



Harvard Men's Health Watch

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Never too late: Exercise helps late starters

The Industrial Revolution changed America forever, and the Information Era has changed it still further. More than ever before, men are working with their brains instead of their backs. It's great progress, but it does have unintended consequences, including global economic competition and unprecedented levels of stress. Another consequence is diminished physical activity. Now that most men don't need to exercise to earn their keep, many view exercise as kids' stuff, the fun and games that fill childhood—or used to in the days before video games and flat-screen TVs.

America has become a nation of spectators. That deprives men of the exercise that improves cholesterol levels, lowers blood sugar, burns away body fat, strengthens muscles and bones, improves mood and sleep, and protects against diabetes, dementia, certain cancers, and especially heart attacks and strokes.

Men who stay physically active throughout life reap these benefits and more. But what about men who slide into sloth once they're too old for school sports? Can a late start make up for years of sedentary living?

Second chances are rare in this life. But when it comes to exercise, new research reinforces earlier studies that tell older men not to act their age.

Starting late in Sweden

A 35-year study from Sweden provides strong evidence that starting to exercise late in life is better than never starting at all—much better, in fact.

The subjects were 2,205 male residents of the municipality of Uppsala. All the men were between the ages of 49 and 51 when they volunteered for the study between 1970 and 1973. During the course of the

investigation, the men were evaluated five times, at ages 50, 60, 70, 77, and 82. At each evaluation, the men submitted detailed information about their exercise, smoking, and drinking habits, and the researchers measured body height and weight, blood sugar and cholesterol levels, and blood pressure.

The researchers divided the men into three groups based on their exercise levels. At age 50, most of the men rated their own health as good, and there was little difference in body mass index, blood pressure, or cholesterol between the low-, moderate-, and high-exercise groups, but smoking was less prevalent in high- versus low-level exercisers (47% vs. 61%). Over the next 35 years, though, major differences in health emerged. Most importantly, men who were highly physically active at age 50 were 32% less likely to die during the study than those who were least active; moderately active men enjoyed a smaller, but still respectable, 13% lower death rate than the least active gents.

The protective effect of regular exercise comes as no surprise. But the long-term nature of the Swedish study allowed the scientists to follow men who were sedentary at age 50 but who increased their exercise level between ages 50 and 60. For the first five years, the major result was disappointment, since these men continued to die at the same high rate as men who remained inactive. But over the next five years, the benefit kicked in; by 10 years of follow-up, the men who adopted exercise in middle age enjoyed the same low mortality rate as men who began before age 50. All in all, men who adopted exercise after 50 had a 49% lower death rate than the men who remained inactive, a benefit even greater than the 40% risk reduction experienced



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Exercise helps late starters (continued)

by men who quit smoking after age 50. And the protective effect of exercise remained significant even after the scientists adjusted their results for the impact of smoking, drinking, obesity, diabetes, cholesterol, blood pressure, and socioeconomic status.

Men looking for an excuse to stay on the couch may suspect a catch, wondering if they have to become long-distance runners to benefit from taking up exercise in midlife. Quite the reverse. According to the Swedish study, men were classified as moderate exercisers if they simply took frequent walks or often went cycling for pleasure. And high-level exercise involved a minimum of just three hours of serious gardening or recreational sports a week. And in case you're tempted to cook up another excuse, you'll soon see that this important new study does not stand alone.

Late bloomers in Britain

Between 1978 and 1980, scientists evaluated 7,735 men from 24 British towns. In 1992, researchers were able to re-evaluate 5,934 of the men, who then had an average age of 63 years. The scientists tracked these men for an additional four years, comparing their risk of illness and death to their amount of physical activity.

At each evaluation, the researchers collected information about recreational and occupational exercise, smoking, drinking, social class, obesity, and health status, but they did not measure cholesterol, blood pressure, or blood sugar levels.

As in the Swedish study, the British research revealed a strong link between exercise and survival. Even light exercise was protective, reducing the rate of death by 39%; moderate exercise was even better, cutting the mortality rate by 50%. Most importantly, exercise was beneficial for men who were sedentary in 1978–80 but who began exercising sometime during the next 12 to 14 years; men who began to exercise later in life enjoyed a 45% lower mortality rate than men who remained sedentary throughout. And the benefits of late-

Turning back the clock

Ponce de Leon learned it the hard way: There is no fountain of youth. But an interesting study tells us that exercise can make arteries act younger.

