

Hormones & Peptides

What are peptides?

These are natural or synthetic substances that consist of amino acids. Everyone can choose their own variation of compounds in order to regulate this or that function of the organism. Most often, peptides in bodybuilding are used to build muscle and get rid of excess fat deposits.

Peptides in powerlifting are an excellent alternative to steroids. Such a substance is rather difficult to detect during doping controls at competitions, because the half-life is rather small here. Peptides are excreted from the body quickly and easily. These additives can significantly increase sports performance.

Properties of peptides

Peptides can be purchased freely, without fear of criminal punishment. In addition, the cycle of taking these drugs is quite affordable, compared with the course of anabolic steroids.

After entering the body, peptides provoke the production of hormones that are responsible for certain body functions. Hormones begin to be produced immediately after the administration of the drug, while at this time the maximum effect. Representatives of one of the varieties of peptides carry out the release of hormones into the blood, not at a time, but by strengthening the peak phases of the body's activity.

As you can see, the importance of peptides for athletes taking part in competitions is quite important. This is inexpensive, and it is impossible to track the reception for doping control. In addition, peptides give tremendous results when the body reaches a natural maximum.

Basically, these drugs are taken by those who engage in "iron" sports. Powerlifting and bodybuilding belong to this category. Peptides, as well as dosages of these drugs, doctors-specialists select individually for each athlete.

Effect of peptides on the body

1. Peptides initiate cell repair and rejuvenation. With the help of peptides, the decay products are rapidly removed from the body, which means that the life span increases.
2. Complexes with peptides help the body not to succumb to the negative influence of an unfavorable ecological situation. Such complexes compensate for harm from already existing bad habits.
3. Peptides in bodybuilding are significantly accelerated after rehabilitation of diseases and injuries.

Peptides in sports

Peptides are stimulants of the secretion of their own growth hormone. This drug replenishes the deficiency of this hormone, besides it has a powerful anabolic and fat burning effect.

Thanks to this, bodybuilders can achieve unprecedented success. After taking this drug, your own growth

hormone increases by two, or even six times. Everything depends on the individual characteristics of the human body.

Injections of HGHP-6 increase the level of natural growth hormone, and enhance all the effects accompanying this process. Those who take the remedy, recover faster after the load, sleep well and do not suffer from overtraining. In addition, such athletes do not need a strict diet in order to maintain a low percentage of fat.

Peptides accelerate metabolism and increase appetite, which is very important for a set of dry muscle mass. After their intake, the level of cholesterol and sugar in the blood decreases, the body rejuvenates, its resistance to various infections increases.

Working on the relief during bodybuilding sessions, peptides will be an excellent assistant for quick achievement of the result. For weight loss solo, this drug is not taken because it increases appetite. Therefore, it is more appropriate to use it in cases where the goal is dry muscle mass, rather than the usual weight loss.

The GHRP-6 peptide perfectly combines with ordinary sports nutrition, for example, amino acids, GABA , ZMA, BSAA.

Positive effects:

- strength indicators increase;
- muscular musculature grows;
- fat deposits are burnt;
- increased relief;
- immunity increases;
- strengthened bones;
- the liver is protected.

Side effects:

- Sometimes itching is possible at the injection site. This is typical for all peptides in bodybuilding.
- A significant increase in appetite is one of the side effects. So, the first couple of weeks it can interfere with the athlete, but then everything passes. In any case, this is how the experienced users of the drug tell.

How to take peptides

To achieve maximum effect, you should adhere to a daily dose of 1 to 3 µg per 1 kg of body weight. If you enter a lower dosage, then in the body there will be no significant increase in growth hormone. If the doses are excessive, there will be no increase in the secretion of growth hormone.

After the drug is administered subcutaneously, the concentration of growth hormone increases lightning fast - it takes about half an hour. Then within four hours, it decreases to its original value. That's why the interval between injections is appropriate at 4 o'clock.

