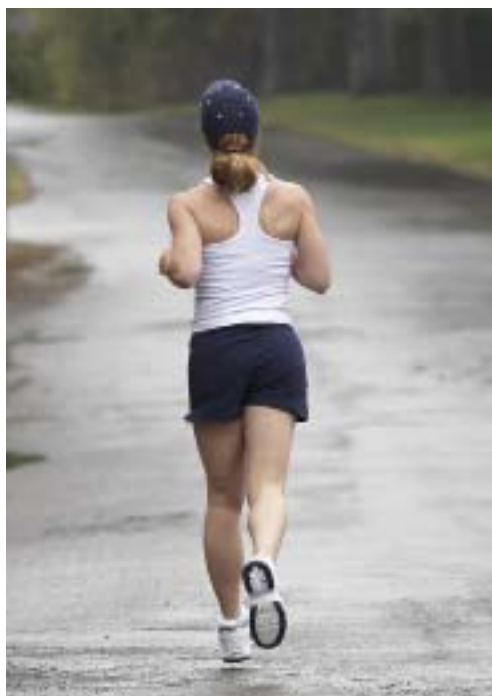


## Straight from the Heart - By Megan Rabbitt

### Heart rate monitors can take your fitness up a notch.

Turns out a heart rate monitor can pay off big when it comes to helping you make the most of your workouts—no matter what your fitness level. Here are four good reasons to strap one on.



You can't trust the puddle of sweat under your bike or your achy muscles during a long run. You can't trust the time or even the intensity level on the elliptical machine to tell you how hard you're working. There's only one true, reliable measure of how much effort you're putting into your workout, and that's the number of times your heart beats each minute.

Heart rate monitors are designed to help you make your training work harder for you. "The only accurate measurement of how hard you're actually working during a workout is to measure your heart rate," says Louis Torres, a trainer at the 24 Hour Fitness in Rancho Cucamonga, California. "They're a great tool

for people at all fitness levels."

John Lally, a personal trainer and training category manager for Suunto heart rate monitors agrees. "A heart rate monitor gives you evidence-based data that describes the intensity you're bringing to the exercise you're doing," he says. "Knowing this helps you train more efficiently and intelligently—and it can be the missing link if you're working out and eating right but not achieving your goals."

Sound simple? Here's how a heart rate monitor can transform the way you exercise:

#### Kill Calories, Not Time

Just finding the time to get to the gym regularly is a battle, but you want to make sure you are getting what you need from your workout to get the desired results. "Despite our best intentions and time-crunched lives, too many of us are spinning our proverbial wheels in spin class," says Torres.

In fact, Torres estimates that nine out of 10 people are working out at an intensity that's not high enough to lose weight or tone up. "If you're not pushing yourself hard enough to bring on lactic acid build up and muscle soreness, you're probably not stimulating your muscles enough to achieve gains," says John Faczak, assistant fitness manager and trainer at the Parker Arapahoe Super Sport in Parker, Colorado.

But before you throw up your hands, there's a solution to help you maximize your workout: A heart rate monitor can help you be sure you make every second of your sweat sessions count. "If you see that you're 10 beats per minute below where you should be, you know you have to pick up your pace or the resistance on the machine you're on," says Faczak. "It's like having a little personal trainer on your wrist—you can use your heart rate to push yourself to the point where you know you're actually burning calories and fat."

#### Keep It Fresh

Whether you're a weekend warrior or a runner trying to shave a minute off your 10K mile

pace, knowing your heart rate during your workouts can keep you from pushing too hard (a surefire way to sideline yourself with an injury). "The human body is designed to adapt, and it does so quickly," says Faczak. "In fact, we can adapt to a new workout routine within 3 weeks. But this also means 3 weeks after you start a new routine, the resulting gains begin to diminish."

But if you're using a heart rate monitor, it will clue you in that you're not working hard enough by showing that your heart rate has dropped. "The more fit you get, the less your heart has to work to pump blood through your body when you exercise," says Torres. "Watching your heart rate go down over time when you do the same exercise is a great indicator that you're building fitness—and that it's time to switch up your routine."

Faczak suggests changing the type of machine you're using, for one. "You effectively change the demand on your body, making it work harder and helping you achieve both your heart rate numbers and results."

#### Beat Burnout

There are those days when you gear up to go an hour on a machine and are toast after just 20 minutes. You can avoid that by knowing how hard your body is working throughout the

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## The Key to a Healthy Lifestyle is in the Mind

The main factors influencing the amount of physical exercise people carry out are their self-perceived ability and the extent of their desire to exercise. A study of 5167 Canadians, reported in the open access journal BMC Public Health, has shown that psychological concerns are the most important barriers to an active lifestyle.

