

THE SPECIFICITY OF FUNCTIONAL TRAINING

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Abstract. *Functional training has become very popular lately in the fitness community, but they are some of the oldest and most popular types of training. Functional training began in rehabilitation centers for war veterans and was created by physiotherapists to improve and accelerate the recovery of patients after injury or disability. Specific exercises have been developed to help patients regain locomotor function and return to daily activities.*

Keywords: *functional training, fitness, cardio exercises, nutrition.*

Actuality of Research. Certainly many of us have heard so far of "functional training", "functional exercise", "core stretching" in the media, on social networks or in gyms. These terms have become very popular these days, and fitness experts are beginning to realize the importance of a strong CORE. CORE - the middle area of the body, somewhere at the center of gravity. It is essentially represented by the abdominal muscles and the lumbar muscles, according to Nemescu Andrei [5].

The purpose of the research is to study the scientific-methodical literature of the aspects and specifics of practicing functional training in the field of fitness.

Functional training, after Daniela Militaru [4], Nemescu Andrei [5] and others is based on the practice of cardio exercises (HIIT type - High Intensity Interval Training), muscle toning exercises, performed with high intensity with very short breaks at longer intervals, static or moving cardio exercises, exercises with their own weight and various accessories . It is the kind of training practiced by military operational units and performance athletes such as athletes, great martial arts champions.

From this beginning, functional training has been taken over and adapted by health and fitness professionals, transformed into exercises that predominate the exercise with the weight of your own body, which simulates daily movements.

Functional training is one of the most effective types of effort, which develops several physical qualities at the same time, many prefer it for this. Functional training is a complex of exercises, oriented for the simultaneous development of several physical abilities, maximally adapted to be performed in concrete circumstances.

The main purpose of functional training is to improve the ability to carry out daily activities. The execution of a movement does not involve a certain muscle, but the coordinated effort between the nervous, cardiovascular, respiratory and musculoskeletal systems that allow a fluid movement.

According to several specialists in the field of practicing functional training [1,2,3], the key to effective functional training is to simulate the real activity that the person wants to improve. The main focus is on achieving similar types of contractions (eccentric, concentric or isometric), speed, range of motion and level of coordination. The closer the exercise is to the

actual activity, the more effective the training. For example, if the person is active who spends a lot of time on the bike, functional training should include exercises that simulate movements and strengthen the muscles used in cycling.

In the process of functional training, coaches [1,3] recommend a slow increase in intensity, allowing the body to adapt to new movements. Almost anyone can incorporate functional training into their fitness program, but working with a fitness professional is one of the best ways to ensure that training is safe and effective.

When creating an effective training, the specialists also suggest us to rely on the following practical-methodical aspects:

- determining the objectives of the functional training for the adaptation in correspondence with the daily activities of the person;
- dosing the effort in accordance with the state of health and physical training of the person;
- duration and level of practice of this type of fitness;
- the training program should include a variety of exercises to educate physical abilities: strength, endurance, flexibility, coordination and balance;
- the fulfillment of the functional training program must always be monitored by the fitness trainer and, if necessary, modified in accordance with changes in the adaptation of the effort by the body;
- the exercises must include several muscles from several planes of movement with concentric, eccentric and isometric muscle contractions;
- a functional training may include the execution of exercises with one's own body weight, elastic bands, fitball, medicine ball, TRX, step-platform, parallel bars or fixed bar and free weights and others. instead of performing exercises only on fitness equipment.

The exercises that make up the functional training, remind of the actions of daily life, develop the body from a physical, psychological point of view and implement the functionality at the skill level.

Below are some examples of functional training. During the fitness-strength training in the gym, doing a push from lying, we develop muscle strength but performing the same exercise on fit ball, where we have to maintain our balance, we add functional exercises. In this case we work not only on the force, but also on the coordination of movements, sense of balance and orientation in space. Another example, in the process of classic cardio training - 30 minutes of running on the treadmill, general endurance develops, but adding a few obstacles, such as push-ups, knee bends, tractions - develops motor coordination, dexterity and endurance strength. According to the desire of the coach and the one who deals with a training, it can be made from any physical exercise a functional one, such as, for example, from a single casting performed on the floor, to be performed on an unstable surface - on the Bosu platform.

