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**C O A C H I N G & N U T R I T I O N**

**B O R N F O R P R O G R E S S**

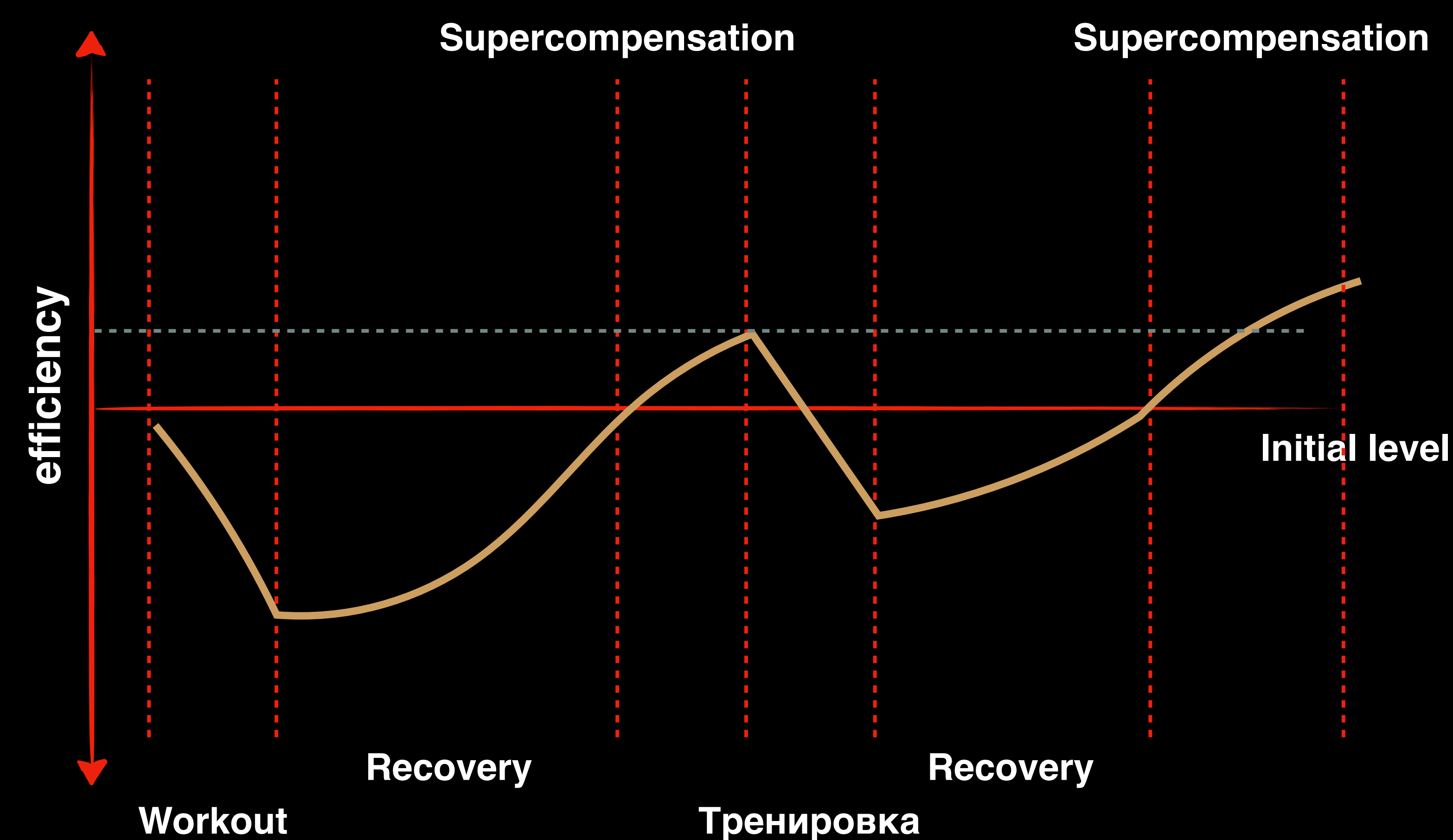
**OVERTRAINING**

 **blackfox\_nutrition**

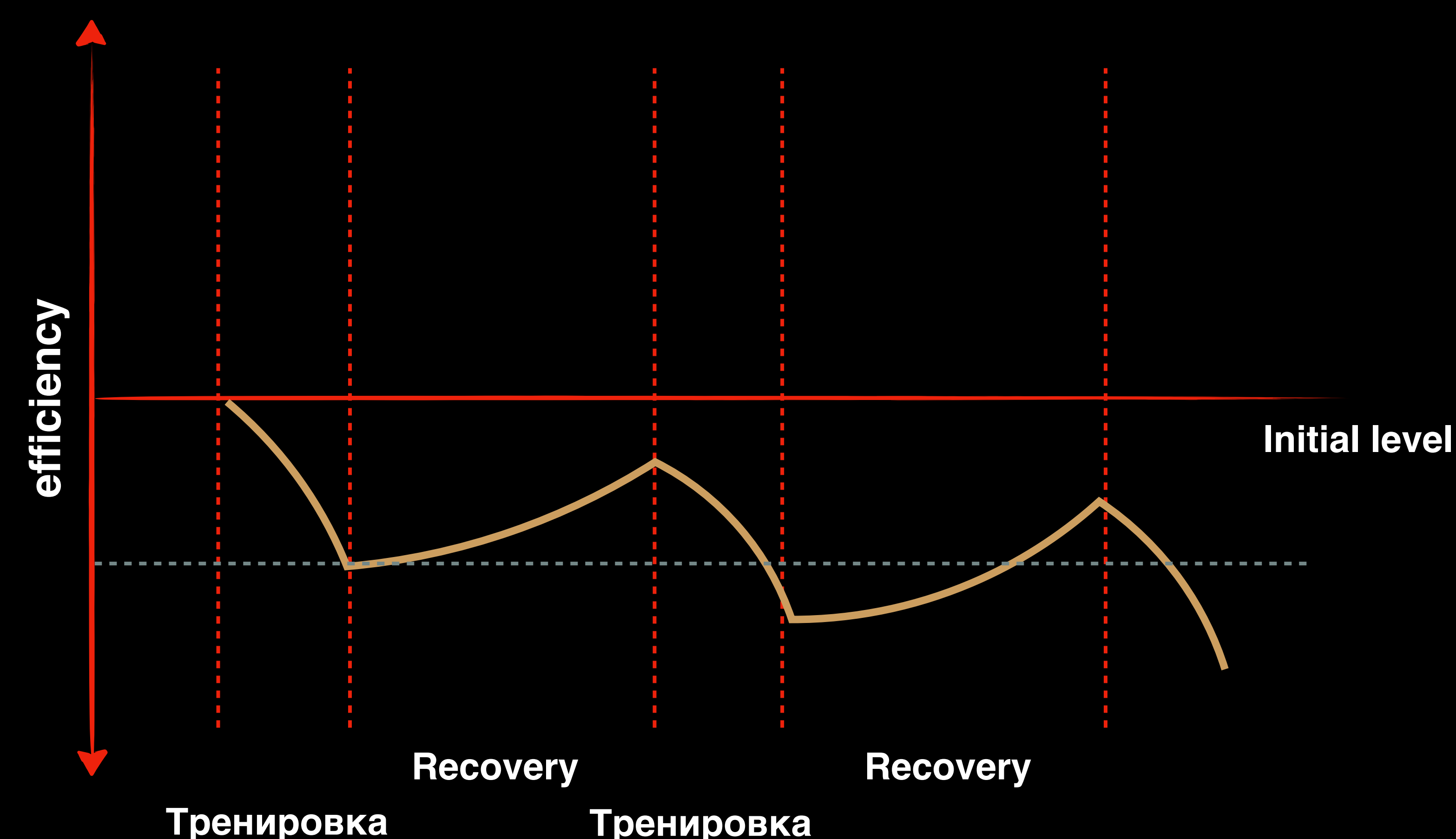
### OVERTRAINING

Improving performance is achieved through training, which upsets some balance in the body. With a strong balance shift towards loads, overtraining occurs!

Overtraining is a decrease in performance resulting from an imbalance between exercise and rest! To restore this balance, the body needs a certain period of rest.



If the volume and intensity of the training are correct, and the rest period is long enough, the body not only recovers, but also exceeds its previous capabilities. This phenomenon is called supercompensation.