Sai Yi Pan, from the Public Health Agency of Canada, led a team of researchers who carried out a study which examined data from a nationwide series of telephone interviews. She said "Our findings highlight the need for health promotion programs to enhance people's confidence and motivation, as well as providing education on the health benefits of physical activity".

One interview question asked participants how confident they were that they could regularly do a total of 30 minutes of moderate physical activity (PA) three or four times a week and a total of 60 minutes of light PA each day. This 'self-efficacy' score was consistently found to

be related to higher PA across gender, age group, education level and family income level. According to the authors, "Confidence in one's personal ability to carry out exercise plays a central role in the direction, intensity and persistence of health-behavior change. People who have higher PA self-efficacy will perceive fewer barriers to PA, or be less influenced by them, and will be more likely to enjoy PA".

Likewise, participants were asked to what extent they intended to be physically active over the next six months. This 'intention score' was another important independent correlate of physical activity.

The strong effects of self-efficacy and intention on PA suggest that interventions designed to increase PA should target these factors. The authors conclude that, "Future research is needed to identify how those influences can be optimally incorporated into interventions that will increase people's belief in their ability and motivation/intention to be

physically active".

Article adapted by Medical News Today from original press release.



## Obese Elderly at High Risk for Chronic Pain



NEW YORK (Reuters Health) - Half of people aged 70 and older suffer from some type of chronic pain, and women and the obese are particularly vulnerable, new research shows.

Chronic pain, defined as pain that persists for three months or longer, is known to be common among older people, Dr. Richard B. Lipton and colleagues from the Albert Einstein College of Medicine in the Bronx, New York, note. Obesity is becoming increasingly prevalent among US seniors, they add, so studying the relationship between excess weight and chronic pain among older people -- as well as the role of conditions that might influence both pain and obesity, such as mental health problems, should be studied.

To that end, Lipton and his team looked at 840 men and women participating in the Einstein Aging Study, an ongoing investigation of people 70 and older living in the Bronx.

Overall, 52 percent had some type of chronic pain, including 40 percent of men and 59 percent of women. People with chronic pain were at double the risk of having symptoms of depression or

anxiety compared to those who were pain-free. Chronic pain was twice as common among obese people as normal-weight individuals, and four times more common among the severely obese.

Obese people were more likely to have pain in virtually every part of the body than were normal-weight people, including the head, neck, or shoulder; back, legs or feet; or abdomen or pelvis.

Even after the researchers accounted for depression, anxiety, high blood pressure, and diabetes, as well as age, gender and education, the relationship between obesity and chronic pain remained strong.

Obesity could contribute to chronic pain by adding stress to the joints, Lipton and his colleagues say. In addition, obesity promotes inflammation, which could be a contributing factor.

More research is needed, they conclude, to understand whether obesity plays a causal role in chronic pain, and if so what mechanisms might be involved.

SOURCE: Journal of the American Geriatrics Society, January 2009.

**What does renowned heart surgeon Mehmet Oz do to keep his own heart strong? His answers and the reasons behind them may surprise you—And inspire you to do the same.**



Dr. Mehmet Oz

Inside the operating room, Mehmet Oz, M.D., sees hearts at their worst. He saves hearts and their surrounding arteries that are scourged by cigarettes, damaged by chronic stress, and hopelessly clogged by burger and Alfredo-sauce addictions. But Oz, an internationally recognized cardiovascular surgeon from New York-Presbyterian Hospital/Columbia University, an Oprah regular, and coauthor of the best-selling health-advice book *YOU: The Owner's Manual*, isn't nearly as inspired by the near-dead hearts as he is by the fully alive ones.

"I don't spend a lot of time scaring people with the bad things. I don't think fear works," Oz says. Instead, he lays it out straight to his patients: The heart has needs, and you have to meet them or it'll stop working. But taking measures to keep your heart healthy won't just keep you off the operating table; starting immediately, it will improve the quality of your life by making you stronger, more energetic, and more vital.

Oz himself is testimonial to that. Those who know him marvel at his ability to maintain high energy through marathon weeks, juggling a dozen demanding projects, and remaining fit, trim, and good-humored. How does he do it? Here, Oz pulls back the curtain on his own life and reveals how he keeps himself at peak performance and his own heart in mint condition. Copy his moves, and you'll never have the pleasure of meeting him.

### Dr. Oz's 5 Favorite cardio workouts

You might think that a 46-year-old guy who is one of America's top heart surgeons would

hit the treadmill hard every day. But Oz, who works an average of 16-hour days with 10 surgeries a week, has precious little time for long, dedicated cardio workouts. He needs his daily exercise time to multitask and accomplish more than just conditioning; he uses it to wring away tension, bond with colleagues, spend time with his kids, and several other differing missions. Here are his five top cardio-training activities.