As people age, their arteries tend to constrict (narrow), reducing the tissue's supply of oxygen-rich blood. To find out if exercise can improve age-related vascular function, scientists compared 13 healthy men with an average age of 27 and 15 healthy men with an average age of 62. As expected, the older gents' arteries were more prone to constrict and less apt to dilate (widen). But for the next three months, eight of the older men began an exercise program, averaging nearly five hours a week of moderate aerobic training. At the end of that time, the arterial function tests were repeated, and the men who began to exercise in their 60s scored younger.

The great 17th-century physician Thomas Sydenham said, "A man is as old as his arteries." Twenty-first-century research suggests older men can use their legs to turn back the hands of their arterial clock.

life exercise were evident in men who already had heart disease by the time they became active as well as in men who were still healthy when they began to exercise.

News from Norway

A third European study, this time from Norway, confirms the findings from Sweden and England. Beginning in 1972, researchers evaluated 2,014 healthy men who were 40 to 60 years old. When the study began, each man got a comprehensive medical work-up and an exercise test. The evaluations were repeated between 1980 and 1982, and the scientists continued to keep track of the men through 1994.

As in the other studies, men who were physically fit enjoyed substantial

protection from cardiovascular disease and early death; in all, the most fit men had a 55% lower mortality rate than the least fit. In addition, men who took up exercise and improved their fitness levels between 1972 and 1982 reduced their risk of dying during the study—but men who let their exercise slide lost the protective effect of physical fitness.

American veterans

The benefits of catch-up exercise are not confined to Europeans. A 2010 study of 5,314 male veterans ages 65 to 92 shows that fitness pays off on both sides of the Atlantic. All the volunteers underwent exercise tolerance testing at VA Medical Centers in Washington, D.C., and Palo Alto, Calif. Researchers followed the men for up to 25.3 years. During that time, the men who were most fit enjoyed a 38% lower mortality rate than those who were least fit. But the men who began to exercise during the follow-up period nearly caught up with the men who were in shape at the start of the study; unfit individuals who improved their fitness had a 35% lower mortality rate than their peers who remained unfit.

Harvard men, too

These four studies that show it's never too late to get fit confirm and extend the findings of an earlier American investigation that focused on middle-aged men. A 1993 report evaluated 10,269 Harvard alumni who were 45 or older when the study began in 1977. Over the next eight years, researchers tracked the effects of lifestyle changes on mortality. Previously sedentary men who began exercising after age 45 clearly benefited, enjoying a 23% lower rate of death than their classmates who remained inactive. The maximum benefits were linked to an amount of exercise equivalent to walking for about 45 minutes a day at a pace of about 17 minutes per mile. Not surprisingly, the Harvard study found that other life-

Not by exercise alone

Men who become physically active later in life enjoy better health and a lower death rate than men who remain sedentary. That's good news for couch potatoes everywhere—but will reforming other health habits in midlife also help?

A study of 15,708 American men and women ages 45 to 64 says the answer is an emphatic yes. At the start of the study, only 1,344 people had all four of these healthy lifestyle habits: eating five or more servings of fruits and vegetables daily, not being obese, not smoking, and exercising regularly. But over the next six years, another 970 people adopted the healthful habits. The late adopters were quickly rewarded with improved health; over the next four years they enjoyed a 35% lower risk of cardiovascular events and a 40% lower death rate than their peers who failed to reform.

Exercise was one of the newly acquired health habits, but since the benefits of starting to exercise later in life take five years to kick in, exercise itself can't account for these rapid improvements. Better late than never, and better all than one.

It's a simple but powerful message, but it seems to fall on deaf ears. Only 8% of Americans between the ages of 40 and 74 have all four of these health habits plus moderate alcohol use—and that percentage has actually declined from a still woe-ful 15% in 1988.

style changes also helped, even if they did not occur until after age 45; quitting cigarette smoking, maintaining normal blood pressure, and avoiding obesity were all associated with less heart disease and longer life.

