Metabolic Analysis Report

Test Information

Test Date	Neumafit Test Count
January 13, 2026	1 time(s)

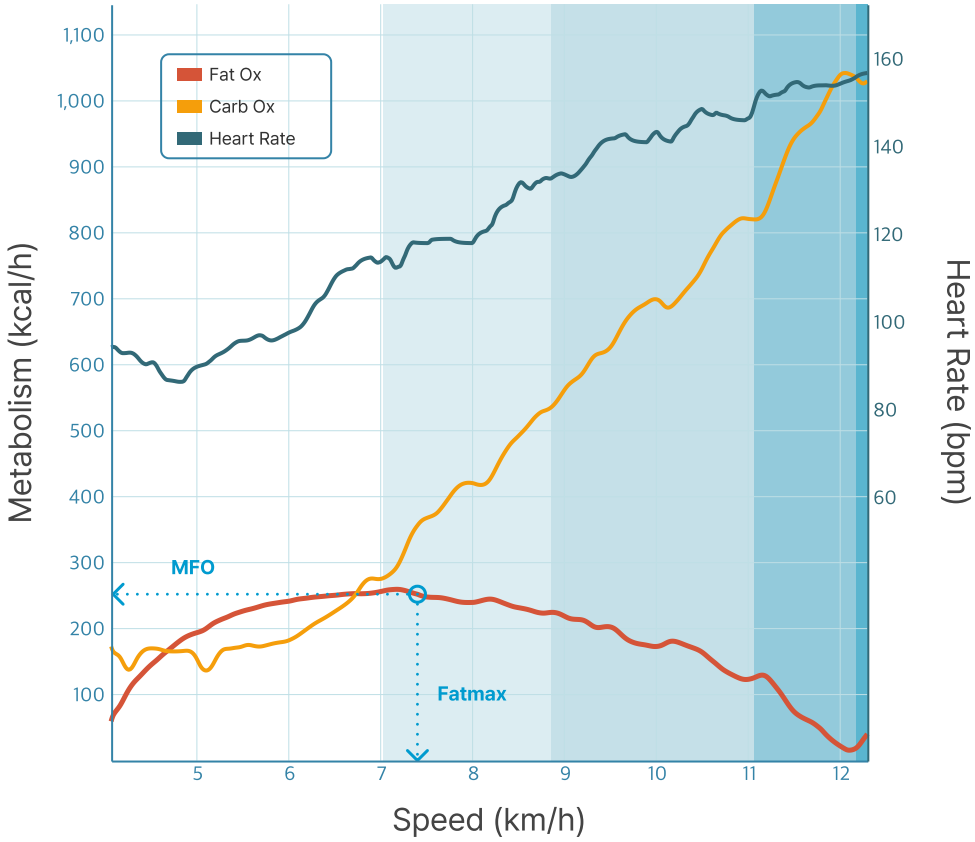
Member Information

Name	Gender	Height	Weight	Age	Phone
John Kim	M	5ft 10in	161lbs	34yrs	010-****-1922

Fat Metabolism Type Analysis

The way individuals metabolize fat and carbohydrates varies significantly. By understanding your own metabolic type, you can establish an appropriate exercise strategy.

My Fat & Carbohydrate Metabolism Graph



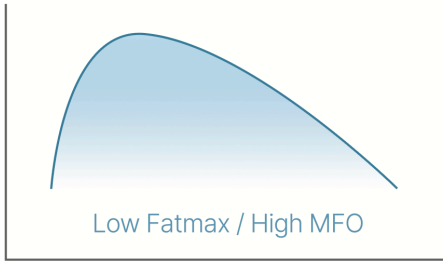
My Fat Metabolism Type

Low Fatmax

(Maximum Fat Oxidation Point)

High MFO

(Maximum Fat Oxidation Rate)



Characteristics

You have high fat oxidation efficiency at low intensities, but reliance on anaerobic metabolism increases rapidly as intensity rises. Training can help extend your fat utilization range into higher intensity zones.

Exercise Strategy

Strengthen your fat oxidation capacity by maintaining low-intensity exercise, such as light jogging, for over an hour. Consistent long-duration exercise is particularly effective for improving muscular endurance and building a stable metabolic base.