"60 minutes of cardio will tune up your heart without overtaxing other parts of your body."

**Power yoga:** Oz has practiced yoga for 15 years. While he enjoys the mental aspect of it, he combines traditional yoga with more rigorous forms so he can get the spiritual and cardiovascular benefits. Power yoga gives him the chance to work hard but then also meditate at the end of the session, or even while in it. "I'm very hyperactive, so it helps get my body busy and my mind quiet," he says.

**Basketball:** On the weekends, Oz plays basketball with people from work. Again, the physical rewards are only partly the motivation; the main reason is the competition. "I love the challenge of beating the other person," Oz admits. "I always want to be on the weaker team, because I love the upset—the challenge is what's enjoyable." Hoops also gives him insight about human nature. "I learn a lot about people by watching them play and interacting with them," he says, "to see whether they give up, how driven they are, how ferocious they are." Literally, to see which ones have heart. "It teaches me how folks control their emotions and think smart about winning, rather than just hustle. It shows me their mental resilience."

**Tennis:** Oz, a lifelong athlete who played football and water polo at Harvard, also likes tennis for the same reasons he likes basketball—the competition, the challenge, and the "playing" aspect of exercise.

**Cycling:** He prefers to ride outside, but if that's impossible, Oz will hop on the stationary bike at the end of the day to break a sweat while catching up on work or reading (another multitasking opportunity).

**Running:** The best part about running, Oz says, is that he can do it anywhere, any time. He doesn't have to schedule meeting times for this activity like he does with basketball and tennis. On an average run (about 4 miles), Oz likes mixing up his pace with interval-type training. For example, he'll find some point in the distance and go all-out to that point. "Or if

I go by a football or soccer field, I'll head there and run a 100-yard dash—it reminds me of playing sports in school," he says.

### Dr. Oz's 5 Favorite Stress Busters

We all know how vulnerable the heart is to tangible, physical dangers such as nicotine, saturated fat, or stray bullets. But the heart can be damaged just as badly by an invisible killer: stress. Stress is ancient, and your heart expects to weather its share of it—in the way we did as cave dwellers millennia ago. "The human heart is supposed to have ups and downs," Oz says. It can handle periods of extreme stress, if it can relax and repair itself afterward. When your heart is continually strained by the fight-or-flight responses to persistent, low-grade mental anxiety—e.g., the boss's phone calls—it can break down.

Giving your heart the breather it desperately needs doesn't require a deserted island and a hammock. Any tactic that lets your heart downshift (or flex its power to feed O<sub>2</sub> to working muscles as it was designed to do), will do the trick. While it initially raises your heart rate, it also de-stresses your heart. Here are Oz's biggest stress relievers.

**Ball tag:** "Ball tag is my stress buster," Oz admits. He plays this game—a mix of dodgeball and freeze tag. The rules: His kids are one team; he's the other. Oz throws the ball to try to hit the kids. If he does, it freezes that one, and the free kids can tag the frozen one to free him or her. "If I get all the kids with the ball before they touch each other, I win the game," he explains. "After 45 minutes, I'm drenched in sweat. It's an impressive workout." Oz also likes the game's fringe benefit: It makes his kids play as a team and teaches them that if they play smart and are athletic, they'll win. And, again, focusing on the game makes him push harder and longer than he would during plain old exercise.

**Plain old exercise:** No matter what form he chooses, Oz finds that any exercise (especially at high intensity) helps him clear his mind and unwind after a long day. At the gym, his favorite exercise is the squat with 150 pounds (using perfect form), and he also does chest presses and bent-over back rows—with 45-pound dumbbells in each arm.

**Watching from the sidelines:** When he can't join in on ball tag or he's chained to his work desk at home, just watching his four kids (Daphne, 20; Arabella, 15; Zoe, 11; and Oliver, 7) play for a few minutes eases his stress.

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"As we get older, we forget to play—we're so preoccupied," Oz explains. "Kids very much live in the moment. And living in the moment is what it's all about."

**Office yoga:** Oz can't play ball tag at the hospital (the administrators just won't warm to it), but he can shut his door and do a couple of yoga moves while taking deep breaths. Alternatively, he'll just bend and touch the floor with his hands. "I keep my tension in my hips and lower back," he says. (Tip: Figure out where you store your tension. Then find a stretch that targets it.)

**The lip lick:** In a moment of stress or frustration, do this 3-second exercise that Oz relies on. Breathe in, lick your lips, swallow, and breathe out slowly, saying "ohm." It's a soothing move that helps you reset, calm down, and refocus in stressful times.

