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Contralateral Effects

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Contralateral Effects

Contralateral strength is an effect that occurs when one side of the body is being exercised, therefore increasing power on the other side of the body. For instance, if a left leg got an injury and one has been training to make it healthy again, inadvertently, the right leg will gain an immense increase in strength. The phenomenon has been investigated as it provides an excellent perception of the determinant of the most active muscle.

On the other hand, if an injured limb is left to heal on its own without any mobilization, studies show that this limb will reduce in size and strength. Hence, the person with the injured limb ends up facing a lengthy rehabilitation process once the injury is healed. According to an article by Dr. Joe Muscolino of the Learn Muscles blog, he states that exercising a healthy uninjured limb can minimize the muscles of an injured leg or arm from wasting away. An analysis by Cirer-Sastre 2017, suggests that training in large volumes, in this case, multiple exercises produces an exemplary increase in contralateral strength.

The contralateral strength exercising can again be dealt through consideration of a process engaging muscular adaptations on untrained limb. This is achieved by anabolic hormonal fluctuations which help in resistance exercising. The systematic mediators of such kind can readily reach to the muscles found in entire untrained limb. Contrary, if these hormonal adopting contributes majorly to contralateral strength in exercising effect, explaining an impact specific to contralateral homologous muscles will be difficult. Evidence shows that the power of a non-homologous muscle is not affected by strength. Also, it is expected that contralateral strength training is most significant in large muscle groups, unlike in small muscle groups.

Another effect of contralateral strength training is on neural mechanism which is mediated by a change activated in the central nervous system. It is achieved by a difference in a

pattern of the neural activity attributed with adaptive changes in neural circuits indulged in execution and planning. Neural adaptations which fuel strength increase in trained limbs are parallel to a given point. However, neural adaptation in this entire trained limb is yet to be discovered.

Some advantages of contralateral strength exercises include increase in body balance, thus increasing efficiency in mobility and increases core activations helping in strengthening the core. Besides, it helps in increasing muscle activation in inactive limbs and reduces atrophy in the immobilized limbs. Examples of these exercises include single-arm dumbbell, single-leg push-off, step down and single hip thrust.

Generally, it is clinically important to train a certain limb in generating strength for other leg or arm. Studies show that this phenomenon is still open to further investigation in the aspects of spinal control and movement. For rehabilitation purposes, patients who have had an injury should be able to preserve the strength of the immobilized limb by performing strength training. As a result, the availability of this advanced psychological technique makes it possible for advancement soon.

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