



Get Healthy No Matter What Your Age

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# Secrets to Staying Strong After 50

Muscle loss is a hallmark sign of aging that can be devastating to health — but it's not inevitable.

By Vera Tweed

Years ago, it was called weight lifting, and associated with body builders and muscle-bound athletes.

Today, "strength training" is the popular term, and it's regarded as an essential component of fitness for everyone, but there are lingering myths that stop many people over 50 from reaping the benefits.

"Older folks often feel that strength training is more harmful than helpful," says Wayne Westcott, a leading expert and prolific researcher on the subject.

Westcott is a professor of exercise science at Quincy College in Massachusetts and author of more than 400 articles and 26 books on the subject, most recently *Strength Training Past 50*.

Among common myths he has encountered among people over 50: the idea that strength training is bad for joints and the heart, and will make you too muscular.

In fact, Professor Westcott tells Health Radar that strength workouts are even more important to middleage people and seniors than the young. After age 20, men lose an average of 7 pounds of muscle per decade. Women lose 5 pounds, and then 10 pounds per decade after menopause.

#### **Fast Track to Weakness**

By age 50, this equates to a loss of 21 pounds of muscle for men and 15 pounds for women.

Even if body weight doesn't increase during those years, there is a much greater percentage of fat, which alters the way the body works. Muscle loss slows metabolism, sapping energy and setting the stage for weight gain.

It reduces the ability to process carbohydrates, leading to high blood sugar and diabetes. And it predisposes us to heart disease, aches and pains, frailty, falls, and loss of independence.

The loss of muscle also leaves us less functional and unable to do physical activities that were routine in our youth.

#### **Reversing Muscle Loss**

No matter how old you are — 50, 60, 70, 80, or older — strength training can reverse the process.

"There's no significant difference

#### **COVER STORY**

in muscle gain at any age," says Westcott. You might be surprised to learn that with the proper workouts, a person at age 70 can make the same percentage gains as a 20-year-old.

The fact is, strength training may be the closest thing we have to a fountain of youth.

#### **Strength Training Benefits**

Younger metabolism: Muscle burns more calories than fat. Consequently, when we are younger and have more muscle, we need more food to support life, but as muscle is lost, the tendency to gain fat increases.

That's why most people can't eat as much as they used to when young, and still mysteriously seem to gain weight. Rebuilding muscle sets back the metabolism clock.

Fat loss: Strength training burns extra calories both while doing the exercises and for up to three days afterward, when muscles are recovering and rebuilding. In contrast, cardiovascular or aerobic exercise, such as jogging or riding a bike, burns extra calories only

while you're doing the activity.

Younger appearance: Muscle is denser than fat, and pound for pound, occupies a smaller space. Replacing fat with muscle, even if there is no change on the scale, makes a body thinner and more toned, creating a younger look.

#### Lower blood pressure:

Although blood pressure does rise temporarily while doing a strength-training exercise, there is a drop in resting blood pressure afterward, which is the marker that matters. Numerous studies have shown that two months of regular strength training improves blood pressure levels, reducing risk for heart disease and stroke.

Healthier blood fats: Studies show a consistent strength-training program has produced these changes: increase in good cholesterol by 8 to 21 percent; decrease in bad cholesterol by 13 to 23 percent; and reduction in triglycerides, which contribute to diabetes and heart disease, by 11 to 18 percent.

**Diabetes protection:** Type 2 diabetes, the most common form

of the disease, stems largely from an unhealthy lifestyle. Strength training protects against diabetes by improving the proper function of the hormone insulin, and reducing the odds of unhealthy levels of blood sugar. Even a few weeks of a strength training can make a significant difference.

Improved bone density: The same strength-training exercises that build muscle also build bone. In studies, substantial increases in bone mineral density have been seen after several months of regular strength workouts.

Fewer aches and pains: Many people believe that strength workouts will cause muscle soreness. And this may be true in the short-term or if you overdo it. But over the long haul, you'll actually have less joint and muscle pain, research shows.

Strength training can be especially helpful for lower back pain, arthritis, and fibromyalgia.

Less frailty: It's never too late. Strength training can dramatically enhance the ability of the elderly to get up and move around, and to



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spend less time in a wheelchair.

After regaining some muscle, many people can progress to other activities, such as walking or riding a bike.

#### Twice a Week Is All You Need

Studies of several thousand people by Professor Westcott and other researchers show that two strength-training workouts per week, done the right way, are all it takes to rebuild muscle for people between the ages of 50 and 90.

Each workout typically lasts between 20 and 40 minutes. A third workout per week will increase weight loss but doesn't significantly increase gains in muscle or strength.

The best way to start is with machines in a gym or health club.

Compared to free weights, says Professor Westcott, "Machines give you support and structure, and are safer."

An effective exercise routine needs to work all the major muscle groups. To accomplish this, Professor Westcott recommends using these five machines:

- Leg press
- Chest press
- Seated row machine
- Lower back machine
- Abdominal machine

These are common pieces of strength-training equipment available in most health club chains. The staff at the facility will be able to identify these pieces of equipment for you. In fact, it is a good idea to bring this issue of Health Radar to the gym with you.

#### 3 Rules for Strength

Professor Westcott says you should follow these three rules

#### How Much Muscle Can You Rebuild?

Studies show that among people over 50 the right type of strength training produces these gains after 10 weeks, according to Professor Westcott, with two workouts per week:

- Men add an average of 4 to 4.5 pounds of muscle.
- ► Women add an average of 2.2 to 2.5 pounds of muscle.

If there is no change in diet, there is also a loss of about 1 to 1.5 pounds of fat for each pound of muscle gain.

during a strength workout:

- 1. Do 10 to 15 repetitions on each machine.
- 2. Set the resistance so that your muscles are fatigued at the end of those repetitions.
- 3. Do each repetition slowly, taking 4 to 6 seconds for each one.

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Strength training works by producing enough challenge to create tiny tears in muscle tissue, and as it heals during the next few days, muscle mass increases.

