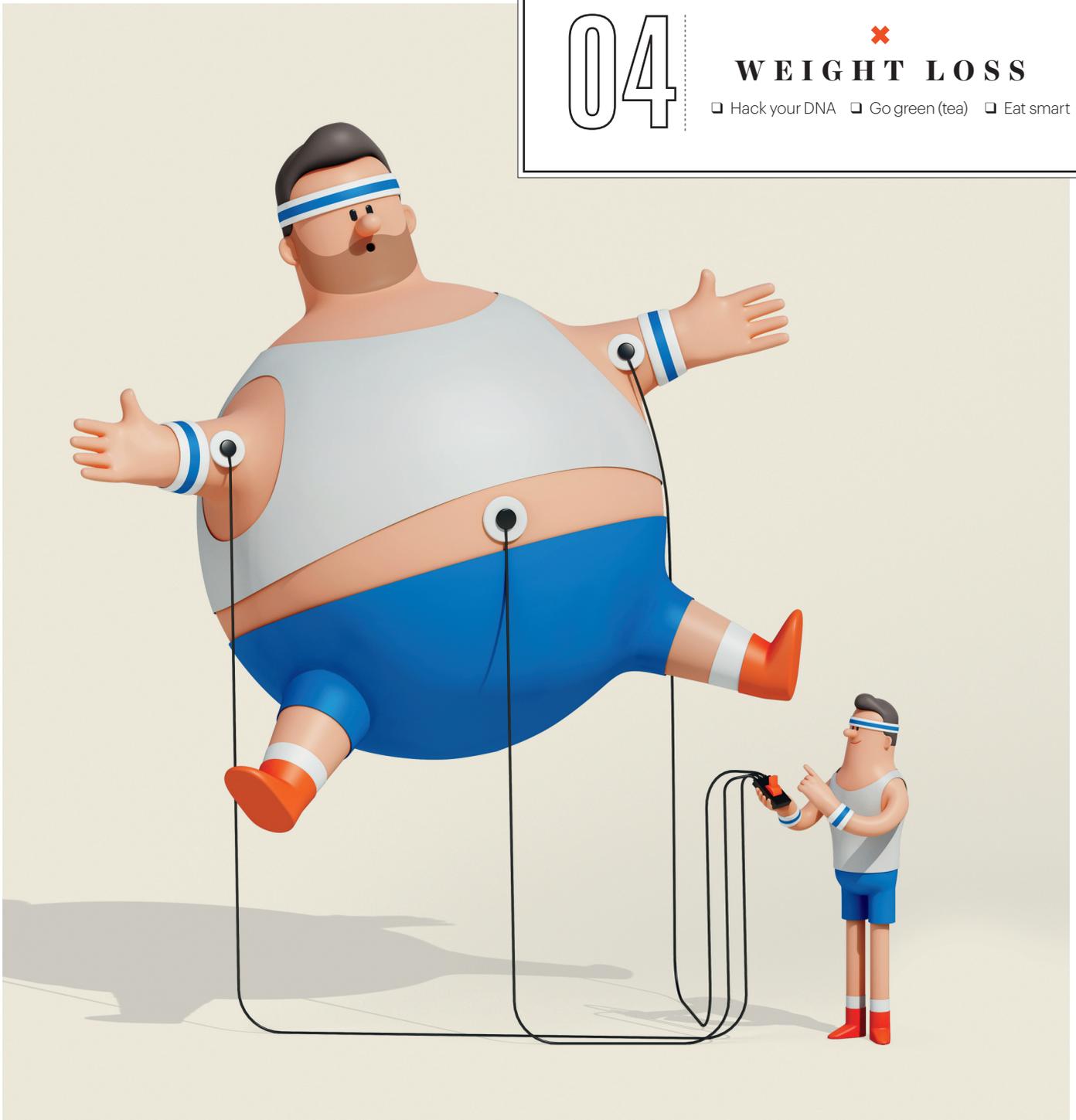


Set a calorie max for a.m. eating:
Count the hours between breakfast and lunch and multiply by 100.

