Consumer Reports: Body fat scales

Enter the brave new world of smart scales, which manufacturers claim will measure not just your overall weight, but also the percentage of your weight that comes from fat vs. muscle, bone and water. Some of the scales also calculate your body mass index, or BMI, which measures your weight in relation to your height.

Consumer Reports recently put body-fat scales to the test. Along with five of the scales that read weight 24 times over two days on each of the men and eight women step on an electronic lab scale, which was used as a control, they measured their height four times over two days on each of the scales. Five of the scales read weight accurately.

Ratings on the scales’ ability to gauge body fat were more complicated, and the results were unimpressive: None was very accurate. Consumer Reports knows that because its testers got benchmark readings using a method called Bod Pod at Sacred Heart University in Fairfield, Connecticut.

Six volunteers — three men and three women, some heavier, some slimmer — climbed into the Bod Pod. The egg-shaped device determines body fat by precisely recording the change in air pressure created when a body is sealed into a closed chamber. The scales that were tested measure body fat using an electric current that travels through your body when you step barefoot onto the device’s metal footpads. That tiny current — much too low to feel, or to cause any harm — passes up one leg, through your pelvis and down your other leg. The resistance the current encounters as it travels depends on the proportion of fat and muscle tissue. Based on that, the scales use built-in formulas to estimate the percentage of your weight that comes from fat.

For some of the test subjects, the scales overstated their body fat; for others, the scales understated it. The scale that came closest to the Bod Pod results was still off by up to 21 percent; the worst performer was off by up to 34 percent.

If high-tech scales aren’t very good at determining your body fat, what’s a dieter to do? You could go to a lab with a Bod Pod for $75 per session. Or you could just use a measuring tape and a calculator.

To calculate your BMI, divide your weight in pounds by your height in inches squared; then multiply by 703. For example, a 140-pound, 5-foot-6-inch person has a BMI of 22.6 (140 divided by 66, divided by 66, times 703). Aim for a BMI of between 18.5 and 24.9.

The Doctor Is In

Dear Doctor K: My back is always sore. A friend suggested that massage therapy might help. Massages are expensive, so I want to make sure there’s some evidence behind this. Is there?

Dear reader: Massage used to be considered an indulgence. But it’s now recognized as a legitimate therapy for some painful conditions — including back pain. Therapeutic massage can relieve pain in several ways. It may relax painful muscles, tendons and joints, or relieve stress and anxiety. It may even change the way the brain processes pain signals.

Many types of massage are available in the United States, with Swedish massage being the most common. It involves long, gliding strokes and kneading of the major muscle groups, as well as friction, gentle rhythmic slapping and vibration. Other massage techniques include deep-tissue, pressure-point, Thai and neuromuscular massage. (I’ve put a table describing different types of massage, and what they involve, on my website, AskDoctorK.com.)

Massage therapy can also involve varying degrees of pressure. Massage doesn’t have to be painful to be therapeutic, so be sure to tell your therapist what type of touch you prefer (light touch, firm pressure, hard pressure).

Massage should not be the only treatment you use for back pain. Instead, use massage in addition to standard care. That includes taking anti-inflammatory pain relievers, staying as active as possible, getting physical therapy and giving your body time to heal. When added to the mix, massage can reduce pain and speed your return to normal activities.

There hasn’t been enough research to say for certain what type of massage is best for back pain. We also don’t know the optimal “dose” and frequency of treatment.

Talk to people you know to get a recommendation. Good practitioners get good results and generate positive referrals. Find out if a medical center in your area has an alternative or integrative medicine program. Such programs typically offer massage by qualified practitioners: people licensed to practice in your state, and certified by a national organization such as the American Massage Therapy Association (www.amtamassage.org).

When I was just beginning medical practice, I learned a valuable lesson. A woman in her mid-80s told me that she had trouble sleeping. I told her about the various ways to improve her “sleep hygiene,” such as going to bed and getting up at the same time each day, not watching TV while in bed, etc.

When I saw her a few months later, she said a massage therapist had cured her sleep problem — and implied that my advice hadn’t done much good. What was keeping her up (as I would have known, had I asked her more questions about her sleep problem) was chronic back pain. That was resolved with massage — and she slept like a baby.

— Dr. Komaroff is a physician and professor at Harvard Medical School. To send questions, go to AskDoctorK.com, or write: Ask Doctor K, 10 Shattuck St., Second Floor, Boston, MA 02115.

Reality Check

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