Fatigue of a muscle is the signal that it is challenged to an adequate degree.

Obviously, too much muscle damage would be counterproductive, but fatigue at the end of 10–15 repetitions has been identified as the beneficial level for people age 50 and older.

For younger people, somewhat greater resistance is recommended, a load that fatigues muscles in 8 to 12 repetitions.

The machines Westcott recommends are designed to control use of muscles, so that you work specific ones, in a safe way.

He also recommends getting some instruction from a professional trainer to learn how to set the resistance correctly and use each machine properly, for safety and maximum benefit.

#### **Supplement Combo Builds Muscle in Seniors**

Research has shown that vitamin D combined with a supplement called HMB builds muscle strength in older people.

HMB (-hydroxy-b-methylbutyrate) is a natural body-building compound discovered by scientists at Iowa State University.

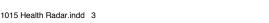
Rick Sharp, a professor of kinesiology at Iowa State University, has been testing the effectiveness of a combination of HMB, vitamin D, and resistance training in older adults to fight sarcopenia, or loss of muscle mass.

"We know that sarcopenia is so predictable in older adults that anything we can do that slows down the progression and/or reverses it, is going to be effective," Sharp said.

Sharp says exercise is vital to prevent sarcopenia, and his research is intended to boost exercise results by providing nutritional support.

HMB supplements are widely available at health food stores and through websites. While optimal dosages of HMB and vitamin D for strength building have not yet been determined, many experts recommend 1,000 IUs of vitamin D a day along with 1 gram of HMB.









### Making **YOU** Live Healthier

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

## Aromatherapy For Better Health

A romatherapy is a complementary treatment that uses essential oils to enhance relaxation and boost mental sharpness.

If you love the scents concocted by distilling volatile oils from the flowers, leaves, and bark of plants, you'll enjoy the varied aromas that deliver aromatherapy's message.

By making sure you get only essential oils — many fragrant oils contain hormone-disrupting phthalates — you'll get the aromas' benefits without any downsides.

Brown University researchers noted in a recent review of 18 aromatherapy studies that "odors can affect mood, physiology, and behavior."

This is most likely because the nerves that carry odor signals to your brain communicate directly with areas involved with emotion and learning.

It may explain aromatherapy's substantial effects, and the list is impressive:

**Grapefruit squashes food cravings.** In a recent study from Japan's Osaka University, the scent of a grapefruit's essential oil reduced appetite.

Lavender, sandalwood, and sweet orange work for relaxation, reduced anxiety. In one study, 12 breast cancer survivors reported drops in anxiety when they received a series of half-hour massages using only essential oils scented with lavender, sandalwood or sweet orange.

The researchers noted that an aromatherapy massage could be a drug-free way to help handle the worries that can linger once cancer treatment ends.

And more research found lavender eased the pain of needle injections and helped reduce post-op pain for kids who'd had their tonsils out.

Furthermore, sniffing a mix of lavender, Roman chamomile, and neroli (citrus orange/floral) helped ease anxiety, improved sleep, and stabilized blood pressure in heart patients receiving stents to open

blocked arteries in the heart.

**Neroli for calm.** The floral scent of neroli eased anxiety in a lab study at Taiwan's Taichung Veterans General Hospital.

Sniffing neroli temporarily lowered blood pressure and heart rate slightly in other research, too.

Roses for deeper sleep. Sniffing rose essential oil led to deeper, longer sleep in a research study from Japan's Mie University Graduate School/Faculty of Medicine.

Rosemary for better memory. Sniffing the scent of rosemary helped people in a study from the U.K.'s University of Northumbria recall specific events from the past with greater ease and become more likely to remember things on future to-do lists.

**Peppermint oil for post-op recovery.** One study found that inhaling the scent of peppermint oil eased post-surgery nausea.

Ready to breathe in the benefits? Follow these strategies for great results:

Choose good quality essential oils that you like. Use real essential oils, not perfume or fragrance oils. Sniff before you buy. Even if a scent has proven benefits, it won't help if you can't stand the smell!

Use just a little.

Add eight to 10 drops to your next bath, five drops to a basin of warm water for a heavenly foot soak or five to six drops to a carrier oil, like jojoba, almond, olive or grapeseed for an out-of-this-world massage.

You also can add a few drops to a cup of hot water to let the scent waft through a room.

Mix, match, and have fun. Try a few drops of this, a few drops of that. You'll soon find a personal formula that makes perfect scents.

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By Michele Bender

Before there were "superfoods," there was olive oil.

Ask most health experts which foods make their list of must-haves and you'll usually find olive oil at or near the top.

That's because it's a source of "good" fat that's loaded with antioxidants.

"Research has shown that olive oil helps lower 'bad' cholesterol and total cholesterol, improve insulin levels and blood clotting and assist with blood sugar control," explains Colette Heimowitz, Atkins' vice president of nutrition and education and resident nutritionist.

However, this ancient staple of good health and long life is surrounded by misconceptions. Here are seven ways to get the most from olive oil:

1. Add vitamin A: This antioxidant is found in carrots, tomatoes, dark leafy greens, bell peppers, cantaloupe, and tropical fruits, among other produce. Because it's fat soluble, consuming vitamin A with olive oil helps the body absorb it better.

"Eating a food high in vitamin A with olive oil satiates the palate so you feel full longer and provides a boost of energy," explains culinary nutritionist Sara Siskind, founder of Hands On Healthy, cooking classes for adults and teens in New York City.

**2. Store it right:** Though supermarket aisles are filled with

a dizzying array of options, choose olive oil that comes in a dark bottle or, even better, a tin.

**Nutritional Benefits** 

These containers protect against light, which causes the oil to deteriorate. "Once you've opened your olive oil, store it in a cool, dark place," says Lisa Young, adjunct professor of nutrition, food studies, and public health at New York University and author of *The Portion Teller Plan*. "And never keep it in the refrigerator."

**3. Go extra-virgin:** This is the top of the line and has more healthy components. Extra virgin olive oil is extracted using natural methods and not heavily refined.

