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**ІННОВАЦІЙНІ ТЕХНОЛОГІЇ В СИСТЕМІ
ПІДВИЩЕННЯ КВАЛІФІКАЦІЇ ФАХІВЦІВ
ФІЗИЧНОГО ВИХОВАННЯ І СПОРТУ**

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BASIC AND ISOLATING STRENGTH TRAINING EXERCISES IN TERMS OF STRENGTH TRAINING OF ARCHERS

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The introduction. All exercises in terms of strength training can be divided into two groups: basic and isolating. Basic trainings are those who activate two and more joints. For example, bench press, deadlift, pulling up on a crossbeam, etc. Isolating strength trainings include qualitative training of group of muscles or one exact muscle, while only one joint on one side of the body is involved into performance. The groundwork of sportsmen strength training, especially beginners, should be basic trainings with any weights. They affect different muscle groups unidirectional (each of them performs its particular work), however none of them gets a fully loaded. That is why, more muscles get involved into training while basic exercises than while performing any isolating one. That approach allows working with bigger weights and guarantee quicker increase in muscle mass. Basic trainings are mostly physical than isolating. It means, that movements in basic trainings are greatly adapted to the structure of bones and joints anatomy, because rarely we use specific muscle group apart from other groups in real life, so the risk factor is minimized.

The aim: to study usage of basic and isolating power exercises in power training of archery shooters.

Study topic description. Process of strong body building is totally rest on complex muscle training and can't be reached by working out of concrete group of muscles only. During complex exercises performance less energy is spent. That happens because of working several muscle groups simultaneously redistribute load on the whole body and as a result leads to rapid growth of muscle mass in smaller period. Completing basic exercises on the beginning of the training warms up the corpse before doing isolating exercises. It

was proved, that while performing basic exercises more testosterone, which stimulate anabolic processes, is emitted in the body. That is why it is so important to perform such basic exercises as: bench press and deadlift that distribute load on the body evenly. Such exercises also have influence on central nervous system and influence on better connection between brain and muscles. Basic trainings insure higher level of nervous muscular contractions stimulation which leads to better muscle building. All that processes as a whole leads to improvement of metabolism an importance of right functioning is known to all sportsmen.

The speed ability in shooting sport is usually given as a formula: V_s (speed) = V_p (perception) + V_m (movement). According to this formula, the smaller every of adding variables the higher archers` speed. Speed of perception is usually determined by characteristics of analyzers (visual, tactile, audio, and others.), dynamics of the central nervous processes and features of neuromuscular connections.

Better metabolism leads to such effects, that food consumed digest quicker and more effectual. Nevertheless, performing only basic exercises has some disadvantages for body health condition. Basic movements include on the same time a lot of muscles and, as a result, sportsmen should use bigger weight that may lead to injuries. Danger to get injured becomes higher when main working muscles are not warmed up enough before basic trainings. So, warming up should be indispensable, wisely planed and least more time than before any other physical activities. To get the best results basic exercises are not enough. Basic and isolating exercises should work in complex while training. That isolating exercises that allows working out particular groups of muscles the best way.

The conclusion. So, while organizing and holding strength training with archers is important to insure successful combination of basic and isolating exercises on every training lesson. Using such approach will guarantee more effective sportsmen strength qualification so important for demonstration level of sportsmanship on competitions.