Which changes matter most? To find out, researchers evaluated some 36,500 male Harvard graduates and 21,000 male and female graduates of the University of Pennsylvania. All in all, sedentary individuals gained 1.6 years of life expectancy from becoming active later in life, smokers gained 1.8 years from quitting, and those who maintained normal blood pressure gained 1.1 years. Best of all was a combination of changes; sedentary smokers gained 3.7 years from quitting and becoming active.

Never too late

From both sides of the Atlantic, the message is clear: exercise is beneficial for all stages of life, and it's never too late to start. But men who start exercising after age 50 also need to exercise caution. Here are some tips:

- Get a check-up to be sure that

you're healthy. In addition to checking for diabetes, hypertension, abnormal cholesterol levels, and evidence of cardiovascular disease, your doctor should be sure your joints and muscles don't merit special precautions.

- Pick an activity that's right for you. For many older gents (and for younger guys, too), walking is ideal (see *Harvard Men's Health Watch*, August 2009). Biking and swimming are also excellent sports, and physically active hobbies such as serious gardening fill the bill, too.

- Set a realistic goal. Aim for 30 to 40 minutes of moderate exercise, such as brisk walking, nearly every day. But don't try to morph from couch potato to jock all at once. Instead, start out gradually and build up to your goal slowly but steadily. For example, you may want to begin exercising for 15 minutes three times a week, and then add minutes and days as you improve. And even when you're in top shape, it's always smart to alternate hard workouts with easier ones and to vary your routine.

- For best results, add stretching ex-

ercises, which are ideal for warming up before and cooling down after your workout. Remember, too, that strength training will complement aerobic training to build a balanced exercise program; all it takes is two to three sessions a week (see *HMHW*, October and November 2009).

- Once you find yourself enjoying exercise, don't be afraid to extend yourself. Walkers, for example, might try a little jogging, golfers should walk the course, and doubles tennis players could switch to singles (or find younger partners).
- Get practical advice from friends

and relatives who enjoy exercise and know the tricks of the trade. Consider professional guidance from a trainer or pro, and don't hesitate to spend a few bucks on good shoes or other gear.

- Make exercise part of a comprehensive health makeover. It's particularly important to avoid tobacco in all its forms and to eat right, control your weight, reduce stress, get enough sleep, and get regular medical care. But just as you've eased your way into exercise, make the other lifestyle changes you need gradually, and don't get down on yourself if you backslide.
- Above all, listen to your body. In

most cases, you'll hear sounds of improvement, but if you detect distress signals—particularly chest pain or pressure, undue fatigue or breathlessness, or an irregular heartbeat or lightheadedness—back off and report it to your physician.

It's never too late to start taking care of yourself, and it's never too early, either. Whether you started early or later, keep going throughout life. And spread the gospel of exercise for health to the younger generations, who have grown distressingly fat and lazy. One of the best ways to lead is by example. ♥

Meat or beans: What will you have? Part II: Beans

Red meat has long occupied a special place in the American diet. Although doctors and dietitians have been hoisting red flags for years, meat has retained its iconic status. In fact, new health warnings have done little to slow the surge in high-end steak houses, to say nothing of the ongoing popularity of hamburger restaurants.

Last month, *Harvard Men's Health Watch* reviewed new research showing a link between meat consumption and premature death, heart disease, colon cancer, and other malignancies.

But men who decide to cut down on red and processed meat need alternatives. Fish and poultry are excellent choices. These options are well known, but another has been neglected. It's a humble but healthful choice: beans.

Counting beans

When most Americans think of beans, they think first of garden-type fresh beans such as green beans, string beans and wax beans, and green peas. But nutritionists think first of *legumes*. Botanists tell us they are characterized by seed-bearing pods and include *grain*

legumes (lentils, chickpeas, and dry beans and peas such as black, lima, fava, pinto, kidney, and navy beans) and *oilseeds* (soybeans and—surprise—peanuts). Leaving peanuts aside, let's think about the nutrients in legumes.

As a group, legumes are a good source of protein and dietary fiber. They have no cholesterol and very little fat and sodium, yet they provide lots of potassium and some calcium and iron as well as B vitamins. Table 1 lists some facts about beans.

