
Training program about using a trampoline and its impact on some mechanical indicators for players performance in order to cross bar the high jump phase

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Annotation. Jumping on a trampoline – a type of sports activity that has an interesting history of origin. In the official professional sports trampoline was introduced recently. Going on a trampoline are different from other sports. The main difference - a level of training that need a jump on the trampoline. This can be engaged as amateur enthusiasts and professional athletes. Very useful for physiological development, to maintain health and prevent serious diseases are different classes on a trampoline for children. Jumping on a trampoline as training include muscle and improve performance such as endurance, work vestibular apparatus, orientation in space, coordination, sensation of own body

Keywords: sports, trampoline, stamina, jumping, balance, exercises, aerobics, daily workout, children exercise on a trampoline, height, vestibular system, water trampoline.

The relevance of labour has formed today's pace of life. On one side is an urban lifestyle that does not allow to fully develop a person physically. On the other hand is wide branching types of sporting activities. Trampolining is one of the universal methods of health maintenance and methods of improving the high jump, overall endurance and skills of aerial gymnastics.

Primary objectives the introduction and study of the historical development of jumping on a trampoline not only as entertainment but also as a sport. Also important is the study of the positive influence on the human body of training with a trampoline. Separate the principles of the program of training jumps.

The trampoline is jumping with the rotations of the body around the longitudinal and the lumbar axis, the gymnasts perform acrobatic stunts Bouncing on the trampoline [15].

The term "trampoline" comes from the Italian word "battuta", which means "strike". Although the first mention of the first models of trampoline from residents of the North who made something similar from the skins of the walrus. Jump on this building was a favorite pastime of the locals. Hard to imagine, but the prudish British also liked to have fun like that, they threw the children into the blankets. Jumping on the trampoline first appeared in the circus. According to experts, the trampoline was invented by a French circus acrobat medieval Du Trampoline. Guess he first managed to create folding wall (what is now called the springboard), and later remade in folding wall .

The development of weightlifting as a sport, refers to 1926 and is connected with the name of Americans L. Griswold and G. Nissen. From 1928 Nissen began designing this equipment. In 1939 he patented a greatly improved model of the trampoline and organized mass production. The popularity of exercises on the trampoline in the U.S. has increased so much that they were included in the program of physical education for schools and universities. Mass hobby trampoline has led to the emergence of competition. First, they are integrated into the programme in gymnastics, but soon the exercises on the trampoline began to be cultivated as a separate kind of sport. In 1948, for the first time held a national student Championships USA in trampoline [6].

Since 1955, thanks to imports, trampolining begin to develop in Western Europe. In 1958-1959, in

Switzerland, Scotland, England, Germany were held in a national competition.

International gymnastics Federation at the Congress of 1959 petitioned for recognition of jumping on a trampoline as a new kind of gymnastic all-round.

In 1960 in Germany is the first attempt to create separate rules for jumping on the trampoline [10].

In 1964 was founded the international Federation of jumps on the trampoline. And in London hosted the first world Cup, which brought together representatives of 12 countries. Since then, regularly hosts world and European Championships, and since 1981, and world Cup jumping on the trampoline.

Jumping on the trampoline, as an independent sport was defined in 1973 and was included in the Olympic program is relatively new in the XXVII Olympic games 2000 in Sydney. The first Olympic Champions at the Games in 2000 became sportsmen of Russia – Alexander Moskalenko and Irina Karavaeva .

Today, the trampoline has become the most affordable and safe trainer for professional athletes and for ordinary families .

One should distinguish between two types of trampolines: sports and recreational. The first use for training and competitions, they can throw a man to the height of about 10 meters, so they are installed in gymnasiums with high ceilings or outdoors.

Amateur differ from sports its dimensions and the material from which made. They are great for aerobics and high jump. But for leisure and entertainment of children created wonderful inflatable bouncer.

The favorable influence of the trampoline on the physical development of the child is that of jumping in children improves coordination, strengthens the vestibular system [4].

In addition, the exercises on the trampoline develop coordination and promote the growth of physical endurance. Of course, depends on techniques and types of jump: we can simply jump in and have fun, but you can spin pirouettes. Trampolining is not only a form of entertainment and way of spending free time, but there is a serious exercise that requires some physical endurance. At first glance it seems that during exercise on a trampoline involved only the legs – this is a misconception. During the jump work all muscle groups [7].