04

×
WEIGHT LOSS

▣ Hack your DNA ▣ Go green (tea) ▣ Eat smart



Turn Off Your Fat Switch

We found five ways you can hack your genes to help achieve your weight loss goals.

BY SARAH WATTS

» —————> If your father is more Dad Bod than Dad God, you might assume you'll eventually grow portly yourself. After all, nearly 100 gene variants are linked to obesity. The good news: Some genes can turn on and off depending on your habits and environment. You could plunk down a few hundred on a DNA test, but why? Instead, try these smart strategies to flip your fat switch.



1 DEPEND ON PROTEIN

Chicken, eggs, and other protein-rich foods are more than just muscle builders. A 2014 study published in the *American Journal of Clinical Nutrition* found that people who carry a variant of the FTO gene linked with higher obesity risk had less appetite and fewer cravings when they ate a low-calorie diet with 25 percent protein. Protein fills you up and requires more energy to digest than other nutrients do, says study author George Bray, M.D., of Pennington Biomedical Research Center.

► **HIT THE SWITCH** Include at least one protein-rich component, like turkey, shrimp, or peanuts, in every meal and snack. "Spreading protein intake throughout the day helps your body best utilize it for function and rebuilding after exercise," says dietitian Rebecca Clyde, M.S., R.D.N.



2 EAT EARLY IN THE DAY

Your body runs on an internal clock, which is why you feel like crap when you wake up at the wrong time. This clock ticks in every cell of your body and influences your metabolism as well as your sleep habits. A 2016 study in the *American Journal of Clinical Nutrition* found that overweight people who carried a certain variant of the PLIN1 gene associated with obesity lost more weight when they ate lunch earlier in the day. And the earlier they took that midday meal, the better the results.

► **HIT THE SWITCH** Eat breakfast and don't work through lunch. There's a simple way to determine how many calories to consume for breakfast and a.m. snacks, says Dina D'Alessandro, R.D.N.: Count the hours between breakfast and lunch on a typical day and multiply by 100.



3 INCREASE YOUR WORKLOAD

Take a cue from the Amish on this one. In a landmark study of an Old Order Amish community, researchers from the University of Maryland concluded that a lifestyle with abundant physical work may help offset the impact of carrying risky variants of the FTO gene. The most active men in this community burn about an extra 900 calories a day, thanks to several hours of farming, carpentry, blacksmithing, and other activities—and this basically overrides that genetic demerit.

► **HIT THE SWITCH** You don't have to live on a farm to be as active as the Amish. There are many ways to log an extra 900 calories a day. For example, walk briskly for 8 miles over about two hours. Or try to run 7 miles in an hour. Or bike to work for 50 minutes each way.

OUTWIT YOUR FAT GENES

Bad genes do matter, but not as much as you think. Here's how each bad habit can raise the BMI of someone who falls in the top 10 percent of people with genetic obesity risk. (A normal BMI is between 18.5 and 24.9.)



BAD >>>



+0.52

Eating fried food every day

Say you're a 6-foot guy with a french fry habit. Bad genes make you about 4 pounds heavier than a genetically gifted guy with the same vice. Bake potato slices in your oven for a less oily treat, says Marisa Moore, R.D.N.



+0.79

Drinking soda on the daily

Frequent fizz fixes can cost a 6-foot guy with bad genes 6 extra pounds. Instead of soda with ice, try seltzer with frozen fruit, says Danielle Battram, Ph.D., R.D., who teaches food and nutritional sciences at Brescia University College.



+1.02

Eating a typical American diet

In other words, too much processed junk and not enough produce. Try to ease into three servings each of leafy greens and fruit a day, says Robert Ostfeld, M.D., director of preventive cardiology at Montefiore Health System.