Men can't live by beans alone, but legumes can go a long way toward filling some of your important nutritional goals, including: fiber (38 grams a day before age 50, 30 grams a day after age 50), protein (about .36 grams per pound of body weight, or about 65 grams—around 2 ounces—for a 180-pound man), and potassium (at least 2,000 milligrams a day; people who have kidney disease may need to restrict potassium, as do those taking medications that retain potassium). Table 2 shows how beans can contribute to your daily goals for some other nutrients.

Legumes and health

You don't have to eat a hill of beans to

Table 1: Nutrients in legumes

Contents per portion (½ cup or about 3 ounces) of cooked beans						
	Calories	Fiber (g)	Protein (g)	Calcium (mg)	Iron (mg)	Potassium (mg)
Black beans	114	7.5	7.6	23	1.8	305
Chickpeas (garbanzo beans)	135	6.3	7.3	40	2.4	239
Fava beans	94	4.6	6.5	31	1.3	228
Kidney beans	113	5.7	7.7	31	2.0	359
Lentils	115	7.8	8.9	19	3.3	370
Lima beans	108	6.6	7.4	16	2.3	478
Navy beans	128	9.6	7.5	63	2.2	354
Soybeans	149	5.2	14.3	88	4.4	443

Source: USDA Nutrient Database

get a mountain of benefits. But men who eat beans regularly appear to have a reduced risk of prostate cancer, precancerous colon polyps, and (in overweight individuals) pancreatic cancer. In these respects, legumes are the anti-red meat—and the same is true when it comes to metabolic abnormalities and cardiovascular disease.

An analysis of data from the National Health and Nutrition Examination Survey found that people who eat beans have lower body weights, smaller waist circumferences, and lower blood pressures than people who don't eat beans. Because of their high fiber content, legumes can also help control blood sugar and cholesterol levels.

All this should add up to better cardiovascular health, and it does. A 19-year study of 9,632 American men and women found that people who eat legumes four or more times a week enjoy a 22% lower risk of coronary artery disease than those who eat legumes less than once a week. And a 10-year Japanese study reported protection against stroke for women but not men.

Legumes are nutritious and inexpensive. They can add flavor, color, and texture to any menu. But there is a hitch: they can trigger bloating and flatulence.

The gas tax

One of the virtues of legumes is that they contain complex carbohydrates that can't be digested by human intestinal enzymes. These carbohydrates have very little caloric value but they are filling. Some help lower cholesterol and blood sugar levels; others make stools softer, bulkier, and easier to pass. But there is a rub. Humans can't digest these carbohydrates, but bacteria in the intestines can—and in the process, they produce gas. Doctors know that beans are good for the heart, and schoolboys know that the more you eat, the more you . . . pass gas.

Soy and prostate cancer

Prostate cancer is much less common in Asia than in the United States and Europe. Soy consumption is high in Asia, low in America, but there are many additional differences between the Asian and Western lifestyles. For example, meat consumption and obesity are more prevalent in the West and they appear to contribute to risk. Studies of soy and prostate cancer have produced widely disparate results, but a new meta-analysis of 15 studies of soy and prostate cancer provides an interesting explanation for the variability.

Overall, a high consumption of soy foods was linked to a 26% reduction in the risk of prostate cancer. But not all soy foods are created equal. Protection was associated with nonfermented soy foods such as tofu and soy milk, but fermented soy products such as miso, natto, and tempeh did not appear beneficial. In addition, studies of Asian populations generally reported protection, but studies of Western populations did not.

The humble soybean sure provides a lot of food for thought.

Fortunately, gas doesn't have to be taxing. To minimize the problem, introduce legumes into your diet slowly. Be sure to drink plenty of fluids. Before you cook dried beans, wash them and soak them overnight or at least for two hours; then rinse them and change the water before you boil them up.

If gas is still a problem, try using a nonprescription enzyme that will start breaking down the carbohydrates before the bacteria in your colon can get to them. *Alpha-galactosidase* (Beano, generic) is available as tablets that you swallow before you start eating or as drops that you

place on your legumes before you eat them. The same tactic may help with other "gassy" foods, such as broccoli and cauliflower.

Why not beans?

Legumes are the neglected nutrients. They are inexpensive and tasty, but they do take some planning, both to cook them right and to eat them without getting intestinal gas. Still, it's not inconvenience or even gas that has banished beans from the typical American diet. Instead, the problem may stem from cultural prejudices, since legumes are a dietary staple in much of the developing world.

