflammatory bowel disease and irritable bowel syndrome.

- 100 calories of simple carbohydrates. Refined sugars, sugar syrups (like high fructose corn syrup), white bread, pasta, sweet sodas and sugar-added juices, snacks, desserts, and baked goods are surefire proof that a calorie is not a calorie despite the efforts of the sugar industry to convince the public that added sugar is not a serious health risk or a trigger for obesity. These carbs directly contribute to the development of inflammation, insulin resistance, obesity, Type 2 diabetes, and heart disease, and promote dangerous belly fat.
- 100 calories of extra-virgin olive oil. Healthy fats like mono- and polyunsaturated fats found in extra-virgin olive oil and sunflower oil, and omega-3 fatty acids like DHA (in salmon) and ALA (in walnuts), help reduce inflammation and promote a healthy gut biome (making it easier to control your weight), as well as keeping arteries clear and helping prevent wrinkles.
- 100 calories of saturated or trans fat. Saturated fat is found in animal protein (especially in red and processed meats), tropical oils, dairy products and eggs all calorie-dense foods that contribute to weight gain. Excess intake raises artery-clogging bad LDL cholesterol. It is also associated with foods (like lunch meats) that boost bodywide inflammation a sure risk for a wide range of diseases.

So the next time you take a bite, remember that it's not just how many calories you consume, it's the foods that contain those calories that make a difference to your weight and your overall health.

□

© 2017 Michael Roizen, M.D. and Mehmet Oz, M.D. Distributed by King Features Syndicate, Inc

Dr. Mehmet Oz is host of *The Dr. Oz Show* and a professor in the Department of Surgery at Columbia University. **Dr. Mike Roizen** is chief medical officer at the Cleveland Clinic Wellness Institute. Dr. Oz and Dr. Roizen are co-authors of the best-selling *You* book series.

Healthy Lifestyle Combats Genetic Risks

By Emily Netburn

For some people, cancer or heart disease may seem inevitable because of genetic risks and family history. But new research by author, educator, and nutritionist Terry Lemerond indicates that lifestyle choices are more important than genes when it comes to preventing cancer and other diseases.

In a recent Webinar — "Cancer Prevention: In Our Hands, Not Our Genes" — Lemerond explained that 90 percent of all diseases are tied to the lifestyle choices we make.

"Our health is not in the hands of our physicians," says Lemerond, who has spent 40 years in the natural products industry, researching and developing more than 400 nutritional and botanical formulations.

"Doctors treat disease, but they do not improve your health. In order to be disease-free, you have to improve your health."

To prove his point, Lemerond examined the health records of 55,000 people for clues to the role of genetics and lifestyle in cancer and other diseases. The participants were sorted into two categories — genetic "winners" and "losers" — based on the number of genes associated with increased risk of heart disease they possessed, as well as "healthy" or "unhealthy" lifestyles.

The "healthy" requirements were modest: Participants could still be "healthy" if they were

overweight, but not obese, exercised only once weekly, didn't smoke, and met only half of the American Heart Association's diet recommendations.

The results of the study showed that genetic "winners" could double their risk of developing heart disease by being unhealthy — even though they were genetically predisposed not to develop cardiovascular problems. On the other side, the genetic "losers" who adopted healthy lifestyles cut their risk of developing heart disease by 50 percent, despite greater genetic risk of cardiovascular problems.

So what are the biggest risk factors? The most common causes of DNA damage linked to cancer and heart disease, according to Lemerond, are smoking, obesity, physical inactivity, and exposure to toxins, pollutants, and radiation. Here's a look at these risk factors and what you can do to reduce your risk.

Obesity. One of the most common of these cancer risk factors is obesity. The metabolic issues, hormonal imbalances, and inflammation associated with being overweight significantly hike the risk of developing certain types of cancer. Losing weight is the single best thing you can do to boost your overall health.

Sugar. Another thing to look out for is sugar intake, which is linked to diabetes, heart disease, and certain cancers. "The average American consumes 62 pounds of high fructose corn syrup a year,"

Lemerond explains. "Sugar feeds cancer cells like gas fuels our cars."

Federal officials say most Americans should limit their intake of sugar and artificial sweeteners to 10 percent of their overall diet.

Tobacco. There is no such thing as a safe level of tobacco. If you smoke or chew, quit.

DNA damage. One of the best ways to can reduce your risk of cancer is to combat DNA damage by taking certain supplements and eating foods that naturally combat disease. One example: curcumin, a potent cancerfighting compound found in the Asian spice turmeric.

Curcumin activates a tumor suppressor protein known as "p53," which Lemerond calls "your body's anticancer shield." It works by binding to damaged DNA and stopping cell replication until either the cell can be repaired or self-destructs.

Although this protein is inactivated in almost all cancers, it can be strengthened by consuming curcumin and other foods, notably grape seeds. Both of these p53 activators reduce cancer-related inflammation, stop precancerous lesions from progressing to cancer, and protect normal cells from damage by toxic chemotherapy drugs.

By cutting back on cigarettes, losing a few pounds, exercising more, and changing your diet, you could be well on your way to decreasing your risk of a cancer diagnosis, says Lemerond.

