**8 Progressive Overload techniques – Manipulating Your Training Variables**

When training, you need to progressively overload for continuing success and results, hence the principle of progressive overload.

**What training variables are there to consider?**

We typically think of weight and total volume when we’re talking about progressive overload, but there is an array of others at your disposal. Here’s the total list:

* **Weight**
* **Rest**
* **Muscle Action**
* **Exercise Tempo**
* **Exercise Type**
* **Number of Exercises**
* **Frequency**
* **Total Volume (sets x reps)**

As you can see, there’s more than one way to apply progressive overload in your training programs. Which training variable you choose and how you modify it will be dependent on your training goal(s) and fitness level.

**Training Variables at your Disposal:**

**Weight (Increase)**

There’s only one way to progressively overload with weight, and that’s to dial it up. As you become stronger, the weight will become easier, calling for you to increase the weight on the bar.

If you’re performing a barbell squat at 3 sets of 5 and hit the prescribed weight through all 15 reps, bump up the resistance the following training session by 5 lbs or 2.5%.

**Rest (Decrease)**

I’ve found rest to be one of the most under-utilized overload variables, which is unfortunate. Rest is one of the primary determinants of the overall intensity of your workout. The amount of rest in between exercises determines your training goals (5-8 minutes for power, 2-5 minutes for strength, 1-2 minutes for hypertrophy, 30-60 seconds for endurance), how you will perform on subsequent sets, and the metabolic demands that will be placed on you during the training session.

With this training variable, we’re looking to decrease. If you’re doing a circuit of 4 exercises with 45 seconds of rest between each exercise and 3 minutes of rest between each round, start by decreasing the rest time between exercises to 35 seconds. Once you have worked your way down to performing each exercise back to back with no rest, move onto reducing the rest time between rounds to 2 minutes and 30 seconds, and so on.

Rest is one of the best ways to modify the intensity of your workout and should be a staple overload variable in your programs, as with it, you can manipulate the training stimulus of any workout.

**Muscle Action (Modify)**

Here, we’re talking about the concentric, eccentric, and isometric actions of a lift. Most programs follow a standard concentric focused routine, but there are plenty of benefits to incorporating other muscle actions.

Emphasizing the negative (eccentric) portion of a lift increases the time under tension and provides a greater stretch through a full ROM than you would get concentrically. And performing circa-maximal or supra-maximal eccentric overload is great for increases in strength and size, not to mention amazing plateau breakers.

**Exercise Tempo (Increase / Decrease)**

By modifying the tempo of an exercise, we’re indirectly emphasizing one of the 3 muscle actions previously mentioned.

If you have been following the standard 1:1 concentric eccentric exercise tempo, try emphasizing the negative portion of the lift to increase the time under tension (i.e., 1:3 concentric eccentric). Or lower the weight to ~60% of your 1RM for an exercise and perform speed work to focus on explosion of a movement (i.e., x:1 concentric eccentric – x stands for explosion).

**Exercise Type (Modify)**

You can manipulate exercise type as an overload variable through exercise progression (i.e., reverse crunch –> decline reverse crunch) or by modifying the exercise stimulus.

In overloading through progression, you’re taking an exercise and overloading by increasing the difficulty. For example, if you have been performing a basic reverse crunch, you can increase up the intensity by performing a decline reverse crunch.

In modifying the exercise stimulus, you’re taking an exercise and modifying the mechanics. Instead of performing the conventional deadlift, you can switch it up by performing a sumo deadlift, snatch grip deadlift, deficit deadlift, and so on.

**Number of Exercises (Increase)**

By increasing the number of exercises, you are inherently increasing the frequency of a muscle group and total volume of the training session. Before adding to the number of exercises in your training program, take this into consideration.

**Frequency (Increase)**

You can overload frequency by increasing the number of training sessions per week (2x/week to 4x/week) or how often you train a specific muscle group (i.e., moving from chest 1x/week to 2x/week).

Again, frequency inherently lives within other training variable parameters such as the number of exercises and total volume, which should be taken into consideration before modifying.

**Total Volume (Increase)**

Volume can be overloaded by increasing the total number of repetitions or sets for the prescribed workout. If you’re considering manipulating this training variable, I would recommend doing so by first increasing the number of repetitions before adding an entire set.

[](http://zelsh.com/wp-content/uploads/2013/07/Progressive-overload.png)

If you’re doing a chest fly at 4 sets of 8 reps for 30 pounds, keep the weight and sets the same for the next workout but increase the number of repetitions to 10. Adding an entire set can be taxing because of the sudden increase in volume. If you have been doing 4 sets at 12 reps of 3 exercises and you increase the volume by adding a set to each exercise, you’ve just increased your total volume by 36 repetitions in a single training session, which may or may not be suitable depending on your fitness level.

Ultimately, you want to prioritize what training variable is important to you based on your goals. If you’re training purely for strength, then you’ll want to progressively overload by increasing the weight on the bar. If the goal is hypertrophy, your focus may instead be on increasing the total volume of the session or modifying the exercise tempo to emphasize the negative.

-Taken from Zelsh.com: [Kristian Bouw](http://zelsh.com)