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Articles

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Flexibility as a Result of Exercise

Heavy exercise is a requirement for increasing the flexibility of an athlete in any sport. Yet the stereotype still exists that relates muscular development to a restricted range-of-movement; in a large part of the public mind, great strength and a lack of flexibility still go together like bread and butter.

While, in fact, the exercises that are best for increasing strength are also best for increasing flexibility. Both the potential for strength and the potential for flexibility vary on an individual basis; some men find it rather easy to build great strength or an unusual degree of flexibility, or both, and some men find it difficult or impossible. But proper exercise is capable of increasing the muscular strength of almost anybody to a marked degree, and also capable of increasing the flexibility of almost anybody to an equally marked degree; even if the final results are not equal in all cases. And while it is not reasonable to expect exactly equal results in all cases, it is both reasonable and logical to use the same type of exercise for increasing both strength and flexibility, and also reasonable and logical to use the same exercises for men with good potential and men with poor potential.

In effect, the method remains the same, regardless of the potential of the subject, and regardless of the purpose for which training is being conducted. When a few common misconceptions are cleared up, it will be obvious that heavy exercise is not only capable of increasing flexibility but is actually required for that purpose.

BUT IT SHOULD BE CLEARLY UNDERSTOOD… that it is impossible to perform heavy exercises without increasing flexibility. If mid-range movements against heavy resistance are practiced, the result may eventually be a marked increase in strength with no increase in flexibility. And if such training is performed in a haphazard manner, with little or no attention to the antagonistic muscles, then the result may well be an asymmetrical muscular development combined with an actual reduction in flexibility.

Such limited range exercise movements and such a choice of exercises is certainly not the most productive style of training even for the purpose of increasing strength; strength increases are produced much more rapidly and to a greater degree when full-range exercises are used, and strength increases also come faster when a balanced program of exercises that provides heavy work for all of the muscular structures of the body is performed. So there is really never any excuse for a badly outlined program of exercises, and no excuse for a poor style of performance. Training properly for maximum strength increases will also provide maximum increases in flexiblity.

Flexibility is the result of stretching, and increases in flexibility are produced best when the resistance is heavy in the starting position of an exercise movement; heavy enough to pull the involved body-parts into a fully extended position.

Heavy resistance is also required in the starting position for the purpose of “pre-stretching” the muscles; which pre-stretching is an important requirement for the stimulation of a maximum intensity of muscular contraction.

“Intensity of muscular contraction” is certainly the most important factor for increasing strength; so it is thus obvious that full-range exercise movement is highly advantageous for both strength and flexibility. Stretching for flexibility… and pre-stretching for strength.

And it is also obvious that the resistance must be heavy enough to produce a high degree of both stretching and pre-stretching; light resistance will not provide enough force to result in either. Such “back pressure” of force that pulls against the direction of movement produced by muscular contraction is provided by all Nautilus Machines, in barbell exercises, and in conventional exercise machines. But it is NOT provided in friction-based exercises such as the so-called “Isokinetic” or “Isonetic” devices produced.

