## PERFORMANCE 101: Do Resistance Machines work?

Summary: When it comes to adding more muscle or enhancing the appearance of existing muscles, resistance-training machines are among the most effective tools available. That is why Body Builders use them in their training. If you want a safe way to shape and build your muscles most machines suit that purpose. Read On!



## **PERFORMANCE 101: Do Resistance Machines work?**

There is a fitness movement for the last 10+ years that preaches the non-use of machines. I feel this is wrong on multiples levels. Machines are an excellent way to build and isolate muscle groups. They are great to use when recovering after injury and they are very easy to learn and set up, especially when introducing muscular training to novice exercisers. BOTTOMLINE: DO NOT GIVE UP ON MACHINES. Here are some very good articles from ACE FITNESS. 6 Benefits of Machines, Circuit Machine Training, Forgotten Benefits: Edited Excerpt-Explosive lifts with barbells, kettlebells and heavy medicine balls can help enhance muscle-force output, burn calories for weight loss, and strengthen elastic connective tissues, yet these types of workouts may not be optimally suited for stimulating the muscular development that many clients want. There are distinct differences among exercise programs designed to improve mobility, burn calories, enhance aerobic efficiency or maximize muscle growth. When it comes to adding more muscle or enhancing the appearance of existing muscles, resistancetraining machines are among the most effective tools available. That is why Body Builders use them in their training. If you want a safe way to shape and build your muscles most machines suit that purpose. See more at our muscular fitness training page.



**RESEARCH:** Machines are training devices that have pin loaded weight stacks with fixed lever arms and range of motion. They provide a safer use than free weights and can be used relatively easy without supervision under many circumstances [Study]. Free weights has been shown to be better in improving vertical jumping ability than resistance machines (Study). The results did show that leg presses did improve vertical jump ability in those in the study but not to the same degree as the squat. Another study found that similar gains in muscularity, strength, and functional ability can be expected for male novices in resistance training regardless of the equipment being used and without a fallback when changing from machines to free weights (Study). Another study found that training sessions with free weights induced greater increases in free testosterone in men; however, training with free weights or machines resulted in similar increases in muscle mass and strength (Study). These findings do not support the thought that training with free weights would result in greater gains in muscle mass and strength.

From the National Strength and Conditioning Association The principle of specificity, highlights the importance of incorporating exercises focused on a single-joint action (i.e., isolation exercises), such as movements targeting the hamstring and adductor musculature, in addition to the other types of exercises when training for improved performance in order to make one's programming more comprehensive and effective. Resistance exercise, from isolation exercises to integrated, multi-joint exercises, should not be looked at as mutually exclusive. Rather, they should be viewed as complementary training components, because each type of resistance exercise offers unique benefits the other types may lack (see article ). Please look to <u>Do It Right Series</u> in the future why these isolation exercises are important.





These Machines Build Muscle That is why Body Builders use them. Use free weights as well to round out program















