



Seven Laws Of Training

1. The Principle Of Individual Differences

No one's training can and should be the same. Consider the following:

- Bigger muscles heal slower than smaller muscles.
- Fast movements require more recovery time than slow movements.
- Red fiber muscle tissue recovers quicker than White fiber muscle tissue.
- Women recover slower than men.
- Younger folks recover quicker than older folks.
- Heavier loads require more recovery than lower loads.

There are many more variables. But these points sum up the point. Furthermore, because not all athletic endeavors are the same, training must be specific (which will be covered later). It makes no sense for a football player, a power lifter and a marathon runner to train the same. Each is "strong" in his or her given sport, and will benefit only by training to enhance their particular "strength".

2. The Principle Of Overcompensation

What happens when you rub the palm of your hand at the knuckles? If done enough — but not too much — calluses will form. Rub it too much and a blister will form. The calluses is good and the blister bad... The bottom line is that Mother Nature overcompensates and adapts the body to the stress it receives. Muscles and skill performance are no different. This leads to (among the other principles) to the Overload Principle.

3. The Overload Principle

In order to force this "Overcompensation" the stress placed upon the body, there must be an overload (a stimulus greater than what is generally placed upon the body). If you are content to squat the same weight with the same reps and sets without ever improving, your chances of improving in the squat are very small. Likewise, if you jump, run or move the same way without ever making it more difficult to do so or trying to do better, you will not improve in sport specific skills.

4. Specific Adaptation to Imposed Demands (SAID)

The body will adapt in a highly specific way. To become better at squats, you must do squats. To become more enduring, you must train enduringly. To become more explosive, you must train explosively. This principle further notes the points made under the Principle of Individual Differences. Training must be specific and it makes no sense to train for anything other than your sport specific skills. However, as we shall see, there are exceptions.

5. The General Adaptation Principle (GAS Principle)

The General Adaptation Syndrome Principle was presented by Dr. Hans Selye years ago and was originally applied to psychological stress. However, it has also been applied (and accepted) to physical stress in three phases:

- A. The Alarm Phase. The body will not like the overloaded stress placed upon it and begins to take drastic measures to combat it.
- B. The Resistance Phase. The body will try to resist the stress.
- C. The Exhaustion Phase. The body will inevitably become exhausted if it doesn't receive rest from the stress. This 3-phase principle leads to the belief that there must be periods of low or no intensity between those overloaded stresses, which tax the body. You simply can't train hard all the time! Doing so will lead to over training (over a period of several weeks) and dire consequences will follow.

6. The Use/Disuse Principle

With the GAS Principle understood, what is it to be? Low or no intensity? The main problem is that it could take weeks to recover from explosive activity (recall what was said in the Principle of Individual Differences), yet there is still the matter of skill training to be considered. Furthermore, the body will never adapt unless it is taxed often enough. Therefore, there must be periods of low intensity (but periods of intensity, indeed!) between periods of high intensity.

7. The Specificity Principle

Getting back to the SAID Principle, the body will adapt in a highly specific way to the training it receives. However, a strong athletic foundation is needed and the body may not be ready for such specific training. This is especially so given that:

1. The season many times causes injury or some breakdown of a solid foundation, and
2. Many sports are ballistic in nature and the body may not be ready to act or train in such a way.

The Specificity Principle simply states that for these reasons, training must go from highly general training to highly specific training. For example, if you are a shot putter, you may want to start out with limit strength training and light cardiovascular conditioning (in the form of sprints) move on to general explosive training (Cleans, dumbbell cleans, etc.), low impact plyometric training and then shock training. If you try to do shock training before the other phases, you will run the risk of such training being ineffective and possibly dangerous.

Conclusion

There may be other "laws" or principles of training. However, these seven usually (if not always) covers all aspects of athletic training. Once put together, the most logical training program involves a periodized approach, which cycles the intensity and training objectives. The training must be specific not only to your sport, but to your individual abilities (tolerance to training stress, recoverability, outside obligations, etc). You must increase the training loads over time (allowing some workouts to be less intense than others) and you must train often enough not only to keep a detraining effect from happening, but to also force an adaptation.

