

7 FOODS THAT

JUMP-START  
YOUR  
*Metabolism*



# 7 Foods That Jump-Start Your Metabolism

We all have that one friend, co-worker, or family member who can eat all day and never gain a pound. Sounds amazing, right? What if you could do the same? The key is to feed your metabolism. But what exactly is your metabolism?

There is a lot of information in the health industry about this essential bodily function, but most of us don't actually know what our metabolism is. According to the Merriam-Webster dictionary, metabolism is "the chemical changes in living cells by which energy is provided for vital processes and activities." [1] So, technically, anything that happens within your body is part of your metabolism – but that's a very broad definition.

Luckily, science has given us an easy tool to measure our metabolisms called basal metabolic rate or BMR. This is the definition most of us have in mind when we complain about our metabolisms being slow, it is the number of calories required to keep your body functioning if you theoretically sat around all day at rest for 24 hours. In fact, according to the *Daily Burn*, your BMR is the single largest component (upwards of 60 percent) of your total energy burned each day. [2] There are a number of online BMR generators if you don't want to break out a calculator, but understanding your BMR is vital to your overall health. The Mifflin St. Jeor Equation is the standard for calculating your BMR:

**For men:**  $BMR = 10 \times \text{weight (kg)} + 6.25 \times \text{height (cm)} - 5 \times \text{age (years)} + 5$

**For women:**  $BMR = 10 \times \text{weight (kg)} + 6.25 \times \text{height (cm)} - 5 \times \text{age (years)} - 161$

As you can see, to a certain extent, your metabolism runs at a preset speed based on your genetics, gender and age – our metabolisms naturally slow down about 5% per decade after age 40. Most likely that friend we mentioned earlier who can eat whatever they want, was blessed genetically with a high metabolism. But don't give up just yet, even if you weren't born with "skinny genes" there are factors within your control that effect your metabolism. Diet and exercise.

As Ellie Krieger, registered dietitian, nutritionist and author described, there is evidence that certain foods and drinks can bump up your total MBR. [3] Edwina Clark, R.D., head of nutrition and wellness at *Yummlly*, and featured in *Women's Health* describes that "While it's important to keep in mind that weight and metabolic rate are complicated, eating the right foods to stoke your metabolic furnace can have an impact on your overall calorie burn." [4]

So what foods are best for your metabolism? Let's find out, by taking a look at 7 foods that jumpstart your metabolism.

## : Green Tea


What is your go to pick-me-up in the morning? Green tea? Most people would say coffee, but there's a good reason to swap out your favorite cup of joe for nature's most celebrated metabolism-boosting substance – green tea.

Tea contains less caffeine than coffee, roughly 150 mg less per cup, which according to Kathleen Zelman, RD, an Atlanta-based nutritional consultant and spokesperson for the American Dietetic Association is a safer alternative for obese people. “All that – in addition to the fact that tea could boost your metabolism – is reason enough to swap out one of those cups of coffee and drink green tea,” says Zelman, “You're talking to a coffee drinker here. I love coffee. But the healthful benefits...they're speculative at best. Drink a cup of tea...you'll actually be doing something good for yourself.” [5]

Numerous studies tout the benefits of green tea, and confirm that the polyphenols known as catechins, particularly epigallocatechin gallate or EGCG, combined with the caffeine in green tea increase the number of calories you burn, on average around 100 calories a day. [3] In a small study published by the International Association for the Study of Obesity, green tea was shown to raise metabolic rates and speed up fat oxidation. [6] Abdul G. Dulloo, a researcher at the University of Geneva, Switzerland explained “Green tea has thermogenic properties and promotes fat oxidation beyond that explained by its caffeine content per se.” Thermogenesis is a metabolic process in which the calories the body burns while digesting and absorbing food is turned into heat. Study participants who consumed green tea extract had a 4% increase in thermogenesis. [5]

But not all green tea is equal in terms of benefits. Susan Bowerman, R.D., director of worldwide nutrition education and training at *Herbalife* suggests you opt for freshly brewed, unsweetened green tea for maximum impact. [4]

## : Whole Grains



Chances are you aren't eating enough whole grains. The 2005 Dietary Guidelines for Americans found that only 5% of women, and 3% of men met their recommended daily intake of whole grains. [11] Making the move from refined grains to whole grains may boost your metabolism according to the latest research and recommendations from the USDA. But what is the difference between the two?

