

Do Free Weights Produce Better Results Than Machines?

Studies have shown that there are no significant differences in the development muscular size and strength when comparing groups that used free weights and groups that used machines. The use of any equipment in which a load is progressively applied on the muscles will stimulate improvements. In one study, 22 college students were randomly assigned to two groups: One group performed the bench press and shoulder press with free weights, and the other grouped performed similar exercises with machines. Both groups used the same training protocol (three sets of six repetitions performed three times per week).

After five weeks, the subjects in the free weight group increased the strength of their elbow extensors by about 22 percent, and shoulder flexors by about 12 percent; the subjects in the machine group increased the strength in their elbow extensors by about 24 percent, and shoulder flexors by about 13 percent. There were no significant differences between the two groups.

Since a muscle doesn't have the ability to think or see, it cannot possibly "know" whether the source of resistance is a barbell, a machine or a cinder block. The sole factors that determine the response from strength training are genetics and effort, not the equipment that's used.