#### Dr. Oz's 5 Favorite Exercises

The heart isn't the only muscle that Oz trains. He does resistance exercises to build strength and stay lean, as muscle burns more calories at rest than fat. He focuses on "foundation muscles"—those in his legs, his core (abs, hips,

trunk), chest, and back—and prefers moves that target several large muscles at once and also increase his stamina...as you'll see. On Saturday and Sunday, he does a 20-minute workout of about 18 tortuous exercises like the ones mentioned here, which is laid out in his new book *YOU: On a Diet*. They require no weights, so he can easily do them on the road. His favorites:

**Planks:** Get in push-up position, but with your elbows on the floor instead of your hands. Keeping your back straight, hold that position for as long as you can. Sounds easy? Try to last a full minute. This strengthens your entire core—from your abs to your lower back. Having a powerful core is critical to Oz, due to an occupational hazard. "Heart surgeons retire early because of back problems," he reveals. "We're always leaning over patients."

**The electric chair:** For strengthening your legs, stand with your back against a wall and slide your back down it until you're in a squat position (as if you're sitting in a chair). Hold that position for as long as you can. Oz calls the move the electric chair because, well,

after 45 seconds or so, it'll be obvious.

**Bicycle:** Lie on your back, and bring your right knee up to your torso while bringing your left elbow toward the knee. Alternate legs and arms in a bicycle motion to work your abdominal muscles for as long as you can, working up to 2 minutes.

**Push-ups:** The no-frills classic. He does as many as he can with strict form during his weekend workout. He also sneaks in 60 to 80 push-ups every day, in sets of 10 or 20 in stolen moments (also a stress-buster).

**Rickety table:** Get on your hands and knees, keeping your back flat, so your body looks like a table. Raise your left leg straight back behind you and raise your right arm straight in front of you, so that both your arm and leg are even and parallel with your back. Bring them back to the ground, and now raise your right leg and left arm. Alternate and do 10 to 12 on each side. This trains your core, and both your upper and lower body. To make it harder, hold dumbbells during the move.

Source: You 24. Used with permission.

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workout. If you know you're hitting 85 percent of your maximum heart rate 5 minutes in, you can take it down to a number that you can sustain. The beauty of this, says Lally, is it not only helps you finish your scheduled workout, but it'll enable you to build a base that'll ultimately help you train harder, for longer periods of time.

"At 65 or 70 percent of your maximum heart rate, you should be able to crank at a good clip for 40 minutes or so—this is the intensity at which you're burning 50 percent of your fat calories as fuel," he says. "But get into this zone too fast, and you won't be able to keep up this effort, which prevents you from developing a good base in this fat-blasting zone."

With heart rate monitors that give you info about how many calories you burned during a workout and what your average heart rate was, it can be a great way to track your progress over time. And the more positive that progress is, the more likely it is you'll be excited to go back to the gym for more.

#### Know Your Numbers

Of course, before you start using a heart rate monitor you need to know what numbers to

look for when you're working out—and there are a couple steps you need to take to get these:

1. Take your resting heart rate. For the most accurate reading, wear your heart rate monitor to sleep for three consecutive nights and see what your heart rate is when you wake up. Average the numbers you get each morning and if you can, do this test during a time when you don't have to set an alarm clock, which can spike your heart rate.

2. Determine your maximum heart rate. This is how many beats per minute your heart pumps when you're working your body as hard as you can. To get this number, Lally suggests wearing your heart rate monitor during an intense training session. Look at how many beats per minute you're at when you reach a 10 on a scale of one to 10—10 being the best performance you've ever had.

3. Know your training zone—or what percent of your maximum heart rate you should be working in during a given workout. There are three zones most trainers recommend:

55 percent of your max: This is the minimum you should reach, particularly during cardiovascular exercises. Anything below

this and you're not getting much out of your workout in terms of calorie and fat burn.

65 percent of your max: This is where you start to maximize your aerobic capacity, and it's where you burn the highest percentage of body fat during a given time, which is why it's often dubbed the "fat burn zone."

85 percent of your max: This is where you're working at an intense enough pace that you're not able to carry on a conversation. Referred to as the "cardio zone," it's also where you burn the most calories.

To know how many beats per minute you should see when you're in these training zones, you've got to do some simple math: Take 220 and minus your age; subtract your resting heart rate from that number; multiply that number by the percentage of your max in which you want to work (for example, multiply by .55, .65, or .85); now add your resting heart rate to that number. This is the beats per minute you'll want to make sure you're hovering around during your workout to know that you're in the right zone.

Source: You 24. Used with permission.