Dosages can be prescribed only by a doctor, you should not do it yourself. Otherwise, there may be negative

reactions from excessive intake of the drug or its insufficient administration. Peptides in bodybuilding require adherence to diet and exercise. The same goes for the rest.

Benefits of peptides over growth hormones

- Peptides are much cheaper than growth hormone. The price of a similar course is several times lower.
- When taking peptides, you can control the concentration of growth hormone in the blood plasma, in order to achieve the optimal anabolic response.
- At this time, the production and use of peptides is not regulated by law, therefore, they can be legally purchased and ordered online.
- Peptides are characterized by a rapid decay period, so they can not be detected in the body during doping control.
- Preparations based on peptides are easily checked for authenticity - it is enough to pass an analysis for the content of growth hormone (growth hormone) in the blood after taking or injecting the drug.
- Peptides do not cause the atrophy of the endocrine system, testicle, pituitary gland, hypothalamus, as it happens when taking hormonal drugs, and refer to hormonal support preparations.

Currently, peptides are widely used, whose action is aimed at stimulating the secretion of growth hormone.

Hormones and their effect on progress in sports

Where can I get hormones?

There are people who are very much laid out in the hall during classes, but the results of these exercises are not at all visible. What is the reason for this? The first reason is the insufficient secretion of anabolic hormones by the athlete's body, these are special chemicals that are produced by the endocrine glands. It is from these substances that the growth of muscle cells largely depends. How to increase their secretion? Is it possible to control this process at all? It is possible, for this purpose there are special training programs. However, to compose it, you need to know how anabolic hormones work, what exactly in the body stimulates the production of these hormones.

Anabolic hormones by chemical structure are divided into several main categories: polypeptide and steroid. Steroid hormones, such as testosterone, cortisol and estrogen, are synthesized by the adrenal glands, ovaries and seminal glands from cholesterol. All other anabolic hormones belong to polypeptide (or protein). These include insulin, insulin-like growth factor-1 and growth hormone.

For biochemical reactions that take place in the body, homeostasis is important, it is a stable internal environment. Hormones provide support for the stability of homeostasis, they regulate the speed of chemical reactions at the cell level. For example, you can recall the hormonal response of the body to intensive training. During training, the protein that is in the muscles breaks down, and the body reacts to this by an increased rate of secretion of anabolic hormones. These hormones help to replenish muscle protein stores.

It is this hormonal reaction that is the basis for building powerful and strong muscles. Regardless of what you set a goal, you will achieve it much easier if you can learn how to stimulate the formation of some of the major hormones.

Insulin

Insulin is a polypeptide hormone, which is produced by the pancreas. If you eat a large amount of carbohydrates, the glucose level in your blood increases, and the pancreas releases more insulin. It is then required that the cell can let in glucose, because this process is possible only with the participation of insulin.

You can say that insulin - a kind of guard, standing at the entrance. Inside the cell insulin allows you to penetrate only to those substances that are necessary for the cell and can not damage it in any way. Leaving the post, insulin as if "takes the key" - the cell is locked tightly. In fact, insulin is a true master of all trades. Insulin also helps fatty acids and amino acids penetrate into the cell. By letting glucose into the cell, insulin makes it possible to stimulate the synthesis of glycogen. Fatty acids are a synthesis of the body's own fats, which are needed by the organs and joints. Amino acids provide the synthesis of intracellular protein. As a result, insulin can be rightly called the main anabolic hormone.

On the other hand, excess insulin easily makes a person sluggish and fat, over time it can even become sick. Physical inactivity, as well as overweight, as well as a diet that is overloaded with carbohydrates - all this is the most favorable soil for producing insulin in excessively large quantities. If you are just fattening, do not exercise, eat too much carbohydrate, then the cells seem to go crazy and stop listening to insulin. Insulin is the faithful cell guard, inserting his "key into the keyhole" in order to let in the cell very valuable amino acids, fats and glucose, but the "door" does not open - it's just locked inside. In this case, the body increases the production of insulin. Insulin, we recall, stimulates the synthesis of fats. And if insulin is too much,

However, this grief you can easily help. Studies prove that training with weights increases the susceptibility of our body's cells to insulin. The level of insulin in our blood decreases, which means - you do not risk at all to gain excess fat if you exercise regularly.