Legumes come in almost endless varieties: black beans, kidney beans, navy beans, pinto beans, black-eyed peas, green or yellow split peas, red or green lentils, lima beans, soy beans, and chick peas (garbanzo beans) are but a few of the legumes you can add to your menu. All are versatile and healthful. Soybeans are particularly excellent as a source of protein, iron, and calcium; tofu is used in many vegetarian recipes. Remember, though, that commercial processing can add undesirable amounts of salt and fat to

Table 2: Beans and nutritional goals

One-half cup of typical cooked beans will provide the following percentage of an average man's daily needs.

Folate	23% to 45%
Manganese	19% to 26%
Magnesium	10% to 15%
Iron	11%
Selenium	8%
Zinc	6% to 8%
Copper	8% to 15%
Calcium	2% to 6%

Source: USDA Nutrient Database

legumes; canned baked beans and split pea soups are examples of good foods gone bad.

Legumes will give you an opportunity to enjoy recipes from around the world, such as black beans or kidney beans in chili (which can be meatless or made with ground turkey), refried black beans, lentils in Indian dal or Hungarian Magyar stew, or navy beans in minestrone. For extra flavor, add spices to the water in which your legumes are soaking; try thyme for lentils, cumin for kidney beans, and garlic for black beans. Beans are

wonderful with grains, and the combination provides a fine protein balance as well as great taste. Legumes can be used as meat substitutes in many dishes. Leftover beans freeze well, so you can always have a supply handy for salads, soups, or casseroles.

Something to chew on

Most men spend much more time eating than cooking. Still, a gent can—and should—help decide what goes on his plate and down his hatch. Cutting down on meat and adding legumes is a step in the right direction, especially

in this tough economy. But the most important goal is good health, which requires a balanced, enjoyable, sustainable diet (see *HMH*, July 2009). Small portions of meat are okay, but fish and skinless poultry are better choices. Go heavy on whole grains, legumes, vegetables, and fruits. Go light on salt, processed foods, sugar, and whole-fat dairy products. Adjust your caloric intake and exercise level to control your weight. Add a drink or two (but not more) if alcohol suits you. And make your menu a pleasure, not a chore. ♥

Obesity: Unhealthy and unmanly

It's no secret that overweight and obesity are big problems in the United States. At present, two-thirds of all Americans need to lose weight, and the number of overweight children and adults is growing at an alarming rate.

And it's no secret that obesity is bad for health. Excess body fat raises levels of LDL ("bad") cholesterol and triglycerides while also lowering HDL ("good") cholesterol levels. Obesity impairs the body's responsiveness to insulin, raising blood sugar and insulin levels. But obesity does more than produce bad numbers: it also leads to bad health, increasing the risk of heart attack, stroke, hypertension, diabetes, gallstones, cancer, osteoarthritis, obstructive sleep apnea, fatty liver, and depression. All in all, obesity is a killer; in fact, obesity and lack of exercise are responsible for about 1,000 American deaths *each day*, and if present trends continue, they will soon overtake smoking as the leading preventable causes of death in the U.S.

Obesity affects men and women about equally. But you may be surprised to learn that men bear a particular burden, since obesity takes a special toll on male hormones, sexuality, and prostate health.

Am I overweight?

A look in the mirror can give you a clue, but to find out if your weight puts you at risk for genitourinary disorders, you need a more precise assessment.

At present, the gold standard is the body mass index, or BMI. You can calculate your BMI by multiplying your weight in pounds by 703 and then dividing by your height in inches squared or by dividing your weight in kilograms by your height in meters squared. Or, if you're like most of us, you can skip the math and use an online calculator (www.nhlbisupport.com/bmi) or use the chart in the January 2009 issue of *Harvard Men's Health Watch* to find your BMI.

The BMI gives a reasonable estimate of overall body fat. A BMI between 25 and 30 puts you in the overweight category, while a reading of 30 or more says you're obese. But the BMI doesn't tell you how your fat is distributed. Scientists know that while no excess body fat is good, abdominal fat is the most harmful variety. So to find out if you are at risk, simply measure your waist at your navel; for men, risk begins to rise at waist circumferences above 37.5 inches, and troubles mount over 40 inches.