"The olives are cold pressed using no chemicals and harmful processing so you get the most benefits from the oil," says Siskind.

Adds Susan S. Blum, M.D., director of Blum Center for Health, author of *The Immune System Recovery Plan*, and assistant clinical professor at The Icahn School of Medicine at Mount Sinai: "Because it is the first extract from the olives, it has the highest concentration of vitamin E, an antioxidant, and phytonutrients, especially polyphenols, known to have anti-inflammatory properties."

**4. Decode the label:** You'll know your oil is up to snuff if it has the letters DOP, DO, DOC, and PDO on the label.

These are European certifications that signify quality. Other good endorsements are

those from the California Olive Oil council, so it will carry a COOC seal, and a USDA organic certification.

The date on the label also matters. Some boast a harvest date after which a bottle of oil is good for 18-24 months. The more recent, the better. Others carry a "best by" date, which isn't as specific, but something to note.

- **5. Go small:** You may want to save a few bucks on that giant, Costco-size tin of olive oil, but pinching pennies this way is not a smart strategy. "Olive oil is best used fresh, so I recommend buying small bottles that you can use within three to six months," explains Siskind.
- **6. Drizzle it:** Extra virgin olive oil is ideal as a dressing on salads, cheese, and vegetables, and to pour on fish and meat right before serving. "This gives you the best flavor and its full health benefits," says Siskind.
- 7. Heat it right: "Though it loses some nutritional benefit, olive oil is still more heart healthy to cook with than other oils," adds Siskind.

While coconut and grape seed oils are best for high heat, olive oil is best for lower heat.

"If it smokes, dump it and start over because it means toxic chemicals have been created," she advises.

Olive oil can also add a moist, unique flavor to baked goods like muffins, and banana or zucchini breads.

### Blood Pressure: How Low Should You Go?

By Rick Ansorge

If you're one of the more than 58 million Americans who are receiving treatment for high blood pressure, you've probably wondered how low you need to go.

Over the years, the optimal readings have changed and they have often varied greatly from expert to expert.

But recently, there is a growing consensus that blood pressure readings may not have to be as low as previously thought. This means you may be able to take a lower dose of your medication or you may not need any medication at all.

#### **Parsing the Numbers**

An increasing number of experts believe that 150/90 or lower for most people age 60 or older is acceptable. For those with diabetes or chronic kidney disease, a maximum of 140/90 is recommended.

Until recently, most experts believed that everyone should be treated when their blood pressure hits 140/90, and that people with diabetes or chronic kidney disease should be treated when their level hits 130/90.

After being on the fringes, the lower numbers have gradually infiltrated mainstream. They've been recommended by a panel of experts appointed by the National Heart, Lung, and Blood Institute and by doctors consulted by *Consumer Reports*.

Proponents of the new

guidelines believe it's unnecessary to push down blood pressure toward the optimal level of 120/80 to prevent heart attacks and strokes. They argue that such an approach often requires high doses of multiple drugs, which increases the risk of side effects such as a nagging cough, frequent urination, dizziness, falls, and erectile dysfunction.

A major NHLBI study is underway that may settle the argument for good, but the results won't be known until 2017.

"No one likes to take medications that they don't need to take," Dr. Lawrence Fine of the NHLBI tells Health Radar.

"Individual physicians and patients need to understand there's uncertainty. Given that and given their own preferences and views, they need to make a (treatment) decision that they're comfortable with."

Fortunately, there is no disagreement about what you should do when you're first diagnosed with high blood pressure.

The first step is to confirm the diagnosis with multiple blood-pressure readings. "Blood pressure fluctuates from day to day and at different times of day," says Dr. Fine. "The more readings you have, the better the estimate of your blood pressure. It's not unreasonable to get a good home monitor and take your blood pressure at home."

If it seems difficult to get a fix on readings, it may be worth wearing an ambulatory monitor

for a few days that takes readings throughout the day and night.

#### **Simple Fixes**

The second step is to make lifestyle changes. Proven strategies include:

- The low-fat DASH diet, which may reduce systolic blood pressure by 8–14 mmHg.
- Regular aerobic exercise. At least 30 minutes per day most days of the week may reduce systolic blood pressure by 4–9 mmHg.
- Losing weight. For every 11 pounds lost, systolic blood pressure may decline by 2.5–10 mmHg.
- Reducing salt to no more than 2,300 milligrams per day, which may reduce systolic blood pressure by 2–8 mmHg.
- Natural remedies. Beet juice and fruits and vegetables high in potassium (bananas, potatoes) have been shown to lower blood pressure. The supplement coenzyme Q10 also works for many people and has shown effectiveness in studies.

#### **Last Resort**

If your blood pressure is still elevated after six months, the third step is to choose wisely from the four basic classes:

- Thiazide diuretics
- ACE inhibitors
- ARBs (angiotensin receptor blockers)
- Calcium channel blockers

Your health status — as well as your race and ethnicity — will help your doctor decide which medication is best for you.

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## Navigating the Doctor Shortage: Should You Go With a Physician Assistant?

By Rick Ansorge

With millions of newly insured patients entering the healthcare system, the demand for family practice doctors has increased astronomically.

There aren't nearly enough general practitioner MDs to go around. By 2025, there will be a national shortage of up to 31,100 family physicians and internists, according to the Association of American Medical Colleges.

#### The Doctor Is Out

To handle the patient overflow, MDs increasingly rely on physician assistants (PAs) and nurse practitioners (NPs).

At many clinics, patients rarely see their primary-care physician, and many of them aren't happy about it. About 72 percent of patients would rather see an MD than a PA, according to a recent national survey.

Should you insist on seeing an MD instead of a PA or NP?

Not necessarily.

"The vast majority of medicine is routine," says Tom Ahern, a certified PA with nearly 40 years of experience. "I would say that 99 percent of the time it's OK to see the PA."

