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The Pre-Exhaustion Principle

To begin with, I want it clearly understood that I make no claims that the subject of this chapter is either new or original; on the contrary, the principle I am about to describe has been mentioned in print (although not under the name I am giving it here) several times during the past few years – however, by and large, I think the very great value of this principle has been overlooked. I do not know the name of the originator of this principle, but he took a long step in the direction of improving the results that are possible from weight-training.

Quite a number of examples of the proper application of this principle could be given – but I will restrict myself to three such examples; however, once the basic idea is clear, it should be possible for almost any trainee to use this principle to very great advantage in dozens of ways.

In general terms, the primary purpose of the application of this principle is to overcome one of the serious shortcomings of almost all conventional exercises; properly used, this principle makes it possible to work a particular muscular structure – almost ANY muscular structure – much harder than is normally possible. In almost all conventional exercises involving the functions of two or more muscular structures, a point of failure is reached when the weakest involved muscles are no longer able to perform; and in such cases, very little in the way of growth stimulation is provided for the stronger muscles involved in the same exercise.

For example; in the squat, a point of failure is usually reached when the lower-back muscles fail – and this normally happens long before the much larger and far stronger frontal thigh muscles have been worked as hard as they should be for the production of best-possible results.

But – by "pre-exhausting" the frontal thigh muscles – this problem can be solved; this can best be done in the following manner. First, perform one set of about twenty to thirty repetitions of leg presses – but continue until it is literally impossible to move the weight in any position, regardless of the number of repetitions that are momentarily required. Second, INSTANTLY follow the leg presses with a set of about twenty thigh extensions – with no rest at all between the leg presses and thigh extensions, and again continuing the set to a point where additional movement is utterly impossible. Third, THEN DO YOUR SQUATS – INSTANTLY, with no rest at all following the thigh extensions, not even so much as two seconds of rest.

You will find that very little weight is required for the squats – probably only half (or even less than half) of the normal amount of weight that you use for squatting; in many cases, as little as 135 pounds will be all that is required for a man that usually squats with well over 300 pounds for 15 or 20 repetitions.

But regardless of the fact that the weight being used is actually very light, when you do reach a point of failure in your squats it won't be because your lower back failed before your thighs were properly worked; your thighs will be worked far harder than they ever were before – and when you fail, it will be because your thighs are exhausted.

In effect, you have removed the "weak link" of lower-back involvement in the squats; by pre-exhausting the frontal thigh muscles before squatting.

Another example. Performing dumbbell "side raises" immediately prior to behind-neck presses. In this case, perform a set of about ten repetitions of STRICT side raises with dumbbells; keep the palms of the hands turned down towards the floor, rather than permitting the palms to rotate forward –maintain a solid "lock" in the elbows, don't permit the arms to bend at all – keep the arms well "back" in line with your shoulders, if held far enough back the arms will "lock-up" in the shoulders at a point just above level –move smoothly and without body-swing – and continue with partial repetitions, following about ten full repetitions, until you are simply unable to move the dumbbells away from your sides.

Then – INSTANTLY – do a set of about ten repetitions of behind-neck presses; with a fairly narrow (slightly wider than shoulder width) grip. And, again, carry this exercise to the point of utter failure.

And now the final example; pullovers immediately followed by pulldowns. In this instance, do a set of as many as fifty repetitions of stiff-arm pullovers, carried to the point of failure – performed on a decline (head lower than feet) bench if you have one available. Then, immediately perform a set of about twelve repetitions of behind-neck "pulldowns" – using a fairly narrow (25 inches wide) grip, and with a bar designed to provide a parallel grip, a grip such that the palms of your hands are facing each other when your elbows are forced back in line with your shoulders.

Done properly, that cycle will "pre-exhaust" your latissimus muscles without tiring your arms – then, during the brief period while your arms are actually stronger than your upper-back muscles, you can take advantage of that momentary condition to use the strength of the arms to work the latissimus muscles much harder than would otherwise be possible.

But – IN ALL CASES – the "recovery time" of the pre-exhausted muscles is very brief indeed, usually something on the order of three seconds, or less; thus, for best results, you must move INSTANTLY from one set of an exercise to the next set of another exercise, with no rest at all, not so much as two seconds of rest.

This principle can be applied to almost any compound exercise; simply decide which muscle you wish to concentrate on, then pre-exhaust that muscle by the performance of an isolation type exercise, and then instantly involve the same muscle in a set of compound movements.

Obviously – when using this system – you WILL NOT be able to use anywhere near as much weight as you normally would in the particular compound exercises involved – in the above examples, these were the squats, the behind-neck presses, and the pulldowns; but you certainly will do far more in the way of stimulating muscle growth.

How many such cycles?

At first, not more than one – later, probably two cycles during each of three weekly workouts; but never more than three such cycles in any workout – and in that case, you would probably be well advised to practice those particular exercises only twice weekly.

And while I promised only three examples, it may be a good idea to add a few more; barbell curls, immediately followed by regular-grip chinning –triceps curls, immediately followed by parallel dips – stiff-arm supine lateral raises, immediately followed by barbell rowing motions. The list is almost endless.

Remember – during a workout, you are trying to build strength, not demonstrate it; the actual amount of weight is of no slightest importance –so long as it "feels" heavy to your muscles.

Try this principle – and try to understand it clearly; once you do, it can be used to simply enormous advantage in workouts conducted for any purpose.