*TuffsNow* explains:

“Whole grains include the outer nutritious layer of grains and are found in products including whole-wheat flour, oatmeal and brown rice. Refined grains are starches that have been processed and broken down into a finer texture, primarily to increase shelf life. This process, known as milling, drains the starch of dietary fiber, iron and many forms of B vitamin. Through an enrichment process, iron and B-vitamins can be added back to the refined grains, but the fiber generally is not. White flour, white bread and white rice are examples of refined grains.” [7]

The 2015-2020 Dietary Guidelines for Americans from the United States Department of Health and Human Services and the USDA recommend replacing refined grains with whole grains. The minimum recommended daily allowance of whole grains is 3 ounces for women and 4 ounces for men, roughly the equivalent of 2 cups of rice. But don't just stick to one type of grain, since grains differ in nutrient content, the USDA recommends getting your daily fix from multiple sources for maximum benefits. [8] So mix it up! Popular whole grains include rice, oatmeal, bread, and cereals. Getting your full daily dose of whole grains not only helps keep you satiated longer, but can also boost your metabolism.

Researchers from Tufts University, the University of Minnesota, and the Bell Institute of Health Nutrition and have found “new evidence of energetic benefits” if you replace refined grains with wholegrains. They also claim that “Eating more wholegrain foods can help to speed up weight loss,” [9]

The study was conducted on two groups of people, one which ate a whole grain diet, and another which ate a refined grain diet for six weeks. The results of the study? Those who ate a diet with whole grains burned an extra 92 calories per day due to increased resting metabolic rate and greater fecal losses. “The extra calories lost by those who ate whole grains was equivalent of a brisk 30 min walk - or enjoying an extra small cookie every day in terms of its impact,” said senior author Susan B. Roberts, Ph.D., senior scientist and director of the Energy Metabolism Laboratory at USDA HNRCA. [7]

How awesome is that? Goodbye refined grains, hello whole grains!



# : Water

One of the easiest tricks to boost your metabolism is to simply drink more water! Rebecca Lewis, RD., in-house dietitian at *HelloFresh* says, “Even mild dehydration can slow your metabolism.” How many glasses a day do you typically drink? Two, maybe three tops? Well it’s time to fill up your water bottle and quench your thirst. A new study found that majority of Americans drink just one glass of water a day. [12] That’s 7 glasses short of the recommended daily amount. Meaning we’re missing out on all the metabolism boosting benefits water has to offer.

In a 2003 study conducted by Michael Boschmann and published in “The Journal of Clinical Endocrinology & Metabolism” found that drinking 500 ml of water was shown to increase metabolic rate by 30%! [10] Even better, this increase occurred after just 10 minutes! Now that’s a quick payoff.


The study concluded that drinking 2 liters of water per day would result in 400 kJ of energy burned, or about 95 calories. To put this into perspective, 2 liters of water is roughly the equivalent of 8 8oz glasses of water, which has been the rule of thumb for water intake for years. Want to get even more precise? Strive to drink at least half your body weight in fluid ounces a day. So, if you weigh 180 pounds, try to consume at least 90 ounces of water each day.

For extra brownie points drink cold water. Boschmann’s research found that drinking cold water forces your body to use more calories to warm it up.