#### Physician Assistant vs. Nurse Practitioner

Although both PAs and NPs can diagnose and treat illnesses, prescribe medications, and order/interpret tests, there are some differences. For example, only PAs are allowed to assist during surgery. NPs specialize in disease prevention and health management of chronic but stable conditions such as diabetes and hypertension.

The role of PAs or NPs varies from practice to practice, and depends on their level of experience. At many family practices, PAs and NPs handle routine problems such as coughs, colds, rashes, sore throats, cuts, sprains, and urinary tract infections. They also ensure that patients are checked for blood pressure, blood cholesterol, and blood sugar, and that their

vaccinations are up to date.

Research shows that the widespread use of PAs and NPs is associated with shorter waits for appointments in clinics and quicker treatment in hospital emergency rooms. According to one study, older patients received higher quality care for dementia, falls, and urinary incontinence when they were managed by an NP and an MD than by an MD alone.

Despite these benefits, there are situations that demand the attention of an MD. "Anybody that has a potentially life-threatening illness really needs to be seen and managed by a physician," Ahern tells Health Radar. "This is particularly true in cancer care, in severe unstable diabetics, and in severe unstable cardiac and pulmonary patients."

Others who should see an MD include the estimated 5-10 percent of patients who arrive in clinics and emergency rooms with conditions that aren't easily identifiable. Because MDs have rigorous continuing education requirements, they may be more likely to correctly identify conditions that seemingly defy diagnosis.

#### Don't Discount a D.O.

If your primary-care MD is usually missing in action, and you want to see someone with an equivalent level of training and experience, consider a DO (Doctor of Osteopathic Medicine).

Nationwide, there are about 87,000 DOs and 60 percent of them work in primary care.

Like MDs, DOs receive training in a four-year medical school. After graduation, they must complete a residency program in a specialty ranging from family medicine, gastroenterology, dermatology, or neurosurgery.

In every state, a DO can do everything an MD does. This includes diagnosing and treating conditions, prescribing medication, ordering tests, and (if qualified) performing surgery. In addition, DOs are trained to use their hands to examine a patient's musculoskeletal system and treat conditions by manipulating joints and muscles.

## No More Pain: Knee Replacement Can Dramatically Improve Quality of Life

#### Q: Who needs knee replacement surgery?

A: Knee replacement surgery should be considered by patients who have limited quality of life due to severe arthritis or traumatic injury to the knee.

Of course, this can mean different things to different people. For some, it may mean that they can't walk for more than a block or two, or can't shop for their own groceries.

For others, it may mean that they can't enjoy their favorite sports or recreational activities such as golf, tennis or biking.

Knee replacement is always a last resort option after nonsurgical treatment has failed. Nonsurgical treatment includes medication, supplements, injections, physical therapy braces, and activity modification.

The number of knee replacements in the U.S. has risen dramatically over the past decade and will soon approach 500,000 a year.

#### Q: What happens during surgery?

A: The surgery, called arthroplasty, is performed under general anesthesia or epidural during which the bottom end of the thigh bone and the top end of the lower leg bone (which make up the knee) are removed and replaced with metal and plastic pieces.

The artificial joint is attached to the thigh bone, shin, and knee cap with cement or a special material. The surgery takes about one hour.

We no longer use a very long incision to perform this surgery and the usual incision is six to eight inches.

Many patients have arthritis in both knees and may consider having both knees replaced in one procedure. For most patients, however, this is not advisable as the medical risks of surgery are increased and the rehabilitation is more difficult.

#### Q: What happens after surgery?

A: The patient gets out of bed the same day or the next day and starts bending and straightening the knee. They usually leave the hospital two or three days after the operation.

A physical therapist helps the patient learn to walk and works on range of motion exercises. Most patients use two canes or a walker at first and within a week or two may start using a single cane.

Most patients can walk without assistance within a month, but there's a lot of variability in recovery.

#### Q: How long does the replacement last?

**A:** Most knee replacements last as long as the patient lives. The rate of loosening requiring repeat surgery is less than 1 percent per year.

So the risk of needing revision surgery for loosening is about 10 percent at 15 years after surgery, for example.

Infection can also necessitate revision surgery, but the rate of infection is less than 1 percent.

The rate of revision surgery is higher in obese patients and those who have diabetes. High impact activity such as jogging, or sports like soccer or basketball, may decrease the longevity of the implant and are not recommended.

#### Q: What are the risks?

**A:** As with any surgery, there are potential dangers. These include anesthesia, medical problems, infections, implant loosening, and blood clots.

Fortunately, complications are quite rare and the vast majority of patients experience a dramatic improvement in their pain and quality of life.

While it is preferable not to have surgery in the first place, for patients who have limited mobility and quality of life due to painful knees, knee replacement surgery can be a life-altering experience.

Dr. Robert Marx is an attending orthopedic surgeon at the Hospital for Special Surgery in New York City and professor of orthopedic surgery at Weill Cornell Medical College.

He is also the author of three books, including The ACL Solution.



## There's a Pound of Pesticide in Your Pants

Toxic clothing chemicals can leach into your body, warns a top doctor.

By Rick Ansorge

Most health-conscious people pay close attention to what they put *into* their bodies. But few people consider the potential hazards of the substances they put onto their bodies.

Clothing is largely overlooked when it comes to health. Holistic doctor Brian Clement and his wife Anna Maria Clement, co-directors of the Hippocrates Health Institute in West Palm Beach, Fla., say that's a grave mistake.

In their book *Killer Clothes*, they show how seemingly safe clothing choices can increase your risk of many chronic conditions.

The bleaching, dyeing, scouring, sizing, and finishing of fabrics involves the use of known carcinogens such as:

- Formaldehyde
- Brominated flame retardants
- Perfluorinated chemicals such as Teflon fibers, which are added to clothes to make them "wrinkle-free" and "no-iron."

Synthetic fabrics are the most dangerous, Dr. Clement tells Health Radar.

These include rayon, nylon, acrylic, modacrylic, polyester, spandex, and olefin.

Synthetic fabrics retain and release small but potentially dangerous amounts of toxins even after hundreds of washings.