Fat Metabolism Analysis (Fatmax)

Fatmax is the exercise intensity at which fat oxidation is maximized, meaning the body primarily uses fat as its energy source. At this intensity—commonly associated with slow jogging—the absolute amount of fat burned can be higher than during high-intensity exercise, making it effective for reducing body fat.

Because Fatmax occurs at a relatively low intensity, it places less strain on the body, leads to less fatigue, and allows for longer exercise duration. Since Fatmax intensity and heart rate vary widely between individuals, identifying your personal Fatmax is the first step in designing effective fat-loss and fitness programs.

Heart Rate at Fatmax

119 bpm — Heart Rate

This is the heart rate at the point of maximum fat usage. Running at this heart rate maximizes fat utilization, making it most effective for reducing body fat and improving base endurance.

Running Pace at Fatmax

8'10" /km — Outdoor Running Pace

7.4 km/h — Treadmill Speed

This is the speed at the point of maximum fat usage. Running at this speed maximizes fat utilization, making it most effective for reducing body fat and improving base endurance.

Maximal Fat Metabolic Rate

28.0 g/h — Fat Oxidation

This represents the amount of fat oxidized per minute at the Fatmax point. Higher values indicate superior fat metabolism capacity.

Energy Metabolism by Fuel

Fatmax This shows the calories and energy sources consumed when exercising at Fatmax intensity for 1 hour.

Active Recovery Ability (RZ1)

RZ1 (Recovery Zone 1) is the exercise intensity zone where metabolic recovery occurs most efficiently. At this point, fat oxidation works dominantly, while the proportion of carbohydrate oxidation remains low.

Because metabolism and blood flow are maintained more actively than when resting, promoting recovery, RZ1 is called the Metabolic Recovery or Active Recovery zone. Since this intensity and heart rate differ for each individual, knowing your own RZ1 is the starting point for an exercise plan aimed at fitness improvement and recovery.

RZ1 Heart Rate

113 bpm — Heart Rate

This is the heart rate where metabolic recovery occurs best. When running at this point, carbohydrate metabolic rate is low relative to fat metabolic rate, allowing you to effectively promote recovery.

RZ1 Speed

9'30" /km — Outdoor Running Pace

6.3 km/h — Treadmill Speed

This is the speed where metabolic recovery occurs best. Carbohydrate metabolic rate is low relative to fat metabolic rate, making it most effective for promoting recovery.

Metabolic Recovery Efficiency

54.3 % — Recovery Efficiency

This indicates the proportion of fat in total energy consumption at the RZ1 point; a higher ratio is more advantageous for recovery.

Energy Metabolism by Fuel

This shows the calories and energy sources consumed when exercising at RZ1 intensity for 1 hour.

True Zone Analysis

Detailed exercise zones have been analyzed based on the diagnostic results. Refer to the effects of each exercise zone to design an exercise strategy that fits your goals.

My Exercise Zones

Zone 2 Analysis

All Exercise Zones

Zone	Heart Rate (bpm)
Zone 1	- 118
Zone 2	118 - 140
Zone 3	140 - 154
Zone 4	154 - 161
Zone 5	161 -

Zone-Specific Exercise Effects

Zone	Intensity		Exercise Effects
Zone 1	LOW	• Light intensity • Natural conversation possible	**Building Aerobic Base** - Increases capillary density and the number and size of mitochondria. **Improving Fat Metabolism Efficiency** - Paves the way for the body to use fat as energy, creating a 'fat-burning body type'. **Fast Recovery** - Removes metabolic waste accumulated after high-intensity training and lowers physical fatigue, serving as a 'recovery run'.
Zone 2			
Zone 3	MID	• Breath is slightly short • Conversation possible but uncomfortable	**Strengthening Cardio Endurance** - Improves the heart's stroke volume and oxygen transport ability. **Pace Maintenance Ability** - Strengthens 'muscular endurance' to maintain a target pace for a long time in long-distance running or cycling.
Zone 4	HIGH	• Sweating a lot • Conversation difficult	**VO2max (Maximal Oxygen Uptake) Improvement** - Draws out the maximum capacity for the body to utilize oxygen. **Speed and Power Enhancement** - Increases the contraction speed and strength of muscle fibers to enable explosive performance. **EPOC(Excess Post-exercise Oxygen Consumption) Effect** - Causes the body to continue consuming high calories for a certain period after exercise to recover.
Zone 5			

What Exercise Strategy Suits Me?