□



By Nick Tate

Picnics are one of the great joys of summer. But they can pose hidden health hazards — foodborne bacteria that can make you seriously ill, foods laden with hidden salt, and side dishes and dressings loaded with allergens. The Centers for Disease Control and Prevention (CDC) estimates that each year roughly 48 million people get sick from a foodborne illness; 128,000 are hospitalized, and 3,000 die.

Liz Weinandy, a registered dietitian from Ohio State University Wexner Medical Center, tells *Health Radar* most food-poisoning cases are not tied to restaurant meals, but improperly prepared homecooked meals or food left unrefrigerated too long.

"This doesn't surprise me at all, because many people do not understand safe food-handling and storage guidelines," says Weinandy. "Most people aren't taught food safety in school, so unless it's practiced at home, they don't give it a second thought."

The good news is that some simple precautions can keep you and your family safe from food poisoning.

Keep cold foods cold, and hot foods hot. Cold foods should be kept on ice so they stay below 40 degrees. Similarly, hot foods should be kept warm — above 160 degrees — to prevent bacteria from growing on them.

Don't leave foods out too long. Refrigerate leftover foods within two hours of serving. If it is over 90 degrees outside, that time shrinks to one hour. Cook meats thoroughly. Use a thermometer to be sure meats are cooked through to at least 160 degrees and poultry to 165 degrees.

Keep a clean kitchen. Use separate utensils, cutting boards, and plates for raw and cooked foods.

Watch out for salty foods. For people on low-sodium diets, barbecue staples can be a problem, including hot dogs with fixings, which can contain more than 1,400 milligrams of salt each; baked beans (1,100 mg/cup); chips (262 mg/serving); potato and macaroni salads (500-600 mg/cup); and salad dressing (150-200 mg/tablespoon).

Beware hidden food allergens. For those with food allergies, certain dishes contain potential life-threatening allergens. Salads and veggies with dressings may contain nuts, gluten, and corn.

Expiration Dates: Is Your Fridge Harboring Food Dangers?

By Lynn Allison

A re the milk, mayo, or cheese in your fridge posing a potential foodpoisoning risk? Nutritionist Tara Gidus Collingwood, team dietitian for the Orlando Magic, notes that some foods are still good well beyond their "sell-by" date, but others could pose a potential health hazard if not consumed quickly.

Here are seven surprising

recommendations about refrigerated perishables:

- **1. Milk.** America's most popular dairy beverage will remain drinkable for about one week after the "sell-by" date.
- **2. Yogurt.** Experts say it should be kept no longer than a week in the fridge.
- **3. Mayonnaise.** Once opened, mayo should be used within two months.
- **4. Beer.** Most mass-produced beers have a three-month shelf

life. Microbrew shelf lives vary.

5. Deli meats. Deli meat and other meats should be consumed within three days for maximum taste and freshness.

6. Wine. Opened or leftover wine should be consumed within a couple of days as its quality diminishes with each passing day.

7. Cheese. Soft cheeses like Brie will last only a week once opened while hard cheeses like Cheddar and Parmesan can last up to two months. □

7 Additives Banned Overseas But Not in U.S.

By Gary Greenberg

Some food additives still play in Peoria even though they've been banned in other countries due to potential health concerns. That may make you wonder why the U.S. Food and Drug Administration (FDA) insists these ingredients are safe for human consumption — though other regulators aren't sure.

"There could be several reasons why one country bans an additive and another doesn't," says Lisa Lefferts, senior scientist at the nonprofit consumer advocacy group Center for Science in the Public Interest (CSPI). "It may be due to differences in regulation or scientific judgment, or it may be due to a more cautionary approach."

Another expert contends that the fear of FDAapproved food additives is more a case of misguided public perception than scientific fact.

"It's an emotional topic, and that's a quandary for the government and food companies," Roger Clemens, an associate professor at the University of Southern California School of Pharmacy, tells Health Radar.

"In fact, more than 99 percent of the toxins to which consumers are exposed come from nature, not man. People will accept natural toxins but not manmade ones, even when the exposure is minimal."

Clemens adds that, by law, government regulators must practice "zero-tolerance with respect to food ingredients that contribute to the development of cancer."

Here are seven food additives that have been banned overseas but not in the U.S. that raise concerns, according to the CSPI:

- **1. Artificial dyes.** Synthetic colors make food look more appetizing, but some have been linked to cancer, as well as hyperactivity in children. The worst offenders have already been banned in the U.S., but others remain in use. The European Union requires warning labels on all products containing artificial dyes. "The FDA should ban food dyes, which serve no purpose other than a cosmetic effect," recommends the CSPI.
 - 2. Butylated hydroxyanisole (BHA). Used to

preserve fat and oils in processed foods, BHA has been linked to cancer in lab animals. The U.S. Department of Health and Human Services considers it "reasonably anticipated to be a human carcinogen." BHA is banned in Europe and Japan, yet the FDA allows it in food. "It should not be permitted," Lefferts tells *Health Radar*, adding that related butylated hydroxytoluene (BHT) should also be "avoided."

