

INTERRUPTED SETS for Uninterrupted Muscle Growth

By Fabio Zonin, StrongFirst Certified Master Instructor

If you have ever watched an old school power bodybuilder closely, at some point you might have witnessed a technique called “rest-pause.”

There are plenty of variations of R/P, but basically it is about performing a set to failure, resting a few seconds, then doing more reps until failure is reached again. Oftentimes this procedure is done 2-3 times in a row, until the athlete can't complete even a single rep.

While this technique is indeed effective for inducing muscle hypertrophy, it presents several downsides.

First, there is no way you can maintain a perfect technique while you are pushing yourself to failure, especially several times in a row. Sooner or later bad things may happen.

Second, even if you are a “no pain, no gain” type of person, while you may enjoy the “burn” during your set and the “pump” right after it, you may not want to be sore and unable to carry on your daily activities for several days after each training session.

Finally, you are constantly exposing your body to an acid bath, which is not healthy in the medium to long term.

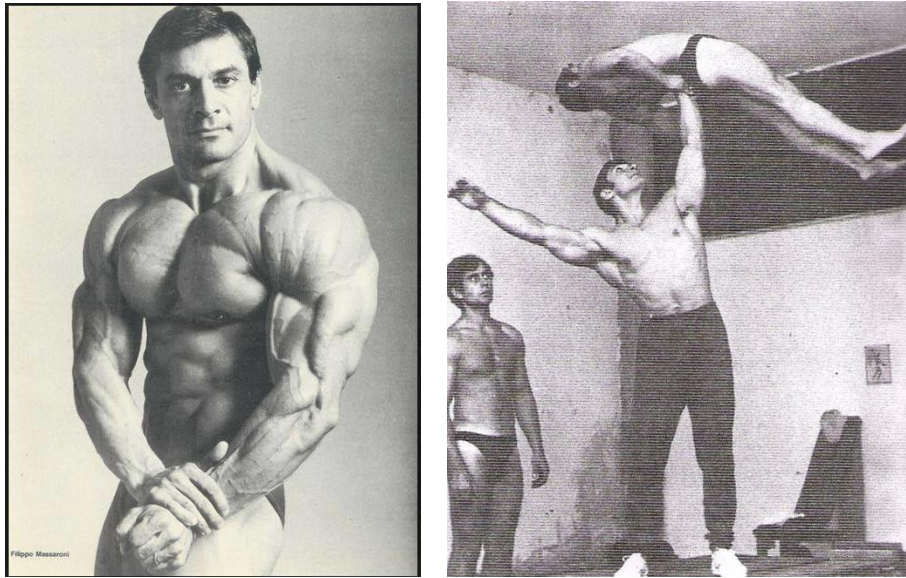
However, there is a variation of the rest-pause technique that delivers great results without any unhealthy compromise and complies with StrongFirst's principles and training guidelines.

This method is called the *Interrupted Set* (IS) and it was introduced a few decades ago by Dr. Filippo Massaroni, a former Italian bodybuilder and strongman. He won the Mr. Universe title back in 1981, has degrees in Biology and Sports Sciences, and was a Motor Sciences teacher at the University of Tor Vergata, in Rome, Italy.

Here is how Dr. Massaroni's technique works.

INTERRUPTED SETS

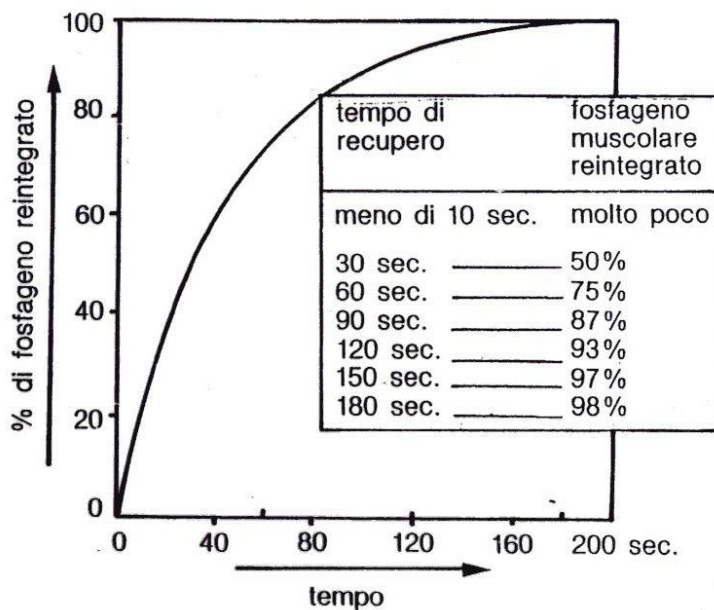
1. **Select a weight that allows you to complete 8-10 perfect reps (8-10RM).**
2. **Do 5 reps.**
3. **Rest for 30sec.**
4. **Repeat #2 and #3 until you can no longer complete 5 reps.**
5. **Rest no less than 3min before doing another set.**



Dr. Filippo Massaroni, the author of the Interrupted Set

Unlike other versions of the rest-pause technique, the Interrupted Set method chooses sets of five reps. “Fives” are the top choice for many strength athletes and power bodybuilders. The weight is heavy enough to produce plenty of strength, yet the set is long enough to produce enough metabolic disturbance to build muscle.

The rest period recommendation takes advantage of the dynamics of ATP and CP recovery. While it takes minutes to fully replenish these “muscle fuels,” their partial recovery is very rapid. After 30sec the muscles are 50% replenished.



And since you have not fully exhausted them, they do need to be fully recovered. 30 seconds later, having refilled about 50% of your ATP and CP, you will be certainly able to complete another set of 5 reps with your 8-10RM.

If you do this several times in a row, your ATP and CP reserves will deplete more and more, until at one point you won't be able to complete the 5 reps. This is when your set ends.

The beauty of this technique is that it allows you to:

- 1) Subject your muscles to a long time under high tension;
- 2) Thoroughly deplete the CP;
- 3) Delay and reduce accumulation of lactic acid.

Both #1 and #2 have been recognized by researchers as key stimuli for triggering muscle hypertrophy.

Lactic acid is also a stimulus—but it should not be allowed to build up excessively for [reasons explained here](#).

Thus, Interrupted Sets are power bodybuilding at its best.

Only the very last rep of an Interrupted Set is taken to the limit: to “refusal,” not to “failure.” As you learned in a previous issue of [StrongFirst newsletter](#), while amateurs train “to failure,” professionals occasionally train “to refusal”, which means they complete as many perfect reps as possible with a given weight, but without missing or messing up any.

Here's how you can apply this technique to your training.

Pick a training session that calls for heavy weights, $\geq 85\%$ 1RM. Once you have completed all your sets planned for the day, back off in weight to your 8-10RM and perform one Interrupted Set. Occasionally, you may do two sets like this, taking plenty of rest between them, no less than 3min.

Always make sure that the following day calls for easy training or for total rest.

Do this no more than once a week, and never for more than 2-3 weeks in a row.

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