Obesity and testosterone

Testosterone is the major male hormone. As such, it's responsible for the deep voice, large muscles, and strong bones that characterize our gender, for development of the male reproductive organs, for sperm production and libido, and for the typical male pattern of beard growth. After being converted to dihydrotestosterone, the hormone also spurs growth of the prostate, which is a much less welcome sign of manhood for older gents.

Testosterone levels surge at puberty and peak in early adulthood, and then after a few years of stability, the hormone begins a slow drift downward in early middle age. Because the drop in testosterone averages just 1% a year, most older men retain normal levels. But anything that accelerates the decline can nudge some men into testosterone deficiency.

Obesity lowers testosterone levels. For example, a 2007 study of 1,667 men ages 40 and above found that each one-point increase in BMI was associated with a 2% decrease in testosterone. In addition, a 2008 study of 1,862 men ages 30 and above found that waist circumference was an even stronger predictor of low testosterone levels than BMI. A four-inch increase in waist

size increased a man's odds of having a low testosterone level by 75%; for comparison, 10 years of aging increased the odds by only 36%. All in all, waist circumference was the strongest single predictor of developing symptoms of testosterone deficiency. And if you doubt these two American studies, just consider Australian research that found almost one in every seven obese men could benefit from testosterone replacement, a rate more than four times higher than in nonobese men.

Erectile dysfunction

Although men with erectile dysfunction (ED) often blame testosterone, hormonal disorders account for only 3% of ED. But even with normal testosterone levels, men who are obese have an increased risk of ED. For example, a Harvard study found that a man with a 42-inch waist is twice as likely to develop the problem as a gent with a 32-inch waist. Brazilian research also linked abdominal obesity to ED, but only in men older than 60. And a California study reported that having a BMI of 28 (overweight but not obese) increased a man's odds of developing ED by over 90%.

Establishing a link is one thing; finding a way to improve erectile function, another. But a Massachusetts study found that weight loss can indeed improve things for overweight men with ED. Similar results were reported by Italian scientists who randomly assigned 110 obese men with ED to a diet and exercise program or to simply continue their usual care. After two years, more than 30% of the men in the diet and exercise group had corrected their ED without medication, compared with less than 6% in the group that received their usual level of medical care. Men who lost the most weight enjoyed the greatest benefit.

Reproductive function

Obesity takes a toll on sexuality, and it may also impair fertility. American re-

search has linked obesity to low sperm counts and reduced sperm motility; German scientists reported similar findings in men between 20 and 30.

Kidney stones

ED can cause great psychological pain for men and their partners. Kidney stones are much less personal but cause much more physical pain. Stones strike men twice as often as women, and obesity increases a man's risk.

A Harvard study of 45,988 men ages 40 to 75 found that high BMIs and large waist circumferences are both linked to an increased risk of kidney stones. Men who gain more than 35 pounds after age 21 are 39% more likely to develop stones than men who remain lean. Men who weigh more than 220 pounds are 44% more likely to have stones than men who weigh less than 150 pounds. These American results don't explain the reason for the link, but research from Europe and Asia shows that overweight people dump excess amounts of calcium and other chemicals into their urine, where the chemicals form stones.

Benign prostatic hyperplasia

Benign prostatic hyperplasia (BPH) becomes more common as men get older. It also becomes more common as men gain girth.

A Harvard study of 25,892 men found that waist circumference was strongly associated with a man's risk of developing BPH symptoms. Men with waists of 43 inches or larger were 2.4 times more likely to need surgery for BPH than men with waists smaller than 35 inches. The Harvard research did not implicate BMI as an independent risk factor, but a Baltimore study did. And scientists in Baltimore and China provide an explanation; they used ultrasounds and MRIs to measure the prostate gland and found that men with bigger bellies have bigger prostates.

PSA levels

The prostate gland is known for scien-

tific puzzles and paradoxes. Here's another: prostate-specific antigen (PSA) levels rise as the prostate gland enlarges, and although obesity appears to grow the prostate, it also lowers the PSA level. According to the 2001–2004 National Health and Nutrition Examination Survey of Caucasian men ages 40 and older, each five-inch increase in waist circumference results in a 6.6% decline in blood PSA levels. But unlike many prostate puzzles, this one has a solution. A study of 13,634 prostate cancer patients found that men with higher BMIs had lower PSA levels, not because their prostates produced less PSA, but because obesity increases blood volume, so PSA is more diluted in the blood.

