

# Body Cardio

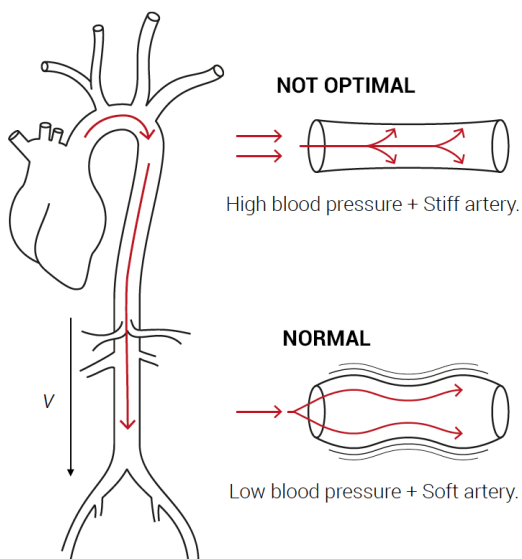
## PULSE WAVE VELOCITY



*For the first time, the most powerful stand-alone heart health metric can be easily and accurately measured at home via the Withings Body Cardio scale to assess overall cardiovascular health.*

Withings Body Cardio is revolutionary because it democratizes a measurement – Pulse Wave Velocity – usually restricted to a clinical setting. Body Cardio is the first scale that allows users to quickly measure Pulse Wave Velocity at home, and follow their trends over time. It has the potential to completely change the way we detect cardiovascular disease and prevent cardiovascular events.

### What is Pulse Wave Velocity?



Each time the heart beats it induces a wave along the aorta and arterial tree.

Pulse Wave Velocity is the propagation speed of this wave along the arteries: it is correlated with blood pressure level and arterial stiffness.

Diseases such as diabetes, cholesterol or high blood pressure induce stiff arteries, which lead to an elevated Pulse Wave Velocity. Medical research has demonstrated a strong correlation between the stiffness of the arteries and the risk of a cardiovascular incident. Stiffer arteries indicate a greater risk for high blood pressure, stroke or heart attack.

## How it works?

Body Cardio measures Pulse Wave Velocity based on the time it takes for blood wave to flow from the aorta to blood vessels in the feet. Thanks to its sensors, Body Cardio detects slight weight variations on the scale caused by heart beats and senses the moment when blood is ejected from the aorta and the moment when it reaches blood vessels in the feet. The time between these two events is then compared to the user's height, and Body Cardio can compute the Pulse Wave Velocity while you step on the scale in approximately 15 seconds.

Paired with Body Cardio, the Health Mate app interprets measurements and trends based on age, and tailors recommendations to improve cardiovascular health accordingly.

## The good news: Pulse Wave Velocity can be improved over time to prevent cardiovascular diseases

Once Pulse Wave Velocity is assessed, it can be improved via healthy lifestyle changes including:

- Losing weight if you are overweight or obese
- Increase some kinds of foods: Mediterranean diet, dark chocolate, green tea...
- Engaging in physical exercise
- Limiting salt and alcohol
- Managing stress to help avoid elevated heart rate and blood pressure readings that can damage arteries over the long term.

Despite its medical value in assessing cardiovascular health, Pulse Wave Velocity measurement is not widespread because:

- Traditional measurement takes at least 20 minutes
- It required a specific device called a sphygmomanometer
- A well-trained operator was needed to perform the measurement.

## Why Pulse Wave Velocity provides a more complete view of heart health than other measurements?

Heart rate is the frequency that the heart beats, and is an indicator of physical fitness. The more active you are, the lower your heart rate.

Blood pressure measures the pressure of blood on the arterial wall. It is one of the major cardiovascular risk factors, and can lead to an increased risk of stroke, heart failure, and kidney failure.

While heart rate and blood pressure measurements are useful in evaluating cardiovascular health, they do not give a complete picture of health. Pulse Wave Velocity, on the other hand, is regarded as an accurate stand-alone measurement of heart health.

### Disclaimer

*These statements have not been evaluated by the Food and Drug Administration. This device is not intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease. Do not attempt self-diagnosis and always consult with a physician before starting any treatment.*