- 3. Brominated vegetable oil (BVO). This emulsifier helps to keep ingredients in sodas and other flavored drinks from separating, but is banned in more than 100 countries because it contains the caustic chemical bromine.
- **4. Potassium bromate.** Bromate, ionized bromine, is also the concern in this baking additive that enhances bread texture. Although high heat converts bromate into harmless bromide, trace amounts of the chemical may remain, posing a "small risk to consumers," says the CSPI. Lefferts adds: "It has been banned virtually worldwide, except in Japan and the U.S."
- **5. Azodicarbonamide.** A bleaching agent used in baking bread and rolls, this chemical has been linked to asthma, and the CSPI says it "slightly increases exposure to a carcinogen." It's banned in Britain, Europe, and other countries, but azodicarbonamide is only dangerous in a concentrated form and not the 45 parts per million found in flour.
- **6. Olestra.** This fat substitute was a colossal commercial failure, in part due to embarrassing bathroom-related occurrences. More critically, studies show it interferes with the absorption of fat-soluble vitamins and nutrients. It's banned in Britain and Canada, but you'll still find it in a few U.S. products, such as fat-free potato chips. "Fortunately, it's not used very much anymore," says Lefferts. "It should never have been allowed on the market."
- 7. Bovine growth hormone. Technically, this is not a food additive but rather an artificial hormone given to cows to boost milk production. It's been banned in several countries, including Australia, Canada, Europe, and Israel. But that's not necessarily for human health concerns as much as for the animals' well-being. No studies have confirmed suspected links to cancer and hormonal problems in humans. □





By Lynn Allison

Q: What is plantar fasciitis?

A: Plantar fasciitis is a localized, degeneration of the plantar fascia, the tough, fibrous band of tissue that connects your heel bone to the base of your toes. The problem occurs at the site where the plantar fascia is attached to the bottom of the heel bone.

It is the most common cause of heel pain, affecting more than 3 million people every year. In my experience it's similar to lower back pain, which could mean a good many more people suffer from the condition. It's common in middle-age and older people who are overweight or who walk or stand on hard surfaces a lot. The condition can be acute, triggered by a specific injury; or chronic, becoming worse over time.

Q: What are common symptoms and causes?

A: In most cases, plantar fasciitis starts with mild pain on the bottom of the heel, especially when taking your first steps of the day. The pain may improve only to worsen later in the day. It's caused by overstressing the plantar fascia, and may remain sore for months.

All foot types are prone to plantar fasciitis, including people with high arches and those with what we call flat feet. It's caused by wear and tear on the fibers of the fascia. The most common direct cause is strain to the tissue due to a specific activity combined with improper or inadequate flexibility of the Achilles tendon and the calf muscle.

Q: When should you see a doctor?

A: If the pain was caused by a specific episode or injury, and doesn't improve within a week of resting and icing the area, you should seek medical help. You should see a specialist when your quality of life begins to suffer despite taking time to rest, stretch, and ice the area.

Q: What is the course of treatment?

A: I am a firm believer in noninvasive treatment for

plantar fasciitis. Stretching is by far the best therapy to relieve the painful symptoms without damaging the integrity of the plantar fascia. We offer simple stretches to loosen up the calf muscle, the Achilles tendon, and of course the plantar fascia itself.

One simple stretching exercise that can be done at your desk involves folding one foot over the opposite knee with your toes flexed back toward you in a figure-four formation. Another is the yoga pose called downward dog. The classic runner's stretch also helps stretch the lower leg and bottom of the foot.

Anti-inflammatory medications may also help reduce pain and inflammation. Cushion-soled shoes, heel cups, and soft orthotics are useful in alleviating symptoms. If the condition doesn't improve after 12 weeks, we might suggest a corticosteroid shot. But beware of having multiple injections as these may weaken the fibers of the fascia even more.

Other interventions such as a night splint or shock wave therapy may also help. I'm not a great proponent of surgery for plantar fasciitis unless noninvasive treatments have failed, but statistics show that about 5 percent of sufferers may be candidates for surgery.

Q: How can one prevent plantar fasciitis?

A: Wear shoes with good arch support and heel cushioning. If you work on hard surfaces, stand on a thick rubber mat to reduce stress on your feet. Make sure that you stretch daily whether you are an athlete or not. Stay at a healthy weight to reduce the load on your feet.

□

Or. Jeffrey E. Johnson is the president of the American Orthopaedic Foot & Ankle Society. He is also professor of orthopedic surgery, chief of foot and ankle service, and director of the Orthopaedic Foot & Ankle Fellowship Program at Washington University Sch

Program at Washington University School of Medicine and Barnes-Jewish Hospital in St. Louis.



By Rick Ansorge

Six in 10 Americans report experiencing chronic sleep problems, and millions resort to nighttime sleep medications. But such drugs can do more harm than good, experts say.

"We are all becoming more sleep-deprived, meaning that people's total sleep time has been decreasing for decades," says Dr. Raj Dasgupta, a sleep expert at the Keck School of Medicine at the University of Southern California.

Dasgupta tells *Health Radar* that sleep medications can promote sleep, but they're a "double-edged sword." Many of the most common prescription and over-the-counter sleep medications have been linked to cognitive decline, brain shrinkage, and an increased risk of Alzheimer's disease.