That's why Dr. Clement advises athletes to steer clear of synthetic micro-fiber sportswear that can leach readily absorbable chemicals onto the skin, especially during vigorous sweat-inducing exercise sessions.

Some natural fabrics also contain toxins, including pesticides and herbicides.

Worldwide, cotton accounts for an astonishing 25 percent of all pesticide use. On non-organic cotton farms, about a pound of pesticides and fertilizers go into the production of every single pair of jeans or T-shirt.

Whether you're a man or a woman, your first order of business should be to protect your reproductive organs, which are most sensitive to toxins, says Dr. Clement.

Not only do many bras contain carcinogens, they also restrict breasts' natural movement and impede lymphatic drainage, which may increase the risk of breast cancer, he said.

Similarly, testicular cancer, infertility, and decreased sexual performance are seen more often in men who wear synthetic, tightfitting underwear.

Women should opt for bra-free options such as camisoles, vests or sleeveless undershirts while men should opt for natural, loose-fitting underwear, he advises.

All undergarments should be made from organically grown fiber that either contains no dyes or only vegetable dyes.

Dr. Clement also recommends that you:

• Choose only natural fibers (preferably organically grown or

raised). The most common ones are cotton, flax, hemp, silk, wool, and linen. Others include alpaca, angora, camel, cashmere, mohair, ramie, and saluyot.

- Avoid "easy care," "no iron," "stain resistant," and "flame-retardant" clothing. Such labels are a sure sign that it contains irritants, allergens, and/or carcinogens.
- Remove the polyester lining from natural-fiber suits and other garments, and replace them with silk or lightweight cotton.
- Gradually rid your closets and drawers of all synthetic clothing and shoes.

## Why You Should Always Wash New Clothes

It may be tempting to show off brand-new, store-bought clothing. But experts recommend that you send them through your washing machine at least once (preferably twice) with a double rinse before wearing them. That's because even the cleanest-looking off-the-rack clothing can contain formaldehyde resins, azo-aniline dyes, and other chemicals that can cause skin irritation, an itchy rash, or even a full-blown allergic reaction.

In addition, many people handle clothing. Workers touch it while it's being manufactured, shipped, and stocked in stores, and consumers try it on in dressing rooms. The result is that clothing can be infected or infested with everything from bacteria and fungi to lice and scabies.



By Lynn Allison

Years ago, there were few warnings about staying in the sun too long. In fact, many of us tried each summer to get a deep tan to look "healthier."

But now we're paying for it with wrinkles, liver spots, and sagging skin, the result of too much UV radiation exposure.

Anthony Youn, M.D., a nationally known cosmetic surgeon who appears regularly on the *Rachael Ray Show*, tells Health Radar that even young people are affected.

"I see sun damage in patients as early as in their 20s," he says. "You don't need to be a sun worshipper to have problems."

The good news is that there are new methods that can reverse much of the damage:

#### 1. Hydroquinone

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Dr. Youn, who practices in Troy,

Mich., says that hydroquinone combined with Retin A or tretinoin is the most effective, non-invasive method of reversing skin damage caused by sun. The topical prescription cream eliminates sun spots and uneven pigmentation.

"It intensely exfoliates the upper layers of skin, so you will get lots of flaking for the first six weeks," he says. "But you will get results within a month."

#### 2. Intense Pulsed Light

"IPL is the gold standard for pigment reduction," explains Dr. Youn. This procedure makes age and sun spots turn dark and flake off over the course of a couple of days. You usually need just a few treatments.

#### 3. Chemical Peel

Dr. Rebecca Baxt, a New York based dermatologist, tells Health Radar, that "peels do wonders to reverse sun damage, especially brown marks on the skin." Many different types of peels are available, but Dr. Baxt prefers those with TCA or trichloroacetic acid and glycolic acid.

Besides getting rid of pigmentation inconsistencies, chemical peels reduce fine lines and wrinkles.

#### 4. Photodynamic Therapy

PDT is FDA approved to reverse precancerous sun damage called actinic keratosis. The procedure involves placing a light-sensitive solution on the skin for approximately an hour, says Dr. Baxt. The solution is activated by a light source and then removed. It's painless but time-consuming, and several treatments are required.

#### 5. Topical antioxidants

Los Angeles-based dermatologist Dr. Ava Shamban tells Health Radar that you can also repair the skin by applying antioxidants directly to the face and neck. She says vitamin C serums with AHA or alpha hydroxy acid that slough off dead skin and boost collagen are particularly effective. You can also make your own mask by combining yogurt — which has natural AHA — with anti-inflammatory honey, and frozen strawberries and blueberries, which are chockfull of antioxidants. Place all the ingredients in a blender and apply to the face for 15 minutes. "The antioxidants penetrate and repair the skin," says Dr. Shamban.

#### "FIT AFTER 50" FACT

Acupuncture has proven to be a viable remedy for hot flashes in a new study of breast cancer patients being treated with estrogentargeting therapies. The findings are based on an analysis by researchers at the Perelman School of Medicine at the University of Pennsylvania. The women were divided into four groups to determine how effectively an acupuncture technique known as electroacupuncture — in which embedded needles deliver weak electrical currents — reduces incidents of hot flashes as compared to the drug gabapentin. For an eight-week period, participants received gabapentin daily, an inactive placebo daily, electroacupuncture (twice per week for two weeks, then once weekly), or a fake electroacupuncture, which involved no actual needle penetration or electrical current. At the end of the study, the patients in the electroacupuncture group showed the greatest improvement in hot flash frequency and severity.



## New Help for High Cholesterol

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

#### **High Cholesterol**

Repatha (evolocumab) is the second medicine in a new class of pricey biotech drugs that reduce artery-clogging cholesterol more than older statin drugs that have been used for decades. The drug, made by Amgen, could eventually help millions of Americans who face increased risk of heart disease because they cannot control their cholesterol with existing drugs and methods.