In addition, trampolining develops coordination and improves physical endurance. Of course, it all depends on how you jump. As a rule, vocational training takes 5 to 10 minutes - not longer withstand even the most experienced athletes. Trampolining belong to aerobic exercise and help to fight with excess weight. 30 minutes of running can be replaced by 10 minutes of jumping on the trampoline, while the load on knee joints and the spine will not be harmful [6].

In addition, there are special exercises on the trampoline, which help not only to keep fit, to stay healthy, but also to improve their athletic achievements. Jumping on a trampoline is an excellent method to improve the high jump for athletes, which is important. It is important that this relatively new type of fitness is suitable for people of any age and level of training. It is proved that daily jumping on the trampoline for 20 minutes, slow down the aging process. This is demonstrated by the experiment that was conducted in California, renowned psychologist James white.

The doctor suggested that the group of elderly women, who lead a passive lifestyle to regularly perform jumps on the trampoline. After that, it was discovered that these women very quickly lost weight, have disappeared or markedly decreased some external signs of skin aging. The fact is that regular exercises on a trampoline contribute actively remove toxins from the body. After all, the toxins accumulate due to sedentary lifestyle, affect us a devastating impact, accelerating the aging process. Trampolining ensure proper movement of lymph, which removes harmful toxins.

For professional athletes identify special training programs on a trampoline. These exercises will help to improve the achievement level of a certain height [5].

Before training you should do warm-up. Useful 5-8 min jump rope. Also very good results show jumping with the technique of pulling up legs to chest.

This warm-up is necessary in order to prepare the joints for the workout, because they are very easy to pull. The first athlete should not jump on the trampoline too high. These exercises should be done at medium altitude. Panic and fear can interfere with the athlete, if he did not succeed the first jump. It should be said that the main task then is to learn to feel confident on the trampolines and in the air [5].

Trampolining requires great coordination, so you must be able to maintain balance, to be collected and be able to concentrate on movement. Recommended exercises on a trampoline for beginners:

1- Starting position – hands are stretched along the body, feet together. Start jumping at low altitude. Grid touch with the whole foot. After you feel confident, raise your hands up and jump with arms extended.

2- Starting position – sitting, back – perpendicular to the elongated feet forward. Hands lightly slide behind, lean hands at the net. Jump in this position, helping hands and pressure. Back straight, slightly bend forward.

3- Stand with your hands at your sides. Jump in flight and try to pull up his legs and spread them apart. Imagine doing stretching on the floor. Reach out to the feet hands. Taking them, return to the starting position. This exercise shows the result immediately, but it is very effective.

4- Starting position – keep the bar, his hands leaning on the trampoline. Need to do the jumps on the stomach. Push down with hands and knees from the net, in flight, to straighten them and get down on your belly. Touching the belly of the grid with the help of the abdominal muscles, return to the starting position.

5- Stand up straight with your arms at your sides. Push down on the mesh in the air and bend one leg to the side, the other right, pull the other way. Hands spread to the side. This is a very good exercise that strengthens the muscles of the legs and hips. After mastering the exercises on the trampoline in the direction of be innovators. Mix and match different exercises and perform them to music and you will more rejoice to your training.

Bounce up just a few inches. Keep your feet at a distance of 30 to 45 cm apart and slightly bend the knees during the jump and landing. Do exercises 1 to 3 minutes [11].

It is important that training on a trampoline is not inferior to other sports and weather conditions or seasonal changes. For example many winter Boarders in the off-season are a bunch of exciting alternative employment, and some particularly advanced, even manage to pay attention to the summer snowboarding, for example – are engaged in acrobatics on the trampoline.

If you do not just ride, but also admire freestyle, the training on a trampoline will improve markedly performed tricks. Besides the fact that trampoline itself is gorgeous fan, it also learn the technique of behavior of the body in the air and work out the skills associated with stunts. Used it not only in acrobatics and similar sports, but in snowboarders and even BMH-Serov.

Typically, depending on the level of training, classes are divided by complexity. First, you have general training, including initial basic skills and tricks, then optionally possible to study more complex. Thus, in order to make a flip, you should be able to do flips. For crust, rodeo, inverter or Andheri, must be able to jump flips, somersaults with screw, etc.