+1.05

Doing just an hour (or less) of hard exercise a week

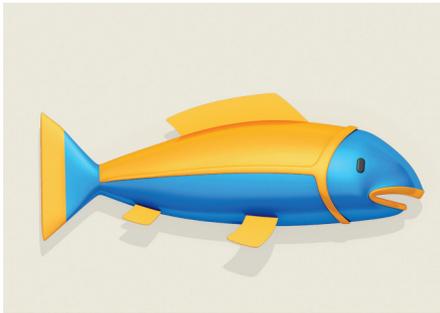
Start hard immediately after your warmup, says Iowa State kinesiology Panteleimon Ekkekakis, Ph.D. Then gradually turn down the intensity over 10 to 15 minutes until you hit your cooldown pace.



+1.32

Doing less than 7 hours of moderate exercise a week

Every Sunday, set aside a few minutes to schedule a week's worth of workouts on your calendar. "Prioritize it like you would a dentist appointment," says University of Minnesota kinesiology Beth Lewis, Ph.D.



4 GO MEDITERRANEAN

A variant of a gene called MC4R predisposes its carriers to obesity and type 2 diabetes. But there's hope: A Mediterranean-style diet may cancel out that increased genetic risk, recent research suggests. This famously healthy (and delicious!) diet is rich in olive oil, fish, poultry, fruits, vegetables, legumes, and nuts. An occasional glass of red wine is perfectly okay. The fiber and antioxidants prevalent in the diet seem to fight fat and improve glucose metabolism. Ciao bella!

HIT THE SWITCH As you eat more Mediterranean foods, think about the tasty stuff you're adding, not what you're missing (like processed foods). When you begin, focus on eating quality meals, not counting calories. Log your food for the first few weeks to stick to it, says Erin Peisach, R.D.N.



5 GUZZLE GREEN TEA

This beverage might boost the activity of several genes that regulate metabolism, like one known as GLUT4. In a 12-week study period, rats fed a high-fat diet plus green tea showed greater GLUT4 expression than rats fed the same diet with water. In humans, green tea antioxidants have been shown to improve blood sugar control. But take note: Researchers who study tea typically don't add sugar or cream. We're not talking about the 430-calorie Starbucks Green Tea Creme Frappuccino here.

HIT THE SWITCH Drink a glass a day. Try regular Lipton Pure Green Tea (\$12 for 100 bags), which had the most antioxidants per bag in a ConsumerLab test. Steep green tea at 185°F for three minutes. This maximizes both flavor and antioxidant content, a Turkish study suggests.



SQUEEZE OUT MORE CALORIES

People who swapped in whole grains for the same amount of refined grains (207 grams) pooped 57 extra calories a day in a recent study. A fiber-filled gut may use more calories in digestion. For the deuce-inducing dose, choose high-fiber grains like oats, brown rice, and quinoa.



WALK TOWARD A SIX-PACK

Replacing 30 minutes of sedentary time with walking every day for a week can reduce your waist by a half inch, Dutch research suggests. One theory: Moving activates production of a fat-burning enzyme called lipoprotein lipase, which is reduced when you're seated.



PHONE IT IN

People at risk for diabetes who used tech tools to follow diet and exercise plans lost an average of 8 pounds in a one- to four-year period in a recent study. Try Omada (itunes.com). It costs \$140 a month for four months and \$20 a month afterward, but many insurance plans cover it.

WORST



+1.97

Watching 4-plus hours of TV a day

It's tough to resist a steady stream of Netflix and Hulu, but all that time on your butt isn't doing your butt (and the rest of your body) any favors. Grab dumbbells, turn to page 34, and do Workout A to build muscle during TV time.



+2.13

Spending 5-plus hours a day sitting

This costs 15 extra pounds for a 6-foot guy who's cursed with bad genes. Each time you hit "send" on an email, stand up and stretch, says Emily Mailey, Ph.D., an assistant professor of kinesiology at Kansas State University.

THE STAT

ONE

Number of daily cups of coffee that, when exceeded, diminishes the influence of gene variants linked to obesity, according to research from Harvard and Tulane

BMC Medicine