We suggest optimal exercise strategies based on your test results.
Refer to the content below to choose the exercise method that suits you now.

Metabolic Recovery Jogging

Metabolic Recovery Jogging is a low-intensity workout where the proportion of fat usage is highest. With very little carbohydrate involvement, physical stress is low, helping with recovery and improving fat metabolism ability while maintaining stable fat metabolism.

6.3 km/h
≈ 9'30"

113 bpm
48min

Recommended for those

- who find high-intensity exercise burdensome due to fatigue
- who want to cultivate fat metabolism ability
- who want to build exercise habits without joint strain

Slow Jogging

Slow jogging uses the most fat while actively utilizing carbohydrates, helping effectively remove excess energy and reduce body fat.

7.4 km/h
≈ 8'10"

119 bpm
40min

Recommended for those

- whose main goal is body fat reduction
- who want to build an aerobic base
- who want to improve cardiovascular health

Interval Running

Interval running is high-intensity training that maximizes the body's oxygen utilization by alternating high-intensity exercise and low-intensity recovery. It explosively uses carbohydrates as the main energy source and helps improve cardiorespiratory capacity and basal metabolic rate in a short time.

6.3 km/h
≈ 9'30"
113 bpm±5
3 min

12.3 km/h
≈ 4'50"
162 bpm±5
4 min

Repeat the above set **× 4 times**

Recommended for those

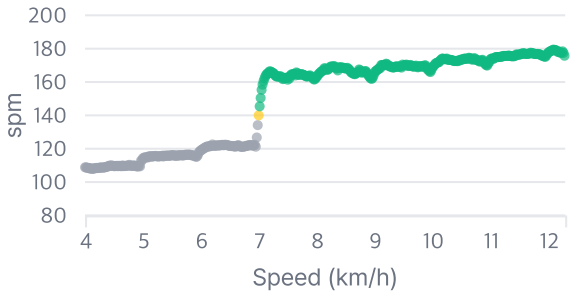
- who want to increase VO2max to take performance to the next level
- who want high calorie burn in a short time (20~30 mins)
- who want to break from monotonous exercise and feel strong engagement

Running Form Analysis

You can check your running form through various measured movement metrics. Because individual variation in posture metrics is large, deviating from the average does not necessarily result in injury.
However, if there is pain and discomfort, it is good to adjust by referring to the trends of each metric.

Walking Zone Below Average Average Range Above Average

Cadence

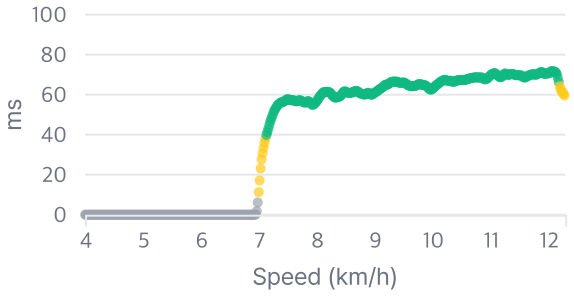


The number of steps per minute. Higher cadence indicates greater use of posterior leg muscles and ankles, while lower cadence indicates greater use of anterior muscles, knees, and hip joints.

Stride Length

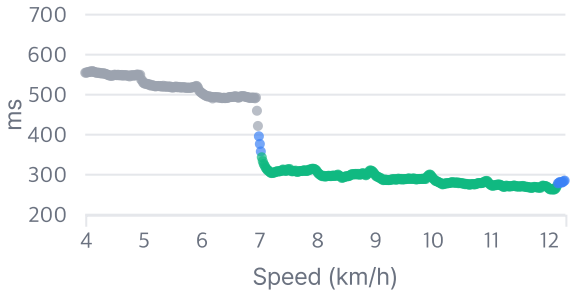
If stride is large, propulsion is high, but the impact also increases. If stride is short, it is advantageous for shock absorption, but disadvantageous for generating speed.

Flight Time



If flight time is long, it becomes a bouncing pattern (jumping up). If flight time is short, it gives a feeling of running stably close to the ground.