These include prescription benzodiazepines such as Xanax (alprazolam) and traditional tricyclic antidepressants such as Elavil (amitriptyline).

Alarming new research suggests that antihistamines such as Benadryl (diphenhydramine), which are often found in over-the-counter sleep medications, also are associated with such effects, particularly in middle-age and older people.

That's because such drugs can deplete the brain's supply of the essential neurotransmitter acetylcholine. That's why they're collectively referred to as anticholinergic drugs. One of the hallmarks of Alzheimer's disease is a deficiency of acetylcholine.

Anticholinergic drugs can also affect speech, gastrointestinal health, and sexual health.

"Most medications are not intended for lifelong use," explains Dasgupta. "The goal of taking them is to try to get down to the lowest possible dose, or not use any medication at all."

Nondrug remedies are best for promoting good sleep, he says. These include aims to establish good sleep hygiene, elements of which includes:

- Reserving your bed for sleep and sex only.
- Having a set bedtime and wake time.
- Avoiding daytime naps longer than 15-20 minutes.
- Not eating or drinking anything

 particularly caffeinated or
 alcoholic beverages in the
 hours before bedtime.
- Winding down with lowintensity activities immediately before bedtime. □

Legal Addictions: Are your Loved Ones in Danger?

By Shellie Faulkner

Everyone knows about the dangers of cocaine, heroin, and alcohol abuse. But many over-the-counter drugs, herbal supplements, and even kitchen items are not only addictive, but can also give someone you love a "legal" but dangerous high.

If you or someone you love has been purchasing abnormally large amounts of seemingly ordinary products, it could be a warning sign of possible addiction. Here's a list of uncommon products that can be addictive.

Robitussin. This is a popular over-the-counter drug that contains dextromethorphan (DXM). At high doses, DXM can cause "hallucinatory and dissociative effects similar to those of PCP or ketamine (special K)."

Nyquil. This popular cold and flu medicine also contains DXM, and can be abused to obtain a "high."

Benadryl. Taken in large doses,

this antihistamine can provide the user a "high" and become addictive.

Nutmeg. A spice often associated with holiday treats, nutmeg contains myristicin, a potent oil that has an effect on the body similar to amphetamines.

Kava. Often used as a natural remedy to relieve anxiety, kava is brewed in teas, and high doses are known to have similar effects to alcohol, such as euphoria, dizziness, and loss of coordination. □

Hidden Summer Allergies: How to Spot Them and Ease Your Symptoms

By Nick Tate

We tend to associate allergies with spring and fall, and cold viruses with winter months. But in fact summer colds and allergies are also common, and knowing whether your symptoms are caused by one or the other is key to getting the right treatment.

Health experts note that colds and seasonal allergies can cause many of the same symptoms runny nose, stuffy nose, sneezing, fatigue, and coughing. But a common cold typically lasts no longer than 10 days, while allergies can linger for months.

Viruses also tend to bring on fever, chills, and body aches that allergy sufferers don't generally experience. They are best treated with rest, drinking plenty of fluids, boosting your immune system, and using over-the-counter remedies to manage symptoms until they've run their course.

Allergies, on the other hand, tend to cause watery eyes, itchy throats, and wheezing — symptoms rarely caused by viruses. Treatment usually requires identifying what's causing them and limiting your exposure, which may require a doctor's care.

"With the hot and humid weather of summer, the symptoms of allergies are in full swing for many," says Robin Wilson, author of "Clean Design: Wellness for Your Lifestyle" and a representative of the Asthma and Allergy Foundation of America.

Wilson offers a handful of

strategies that can help identify and remedy summer allergies.

Fruit is a common allergy trigger. Surprisingly, many favorite fruits — including apples, bananas, peaches, and plums — can cause symptoms similar to grass or tree pollen reactions. But there are ways to reduce risk of allergic reaction.

66Colds and seasonal allergies can cause many of the same symptoms. But a cold typically lasts no longer than 10 days, while allergies can linger for months.

Cleaner is not always better. Many studies show that a little exposure to dirt and germs is actually a good thing, because it strengthens the immune system. So resist the urge to use heavy chemical cleaners to sanitize your home. Doing so can lower your immune system's ability to fend off pathogens and allergens, Wilson notes. "When cleaning, always use a nontoxic cleaner, and remove excess books, magazines, and other clutter from the sleeping area to reduce dust buildup," she adds.

Wash or toss that pillow. If your pillow is older than three years and has not been washed, it's probably loaded with dust mites that can cause allergic reactions.

"Use hypoallergenic pillows over down pillows, and use a zippered pillow protector that you wash weekly for a double barrier," Wilson says.

There's no hypoallergenic dog. Poodles, labradoodles, and Yorkshire terriers are considered hypoallergenic because they don't shed hair. But there's no scientific proof that these breeds produce lower amounts of the most common dog allergens. Your best bet for reducing allergic reactions: Avoid exposure to pets.

Tear out the carpet. Tile and hardwood floors are less likely than carpet to harbor allergyproducing dust and allergens. But they must be vacuumed on a regular basis with a HEPA filter, which captures more microscopic airborne particles, such as dust, pollen, and pet dander.

