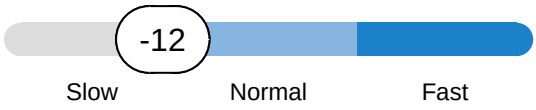
Metabolic Report

Resting Energy Expenditure

1592
kcal/day

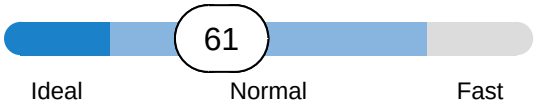
This is an objective measure of your daily energy expenditure at rest. You can master a healthy weight by monitoring your caloric intake.

Your Metabolism [%]



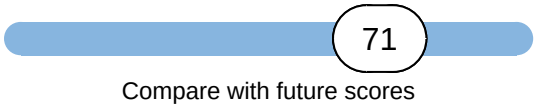
This is how your metabolism compares to the average given your age, weight, height, and sex.

Resting Heart Rate [bpm]



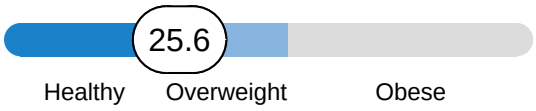
Those who achieve a resting heart rate under 50 live the longest.

Heart Rate Variability



A higher HRV is associated with better health and fitness.

Body Mass Index



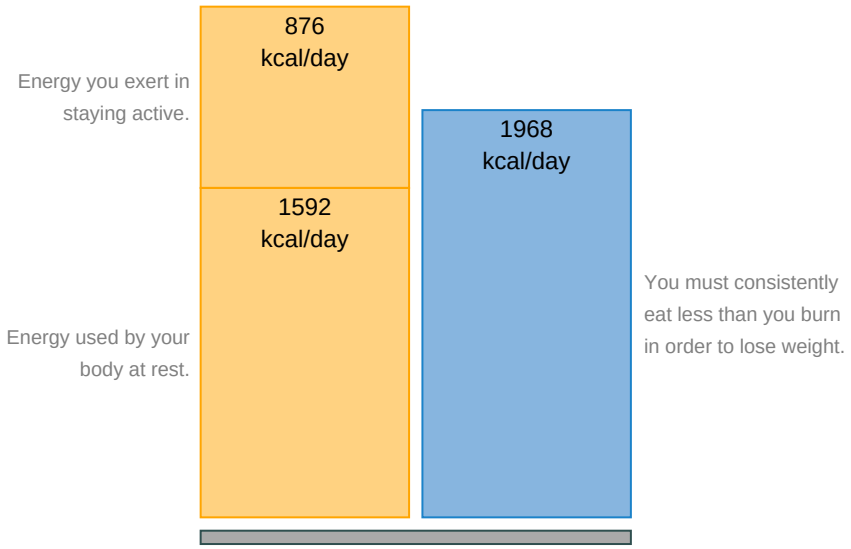
Being overweight is associated with an increased risk of all-cause mortality.

Caloric Balance

You need to eat 500 fewer calories than you burn daily to achieve your goal of weighing 75 kg in 14 weeks.

Current weight:	82 kg
Goal weight:	75 kg
Weeks to attain:	14
Weekly loss goal:	0.5 kg
Activity level:	Moderate

You Burn	Goal Ingestion
2468 Calories	1968 Calories
Total Daily Energy Expenditure	Daily Caloric Intake



VO2/kg	Ve[L/min]	Tv[L]	Rf[bpm]	FeO2	HR[bpm]
2.8	7.6	0.8	9.2	16.5	61

Workout Name	Athlete Name	Weight
Peter RMR		82 kg

Test Date - UTC	Date of Birth	Sex	Height
2021-07-19 10:26 PM	1994-07-27 (26)	Male	179 cm

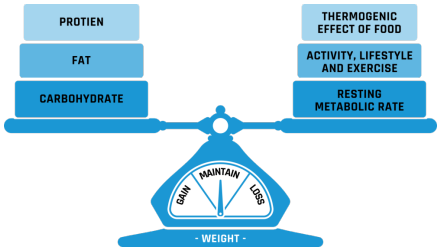
Elapsed	Data Average	PDF Version	Notes
00:10:00	60s	1.4.5.0	

User Piece Size	Mask Size
Resting	Small

Learn the Fundamentals

Energy Balance

The primary determinant of weight management is energy balance. Energy balance describes the difference between energy consumed and energy burned, measured in calories. Measuring metabolic rate is the first step in managing energy balance.



