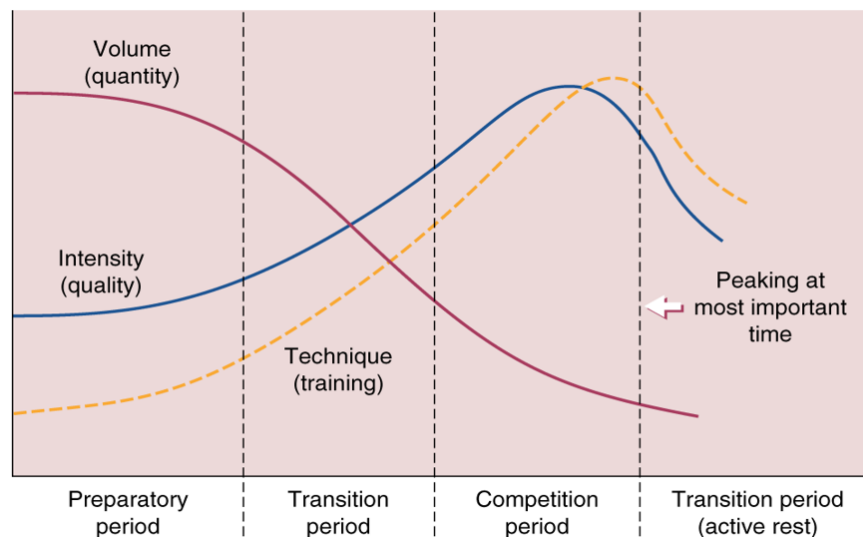


# The Effect of High-Volume Training in Weightlifting

By Leo Isaac, January 2019

In general, training in the sport of Olympic Weightlifting through the year fluctuates in intensity and volume according to the nearness of a competition. If a competition is many months away, the volume of training (the amount of work done) is relatively high while intensity is low. As the competition approaches, volume tends to reduce while intensity increases. This characterisation of training practice follows Matveyev's principle which is now a half-century old (see illustration below).



Athletes in Olympic Weightlifting are typically fond of training that provides an opportunity to push towards lifting heavier weights and prefer to keep volume low in the belief it will improve their chances. This natural tendency should not be surprising given the ultimate purpose of competitive Weightlifting. However, the maintenance of training regime that involves frequent pushing for maximum weights on an ongoing basis can have significant and long-lasting detrimental effects on the wellbeing of the athlete. An athlete who attempts to prolong high-intensity training can go backwards, a phenomenon called 'maladaptation'. Injuries may occur and increase in severity until the athlete acknowledges the need for rest and medical support.

The improvement of the athlete's performance is however dependent on the extent of effort they consistently put into their training. Although it is not feasible to push all year round on maximal weights, it is not realistic to expect improvement unless there is a systematic approach to increasing training stress. Developing such a process is the central theme of periodisation theory, the division of the year into different types of training to maintain a high stimulus for adaptation but without exhaustion and injury.

In Weightlifting, adherence to Metveyev's principle, and to the theory of periodization, means that it is beneficial for the Weightlifter to experience high volume, low intensity training at certain times of the year. This type of training takes place in what is usually referred to as the preparatory period and is often maintained for 4-6 weeks continuously. It is characterized by a greater number of reps per set and a modification of the training schedule that focuses less on technique and more on power and strength development. The number of reps per set is commonly 5 and because of the physiologic stress that this creates, weights lifted fall into the spectrum of 60-80% of maximum.

During high volume training sessions athletes should experience momentary bouts of high physiologic stress. The cardiovascular system will be in overdrive to replenish energy used during the set and this means that the heart rate will rise to very high levels, respiration will increase and unpleasant side effects of energy production (lactic acid) will be experienced. While it is common to hear Weightlifters grumble about high volume training, it should be remembered that such physiologic symptoms are common to the training of the athletes in the majority of sports. Weightlifters are athletes after all.

If an athlete engages in high volume training with the right attitude, the intent should be to develop a high level of Weightlifting fitness. The objective should be to increase one's capacity to train. After several weeks of high-volume training, an athlete should show signs of adaptation, a capacity to endure, and an ability to complete more work in a training session. This is very good adaptation! As the athlete moves into the next period where volume begins to fall, and intensity rises, they should be fitter and more able to cope better with the physiologic stress of training at higher levels.

No matter what period of the year, the task for the athlete and the coach is to obtain the maximum value out of their training. If athletes seek to improve, they must purposefully and consistently work to develop their capability to train effectively and this means pushing the boundaries of their fitness for Weightlifting. This requires a great deal of effort and commitment, and athletes are defined by these qualities.