Watch for indoor mold. Mold is a huge trigger for allergies and asthma, and it's quite common. "Watch for mold in the dishwasher and refrigerator pan, which can build up quickly and with very little warning; on your air conditioning system; and on any wood, paper, or cotton materials that sit in water for too long," Wilson says.

Keep the outside world from **coming in.** Always take off your shoes before going indoors, and keep all outdoor tools and toys in a garage or shed. "If not, you will be dragging in the outdoor dirt and pollen into your living area, and provoking allergies and asthma," Wilson notes. □

Page 10 / June 2017

FDA Approvals: Hep C, Facial Tics, Liver Cancer, Leukemia, Genetic Risk Test

Compiled exclusively by Health Radar, here are the most significant new drugs and medical devices approved by the U.S. Food and Drug Administration.

Hep C Drugs for Kids

The FDA has approved two drugs to treat hepatitis C infection in children ages 12 and older. Both Sovaldi (sofosbuvir) and Harvoni (ledipasvir, sofosbuvir) are already approved for use in adults. The medications are antivirals that prevent the hepatitis C virus from reproducing.

Hepatitis C causes liver inflammation that can lead to liver failure. Between 3 and 4 million people in the United States are infected with the virus. Children born to infected mothers are at higher risk of being infected, the FDA said, noting there are an estimated 23,000 to 46,000 children in the United States with hepatitis C. In clinical studies, the most common side effects of both drugs were fatigue and headache.

First Treatment for Tardive Dyskinesia

Ingrezza (valbenazine), the first drug to treat adults with the neurological disorder tardive dyskinesia, has been approved. The disorder is characterized by repetitive involuntary movements, usually of the jaw, lips, and tongue. Affected people may stick out the tongue, smack the lips, involuntarily move the arms and legs, and have trouble breathing.

Ingrezza's effectiveness was established in a clinical study of 224 people that compared the drug to a placebo. Potential side effects included sleepiness and abnormal heartbeat. Anyone taking Ingrezza should not drive or use heavy machinery until the effects of the drug on the person are known.

Stivarga for Liver Cancer

Stivarga (regorafenib) has been expanded to include liver cancer. The drug, which belongs to the class called kinase inhibitors, is designed to block enzymes that foster cancer growth. It's the first drug approved to treat liver cancer in nearly a decade. More than 40,000 people in the United States

are projected to be diagnosed this year with liver cancer, and nearly 29,000 will die from it.

The drug's effectiveness for treating liver cancer was evaluated in clinical studies of 573 people whose tumors had progressed despite being given sorafenib. The most common side effects included gastrointestinal and abdominal pain, skin reactions, fatigue, diarrhea, loss of appetite, high blood pressure, and infection. More serious risks included liver damage, heavy bleeding, gastrointestinal ulcers and problems with blood flow to the heart.

Women who are pregnant or breastfeeding shouldn't take Stivarga.

Rydapt for Acute Myeloid Leukemia

Rydapt (midostaurin) has been approved, in combination with chemotherapy, to treat adults with acute myeloid leukemia (AML) who have a specific genetic mutation dubbed FLT3. AML, a rapidly spreading cancer that forms in the blood marrow and spikes white blood cells, is projected to be diagnosed in just under 20,000 people, and more than 10,000 are expected to die of the disease annually.

Rydapt is a kinase inhibitor that blocks enzymes that foster cancer cell growth. It was evaluated in a clinical study of more than 700 people who hadn't been treated previously for AML. Common side effects included low white cell count, fever, nausea, headache, and muscular/bone pain. A more serious side effect could include lung damage.

Women who are pregnant or nursing shouldn't take Rydapt, which could harm a developing fetus or newborn.

Direct-to-Consumer Genetic Risk Test

The FDA approved the first direct-to-consumer genetic health risk test. Known as the 23andMe Personal Genome Service Genetic Health Risk test, it assesses a person's inherited risk for 10 diseases and conditions. The test derives DNA from a saliva sample, which is then screened for more than 500,000 genetic variants associated with disease risk. □

•

BREAKING NEWS, STUDIES & MEDICAL UPDATES

OMEGA-3 SUPPLEMENTS CAN PREVENT ASTHMA

Taking omega-3 fatty acid supplements during the third trimester of pregnancy can cut the odds of childhood asthma by a third, according to a study published in The New England Journal of Medicine. The fatty acids eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) are found in cold-water fish and reduce. inflammation. Women who had low levels at the beginning of the study reduced their children's risk of asthma by 54 percent. "Asthma and wheezing disorders have more than doubled in Western countries in recent decades," said researcher Hans Bisgaard. "We now have a preventive measure to help bring those numbers down."



ASPIRIN SLOWS CANCER GROWTH

Aspirin is known to reduce the risk of some gastrointestinal cancers, but scientists couldn't understand the mechanics behind the benefit. Researchers from Oregon Health & Science University may have discovered the answer. They knew that platelets, the blood cells involved with clotting, promoted spread of cancer by releasing chemicals that increased the growth of cancerous

cells, and caused a surge in proteins that regulate the development of tumors. They combined platelets with three groups of cancer cells: metastatic colon cancer (cells that have spread outside the colon), nonmetastatic colon cancer (cells growing only within the colon), and nonmetastatic pancreatic cancer cells. When they added aspirin to the mixture, they found that the platelets were no longer able to stimulate growth and replication in the pancreatic and nonmetastatic colon cancer cells.