Need some help getting more water in your life? Swallow your excuses and use these dietitian approved tricks from *Prevention*. Rebecca Lewis suggests adding flavor to your water with herbs such as mint and citrus. “Muddling your herbs with a wooden spoon unlocks their flavor so they add more oomph to your agua. Unpeeled citrus lends a bitter taste. So, if you’re planning to make a big batch to last all day, peel off the skin before adding the fruit to your water.” [13]

Always forget to drink enough throughout the day? Turn your daily transitions into water triggers. “For instance, finish your water bottle before you get out of the car to go to work, or don’t leave for lunch without finishing the glass of water on your desk,” says certified nutritionist Tara Coleman. [13]

Keep in mind, you don’t have to “drink” water to get your daily allotment. Swap out snacks like popcorn or pretzels for fruits and veggies high in water like cucumbers or watermelon. Better



yet, make a meal out of it. Soup is a great hydrating and filling option to help you consume more water throughout the day.

So what're you waiting for? Bottoms up!

## : Yogurt


A new study found a clear link between calcium intake and the ability for the body to burn fat. "When we put people on diets that include three servings of yogurt a day, we're able to nearly double the amount of fat that's lost, compared to people on a low-dairy diet," says Dr. Michael Zemel, nutrition professor at the University of Tennessee. [14] How does it work? Increased calcium levels in the diet signal fat cells to stop storing fat and start burning it instead. Revving up your metabolism and thinning your waistline.

Zemel's research over the past decade has established a clear link between calcium intake and the ability of the body to burn fat. He has documented that increased calcium levels in the diet signal fat cells to stop storing fat and to start burning it. [14]

In Zemel's study, participants who consumed an increased calcium diet lost 22% more weight and 61% more body fat than those who merely reduced calories. Zemel commented on the findings stating "People shoot themselves in the foot by jettisoning dairy when they go on diets. What they need to do is maintain or increase the dairy intake for a host of health-related reasons, and here's one more: it's going to help you burn fat." [14]

Dr. Zemel is not alone in his praise of yogurt for its fat burning qualities. "There's some evidence that calcium deficiency, which is common in many women, may slow metabolism," says Tammy Lakatos, RD. Research shows that consuming calcium through dairy foods such as fat-free milk and low-fat yogurt may also reduce fat absorption from other foods. [15]

Even Dr. Oz has hopped on the pro yogurt train including it on his list of 14 Mega Metabolism Boosters. His recommendation? Try mixing Greek yogurt with lemon, not only is it a dynamic duo for flavor, but the vitamin C in lemon can help your body absorb the metabolism-boosting calcium in yogurt. [16]



# : Chilis

Some like it hot, do you? Research suggests that spicy foods not only heat you up, but also your metabolism. Studies have shown that eating a spicy meal such as a bowl of chili, can temporarily boost your metabolism roughly 8% higher than your normal rate. [17]


So what's responsible for making you sweat? The compound that gives peppers their kick is a bioactive compound called capsaicin. Capsaicin is an oily chemical found in the membrane surrounding the seeds within peppers. This compound revs up thermogenesis, raising your body temperature to burn more calories immediately after a spicy meal. It can also help curb your appetite. *The New York Times* reported that in a Canadian study, men who ate appetizers containing hot sauce consumed 200 fewer calories at their next meal. [17] This study concluded that spicy foods can act as a mild appetite suppressant.

So, adding hot peppers to your repertoire can support weight-management and overall health because they are low-calorie and full of nutrients. But which peppers should you choose? That all depends on your spice tolerance. In 1912, pharmacist Wilbur Scoville invented the Scoville scale to measure the heat of peppers. The higher the number of Scoville units (SHUs), the more capsaicin a pepper contains, meaning a greater effect on thermogenesis and calorie burn.