How is Energy Burned?

Expenditure[kcal] = RMR + Activity + Exercise + Thermogenesis from food

Resting Metabolic Rate (RMR)

Resting metabolic rate is the amount of energy your body would burn if you laid around all day. This measure is unique to each individual and is largely determined by lean muscle mass and organ function. Your unique RMR was measured today.

Activity and Lifestyle

Anything you do requires energy. How much you move on average throughout the day has the greatest effect on your caloric expenditure - even more than exercise.

Exercise

While exercise does not typically make up a large proportion of the total calories burned,it does help to increase lean muscle mass which can increase your RMR over time.

Thermogenic Effect of Food

Your body burns a small amount of energy to digest the food you eat. This is the reason you must fast before measuring RMR.

How is Energy Consumed?

Consumption[kcal] = Food Eaten

The food you consume throughout the day constitutes your energy consumption and can be categorized as fats, carbohydrates, and proteins.

Interpret Your Metabolic Report

How to Use the Caloric Balance

Weight Loss

To lose weight, you must consume fewer calories than you burn. Depending on your weight loss goals it is generally safe to consume 250-750 fewer calories daily.



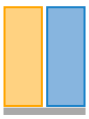
Weight Gain

To gain weight, you must consume more calories than you burn. If your goals are to gain lean mass through proper exercise, then consuming 250-750 more calories than you burn will help you to effectively gain weight.



Weight Maintenance

Eating at caloric maintenance causes no change in weight.



How Your Metabolism Compares

Your measured metabolism is a "gold standard". Here we compare it to the general population given your weight, height, age and sex.

Fast Metabolism

A score of +10 means your metabolism is 10% faster than people similar to you.



Slow Metabolism

A score of -10 means your metabolism is 10% slower than people similar to you.



Resting Heart Rate

A resting heart rate under 50 beats per minute (BPM) is associated with the lowest risk of all-cause mortality. Risk of all-cause mortality increases two-fold at 80bpm.

< 50	50 - 80	> 80
Ideal	Normal	Fast

Heart Rate Variability (HRV)

Heart Rate Variability describes the variation of time between heart beats. HRV depends on age, fitness, and mental state. As your fitness improves your HRV should increase.

Body Mass Index

BMI = height[cm] / weight[kg] ^ 2

BMI is an approximate measure of much weight someone is carrying relative to their height. BMI between 20 and 25 have been associated with lower risk of all-cause mortality. Very muscular people will score artificially high on the BMI scale.

Achieve Your Nutritional Goals

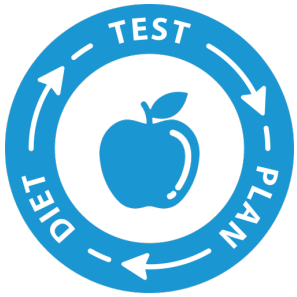
Where to Start

Weight management can be challenging and most often requires us to change the way we perceive food and exercise. Make slow changes and remember, whether you are gaining, losing or maintaining weight, it all comes back to energy balance; manage the calories consumed with the calories burned.

Proper weight management comes from adjusting both sides of the energy balance equation.

Scientists call the activity you do all day that aren't deliberate exercise non-exercise activity thermogenesis (NEAT). This activity includes walking from room to room, gardening and even fidgeting. NEAT typically accounts for 100 to 800 calories burned daily. The easiest way to change the number of calories you burn is to move more. Take the stairs instead of the elevator. Park your car further from work. Change seated meetings to walking meetings. If you are trying to increase caloric burn through exercise, the duration is just as important as the intensity.

If you are reducing calories to help with weight loss, make sure you are not sacrificing your protein. Follow nutritional guidelines to ensure you are supplying your body with the nutrients needed to keep your muscles healthy. Having muscle mass, also known as lean mass, is one of the keys to maintaining a higher metabolism. Following proper exercise guidelines, and the recommendations of your health professional will help you to increase and maintain muscle mass while safely pursuing your weight goals.



Technical Details

RMR is calculated using the Weir equation, assuming an RQ of 0.85.