BRUSSELS SPROUTS COMBAT DEMENTIA

Scientists are creating a supercharged synthetic version of a nutrient found in Brussels sprouts to fight Alzheimer's disease. Retinoic acid, a nutrient created in the body from vitamin A that's found in vegetables such as Brussels sprouts, tomatoes, and carrots, interacts with specific receptors in the brain. Previous studies indicate it may help slow the formation of brain-destroying beta amyloid deposits. They hope that an amplified nutrient could stimulate the growth of brain cells and repair damage from braindestroying conditions such as Alzheimer's and Parkinson's.

"We are basically trying to create a massively amplified version of what vitamin A already does for the body," said researcher Peter McCaffrey.

BEWARE THERAPY FOR ABNORMAL HEART RHYTHM

Catheter ablation, a common minimally invasive treatment that uses either heat or cold to destroy tissue responsible for abnormal

"FIT AFTER 50" FACT

Drop the meds, pick up a barbell. That's the upshot of new research that shows just a little physical activity seems to go a long way toward helping older adults with arthritis combat pain and remain able to do daily tasks. Seniors with arthritis-related joint pain and stiffness need to keep moving to remain functionally independent. But only 10 percent of Americans with arthritis in their knees meet federal guidelines of at least 150 minutes of moderate activity a week, the researchers said. Northwestern University researchers found that doing even about one-third of that amount is still beneficial. The study involved more than 1,600 adults 49 or older who had arthritic pain or stiffness in their hips, knees, or feet. Those who engaged in at least 45 minutes of exercise every week were 80 percent more likely to improve or sustain physical function, compared with those who did less activity, the researchers found. The study was published in the journal Arthritis Care & Research.

heart rhythms, may cause the formation of brain lesions when it is performed on the left side of the heart, according to researchers at the University of California, San Francisco.

Even worse, evidence shows the lesions may be associated with

BREAKING NEWS, STUDIES & MEDICAL UPDATES

cognitive decline. In left ventricular ablations, 63 percent of patients experienced brain lesions compared to none in those undergoing right ventricular ablation.

ONE HIGH-FAT MEAL **CAN HARM LIVER**

A single high-fat meal, such as a burger and fries, can disturb liver function and perhaps begin a chain of events that will lead to serious conditions such as nonalcoholic liver disease (NAFLD). Researchers at Germany's German Diabetes Center found that a single meal high in saturated fat immediately changed metabolism, causing the accumulation of fat in the liver. It also increased triglyceride levels and decreased insulin sensitivity, thereby laying the foundation for metabolic disease.

NATURAL COMPOUND **BLOCKS PARKINSON'S DISEASE**

A natural compound called squalamine can block a process that's believed to be a root cause of Parkinson's disease. An animal study from the University of Cambridge found that squalamine, a steroid found in dogfish sharks, dramatically inhibits the early formation of toxic clumps of the protein alpha-synuclein, a development believed to start a chain of events that eventually leads to Parkinson's disease. A clinical trial is being planned for Parkinson's patients.

DIABETES DIAGNOSIS COULD SIGNAL PANCREATIC CANCER

A French study found that the onset or worsening of Type 2 diabetes could indicate hard-todiagnose deadly pancreatic cancer. Scientists analyzed data on more than 900,000 patients with either Type 2 diabetes or pancreatic cancer, and found that half of all cases of pancreatic cancer were diagnosed within a year of being diagnosed with diabetes. They warn that the onset of diabetes or rapidly deteriorating diabetes could be the first sign of hidden pancreatic cancer.



EGGS FOR HEALTHY BRAINS

For 50 years, eggs were linked with heart disease and high blood pressure, two conditions associated with Alzheimer's disease. But recent studies have refuted the outdated belief. A new study published in the American Journal of Clinical Nutrition found that eggs only have a slight effect on cholesterol levels, and not only didn't increase the risk of dementia or Alzheimer's, but actually enhanced brain function.

HEART DRUG EASES NASAL PROBLEMS

Verapamil, a drug currently used to treat cardiovascular disease and cluster headaches. can ease the symptoms of chronic rhinosinusitis (CRS), a common sinus condition which is also called chronic sinusitis. Nasal polyps represent a particularly severe form of the disease that is often lifelong and commonly requires

long-term steroid use, which does not target the cause of the disease and can cause serious side effects. Verapamil works by inhibiting P-glycoprotein, a protein pump inside the nasal lining that appears to be a factor in severe cases that include the presence of nasal polyps, and may offer an alternative to steroids, according to a study published in the Journal of Allergy and Clinical Immunology.

CONCUSSIONS LINKED

Even mild head injuries can dramatically increase the odds of developing Alzheimer's disease, says a study from Boston University School of Medicine. Participants were war veterans, some of whom had suffered concussions and some who had not. Researchers measured the thickness of the brain's cerebral cortex in regions that are the first to show atrophy associated with Alzheimer's. They found that even a single concussion was associated with lower cortical thickness in those areas, and that it accelerated cognitive decline in people who are at genetic risk for the condition.

