

TRAINING

Training by Percents

as told by LOUIE SIMMONS

In the Eastern Bloc countries, lifters break world records during the full course of the year. How do they do this? They do it by training by percents. There are many things that should be clarified to any lifter who trains in such a manner. The tables and graph that accompany this article can be used as guidelines for those who train by percents.

What's wrong with the progressive overload theory of training? Let's start in the first few weeks of a twelve week cycle. The weights are normally in the 50-60 percent of max range at 6-10 reps which is fine for building mass, but that's all it will accomplish. The strength portion of that cycle, which consists of weights in the 70-90 percent of max range, is usually used for a few weeks in mid-cycle. But, weights above 90 percent max will produce no additional strength, leading to "maxing out" on the last workout, but not at the contest! Absolute strength must be tested at the contest, not in the gym.

Many people feel that training for 3 reps will keep them from overtraining, but this is a misconception (see Table 1). The main concern for people who train for strength is to manage their training with optimal reps with a given percent. For instance, the Russian 6 week training program consists of sets of 80 percent max for doubles. When training with 80 percent, the optimal reps are 2-4 and the number of total lifts should be no less than 10 and no more than 20. This is where slow adaptation to training occurs.

When an athlete can progress from 5 doubles to the optimum of 10 doubles or 5 sets of 4 reps, he has then accomplished "slow adaptation" through a greater training load which increases strength. The athlete who can handle the greatest training load at the correct percents will be the strongest. A bodybuilder may handle the same total weights as a powerlifter, yet the bodybuilder will achieve greater mass because his training occurs at the 50-60 percent max range, which is designed for mass. Whereas, the powerlifter who trains with 70-90 percent will achieve strength and possibly lose mass at the end of a cycle.

Here is a list of things to know about power cycling with percents:

1. Do not worry about not handling heavy weights all through the cycle. It doesn't take heavy poundages to build tendon and ligament strength. Tendon and ligament strength is built by using 50-70 repetitions at about 30 percent of maximum weight.
2. To build speed and strength, use 2-6 reps at 70-90 percent.
3. For every 200 lifts, 20 of them (or 10 percent of the time) should be above 90 percent, and up to 100 percent.
4. When training by percents, a rule of thumb for jumps (intermediate weights) is to use 70 percent for 2 reps and 75 percent for 2 reps for warmups, and then proceed to your optimum percent in the 70-90 percent range for multiple sets.
5. The Russian 6 week training program was never intended to be used

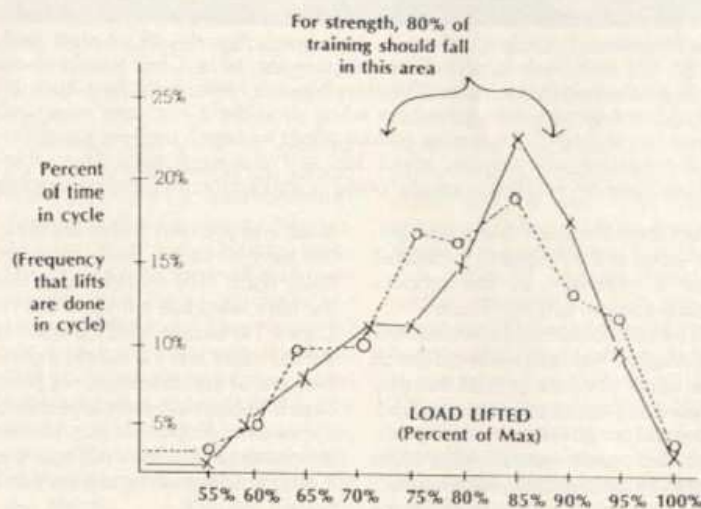
TABLE 1
Optimal Number of Lifts by Percent (Prilepin, 1974)

Percent	Repetitions	Optimal	Range
70	3-6	18 lifts	12-24
80	2-4	15 lifts	10-20
90	1-2	7-10 lifts	4-10

TABLE 2
Suggested Training Routine (no gear used)

Week 1.....70% x 8 triples, 2 minutes between sets
 Week 2.....75% x 8 triples, 2 minutes between sets
 Week 3...80% x 6 doubles, 2 minutes between sets
 Week 4...85% x 5 doubles, 3 minutes between sets
 Week 5.....(80x2, 85% x 2, 90% x 2)
 5 minutes between sets
 Week 6.....contest

The cycle above should be repeated not only for contests but continuously throughout the year.



GRAPH A - Training percents of accomplished Soviet lifters
 (o) clean & jerk
 (x) snatch
 (adapted from Ermakov & Atanasov, 1975)

throughout the year. It does not provide enough recovery time between workouts. Restoration techniques are not as developed here in the USA as they are in the Eastern Bloc countries.

Instead of training 2-3 times per day, as they do in the Soviet Union, we normally can only train once a day. The workout time may be the same, but they can divide the workout into intense and fast segments, spaced throughout the day. Therefore training tempo is important.

6. Optimal time between sets is one and a half minutes and should never

exceed five minutes. If left to fully recover, a muscle will never be overloaded and no additional strength can be gained.

7. When training with weights over 90 percent, the weights at the end of that workout should be dropped to 30 percent max to incorporate speed-strength qualities as well. This can be used as a substitute for plyometrics which many people feel are dangerous and inconvenient.

8. To become stronger, one must raise the training load per workout. Total tonnage in the correct percent training range is critical to achieve absolute strength. This is simply achieved by adding sets but not exceeding optimal lifts (see Table 1).

9. In the Soviet Union, 50 percent of all training is in the assistance exercises, which are also trained by percents.

10. In the Soviet Union highly qualified athletes train in the 70-90 percent range for 80 percent of their lifts. Ten percent of the lifts are below 70 percent and ten percent are above 90 percent. This has proven to be highly effective for the past 12 years for them. (see Graph A)

By using the techniques described above, Laura Dodd rose to become the greatest female squatter pound for pound by the Malone Formula. She squatted 545 lbs. weighing 162 lbs. at 40 years of age after only training for 5 years. Matt Dimel squatted 1010 lbs. also after 5 years of training by this method.

Innovative ways of training must be utilized in this country to bridge the gap with Soviet knowledge and success. What I have presented is a formula that can help anyone reach their genetic potential for powerlifting strength.

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Louie Simmons, who has coached 13 national and 6 world champions, submitted this article (previously published in POWER PLATFORM) because he wanted to reach as many lifters as possible. His interest is the betterment of American lifters. 'I'd like to help Powerlifting from declining as Olympic lifting did here in America, because of the lack of unity within the sport. We must pull together and help each other regardless of federation loyalty. A day may come when Powerlifting is truly a worldwide competitive sport'



Louie Simmons...at the 1973 CIWC Open. He recently squatted 810 at 242.