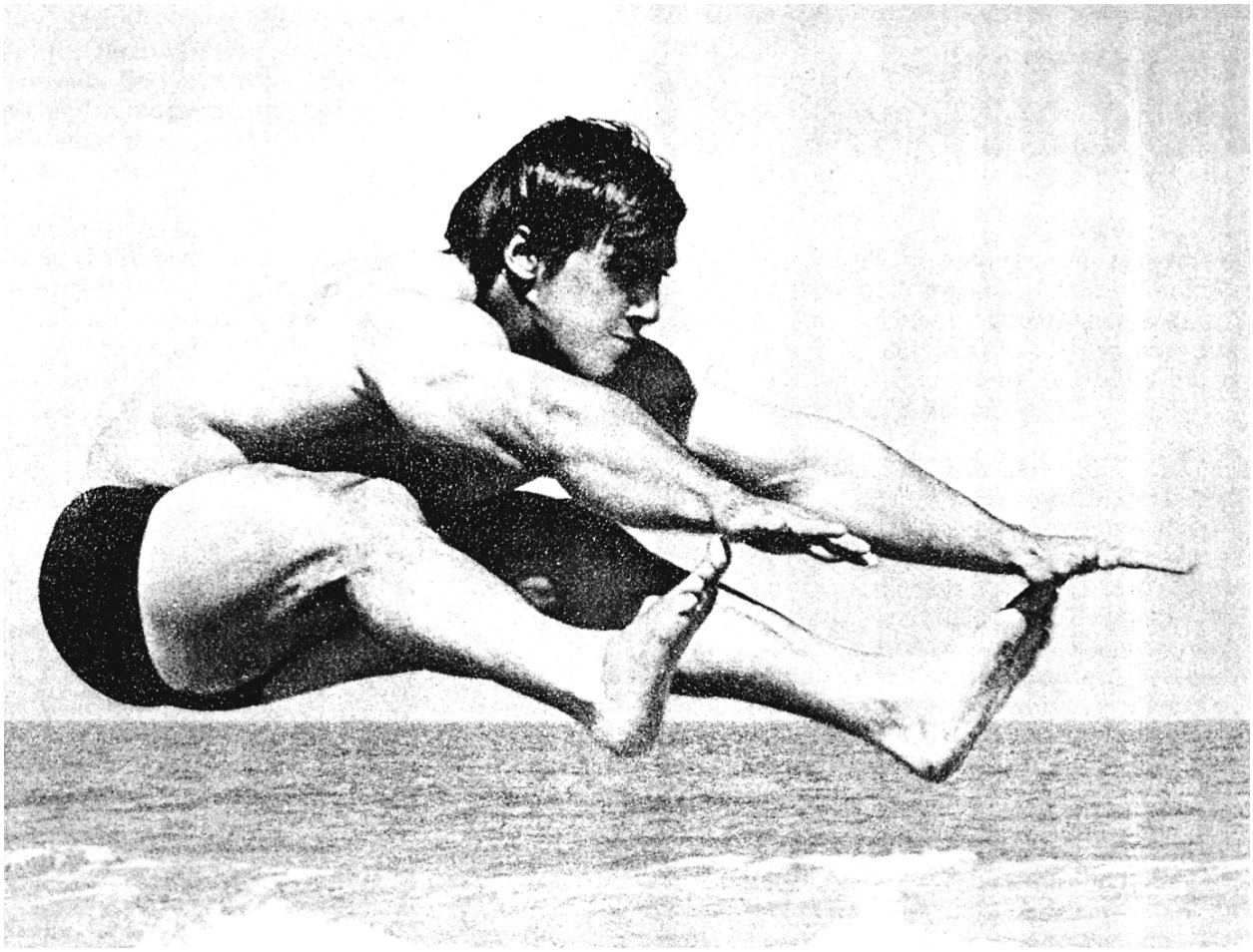
Which is not meant to imply that all barbell exercises and the barbell-like exercises produced by the conventional machines provide good stretching or pre-stretching. THEY DON’T… because barbells and conventional machines provide “straight line” resistance; while the movement of the body-parts caused by muscular contraction is “rotary” in nature. The result being that most barbell and conventional exercises do little or nothing in the way of increasing flexibility, and likewise do not produce as high an intensity of muscular contraction as is really desirable.

A few barbell exercises do provide stretching and pre-stretching; but when these factors are involved in a barbell exercise, they are purchased at a high price… the price being a total lack of resistance in the other end of the movement, the fully-contracted finishing position.

No matter how you try to do it, YOU CANNOT GO AROUND A CURVE WHILE MOVING IN A STRAIGHT LINE. During an exercise your body-parts move through an arc, part of a circle… but the resistance provided by barbells and conventional machines is moving in a straight line. The result being that a full-range exercise is utterly impossible with a barbell or a conventional machine. You can have resistance during the mid-range of movement… or you can have resistance at the start and during the first part of movement… or you can have resistance during the last part of the movement and at the end of a movement… BUT YOU CAN HAVE ONLY ONE OF THE THREE CHOICES. And in many cases you have no real choice, you are stuck with what is available.

Most barbell and conventional machine exercises provide only mid-range resistance, and such exercises do absolutely NOTHING for flexibility. Friction-based exercises (Isokinetics or Isonetics) are utterly useless in regard to flexibility.

Only Nautilus Machines are designed to provide the absolutely essential rotary form of movement that is required for full-range resistance, thus Nautilus Machines are the ONLY source of FULL-RANGE exercise.



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