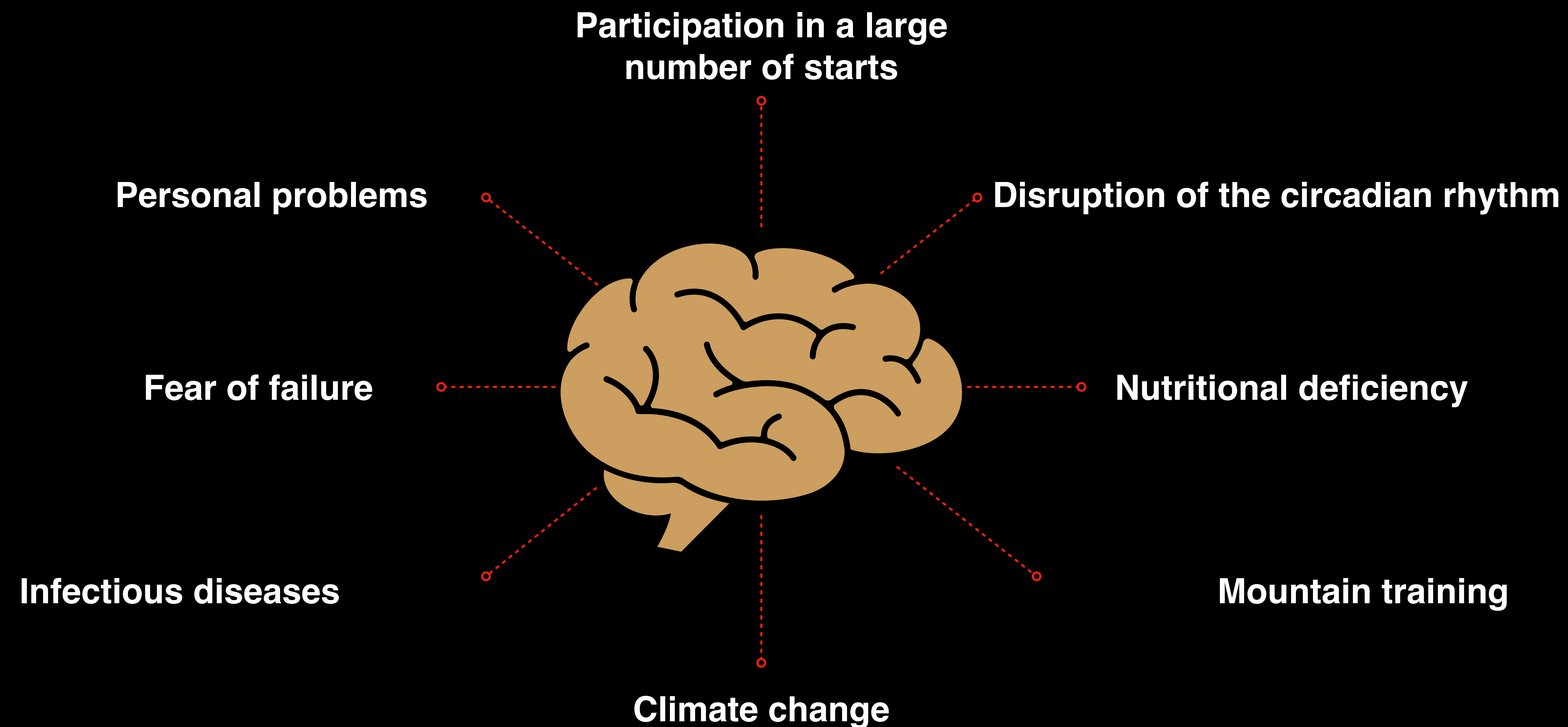


Recovery is a necessary part of the training process. Unfortunately, many athletes often train on a “more is better” basis and neglect adequate rest and recovery. In this case, the danger of overtraining increases dramatically. With a prolonged period of underrecovery, overtraining inevitably occurs.



### FACTORS

The hormonal and nervous systems play an important role in the recovery process. Both systems are controlled and coordinated by a center in the brain called the hypothalamus. The main task of the hypothalamus is to control the body's response to various external stimuli. An irritant can be both physical activity (for example, an intense training session) and psychological stress (problems at home or at work).



The hypothalamus can cope with certain physical and psychological pressure, however, when the permissible limits are exceeded, the work of the hormonal and nervous systems is disrupted, which happens when overtraining. If the athlete does not take these factors into account and continues to train hard despite the reduced physical capabilities, he falls into a "tailspin", which ultimately leads to overtraining

### MAIN REASONS

#### TRAINING ERRORS

It is not difficult to make a mistake in the training process, especially in CrossFit. Some of these pitfalls include building up training loads quickly, high intensity when doing long workouts, high volume when doing interval training, and resuming high intensity training early after illness or injury.

#### INTENSIVE COMPETITION SCHEDULE

Too many starts in a short amount of time can lead to overtraining, as well as poor sleep before a competition combined with an inappropriate training program.