Among common peppers found at your local grocery store, habaneros score the highest with 500,000 – 1 million SHUs. The iconic cayenne pepper is a close second ranking between 250,000 – 500,000 SHUs. But these peppers are not for the faint of heart. For the average spice lover, try cooking with tabasco peppers which have 100,000 – 250,000 SHUs or Thai chilis having 50,000 – 100,000 SHUs. Like spice but not the burn? Opt for a more mild pepper such as jalapeno or serrano chili peppers with just 5,000 – 25,000 SHUs. [18]

When in doubt, just look to the stem to determine the heat of a pepper. According to the American Chemical Society, the thinner the stem, the hotter the pepper. Another great rule of thumb is color. Red peppers are hotter than green, and dried peppers are a more concentrated source of capsaicin than fresh. [18]

# : Eggs



Did you know eggs are a thyroid super food? Typically, super foods cost a pretty penny, but eggs are a budget friendly nutritious power house. One large egg contains nearly 16% of the iodine and 20% of the selenium you need daily. Mira Ilic, RD, a registered dietician at the Cleveland Clinic recommends eating the whole egg since most of the iodine and selenium is located in the yolk. [19]

In fact, whole eggs are so nutritious, they're often referred to as "nature's multivitamin." One large egg has only 77 calories, but packs a punch having 6g of protein, 5 grams of healthy fat, and all 9 essential amino acids – which help you build muscle. Studies suggest they can also help you lose weight.


In a 2008 study published in the *International Journal of Obesity*, researchers found that eating eggs at breakfast promoted weight loss. In their study, participants who ate eggs for breakfast for eight weeks showed a 65% greater weight loss, a 35% greater reduction in waist circumference and a 16% greater reduction in percent body fat than those who ate bagels for breakfast. [20]

A similar study conducted in 2005 found that women who ate eggs for breakfast consumed roughly 500 calories less later in the day. Why you may ask? Experts say that eating eggs may produce a "satiety hormone" leaving you feeling fuller, longer. Dietician Dr. Carrie Ruxton explains "Previous studies have found that eating eggs at breakfast or at lunch reduces feelings of hunger and helps people eat fewer calories at a later meal. The new research provides information on hormone levels for the first time, showing that consumption of eggs boosts PYY, a potent satiety hormone, while reducing levels of the hunger hormone ghrelin." [21]

Whether you like them scrambled, whole, or over easy, adding eggs to your diet, particularly at breakfast can have shrinking effect on your waistline and improve your overall health. Sp-egg-tacular!



## : Fish



Similar to eggs, Susan Bowerman describes how "Fish is an excellent source of both iodine and selenium, two minerals that support the function of the thyroid gland, which regulates metabolism," [4] Next time you're tempted to go for that burger, try opting for a cold-water



fish such as salmon or trout instead. Fish is an excellent form of lean protein which studies have found to increase the rate of your metabolism more than any other food type. [23] Protein can speed up your metabolism by nearly 30%, that's a lot compared to 10% for carbs and only 3% for fat. [24]

Not only is fish a great source of protein but it also contains ample amounts of Omega 3's. A recent 2015 study found that consuming omega-3-rich fish oil can increase your resting metabolic rate (RMR). [25] Participants RMR's increased by 11% after just 6 weeks, and increased up to 14% after 12 weeks. Not only did adding fish to their diet boost their metabolism, but it also helped amp up their workouts. Participants saw a boost in calories burned during exercise by 10%. Talk about double dipping – in a good way!

But it gets even better, eating fish like salmon twice a week is already encouraged by the American Heart Association to reduce heart disease, so the added benefit to your metabolism makes eating fish a no brainer! The American Heart Association suggests eating fatty fish like salmon, mackerel, herring, lake trout, sardines and albacore tuna since they are high in omega-3 fatty acids. [26]

Need a little help incorporating those two servings of fish a week into your diet? Dietician Samara Foisy, RD, has some suggestions. "I'm a fish out of water when it comes to cooking fish, so to speak. So, I came up with some ideas that are fun and easy" she says, "Don't overlook canned or frozen fish as a quick and easy way to incorporate fish into your diet. Look for canned fish packed in water with little or no added salt instead of those packed in oil and frozen fish with little or no added salt or seasoning."

Not a home chef? Strive to order fish when you are dining out. Seek out baked, broiled or grilled options with little or no added salt for maximum benefits. Who knows, maybe a delicious dish will inspire you to try recreating it at home.



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