The drug is designed to be self-injected once or twice a month. Repatha, along with a similar drug, **Praluent**, are considered the first major advance in managing cholesterol since the introduction of statin drugs more than 20 years ago.

The new drugs lower low-density lipoprotein, or LDL, cholesterol more powerfully and in a different way than statins. They block a substance called PCSK9, which interferes with the liver's ability to remove cholesterol from the blood. Adding the new drugs to older statins reduces LDL cholesterol by about 40 percent to 60 percent.

#### **Female Low Sex Drive**

**Addyi** (flibanserin) is the first drug to treat low sexual desire among premenopausal women. The drug is for women who do not have an underlying physical or psychological cause for the disorder.

Addyi's label will warn that it can cause blood pressure to drop severely and may lead to loss of consciousness. These risks increase when alcohol is consumed. So, Addyi users are warned not to drink any alcohol.

Addyi was evaluated in clinical studies involving some 2,400 premenopausal women who reported a significant increase in sexual desire compared to those who took a placebo.

#### **Hepatitis C**

**Technivie** (ombitasvir, paritaprevir and ritonavir) has been approved, in tandem with ribavirin, to treat hepatitis C genotype 4 infection among people

without cirrhosis.

Some 2.7 million Americans have hepatitis C, and genotype 4 is among the least common genetic subtypes. Technivie is the first drug to be sanctioned to treat genotype 4 hepatitis C infection without requiring co-use of the drug interferon.

Infection with the hepatitis C virus causes liver inflammation that may lead to cirrhosis or liver failure. Most infected people don't develop symptoms until liver damage has already occurred.

#### Chemo Nausea

Varubi (rolapitant) treats chemotherapy-induced nausea and vomiting in adults. The drug was approved to be used along with other agents to prevent delayed nausea and vomiting associated with initial and repeat courses of chemotherapy.

#### **Leg Prosthesis**

The Osseointegrated Prosthesis for the Rehabilitation of Amputees (OPRA) is a prosthesis for people with above-the-knee amputations who cannot use conventional devices. It adheres to the leg with fixtures and screws implanted into the remaining thigh bone, rather than fitting into the socket as does a conventional device.

The new device is meant for people who don't have enough of a remaining limb — or have scarring, pain, skin infections or fluctuating shape of the remaining limb — which make use of a conventional device difficult or impossible.

The OPRA device involves two surgeries to implant the necessary hardware, approximately six months apart.

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#### **BREAKING NEWS, STUDIES & MEDICAL UPDATES**

## MORE EVIDENCE CELLPHONES CAUSE CANCER

There is strong evidence that cellphone radiation damages DNA, which can lead to cancer, according to an exhaustive review of 100 previous studies. The research, published in *Electromagnetic Biology and Medicine*, found that using a cellphone for 20 minutes a day for five years increases the risk of a brain tumor by 300 percent, and talking on a cellphone for an hour a day for four years increases risk of tumors up to 500 percent.



#### SATURATED FATS' BAD RAP

A study from McMaster University finds that saturated fats, long maligned as a cause of heart disease, do not increase the risk of heart disease, heart attack, stroke, Type 2 diabetes, or death.

Trans fats, however, were found to carry major heart risks.

Researcher Russell de Souza analyzed the results of 50 studies to tease out the association among trans and saturated fats, and heart problems. Regardless of prevailing warnings not to eat saturated fats, which are found in animal products such as butter and red meat, de Souza found no association

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between higher intake of saturated fats and an increased risk of heart disease, stroke, or Type 2 diabetes.

However, trans fats were linked to a 34 percent increase in death for any reason, and a 28 percent increase in the risk of dying from heart disease. The study was published in the *British Medical Journal*.

#### TREES KEEP YOU YOUNG

Living in an area with lots of trees is the equivalent of being seven years younger, according to a study published in *Scientific Reports*. Researchers from the University of Chicago used satellite images to measure green spaces around Toronto and compared the results against information gleaned from the Ontario Health Study.

## PARKINSON'S HELP FROM OLD DRUG

Low dosages of lithium, a medication that's been used for years to treat bipolar disorder, can ease the side effects of Parkinson's medications, say researchers at the Buck Institute for Research on Aging.

Levodopa is the most effective drug available to manage Parkinson's symptoms, but it causes abnormal involuntary movements in 30 percent of patients after four to six years, and in about 90 percent of patients after using the drug for nine years.

Mice with a human mutation for Parkinson's were given a dose of lithium the equivalent to about a quarter of what humans receive to treat psychiatric diseases. Researchers found that lithium significantly reduced side effects caused by Levodopa.

#### "FIT AFTER 50" FACT

Most Americans are happy in retirement and find they enjoy a boost in health after they stop working, new research finds. According to the University of Michigan Health and Retirement Study, most of the 20,000 retirees surveyed reported an immediate improvement in health. The benefits didn't fade: Four years later, they reported "significant improvements" in health, which the researchers speculate was due to retirees adopting healthier habits whose benefits took more time to become obvious.

#### **SALT WORSENS MS**

Diets high in sodium may increase the risk for multiple sclerosis (MS).

Researchers conducting an animal study published in the *FASEB Journal* fed mice either a high-sodium diet or a control diet to three genetically different groups of mice, and then induced a disease that mimics human multiple sclerosis.

In one group, both males and females on the high-salt diet showed worse MS symptoms.

In the second group, only females showed a worsening of symptoms, and the third genetic group showed no response to salt.

"As is the case with other things, you need to get enough salt so your body functions properly, but not too much or things start to go haywire," said *FASEB Journal* editorin-chief Gerald Weissmann.





#### **BREAKING NEWS, STUDIES & MEDICAL UPDATES**

#### GOUT MEDS TREAT LIVER DISEASE

Common gout medicines may help those with alcohol-induced liver disease. The medicines target uric acid and adenosine triphosphate, which are released by alcohol-damaged cells in the liver called hepatocytes.

An animal study from the University of Massachusetts Medical School found that the two chemicals activate the inflammasome, components of the immune system that trigger the inflammatory process that causes liver damage.

