## **Pulscore**

Every effort counts.



#### What is Pulscore?

The word *Pulscore* is the combination of the words *pulse* and *score*. You earn Pulscore every time your heart rate increases – the higher heart rate, the faster you earn Pulscore. Those who keep Pulscore 50 or above over time gain better health and longer life expectancy.

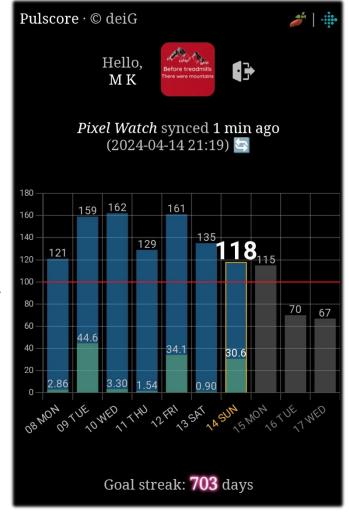
Pulscore is based on the only thing that reflects the intensity of your activity: your heart rate. In order to use Pulscore, everything you need to do is to measure your heart rate continuously.

If the score is 50 or higher, you're active enough. If not, you could reduce your health risk by becoming more physically active.

#### Can I have Pulscore?

Currently, Pulscore has not been open to the public yet. However, you can apply for access by sending an email to <a href="mailto:pulscore@asc.hk">pulscore@asc.hk</a> if you own a Fitbit or Google fitness tracker or smart watch. And you will be directed to the Pulscore

website/app and asked to login with your Fitbit account.



## Why Pulscore?

Pulscore was inspired by the idea of a study from the Cardiac Exercise Research Group at the Norwegian University of Science and Technology, and empowered by our unique and proprietary algorithm backed by mathematics and science.

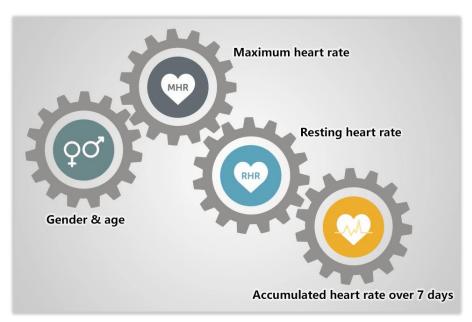
More than five million deaths worldwide could have been prevented if people were more physically active. Pulscore could contribute to prevent cardiovascular disease and premature death by encouraging people to be more active.

Major benefits of keeping your Pulscore 50 or higher: [1] [2] [3]

- ✓ Considerably lower risk of mortality and longer life expectancy.
- ✓ Significantly lower risk of developing dementia, heart diseases, stroke, type 2 diabetes, and other diseases.
- ✓ Improved cardiorespiratory fitness and overall health.
- ✓ More effective weight control.

#### How is Pulscore calculated?

Pulscore considers your age, gender, resting heart rate and maximum heart rate. In other words. Pulscore is not based on the number of steps you walk or how many minutes of physical activity you perform each day. Those measurements do not consider the intensity of activity. Therefore. the Pulscore is a more accurate and attractive activity standard to tell you if you exercise enough.



It tracks every single piece of the heart rate data from your fitness tracker (or smart watch). Every single elevated beat-per-minute counts and pays off.

## **How to earn Pulscore?**

It doesn't matter what type of activity you do to earn Pulscore – you could walk, run, cycle, row, swim, go skiing, or even do housework. All that matters is how high your heart rate is during the activity. As an example, over a 7-day period, you need only two sessions totaling one and a half hours of exercise to reach 50 Pulscore if the intensity is at least 80% of your maximum heart rate. On the other hand, two hours of moderate intensity activity will give you approximately 25 Pulscore.

The better your fitness, the more physical activity is needed to achieve the goal. In other words, Pulscore adjusts to your progress. If you are untrained and out of shape, you could earn your 50 Pulscore just by going for short walks regularly throughout the week, as that will raise your heart rate. If you are in shape and well trained, you will need to do more.

Keep in mind that no one has to be active every single day to achieve the goal as the score is basically on a rolling 7-day basis.

# What goal shall I set?

Here are a few criteria while you set your goal of Pulscore:

- Keeping Pulscore 50+ is the recommended goal for the general public.
- o If you live (or wish to live) a more active lifestyle, you may consider raising the goal to 100.
- o If you get used to sedentariness but are willing to change, Pulscore 25 is a good point to start.
- Pulscore 300+ is not recommended as it could be a sign of overtraining, except if you are a professional athlete following a training plan under expert guidance.

# **Any limitations?**

Currently Pulscore has some known limitations:

- ▼ Strength training might produce less Pulscore than expected, as the heart rate isn't usually kept elevated for long during strength training in comparison with aerobics, because of the difference in source of energy.
- ▼ The maximum heart rate is one of the factors in Pulscore calculation. Pulscore uses proprietary algorithms to estimate your maximum heart rate. However, the actual maximum heart rate varies even among individuals of the same age and gender. Those with higher actual maximum heart rates than estimated tend to earn Pulscore a bit easier, and vice versa.
- ▼ The accuracy of your heart rate monitor affects the outcome of Pulscore although, overall, Fitbit and Google trackers and smart watches have good heart rate accuracy, especially Google smart watches.

