

педистов-даунхильщиков концентрированные блоки для поддержания силы. У женщин соревновательная нагрузка наоборот способствовала повышению указанных выше физических качеств, что говорит о высоком тренирующем потенциале соревнований и необходимости использования в подготовительном периоде нагрузок близких к соревновательным, для перехода на более высокий уровень подготовленности.

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ТРЕНИРОВОЧНАЯ ПРОГРАММА ДЛЯ ПРЫЖКОВ НА БАТУТЕ И ЕЕ ВЛИЯНИЕ НА НЕКОТОРЫЕ МЕХАНИЧЕСКИЕ ПОКАЗАТЕЛИ ЗАНИМАЮЩИХСЯ, ВЫПОЛНЯЮЩИХ УПРАЖНЕНИЯ В ФАЗЕ ПОЛЕТА ПРИ ПРЫЖКОВОМ ОТТАЛКИВАНИИ

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Аннотация

Прыжки на батуте – тип спортивной деятельности, который имеет интересную историю происхождения. В профессиональный спорт прыжки на батуте вошли сравнительно недавно. Они значительно отличаются от других видов спорта. Главное отличие – уровень подготовки, который необходим для прыжков на батуте. Это один из немногих видов спорта, который подойдет как для профессиональных спортсменов, так и для любителей. Разные виды прыжков на батуте очень полезны для физиологического развития детей и для поддержки здоровья. При прыжках на батуте

задействованы мышцы, что в результате улучшает спортивную форму, увеличивает выносливость, гармонизирует работу вестибулярного аппарата, ориентацию в пространстве, координацию и ощущение собственного тела.

Ключевые слова: спорт, батут, выносливость, прыжки, баланс, упражнение, аэробика, ежедневная повседневная тренировка, тренировка детей на батуте, высота, вестибулярная система, батут на воде.

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TRAINING PROGRAM ABOUT USING THE TRAMPOLINE AND ITS IMPACT ON SOME MECHANICAL INDICATORS FOR PLAYERS PERFORMANCE IN ORDER TO CROSS THE BAR IN 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 the trampoline has been recently introduced. Trampoline jumps are different from other sports. The main difference is a level of training that is needed to jump on the trampoline. It can be applied for the amateur enthusiasts and professional athletes. It is very useful for physiological development, including the maintenance of the health and prevention of the serious diseases at different trampoline classes for the children. Jumping on the trampoline as a training program includes muscle effort and it improves the performance, the endurance, the work of the vestibular apparatus, the orientation in the space, the coordination abilities, and the sensation of the 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 labor has formed today's pace of life. On one side, there is an urban lifestyle that does not allow us to develop fully the person physical fitness. On the other hand, there are many types of the sporting activities. Trampolining is one of the universal methods for health support and method for improving the high jump, overall endurance and skills of aerial gymnastics.

The primary objectives of the study of the historical development of jumping on the trampoline are not only the entertainment aspects but also the sport. For researchers there is an importance in the study of the positive influence of training to the trampoline jump on the human body. The principles of the program for the training of jumps are considered separately.

The trampoline sport is a jumping with the rotations of the body around the longitudinal and lumbar axis while the gymnasts perform acrobatic stunts.

Purpose of the study: to analyze the effectiveness of using the trampoline and its impact on some mechanical indicators for the athletes' performance.

Hypothesis: It has been assumed that use of the trampoline in the training processes of the young gymnasts does not only improve the coordination, but it affects the overall total and special physical abilities.

The term "trampoline" comes from the Italian word "Battuta", which means "strike". Although the initial mention of the first models of the trampoline comes from the residents of the North who made something similar from the skins of the walrus. Jump on this «trampoline» was favorite pastime of the locals.

The first devices for jumping were produced by the ancient Eskimos from walrus skins: the adults jumped on such constructions and children tossed to them. The Comanche Indians knew related activities; they just pulled the skins of the animals available to them. Apparently, these games can be considered as the ancestor to the jumping on the trampoline.

It is hard to imagine, but the prudish British also liked to have fun like that, they threw

the children into the blankets. The gliders used trampoline as a simulator, the same is with the parachutists and pilots: while jumping is the active training of the vestibular apparatus, strengthening different muscle groups, it develops the ability to control the body in the air. Jumping on the trampoline firstly appeared in the circus. According to the experts, the French circus medieval acrobat Du Trampoline invented the trampoline. The scientists may guess that he was the first to manage to create the folding wall (what is now called the springboard), and later remade it.

The development of weightlifting as a sport refers to 1926 and it 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 the exercises on the trampoline in the U.S. has increased so much that they have been included in the program of the physical education for schools and universities. Mass hobby trampoline has led to the emergence of the competitions. Firstly, they have been integrated into the program 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 there was held the national student Championships USA in trampoline.

Since 1955, thanks to the importing, the trampoline jumps began to develop in the Western Europe. In 1958-1959, in Switzerland, Scotland, England, and Germany there were held the national competitions.

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.

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 included in the Olympic program, so it was considered relatively new sport in the XXVII Olympic games 2000 in Sydney. The first Olympic Champions at the Games in 2000 became the sportsmen from Russia – Alexander Moskalenko and Irina Karavaeva.

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

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

Amateur sport differs from the professional one by its dimensions and the material from which the trampoline is made. It is great for the aerobics and high jump. But for leisure and entertainment of children it has created the wonderful inflatable bouncer.

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

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

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 – there is no ability for longer withstanding it even if there are experienced athletes. Trampolining

belongs to the aerobic exercises and helps to fight with excess weight. 30 minutes of running can be replaced with 10 minutes of jumping on the trampoline, while the load on knee joints and the spine will not be harmful.