Gout medications, such as allopurinol, block the production of uric acid, and researchers believe they could help prevent damage from alcohol in humans.

## SLEEPING ON SIDE FIGHTS ALZHEIMER'S

Sleeping on your side may protect you from Alzheimer's disease, according to a study at New York's Stony Brook University. Researchers used magnetic resonance imaging (MRI) to scan the brains of volunteers while they slept.

They observed how cells clear waste material from the brain that contributes to neurodegenerative diseases such as Alzheimer's and Parkinson's. They found that sleeping on the side allowed the brain to more efficiently remove waste associated with dementia.

#### LOW-T DRUGS LOWER HEART RISK

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Men who undergo testosterone replacement therapy are at lower risk for heart attack and stroke, according to research published in the *European Heart Journal*. A study of more than 83,000 healthy men who were diagnosed with low testosterone, or low-T, found that those who took hormone replacement lowered their risk of heart attacks and strokes.

## HARVARD: SPICY FOODS INCREASE LIFESPAN

Research from Harvard Medical School found that people who eat spicy foods at least once a week were less likely to die during the study period.

People who said they ate spicy foods one or two days a week reduced their risk of dying during the seven-year study by 10 percent



compared with people who ate spicy foods less than once a week.

Chili peppers were found especially effective in reducing the risk of cancer, heart disease, and diabetes.

## TYPE 1 DIABETES: INSULIN PUMPS CUT DEATH RISK

Patients with Type 1 diabetes cut their risk of dying from heart-related disease almost in half if they use insulin pump therapy instead of daily injections.

They are also 27 percent less likely to die from any cause, according to a new Scandinavian study. Pumps deliver a steady dose of insulin that more closely resembles the body's release of insulin.

#### **ELDERBERRIES FIGHT COLDS**

Elderberries have long been used in herbal medicines to combat colds, and Australian researchers have found that elderberry extract protects people from cold and flu symptoms following long-haul plane flights.

A clinical trial conducted by Menzies Health Institute Queensland found that people who took elderberry had fewer colds of lesser severity after plane flights.

Elderberries are native to subtropical regions around the world.

Elderberry extract supplements are widely available at health food stores and over the Internet.

## DAILY ASPIRIN REVERSES CANCER RISK

People who have an inherited genetic disorder called Lynch syndrome have an increased risk of colon cancer, and those who are also overweight increase their risk almost threefold.

But the extra risk can be reversed by taking daily aspirin, according to a 10-year study published in the *Journal of Clinical Oncology*.

Researchers found that when obese people with the syndrome took a dose of two aspirin (600 mg) every day for two years, their risk reverted to the same as those with the genetic disorder whose weight was normal.

"This is important for people with Lynch syndrome but affects the rest of us too," said study leader Sir John Burn of Newcastle University.

"Lots of people struggle with their weight, and this suggests the extra cancer risk can be cancelled by taking an aspirin."

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## Nondrug Relief for Crohn's, Colitis, Arthritis

"FIT AFTER 50" FACT

Government guidelines advise

seniors to get 150 minutes of

older adults don't meet that

physical activity a week, but many

goal. An analysis of nine studies

involving people over the age of

60 found that although meeting

of approximately 15 minutes of

physical activity daily — lowered

the risk of dying by 28 percent,

amount (just over 10 minutes a

day) still lowered their risk by 22

percent. Much of the health benefit

appeared to be for a reduced risk of

those who did only half that

dying from heart disease.

the exercise goal — the equivalent

By William S. Maxfield, M.D.

When you watch TV, you often see multiple ads promoting drugs as cures for a wide variety of ailments.

These are, of course, paid for by pharmaceutical

companies. What they don't tell you is that there are other ways of treating diseases that don't involve the drugs they are pushing.

There are plenty of ads touting statin drugs to treat cholesterol problems even though it has now been more than two years since the FDA published data showing there was a significant incidence of cognitive defects in patients who used statins.

#### **HBOT Instead of Drugs**

You also hear ads about medications to treat Crohn's disease, which is an inflammation of the small intestine.

These ads list all of the complications of the drug,

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but don't tell you that hyperbaric oxygen therapy (HBOT) is also a very effective treatment for Crohn's.

I have had patients whose Crohn's disease has been

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.

completely controlled with that therapy.

Another gastrointestinal complication promoted on TV and printed ads is ulcerative colitis, which is an inflammatory process in the colon that is somewhat similar to Crohn's disease.

Again, HBOT, which these ads do not mention

because they are promoted by the pharmaceutical industry, is very effective in treating ulcerative colitis.

I have had patients treated for other HBOT indications whose ulcerative colitis was completely cleared in the process.

#### **Arthritis Help**

Another disease you'll hear the pharmaceutical industry promoting drugs to treat is rheumatoid arthritis. And once again, HBOT is very effective in treating the condition.

I had one patient whose blood level for rheumatoid arthritis factor was more than 11,000. That went down to normal with a series of HBOT treatments.

It's unfortunate that the use

of HBOT for treating Crohn's disease, ulcerative colitis, and rheumatoid arthritis is not an approved indication that is routinely covered by insurance and Medicare.

However, there are laws saying that if a treatment works, Medicare has to cover it.

In Florida, I had a patient with multiple sclerosis whose symptoms cleared with HBOT who then sued Blue Cross Blue Shield and won complete reimbursement for her treatment.

In addition to those indications noted above, HBOT has been very effective in treating traumatic brain injury, PTSD, and blast exposure. We hope to obtain recognition of the value of HBOT in all of these conditions in the near future.

## B12 Deficiency Is Devastating to Health

By Vera Tweed

WI hat do lack of energy, falls, shakiness, difficulty walking, mental fogginess, and depression have in common? All can signal a deficiency of B12, a crucial vitamin found in meat, eggs, and dairy products.

One in four American adults may be B12 deficient, according to the Framingham Offspring Study, which tracked the health of more than 5,000 American men and women between 1971 and 2014. And other studies show that among vegetarians, up to 86 percent are deficient.