PETS AID MENTAL PATIENTS

The reliable presence and physical closeness of pets to their owners provide a calming, therapeutic effect for people who have longterm mental health problems. Researchers at the University of Manchester suggest that pets should be considered a main source of support, providing acceptance without judgment together with unconditional support that patients often don't get from family members or social relationships. □



Colonoscopy: Do You Know the Risks?

By William S. Maxfield, M.D.

Colorectal cancers are the fourth most common type diagnosed in the United States, with nearly 140,000 new cases reported each year. The most common test for evaluating the colon is called a colonoscopy, in which a thin, flexible tube is inserted in order to look at the inner lining of the large intestine.

The procedure, which is usually performed under anesthesia, helps identify ulcers, colon polyps, tumors, and areas of inflammation or bleeding.

The problem is that there are significant risks related to the colonoscopy procedure. Potential complications include infection and perforation of the colon. Data show that each year, about 15 million Americans undergo a colonoscopy. Of that group, 15,000 of them die — not from cancer, but from the colonoscopy screening itself.

In addition, there is a risk of developing dysbiosis, a condition in which the balance between the protective and harmful bacteria in the gut becomes offset.

Yet another complication of colonoscopies is the use of anesthesia, which can produce hypoxia in the brain, aspiration pneumonia, cardiac arrhythmias, abdominal pain, and nausea. Anesthesia can also lead to a defect that impairs cognitive function and memory. In fact, this has occurred in some patients that I've been associated with.

Finally, there is a potential for false readings with colonoscopies, with some research indicating that 15 percent to 27 percent of cancer polyps go unnoticed during the procedure.

Dr. William S. Maxfield, M.D., is a board-certified physician in hyperbaric medicine, radiology, and nuclear medicine. He is one of the nation's foremost experts in hyperbaric medicine. He has served on the faculties of the Johns Hopkins School of Medicine, Tulane University School of Medicine, and LSU Medical School. He also has served as the chief of the Radioisotope Laboratory at the U.S. Naval Hospital in Bethesda, Md. He currently is in private practice in the Tampa Bay, Fla., area.

Luckily, other techniques are being developed that can provide equal accuracy without the risks of colonoscopy.

Less invasive screening techniques include fecal occult blood testing (FOBT) and flexible sigmordoscopy. These tests are gaining greater acceptance with the increased understanding of the risks of colonoscopy — particularly the risk of cognitive defects.

Another technique — called virtual CT colonography — has the advantage of not requiring anesthesia. Unfortunately, this procedure can also sometimes miss colon cancer, though the accuracy does seem to be getting better.

A newer technique under development is MRI colonoscopy, which has the advantage of requiring neither anesthesia nor a radiation dose, as occurs with an CT colonography. But MRI colonoscopy is just really beginning to be understood as a useful technique.

Finally, there is an at-home colon cancer test kit called Cologuard (which you may have seen advertised on TV). This is a noninvasive technique for evaluating the health of the colon.

It works by simply collecting a stool sample and putting it in special packaging that comes with the test kit. That package can then be sent to the company for evaluation.

Current data indicate that the accuracy of Cologuard for detecting cancer in the colon is 92 percent — which is equal to or better than other methods for evaluating colon health. In addition, precancerous changes were detected at a 69 percent rate, which is again very good for any colon test.

I believe this is a procedure that you should ask your doctor about. He or she can order a Cologuard packet for you.

If you want to know more about new techniques for evaluating colon health, there is plenty of information online. Look for the procedures I've mentioned here: CT colonography, MRI colonoscopy, FOBT, sigmordoscopy, and Cologuard.

As I have noted before, medicine is always changing, and we are getting to the point when we no longer consider colonoscopy to be the screening procedure of choice for evaluation of the presence or absence of colon cancer.

□

More Than 100 Drugs Worsen Heart Failure: AHA Warning

By Lynn Allison

More than 100 medications and supplements can seriously threaten the lives of heart failure patients, according to a dire new warning from the American Heart Association (AHA).

More than 5 million Americans currently suffer from heart failure and may be putting themselves at greater risk with these medications.

"Drug interactions and side effects are the number one reason for emergency room visits for those over age 65," Dr. Kevin Campbell, a board-certified cardiologist from North Carolina tells *Health Radar*.

"It is critical for patients suffering from chronic heart failure to avoid potentially dangerous drug interactions. Socalled natural supplements also must be taken with great caution," says Campbell.

"For example, medications like ibuprofen and naproxen can cause sodium and fluid retention, which can trigger or worsen heart failure and make diuretic medications ineffective," explains Dr. Richard Harris, a specialist at the Kelsey-Seybold Clinic in Texas.

The AHA listed the following medications and remedies:

- Drugs that contain sodium and over-the-counter drugs that end in "D" for decongestant can cause problems for heart patients.
- Decongestants such as pseudoephedrine can raise heart rate and blood pressure.
- Watch out for natural products beginning with the letter "G,"

including green tea, ginkgo, ginger, grapefruit juice, and garlic powder. These were found to interact with medicines often taken by heart failure patients. For instance, green tea can affect the way the blood thinner warfarin (Coumadin) works, the researchers found.

