

I do not know how to receive the measurement results of the BioRICS Mindstretch app

In order to be able to download the new Mindstretch version on your smartphone, you must first receive an invitation link from your employer via email. Via this link, you can create a password, then download the "Mindstretch by BioRICS" app via the App Store or Google Play and, at first login, connect the app with your Fitbit app. You will be guided through this process via the app. Please keep your Fitbit credentials at hand because at some point, you will have to login on the Fitbit platform. These credentials do not have to be identical to the BioRICS ones. Once this connection is made, you will receive your latest measurement results each time you open the BioRICS Mindstretch app and press the sync circle at the right top of the Daily graph screen. The app automatically updates the data every hour.

Which external factors impact the measurement results?

In some specific situations, the system is unable to clearly distinguish the mental component. These are:

- environmental temperature change e.g. lying in the sun
- change of height e.g. being in the mountains. Heart rate increase is due to reduced oxygen in the air
- use of medication which can cause fluctuations in heart rate
- eating/drinking: energy used for digestion
- doing a physical activity that does not require many/any steps such as working in the garden (especially the hands are moving) or cycling (legs are moving).

How does BioRICS Mindstretch differ from other stress measurement apps or devices?

Most stress measurement apps are based on the measurement of Heart Rate Variability (HRV).

Literature studies have made clear that there is no strong correlation between HRV and the stress component, especially when someone is moving or performing a physical activity. BioRICS Mindstretch uses a different scientific method as it measures the energy used by the brain for mental activities (of which stress can be responsible for higher mental load). The BioRICS method has been validated in several peer reviewed studies.

is a daily balance score under 50% negative?

No, a balance score which is lower than 50% just tells you that you consumed more mental energy than what you have regained. This result is not necessarily negative or bad as some days are just more intense than others. More important is to keep track of the monthly overview. It is recommended to have a least 5 'green' days in one month.

Is an orange peak of 100% bad or wrong?

No, it can be perfectly OK to have such a high percentage of energy use when you are in a specific situation, i.e. when having to deal with several urgent tasks that require your attention at the same moment or when you are in a frightening situation. The height of the peak will depend on the kind of person you are as every person is unique and will respond in a different way.

I noticed a high peak of energy use although I felt relaxed

The user's perception is not always identical to what the body experiences. A peak of energy use can be due to a positive or a negative event or emotion. High energy use peaks occur for example when socializing with friends, watching an exciting movie or cooking a dinner. These events and emotions, even when positive, do require energy from body and mind and therefore do not necessarily create recovery. Keep in mind that each package of energy can only be used once throughout the day.

I have a normal heart rate which is rather high. Will this influence the monitoring results?

BioRICS Mindstretch uses individualised algorithms, which means that the system will continuously adapt to your body and refine its information. As it will have to get to know you, the monitoring results of the first 2-3 days might not be 100% accurate yet. After day 3, you can fully rely on the results shown.

What do the morning scores of sleep and balance tell me when I get up in the morning?

The balance score you see when you get up in the morning tells you how much energy was used/recovered during the night whilst the sleep score indicated what the quality of your sleep was. Even if your night's graph was fully green, without orange peaks, this does not always mean that your night's recovery was perfect. The quality of your sleep has an important influence on the level of your overall recovery. Different combinations are possible:

- your balance score is high but your sleep score is low: your sleep quality was not good which is reflected in a low sleep score. However, as you did not use any energy overnight (no orange peaks), your body was still able to catch good recovery levels and you start the day with a high balance score.
- Your balance score is low and your sleep score is also low: your sleep quality was not good and on top of this, you were not able to recover well enough. Most probably, your night's overview will also show orange peaks, reason why your balance score is low. You will be more tired at the start of your day.
- Your balance score is high and your sleep score is also high: this is the ideal scenario. You had a good quality of sleep AND high recovery levels which boosted your balance score. You are fit for a perfect day!

My night was orange but I have the feeling I slept well. Can you explain?

Maybe you have done some intense sports the previous day. If this is the case, your body will need time to recover physically. Consequently, this can have an impact on your mental recovery the following night. Even if you have the feeling that you slept well, your body will still be busy with its physical recovery. Because of this 'compensation behavior', your daily graph will show more orange because the mental tasks will require more effort.

An orange night may also be caused by external factors such as fever or alcohol use. These might not have a mental cause but result in higher energy use overall due to which the night's recovery will be postponed.

What do I have to do when my daily balance is 0%?

Many users see the balance percentage as an equivalent for the battery percentage. This is true only for the long term. If the daily balance score is 0%, this means that only for that day, mental energy use has been very high compared to the recovery of that day. The body has enough reserves though to handle this situation unless this pattern persists over a longer period of time. In this latter case, the body is unable to recover and finally a health problem will occur. When daily scores remain low, one should consider contacting a professional coach or caregiver who can offer the necessary support to bring the balance scores back to normal.