#### LIFESTYLE

An athlete's lifestyle affects his physical condition. The occurrence of overtraining is facilitated by irregular daily routine (for example, work at night), lack of sleep. Smoking and alcohol abuse are harmful to the training process.

#### SOCIAL ENVIRONMENT

The social life of an athlete influences his training. Intense family situations and conflicts with friends are stressful for a person. A person experiencing overtraining at work, school or college is at a high risk of developing symptoms of overtraining.

#### DISEASES

Infectious diseases limit the training impact. Chronic inflammation (such as tonsillitis, laryngitis, or sinusitis) weakens the body's defenses. A person with a medical condition cannot expect to do their workout routinely. Even dental problems negatively affect the training process.



### TYPES

#### SYMPATHIC

- Poor recovery of heart rate after exercise
- High resting heart rate
- Rapid onset of fatigue
- Decreased appetite and weight loss
- Poor athletic performance
- Severe muscle soreness
- Emotional instability
- Restless sleep
- Nervousness
- Sense of anxiety
- Sweating
- Decreased interest in training
- Increased risk of injury
- Increased risk of infection

At the first symptoms of sympathetic overtraining, the volume and intensity of training should be sharply and immediately reduced. If action is taken quickly, improvement can be achieved in a few weeks.

This type of overtraining is common among hard-training athletes. High-intensity workouts performed most often lead to sympathetic overtraining. After such training, a recovery period of about 3 days is required. The number of intense interval training sessions per week (including competitions) should not exceed two.

#### PARASYMPATHIC

- Constant body weight and normal appetite
- Normal recovery of heart rate after exercise is often observed.
- Low blood pressure
- Low resting heart rate
- Depression
- Fatigue
- Drowsiness
- Lethargy
- Hypoglycemia
- Increased interest in training

Parasympathetic overtraining is common in endurance athletes who do a lot of training work. In the case of parasympathetic overtraining, recovery can take weeks or even months.

### STAGES

#### OVERLOAD

Overloading is usually a normal part of increasing intensity during training when you incorporate new training tools and methods or unusual combinations. It forces you to adapt to new conditions. If the overload is significant, but at the same time within manageable limits, it will result in a supercompensation phase in the preparation process.

This stage is characterized by short-term fatigue, but overall you may feel good and perform well. Often, at this stage, you may have the feeling that you can do any training volume, but here you need to be careful not to give in to the feeling that the training volume is low or I will do a couple of extra approaches / complexes!

#### OVEREXERTION

Usually, feelings of low or underestimating the load tend to lead you to the "overexertion" stage, in which you begin to train at an unusually high level of load for two or more weeks. After such training, your results will begin to decline noticeably. The state of fatigue usually lasts longer than during the "overload" stage. At this moment, a few more days of rest are enough to turn the situation for the better. But it seems to you that in order to improve results, you need not rest, but train even more and more intensely.

#### TOTAL OVER-TRAINING

Often faced with the symptoms of overtraining, a person is at a loss! He starts training even harder, sacrificing rest time to get back to his old state! It is extremely rare to find someone who prefers to get more rest when things are not going well and the results are stagnant! At this stage, fatigue will become chronic, it constantly haunts you. You feel tired already when you wake up. This feeling stays with you all day: at work, study, rest. Sleep problems may occur.