• St. John's wort, a remedy for depression, can interact with many heart drugs. This herb can cause a buildup of the drug dioxin in the blood and trigger an abnormal and fatal heart rhythm.

Keep a list of all your medications and doses to show at every medical visit, and inform healthcare providers treating your heart failure before starting or stopping any medication.

Ideally, there should be a "captain" who oversees all of your medications. □

Coffee: Good for Your Ticker

By Rick Ansorge

Chalk up another health benefit for coffee. A new study from Stanford University finds caffeine may help prevent heart disease, heart attacks, and strokes by easing inflammation. The long-term study of more than 100 adults tracked older people who fell into two groups. The first group had a genetic predisposition to high levels of age-related inflammation and excess production of the inflammatory protein IL-1-beta.

The second group had far lower levels of inflammation.

Individuals in the high inflammation group were more likely to have elevated blood pressure and stiff coronary arteries. They also were less likely to have a close relative who lived to at least age 90.

Researchers identified one lifestyle factor that stood out: The high inflammation group drank almost no caffeinated beverages while the low inflammation group drank as much as seven cups of coffee per day.

This was no coincidence. Caffeine lowered inflammation levels, which have been linked with cardiovascular disease.

"This inflammatory [mechanism] is mainly associated with infectious disease," says Dr. Mark Davis, PhD, a senior coauthor of the study, which was published online in the journal *Nature Medicine*.

The results suggest that IL-1-beta may be one of many new molecular targets in the quest to conquer heart disease, which is the world's leading cause of death.

□

BREAKTHROUGHS



Can Spider Venom Help Stroke Victims?

A protein in the venom of a deadly Australian spider could protect the victims of stroke from brain injury. "We believe that we have, for the first time, found a way to minimize the effects of brain damage after a stroke," said Glenn King, a professor at the University of Queensland. The protein was found in the DNA of the venom of the funnelweb spider, one of the world's most deadly toxins. "The small protein, Hi1a, blocks acid-sensing ion channels in the brain, which are key drivers of brain damage after stroke," King said. Researchers, including scientists from Monash University found that a single dose of Hi1a administered up to eight hours after a stroke protected brain tissue and drastically improved neurological performance. Researchers said the window for treatment is "remarkably long" and will help provide better outcomes for patients by limiting damage and disability, which are often devastating. "Hi1a even provides protection to the brain region most affected by oxygen deprivation, which is considered unrecoverable due to the rapid cell death caused by stroke," King said. The research was published in Proceedings of the National Academy of Sciences.

Noninvasive Way to Combat Prostate Cancer

Researchers at Washington State University are developing a noninvasive method for diagnosing prostate cancer and tracking its progression. A filter makes use of specially designed biomarkers to attract proteins and RNA molecules called exosomes that prostate tumors shed in blood and urine. The proteins contain genetic information that can be analyzed to diagnose cancer, and see how far it has advanced. The device could allow doctors not only to diagnose cancer without

Exclusive to Current Subscribers

Current subscribers have instant access to any and every past edition of **Health Radar**.

Simply go here: healthradar.newsmax.com

This month's password is: fitness (Please remember to use lowercase letters.)

biopsies, but also determine how patients respond to treatments, enabling them to determine whether or not a therapy is effective by the numbers of exosomes present. Researchers say the device could be fitted with a wide range of biomarkers to identify other types of cancer, such as breast and pancreatic, in blood, urine, and other bodily fluids.

An End to Blood Shortages?

Scientists at Britain's University of Bristol and NHS Blood and Transplant have found a way to mass produce red blood cells suitable for donation, an innovation that may lead to a safe source of transfusions for people with rare blood types or occasions when blood supplies don't meet demand. An older method coaxed stem cells that produce red blood cells in the body to produce them in the lab, but the cells produced a limited number. The new method catches stem cells at an earlier stage, when they can produce red blood cells indefinitely — making them "immortal." "Cultured red blood cells have advantages over donor blood, such as reduced risk of infectious disease transmission," said the University of Bristol's Dr. Jan Frayne. The first trial is planned for later this year when manufactured red blood cells from stem cells will be used in a normal donation.

Stem Cell Therapy Repairs Lung Damage

Stem cell therapy can reduce lung inflammation associated with chronic obstructive pulmonary disease (COPD) and cystic fibrosis, say findings presented at the European Respiratory Society's Lung Science Conference. COPD and cystic fibrosis are characterized by inflammation that causes diminished lung function, which eventually leads to respiratory failure. The new research used mesenchymal stem cells (MSCs) in mice with inflammatory lung disease, which has some of the features of COPD and cystic fibrosis. MSCs are stem cells that can differentiate into different types of cells, including bone, cartilage, fat, and muscle cells. Mice were given MSC therapy at four and six weeks. After eight weeks, lung tissue was taken from the mice and compared to mice that hadn't received the treatment. Mice given MSC therapy showed reduced inflammation and improved lung tissue, suggesting the treatment may fix damaged tissue. □