Prostate cancer

Because obesity lowers PSA levels, it can make it harder for doctors to use PSA measurements to detect prostate cancer in overweight guys. That's a numbers game caused by an artificial lowering of PSA. But obesity also has an adverse effect on the biology of prostate cancer.

Research from around the world shows that extra body fat increases a man's risk of developing prostate cancer. An American Cancer Society study of 404,576 men demonstrated the link: being overweight increases a man's risk by 8%, being obese boosts risk by 20%, and being severely obese increases risk by 34%. And that's not all. Obesity increases the odds that prostate cancer will spread beyond the gland, and it also makes relapse after treatment more likely. In addition, obesity boosts a man's chance of developing urinary incontinence after a radical prostatectomy operation.

Why is obesity such bad news for prostate cancer? Overweight men tend to put off medical care and they have lower PSA levels, so delayed diagnosis is part of the explanation. But obesity also alters the metabolism of sex hormones, which could affect the growth

of prostate cancer. Most important, perhaps, obesity increases the body's production of growth factors such as insulin and *insulin-like growth factor 1* (IGF-1). Both increase the rate of cell multiplication, and high blood levels of IGF-1 have been linked to an increased risk of prostate cancer, colon cancer, and other malignancies.

Why weight?

In today's America, being overweight is the norm—but it's not normal. In fact, this common problem is one of the things that make diabetes, high blood pressure, stroke, heart attack, and arthritis so common. And if that's not bad enough, it also increases the risk of male maladies, ranging from erectile dysfunction

to BPH and prostate cancer.

It's hard to shed excess pounds, but it is possible. There is no quick fix, but there is a slow fix: adjust your diet to take in fewer calories and ramp up your exercise to burn off more calories. It's the manly thing to do, and the time to start is now.

When it comes to improving your health, don't weight. ♥



ON CALL

with Harvey B. Simon, M.D., Editor

Peripheral artery disease screening

Q My senior center is sponsoring a test to check for "peripheral artery disease." The test is free, and they say it's safe and painless. Do you think it's a good idea?

A *Peripheral artery disease* (PAD) is a form of atherosclerosis. In this case, cholesterol deposits produce blockages in the arteries that carry oxygen-rich blood to your legs. Mild blockages don't cause any symptoms, but more substantial disease can cause leg pain when you walk, which is called *intermittent claudication*. And severe narrowing will produce pain at rest or, worst of all, critical tissue damage that requires urgent surgery or even amputation. If that's not bad enough, PAD also indicates an increased risk for heart attacks and strokes.

About 8 million Americans have PAD, and the majority are men. Your doctor can screen for PAD simply by asking if you have symptoms and by feeling the pulses in your legs and feet. In addition, a painless, safe, simple test can detect PAD and estimate its severity. Called the *ankle-brachial index*, or ABI, it's simply a matter of using a special device to take blood pressure readings in your arms and legs, and then comparing the numbers.

Since PAD is common and can be serious, and since the ABI is simple, safe, and accurate, screening sounds like a no-brainer. Indeed, many experts recommend it—but the authoritative United States Preventive Services Task Force (USPSTF) does not. They reason

that everyone needs to pay attention to the root causes of atherosclerosis, including tobacco exposure, hypertension, unhealthy cholesterol levels, and lack of exercise. Since doctors and patients must work to improve these risk factors in any case, they argue, screening for PAD in asymptomatic people will add little beneficial information. Moreover, while testing may be safe and inexpensive, or even free, it may lead to treatments that are unnecessary, costly, and even risky.

At present, the USPSTF's position seems sound—but new developments may modify the situation. Some new guidelines have changed important goals for patients with atherosclerosis. For example, the blood pressure treatment target for these folks has been lowered to 130/80 millimeters of mercury (mm/Hg) or lower instead of the 140/90 mm/Hg or lower that's acceptable for otherwise healthy people with hypertension. Similarly, the LDL ("bad") cholesterol goal is 100 milligrams per deciliter (mg/dL) or lower instead of 130 mg/dL or lower. If studies show that ABI screening in asymptomatic people actually helps achieve these goals and better health, it may gain wider acceptance.

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