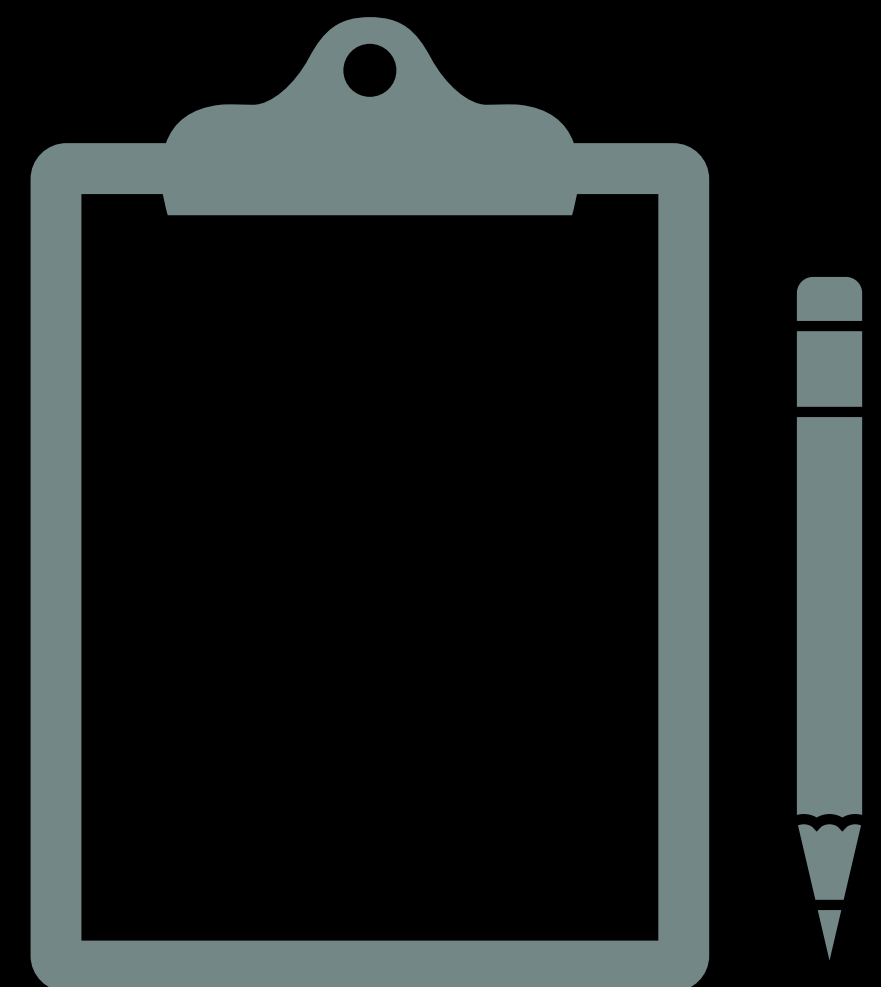


### Heart rate and overtraining



**A slight increase in resting heart rate by 5-6 beats may be an indicator of insufficient recovery. Thus, by regularly measuring your morning heart rate, you can detect overtraining at an early stage of its development. It is even more likely that you may be overtraining by measuring your heart rate while you sleep.**

**With overtraining, the athlete notes that it is more difficult to maintain a normal training pace during training, while the heart rate is increased. In the case of sympathetic overtraining, there may be a slow decrease in heart rate after exercise.**



**A training diary can be a great help in recognizing early signs of overtraining. Daily records indicating increased morning heart rate, changes in weight, or poor training performance, with the same or increased volume and / or intensity of exercise, require an immediate re-evaluation of the training program.**

**To begin with, you need to know your "normal" heart rate at rest, and for this you will have to measure your heart rate every morning after waking up and enter it in a diary for at least two weeks.**

**After two weeks, you will be able to determine an average value from which to start. If the resting heart rate fluctuates in the range of 3-4 beats per minute, then there is no cause for concern. Alert should be an increase in heart rate by 7-10 beats per minute from your average values.**



### ACTIONS FOR OVER-TRAINING

- Stop your workouts completely for 4-7 days.
- After several days of complete rest from physical activity, perform only slow jogging 3-4 km for 7-10 days, reduce the intensity of the exercise; that is, eliminate interval training; the intensity for other workouts should not exceed 75% of the maximum heart rate.
- Enjoy outdoor activities in a relaxed environment. This could be, for example, a walk in the woods. Passive rest is not recommended because a complete ban on physical activity usually leads to even more discomfort.
- Eat regularly and well. Don't skip meals! Monitor the intake of vitamins and minerals. Overtraining can reduce levels of zinc, calcium, vitamins B and C. There are different approaches, opinions and theories about taking vitamins, but a number of sports medicine experts recommend supplementing these vitamins and minerals for faster recovery.
- Take a relaxing bath, sign up for a massage, visit the sauna.
- Observe a sleep and wake schedule. Try to sleep at least 8-9 hours, fall asleep and wake up at the same time, even on weekends.
- Watch movies and read books (no, not about running!) That fill you with positive emotions and make you laugh.
- Meditate. Start with 5-10 minutes a day in silence, without being distracted by your phone or computer; listen to relaxing music and do breathing exercises.
- Perhaps the hardest part is trying to isolate yourself from stress.
- And the simplest thing - do not read motivational posters of the following nature: "I will not stop when I am tired ... I will stop when I am finished", "Pain is a weakness leaving the body" and the like. Of course, such "motivation" can help when you are too lazy to go for a run in the rain, but if you exercise regularly, it can lead to unnecessary injury and mental exhaustion.
- When all signs of overtraining disappear, you can resume training activity, at the beginning gradually increasing the volume, and then the intensity. An athlete can only start participating in competitions when he can perform intense training without problems.





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