Perhaps the biggest advantage trampoline, is that it can repeat the trick a thousand times: half rotation, distort, fall head down and not get injuries and fractures (although we should recognize could get hurt).

Learning on a trampoline can be a lot – from simple 360 with any paddle to ofaksis trick. You can work out a rotation, is rational and saves time and body. In general, they should do, if you want to learn how to control body in the air or voltage and development of the muscles that are needed for that [14].

Growth in much of the training depends on desire. In his absence you can try to learn half somersault jump or 360. But if there is a serious desire to master the tricks, then a month later you can do front and back roll indie, in the second month – jump frontflip noushreb while landing smoothly on slippery surfaces.

Many believe that practicing on the trampoline for children on the very same type of performance. But this is absolutely not the case. Themselves jumping for children is very interesting. And they do not quickly get bored! However, sport pedagogy and developed special methods and approaches children jumping on the trampoline. Such as the following exercise [9].

“Fun Account”

The child, who first met with the figures should count their jumps. If you made a mistake – Give the place another child on the trampoline.

In such competitive games and executed and entertainment functions.

And finally note: Jumping on a trampoline – Is not only a form of entertainment and a form of leisure, but also a serious workout. The fact that during the sessions involved only on a trampoline feet – typical illusion and error. During the jump grouped the whole body, and therefore work all muscle groups. Going on a trampoline help to strengthen the heart muscle, blood vessels, lungs, vestibular apparatus, the development of motor coordination, improved physical fitness and general health improvement .

Start engaged on a trampoline, and you will always be charged an unprecedented energy.

Also, there are different types trampolines. Example – Trampolines for halls

Consolidated trampolines for practicing in the hall or outdoors vary in diameter. In the very young, he is from 102 to 140 cm. The surface for jumping, made of highly durable material connected to the frame by means of springs, whose number varies from 36 to 48 pieces (depending on model). The height of the mini-trampoline – about 21 cm .

This compact sports equipment is perfect for aerobics, jumping and even jogging for all family members, from the smallest. In addition, the mini-trampoline can be easily assembled and disassembled, and bundled him attached to the bag comfortable contemporary design.

Models of average diameter–about 3.4 m – suitable both for training in the hall, and for playing outdoors. The frame of these models consists of a steel frame with corrosion-resistant coating. Jumping surface is made of highly durable polypropylene. Between themselves, they connected springs. This design is intended for jumper weighing up to 120kg.

A similar model with a diameter of 3 meters, but designed for weight up to 80 kg, very popular fitness in children and adolescent institutions. Both models are easily composed and transported in the car .

Most large and powerful models trampolines - over 4 meters in diameter – also with steel frame basis. Jumping surface – just like previous models – made of highly durable polypropylene. They have 110 connecting steel springs.

The base of the trampoline – five "W" -like legs that can support the weight of 150 kg. Meanwhile, this powerful structure (in assembled form) easily fit in a car.

For assembly-disassembly of the trampoline is not necessary to call a specialist, anyone can easily cope with it alone. Description for sports equipment so detailed that everything about everything will need some 20 minutes.

Recently, a very popular pastime began jumping on a trampoline is not only in the hall or outdoors, but also in the water. This is a great way to combine fitness with water and sunbathing .

The design of the water trampoline fundamentally different from the ground. There are no metal frame – substituting inflatable circle. On the surface it stretches for jumping. In addition to the main structure, the set includes anchors, pump and ladder on which to climb the shell of the water. Another feature is an inflatable trampoline is that it can be used both on water and on land.

Those who watched jumps on the trampoline only from the outside, we recommend to experience this pleasure for yourself - they will cause a lot of emotions and provide an excellent workout. Jumping on a trampoline for 5-7 minutes commute a run length of 1 km, and the result is visible already after 2 weeks .

During the exercises on the trampoline to the cells comes an increased amount of oxygen, which stimulates the process of metabolism at the cellular level. The cell walls become stronger from this, and the cells themselves begin to function more efficiently [8].

Trampoline – a great experience not only for the body but for the soul. Enjoying the incredible feeling of flight and ease, we become younger and happier, starting with ease of looking at problems, different attitude towards themselves and others. It's all in endorphin, the hormone of joy, which we miss in everyday life.

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