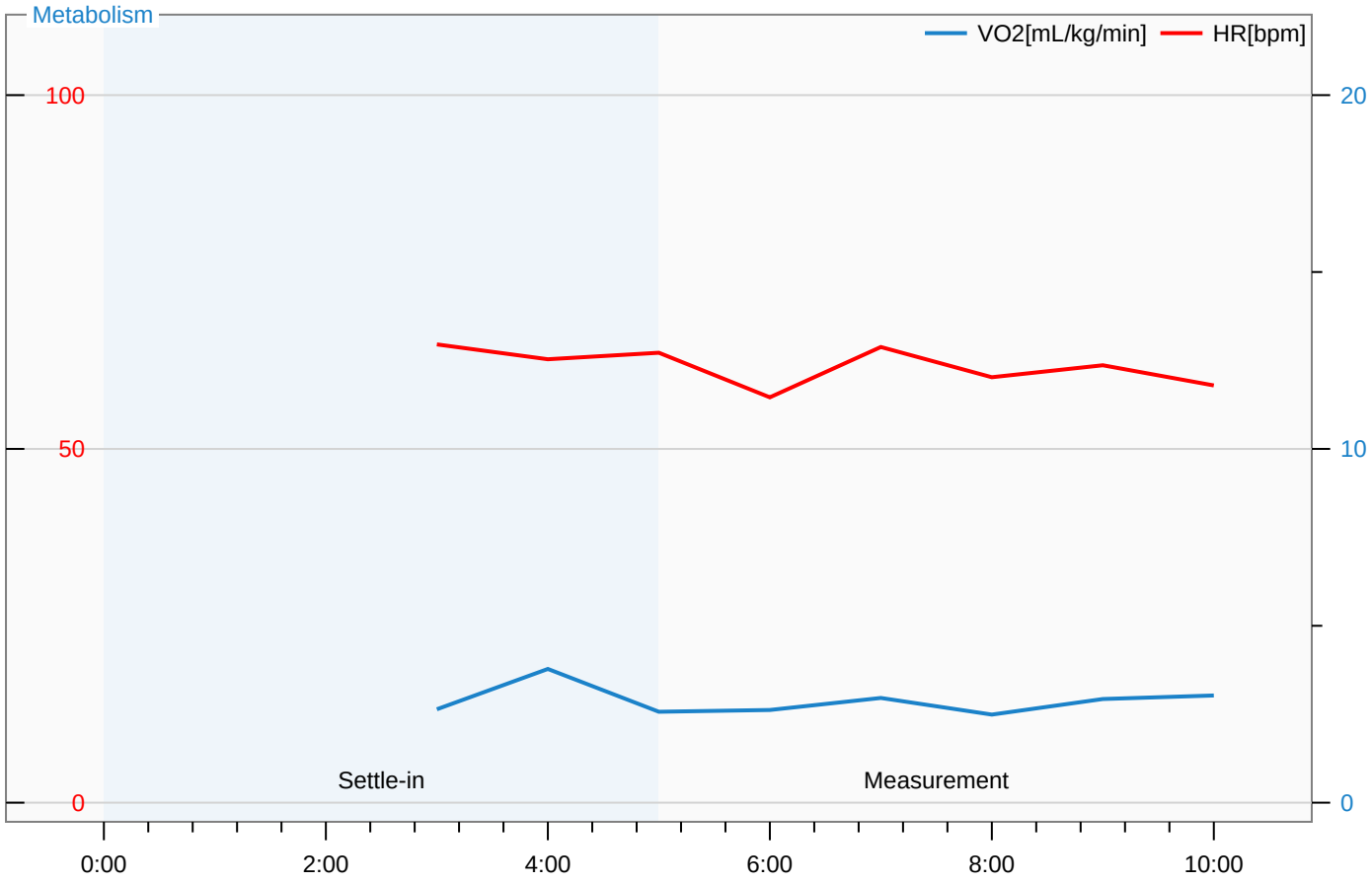
Predicted RMR used in the metabolic comparison uses the Mifflin St. Joer equation.

