

Breezing

Frequently Asked Questions

What is metabolism?

Metabolism is a set of chemical processes powering the body to maintain life. Metabolism determines how the body uses energy. “Fast” or “slow” metabolism, actually refers to metabolic rate – the speed of metabolism.

What is REE?

Resting metabolic rate, or resting energy expenditure (REE), is the energy the body uses to sustain vital functions – breathing, cell growth and repair, circulation. If someone spent the day lying down without moving, the body would still burn calories to carry out these basic functions. The number of calories the body burns is the REE.

Why track metabolism?

The metabolism is the missing piece to weight management. Typically, the body burns most of the energy intake when it is at rest – not when exercising. Once it is known how many calories the body actually uses, someone can adjust the diet and exercise plan to reach the goals. In fact, the American Dietetic Association strongly recommends basing the energy needs on the resting metabolic rate.

Tracking the metabolism also allows a better understanding the changes in the body. Having an extremely fast or an extremely slow metabolism may be a sign of a disorder. Knowing the metabolic history helps someone know when to consult the healthcare specialist.

How does my metabolism affect my weight?

Conventional wisdom says: The higher the metabolism, the more that can be eaten without gaining weight. And vice versa.

Here’s how it works.

When someone eats, they take in calories. The metabolism transforms these calories into the body’s fuel. What isn’t used is later stored as fat.

Weight loss occurs when someone takes in fewer calories than what is used. Weight gain occurs when more is taken in. And the weight stays the same when the calories taken in are equal to what is burned.

The total number of calories burned (the total energy expenditure) comes from the resting metabolism and the level of physical activity. In today’s world, resting metabolism makes up as much as 70-85% of total energy expenditure.

When the metabolism is known, it is also known how many calories are really burning. Instead of following a “standard” 1500 or 2000 calorie meal plan, someone can fine-tune the diet to precisely match the daily calorie needs.

What is the weight loss plateau?

Here's what usually happens:

As weight is lost, the metabolism drops. And as the metabolism drops, the body tries to stop losing weight.

For the same amount of exercise, fewer calories are burned than before. For the same diet, the slower metabolism keeps someone from seeing results. They have reached the **weight loss plateau** – a point where more weight can't be lost with the same diet and exercise routine. To avoid the weight loss plateau, Breezing adjusts the diet and exercise plan every time the metabolism changes. This way, the user stays on track.

Someone knows metabolism, and is eating fewer calories and exercising more. Why can the weight not change?

The weight can stay the same even when the overall body composition is changing.

The weight comes from both fat tissue and lean tissue. Lean tissue – which includes organs, bone, and muscle – weighs more than fat tissue. If a person loses fat tissue, but gains muscle tissue, this contributes to the weight. However, gaining more muscle tends to raise metabolism, which can benefit long-term weight management.

In addition to tracking the weight and metabolism, one can track body composition changes with an impedance scale (such as the Withings Body Analyzer) or by regularly measuring the waist-to-hip ratio.

What determines metabolism?

The metabolism is based on a number of factors. The major ones are:

- **Body size** – Those with larger frames tend to have higher metabolisms.
- **Body composition** – Individuals with greater muscle mass burn more calories, even at rest.
- **Age** – Growing older, metabolism slows down.
- **Sex** - Men typically have a faster metabolism than women of the same age and weight.
- **Health and medical conditions** – Stress, medications, pregnancy, and hormonal disorders (such as hypothyroidism) can change metabolism.
- **Genes** – Born this way.

How does Breezing measure metabolism?

Breezing measures the metabolism using indirect calorimetry which is the most accurate method of metabolic measurement available, the Gold Standard preferred by the American College of Sports Medicine, American Dietetic Association, World Health Organization, and other institutions.

While traditional indirect calorimeters are bulky, difficult-to-use, and often only found in the doctor's office, Breezing is different. Through sensor technology and creative engineering, Breezing streamlines indirect calorimetry – so it's simple, mobile, and effective.

What devices does Breezing support?

The Breezing iOS version supports iPhone (4s/5/5s/5c), iPad (3rd generation, 4th generation), iPad Air, and iPad Mini, on iOS 6.0+.