In addition, there are special exercises on the trampoline, which help not only to keep fit, to stay healthy, but also to improve the athletic achievements. Jumping on the 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 has been 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, by the renowned psychologist James White.

The doctor suggested that the group of the elderly women, who lead a passive lifestyle, ought to perform jumps on the trampoline regularly. After that, it has been discovered that these women have lost weight very quickly; they have got healthier or decreased markedly some external signs of the skin aging. The fact is that regular exercises on the trampoline contribute to the active remove of the toxins from the body. After all, the toxins are accumulated due to the sedentary lifestyle; they affect us with the devastating impact, accelerating the aging process. Trampolining ensures proper movement of the lymph, which removes harmful toxins.

For professional athletes it is important to identify the special training programs on the trampoline. These exercises will help to improve the achievement level to the certain height.

Before training you should do warm-up. 5-8 min of the jump with the rope is useful. There are also good results showed while jumping with the technique of the pulling up the legs to the chest.

This warm-up is necessary in order to prepare the joints for the workout, because they are very easy to pull out. First of all, the 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.

Trampolining requires great coordination, so you must be able to maintain balance, to be concentrated and be able to execute the movement. The author recommended the exercises on the trampoline for the 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 the 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 with the hands and pressure. Back straight, slightly bend forward.

3. Stand with your hands at both sides. Jump in flight and try to pull up the 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, the 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 both sides. Push down on the mesh in the air and bend one leg to the side, the other right, and 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, be in the direction of the innovators. Mix and match different exercises and perform them under the music and you will enjoy more 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.

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

If you do not just ride, but admire freestyle, the training on the trampoline will improve your performed tricks to a new level. Besides, the fact that trampoline itself is gorgeous fan, it is also connected with learning the technique of behavior of the body in the air and it helps to work out the skills associated with stunts. Use it not only for the acrobatics and similar sports, but also for snowboarding and even BMH-Serov.

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

Perhaps, the biggest advantage of the trampoline is that it can repeat the trick for thousand times: half rotation, falling head down and avoiding get injuries and fractures (although we should recognize we could get hurt).

Learning the trampoline can be difficult. You can work out a rotation, it is rational and it saves time and body. In general, you should do it if you want to learn how to control body in the air or develop the muscles that are needed for that.

The perfection in the training depends on the desire. In its absence you can try to learn half somersault jump or 360. But if there is a serious desire to master the tricks, after a month of training you can do front and back roll, after the second month – jump front flip while landing smoothly on the slippery surfaces.

Many believe that children practicing the trampoline find it monotonous for some types of performance. But this is absolutely not the case. The jumping for the children is very interesting. And they do not get bored quickly! However, sports pedagogy has developed the special methods and approaches to the children jumping on the trampoline. The following exercises are very interesting.

“Fun Account”

The child, who met with the exercises for the first time, should count their jumps. If you made a mistake – give the place on the trampoline to another child.

Such competitive games have the entertainment functions.

And finally everybody should note: jumping on the trampoline is not only the form of entertainment and leisure, but also it is a serious workout. The fact that during the sessions it involved only the feet is typical illusion and error. During the jump the athlete or amateur group the whole body, and, therefore, he or she works with all muscle groups. Going on a trampoline helps to strengthen the heart muscle, blood vessels, lungs, vestibular apparatus; it develops the motor coordination, and improves the physical fitness and general health level.

Start jumping on the trampoline and you will always be charged with the unprecedented energy. Also, there are different types of trampolines. For example, there are the trampolines for the indoor activities.

Consolidated trampolines for practicing indoors or outdoors vary in diameter. For the smallest ones, they are from 102 to 140 cm. The surface for jumping, made of highly durable material connected to the frame by means of springs, which number varies from 36 to 48 pieces (depending on the model). The height of the mini-trampoline is about 21 cm.

This compact sports equipment is perfect for the aerobics, jumping and even jogging for all family members, beginning from the youngest. In addition, the mini-trampoline can be easily assembled and disassembled, and you can carry it attached to the bag of the comfortable contemporary design.

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

A similar model with a diameter of 3 meters, but designed for the weight up to 80 kg, is very popular fitness in the 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 it is not necessary to call the specialist, anyone can easily cope with it. Description for the sports equipment is so detailed that everything you need is about 20 minutes.

Recently, a very popular pastime has been introduced. It is jumping on the trampoline in the water. This is a great way to combine fitness with water and sunbathing.

The design of the water trampoline is fundamentally different from the ground one. There are no metal frames; they are substituted with inflatable circle. It stretches for jumping on the surface. In addition to the main structure, the set includes anchors, pump and ladder. Another feature is an inflatable trampoline that can be used both on the water and on the land.

For those who watched jumps on the trampoline only from the outside, we would recommend experiencing this pleasure for themselves - they will get a lot of emotions and it provides them with the excellent workout. Jumping on the trampoline for 5-7 minutes is equal to the run distance of 1 km, and the result is already visible after 2 weeks.

During the exercises on the trampoline the cells get the increased amount of oxygen, which stimulates the process of metabolism at the cellular level. The cell walls become stronger, and the cells themselves begin to function more efficiently.

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

The analysis of the literature and available data has showed that the trampoline is one of the important conditions for the classroom training combined with the general and special physical preparation. High jump develops coordination and flexibility, as these qualities are crucial in achieving high results. And finally, thanks to the purposeful development of the flexibility it facilitates the execution of all kinds of the gymnastic exercises – inclinations, balance, jumping. Thus, the basis of the athletics is natural human movement. Athletics contribute to the comprehensive physical development; it improves the health of people. The popularity of this type of athletics is explained with the availability and wide variety of the athletic exercises, the simple technology implementation, the ability to vary the load and hold classes at any time of the year, not only on the sports field, but also outdoors.

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