Activity level is calculated as a percent of your RMR. Each option makes an assumption of your average daily MET value:

Sedentary:	*20.0%*	*Light:*	*37.5%*
Moderate:	*55.0%*	*Very:*	*75.0%*
Extra:	*90.0%*		

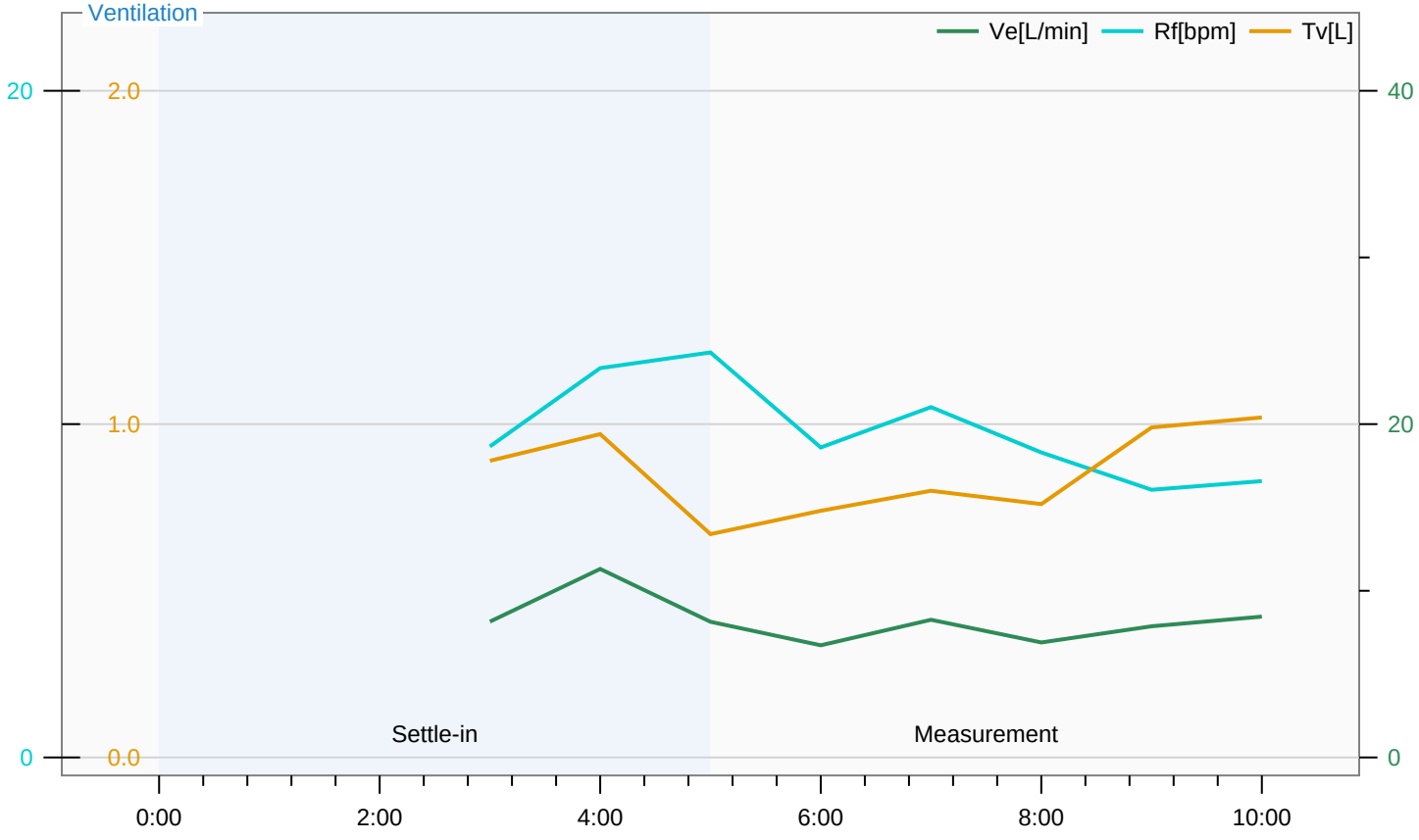
Resting heart rate scale: "Elevated resting heart rate, physical fitness and all-cause mortality" by Magnus Thorsten Jensen et al.

VO2 Min: 2.5 Max: 3.8 Avg: 2.9 HR Min: 57 Max: 65 Avg: 62



Tv Min: 0.7 Max: 1.0 Avg: 0.9 Rf Min: 8.0 Max: 12.2 Avg: 9.8

Ve Min: 6.7 Max: 11.3 Avg: 8.2




FeO2 Min: 16.2 Max: 17.2 Avg: 16.8
Ve/VO2 Min: 31.38 Max: 38.98 Avg: 35.02
Gas Exchange
FeO2[%]
Ve/VO2
60
40
20
18
17.5
17
16.5
16
15.5
15
Settle-in
Measurement
0:00
2:00
4:00
6:00
8:00
10:00