Yet, despite the fact that shortage of B12 is epidemic and devastating to health, doctors typically misdiagnose it.

#### **Epidemic of Misdiagnosis**

"Healthcare providers are not really up to date on B12 deficiency," says registered nurse Sally Pacholok, lead author of the book Could It Be B12? An Epidemic of Misdiagnoses.

"They don't look for a deficiency," she tells Health Radar, "And when you miss it, you can cause a lot of havoc in the body."

B12 is necessary for our bodies to produce red blood cells and to maintain a healthy nervous system, which includes the brain and spinal cord.

But as we get older, supplies are likely to fall short because our bodies produce less stomach acid, which is necessary to absorb B12.

#### **Causes of B12 Deficiency**

and Often Missed by Doctors

Pernicious anemia is a widely recognized cause of B12 deficiency, and because meat is a major dietary source of the nutrient, vegans are quite likely to fall short. However, other common contributors to a lack of B12 are often overlooked. These include bariatric surgery, Crohn's disease, ulcers, irritable bowel syndrome, and eating disorders. Certain drugs can also cause B12 deficiency, including heartburn drugs such as proton pump inhibitors (Prilosec, Zantac, Nexium); antacids, the diabetes drug metformin, and nitrous oxide used for anesthesia during dental procedures.

#### Signs of Shortfall

Symptoms can take years to develop and may not be noticeable until they become more severe and debilitating.

They may include fatigue, weakness, dizziness, difficulty walking, memory loss, depression, irritability, shortness of breath, heart palpitations, diarrhea, loss of appetite, nausea, or weight loss.

If you suspect a deficiency, Pacholok recommends getting these two blood tests: serum B12 and methylmalonic acid, a substance that is elevated when B12 is lacking.

In some instances, there may be an underlying medical condition that needs attention. Or, you simply may need to take B12 supplements or get shots.

#### The Right Supplement

If you are healthy and want to stay that way, Dr. Holly Lucille recommends sublingual supplements, 1,000 mcg daily, of methylcobalamin B12.

This form of the vitamin is naturally found in the human

Many supplements come in another, lower-priced form called cyanocobalamin, which she doesn't recommend.

"Cyanocobalamin has to be broken down into the methylcobalamin form to be used," she tells Health Radar. That process can be problematic, and additives in the lower-priced form can cause side effects.

Many people get B12 injections from their doctor periodically, which can also be an effective way to avoid deficiency.

Any way you decide to take the vitamin, overdosing on B12 is not considered an issue.

The Institute of Medicine. which sets safe upper limits for nutrients, has never set a limit for B12 because, it concluded, "no adverse effects have been associated with excess vitamin B12 intake from food and supplements in healthy individuals."

Says Dr. Lucille: "If you're healthy and want shots because they make you feel better, that's OK. It's a pretty safe injection."

However, she adds, "Some studies have shown that the sublingual form is as effective as injections."

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#### **BREAKTHROUGHS**



## Pancreatic Cancer: No Longer a Death Sentence?

British scientists have devised a simple urine test for pancreatic cancer, making it possible that the usually lethal disease may be caught in the early stages when it is still curable.

Researchers found that three proteins present at high levels in urine can be a marker for the cancer. The team at Barts Cancer Institute in London believe their discovery could lead to a non-invasive screening test.

Pancreatic cancer now has a five-year survival rate of only 5 percent, mainly because it has no early symptoms and usually isn't diagnosed until the cancer is advanced.

## Laser Treatment Revitalizes Women's Sex Lives

A painless, quick, in-office laser treatment can revitalize the sex lives of women who suffer from vaginal atrophy.

This is a condition that commonly occurs as a result of menopause or anti-estrogen treatments following breast cancer surgery.

The MonaLisa Touch treatment uses the same carbon dioxide laser that has been used for years to revitalize skin in the face and neck to deliver CO2 laser energy to the vagina, which stimulates the regeneration of collagen fibers in vaginal tissue.

New collagen increases moisture and better lubrication, which restores the vagina to a state similar to before menopause.

All women involved in a study conducted by Stanford Health Care and The Christ Hospital, Cincinnati, experienced significant improvement.

The treatment consists of three 5-minute treatments six weeks apart with a follow-up annual treatment.

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#### Yale Scientists Discover Help for 'Untreatable' Eczema

Researchers at Yale School of Medicine have used the arthritis drug tofacitinib citrate (Xeljanz) to treat moderate to severe eczema (atopic dermatitis) that is unresponsive to other medicines.

The chronic condition causes severe itching and leaves the skin red and thickened, and standard treatments, such as steroid creams and oral medications, often fail to help.

Patients who had exhausted conventional treatments were treated with tofacitinib citrate and showed dramatic improvement. Researchers believe the drug interrupts the immune response that causes eczema.

#### **Eye Drops Dissolve Cataracts**

A new eye drop dissolves cataracts in six weeks, according to an animal study published in the journal *Nature*. Currently, surgery that replaces the cloudy lens with artificial lenses is the only treatment.

Researchers studied families with congenital cataracts and found they carried mutations in a gene that makes a molecule called lanosterol. They theorized that lanosterol is responsible for preventing the proteins that cause cataracts. When they administered lanosterol to dogs that had cataracts, it dissolved the clumped proteins that cause cloudy lenses. Researcher Dr. Kang Zhang hopes to start human trials within two years.

#### **Quitting Smoking Made Easy**

Quitting smoking may soon get easier. Scientists at The Scripps Research Institute have found an enzyme that neutralizes nicotine in the bloodstream before it can reach the brain's "reward center," short-circuiting addiction.

"The bacterium is like a little Pac-Man," said researcher Kim Janda. "It goes along and eats nicotine."

When researchers combined blood serum with a dose of nicotine equivalent to one cigarette, the nicotine's half-life dropped from two to three hours to only 9 to 15 minutes. The researchers hope their discovery could evolve into a single injection that would last for up to a month, and help millions kick the habit.