A growth hormone

Growth hormone is a polypeptide hormone, which is produced by the anterior pituitary gland. This hormonal gland is located directly in our brain. The peculiarity of this growth hormone is that it can cause our body to rebuild the accent from carbohydrate to fat metabolism. As an energy fuel (thanks to GR), our body in this case will begin to use subcutaneous fat. This in itself is not bad, but more important for the bodybuilder is another property of growth hormone - it allows us to increase the growth of our muscle tissues. As a result, the muscles of our body grow, while the fat disappears.

Note that the bodybuilder himself at the expense of training stimulates the secretion of GR in his body. And here science can give quite accurate recommendations. The optimal training scheme for maximizing the secretion of growth hormone can be called this: in the exercise there should be 3-5 sets with a weight that is oriented to 10 repetitions, it is also supposed a one-minute rest between sets. This training scheme is perfect for men and women.

Insulin-like growth factor (IGF-1)

IGF-1 belongs to the category of growth factors that are produced by the liver of our body, as well as some other of its cells. Note that the term "growth factor" is used in this case because some scientists do not agree to refer to IGF-1 as a hormone. In their opinion, hormones are produced by our body on a regular basis, whereas IGF-1 - occasionally, and it is not yet known, for what reasons it is produced. Like growth hormone and insulin, IGF-1 is responsible for stimulating protein synthesis, that is, it works on the growth of muscle mass.

If you need to increase the level of IGF-1, then you need to shorten the rest time between sets, and also train with much smaller scales, but with more repetitions. The body will start to produce more IGF-1, and during the actual training, and in the recovery period after its completion.

Testosterone

Testosterone is a steroid hormone that is produced from cholesterol. First of all, it is produced by male testes, and in small amounts it is also produced by female ovaries. In addition, a little testosterone is

produced by the adrenal glands, both in women and men. The bulk of testosterone that circulates in our blood is blocked by special protein molecules. This is because testosterone is a pretty strong anabolic hormone. If this hormone is in the body too much, it can lead to uncontrolled growth of tissues, as well as in tumors. Unbound (also referred to as "free"), testosterone directly takes part in the synthesis of protein structures within our muscle cells. This eventually makes such cells larger, whereas the muscle becomes stronger. In parallel, the catabolism of our muscle tissues becomes slower.

Outcomes

As it is not difficult to guess, the meaning of training is usually reduced to the hormonal stimulation of our body. If your body does not have hormone secretion, or if it is suppressed for some reason (maybe because of too much stressful training), then you should not count on the result. In this sense, absolutely any training scheme must necessarily correspond to the scientific provisions, not at all deviating from them. In our time, science has introduced into bodybuilding a strict concept - "rest between sets." Previously, athletes believed that the duration of such a holiday - it's a matter of taste. Now the duration of the break between the sets must be measured by the hour. It is rather difficult to get used to this approach. However, the conclusions of the research are undeniable: time is a real factor in the matter of hormonal secretion.

If you are a beginner, or have never previously trained with small (about a minute) pauses between sets, then it is worth taking note of our tips:

- At the initial training should not go to failure - it will eventually cause pain in the muscles, which will be a strong hindrance for you at the next training session.
- Increasing the load is required gradually, but at the same time - constantly. You need to move forward carefully, at a restrained pace, which is best proportioned to your rhythm of life.
- Overtraining should be avoided. Its first signs are insomnia or, on the contrary, drowsiness.
- You need to sleep eight hours a day - this is the minimum.
- During training, before and after it you need to drink more water.
- You need to eat regularly.
- You need to train for no more than one hour (this does not include time for warm-up and hitching).

Remember that training is both work and pleasure. Do not force yourself to do something forcibly yourself: if you feel that you have not rested enough, you need to give yourself some more time to recover.