Ground Contact Time



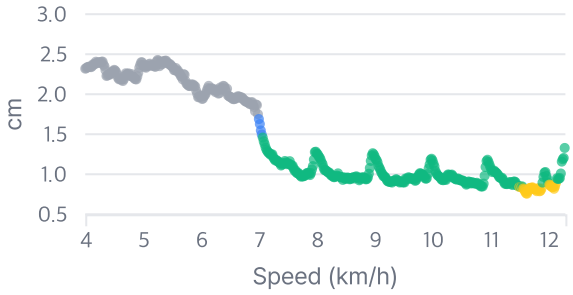
If contact time is long, unnecessary friction may be generated. If contact time is short, it is advantageous for increasing propulsion.

Walking Zone Below Average Average Range Above Average

Vertical Oscillation

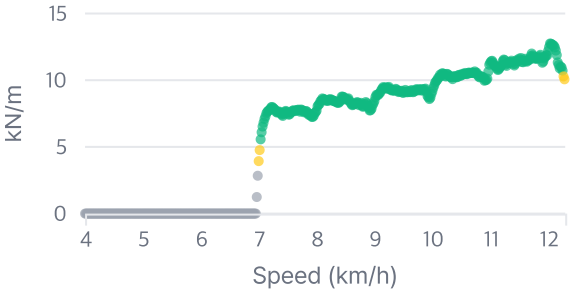
If vertical oscillation is high, the up-and-down shaking increases, leading to increased energy consumption. If it is low, a more efficient, forward-focused movement pattern appears.

Horizontal Oscillation



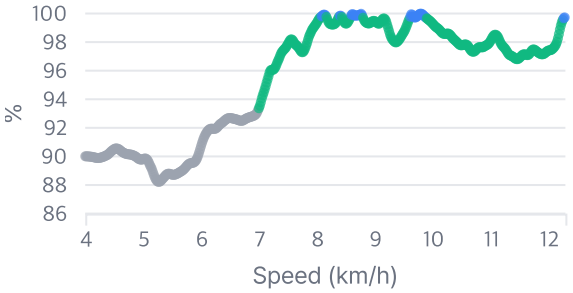
If horizontal oscillation is high, energy is dispersed through unnecessary movement, which can reduce running efficiency.

Stiffness



High stiffness is advantageous for fast running, but it increases the load on the lower body. Low stiffness provides soft shock absorption, but propulsion may be weaker.

Left-Right Balance



The greater the imbalance, the greater the load placed on one leg, which can lead to injury.

Frequently Asked Questions

Is it okay to take the metabolic test only once?

We recommend taking it periodically, about every 30 days. As body composition and exercise capacity change, your assessment results will also change. We recommend a 4-week interval if your exercise volume is high, and a 6-week interval if it is low.

Do the results vary depending on my condition?

Yes, results can vary depending on nutrition, sleep, and accumulated fatigue. Therefore, we recommend getting assessed under your normal, typical condition.

Which is more accurate in the results: Speed or Heart Rate?

Heart Rate is accurate. Speed tends to fluctuate significantly depending on the treadmill type and muscular fatigue. Therefore, please exercise based on the heart rate criteria calculated in the report.

I exercise a lot, but my fat metabolism ability came out low.

If you primarily do strength training or medium/high-intensity exercise, your body uses carbohydrates as its main energy source, so your fat metabolism ability may be relatively low. You can help your body utilize fat better through low-intensity exercise that activates fat metabolism.

Do I have to choose only one between Low-Intensity and High-Intensity exercise?

No. It is best to combine them according to your personal tendency and preference. The method most recommended by experts is to combine the two exercises in an 8:2 ratio (80% Low / 20% High).

Which is better for dieting: Slow Jogging or Interval Running?

Comparative studies have shown that they have almost the same level of effect. Slow jogging has the advantage of being sustainable due to low burden, while interval running has the advantage of seeing high effects in a relatively short time.

Is it okay if my posture (form) is outside the average range?

Yes, it is okay. Posture has large individual variations depending on body type and running habits, so a specific value is not the "correct answer". However, if you feel pain or discomfort, correcting it to fit the average range can be helpful.

Is there a separate dedicated app?

Yes, there is. To utilize the diagnostic results 200%, we recommend using the [Neumafit App]. You can receive systematic exercise feedback, including management of Neumafit assessment results and analysis of your regular exercise effects.