A functional training can be performed in a circuit system when fixed workstations are established, such as workstations where the person stops to perform the exercise required by that station and then move on to the next station. After performing a circuit, with the execution of an exercise in the number of repetitions or in the time required in each position, a break is made for 2-3 minutes, after which the next circuit is resumed. For this stage, jobs are created that can be based on the number of participants, even one job for each. An exercise is established for each position and about 30 seconds are allocated for each. The workstation changes clockwise at the coach's signal and the circuit closes when each participant has gone through all the stations. If we opt for functional training in the circuit system, the warm-up at the beginning of the training as well as the relaxation at the end are performed at the same time by the entire group of participants in the training.

Another functional training time is the one adapted to a class with a larger number of participants who perform the same exercise at the same time. If you want to perform several exercises that include as many muscle groups as possible, it is difficult to work on several workstations, because it is difficult to remember the exercises to be performed when changing one workstation with the other. In this case, even the instructor cannot follow each post closely, so it is ideal for all practitioners to be observed at the same time.

Practicing functional training forms the following beneficial effects for the human body and several advantages over other types of fitness-training:

- processing several muscle groups and developing all physical abilities simultaneously in a single workout;
- the human body gradually adapts to physical exertion, which is favorable and effective;
- during functional training burns a lot of calories (up to 900 per hour) - because several muscle groups are worked at the same time, often being performed on an unstable surface, which contributes to weakening and shaping the figure;
- not too heavy weights are used and in one hour the whole body is processed, as a result the muscles are toned and highlighted;
- exercises adapted to the maximum conditions of daily living, improve work skills;
- the diversity of exercises practiced in a single training reduces the pressure on the human psyche;
- functional training excludes monotony;
- the possibility of reducing the training time up to 20 minutes;
- the possibility of group training, which also contributes to the socialization of people;
- workouts can be carried out as desired in the gym, outdoors or at home.

For the composition of functional training programs specialists-coaches [2,3] recommend the following:

- to take into account the condition of the practitioner: brief review of the person's anamnesis depending on possible heart, respiratory, joint, weight, training takes the appropriate form for each practitioner;

- not to neglect age of the practitioner, there are certain restrictions of exercises such as: which put vertical pressure on the spine in the case of people under 18, in order not to subject the spine to injuries or to not influence its growing development;

- to avoid exercises that put high pressure on the joints in the case of people over the age of 50.

- for people aged 35-50 it is recommended (especially men) strength exercises, heavy weight exercises, because being in a period when hormonal secretion decreases suddenly, their bodies need this type of exercise, known as the best natural stimulants of normal hormone secretion (especially testosterone),

- the right diet is the key to success towards the desired goal in combination with all workouts, especially the functional one, the ratio 4: 1: 1 (4 gr carbohydrates / 1gr protein / 1gr fat per kg-body) must be observed when we subject the body to increased physical exertion together with daily hydration at least 2 liters of water per day.

Opinions are divided on the specifics of functional training. Most experts believe that this type of training increases mobility, balance and motor coordination. There are also rumors that functional training does not develop enough muscular endurance and therefore cannot replace resistance training. Despite these differences of opinion, most fitness experts believe that this type of exercise can be successfully integrated into a training program that combines cardio activities with those designed to increase endurance.

In **conclusion** we can say that the field of fitness - functional training remains a new and very popular field among young people and beyond. Functional training is based on all the exercises performed in the gym, at home or outdoors, corresponding to the activities of the body that act in daily life. These exercises are the best means of body modeling, because they successfully combine both strength and cardio exercises, and are very effective for educating psychomotor skills, such as strength, endurance, mobility, motor coordination and sense of balance. The exercises in the training program can be adapted so that they can be performed by both beginners and those who are in very good physical condition. This work system will not replace aerobic or bodybuilding equipment or training methods, but we will certainly witness a parallel development of the field of fitness - functional training. Functional training is designed for people of all ages and can be adapted to the purpose of each one.

References

1. <https://www.fitness-education.ro/2018/09/07/totul-despre-antrenamentele-functionale-functional-training/accessed27.03.21>
2. <https://omactiv.md/ro/be-strong / funktsionalnyj-training-kak-na-odnoj-trenirovke-razvit-vsyo-cto-mozhno accessed 27.03.21>
3. <https://12fitnessgym.ro/antrenamentu-functional-cat-de-pregatit-esti/>
4. Military Daniela. Functional training <https://www.antrenoare.ro/fitness/antrenamentu-functional/> accessed 27.03.21
5. Nemtescu Andrei. FITNESS Functional training vs Isolated exercises <https://www.zonadesport.ro/antrenament-functional/> accessed 27.03.21