

Chain Drilling and Grind Matches: Preparing for the end-of-the-season conditioning peak

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In planning for a national or state championship, several factors must be considered. Among the most important is the end-of-the-season conditioning peak. While it is too early for wrestlers to train like they are peaking, it is critical that wrestlers and coaches have a plan for the peak. To be most effective, planning must take into consideration the energy systems that provide a wrestler with the power and stamina necessary to dominate a match.

Many wrestlers are familiar with the term lactic acid. It is often associated with the burn you get in your muscles during a hard effort. This substance can be converted to fuel for muscle contraction; in fact, during a hard match, the lactic acid system provides a substantial amount of energy. On the other hand, when the levels of lactic acid become too high, excessive fatigue and muscle failure result. However, a properly trained lactic acid system allows for repeated, intense 30-second to one-minute bursts like you have in a match.

This is different from the aerobic energy systems, which are used more extensively during longer bouts of exercise. Aerobic sources of energy production, make up the oxidative system, which should be the base of a wrestler's conditioning program. There are two reasons for this. First, a well-conditioned oxidative system enables wrestlers to train at a higher level before switching to anaerobic sources of energy production, which tend to bring on fatigue more quickly. A second benefit of aerobic fitness is the corresponding increase in the concentration of enzymes and other structures within muscle cells that use fat for energy. Thus, a person can literally use more fat for energy, even at rest.

During the early-season and through December, wrestlers can continue to train the aerobic system through *chain drilling* and *grind matches*. These activities focus on aerobic energy systems, while intermittently requiring short-bursts of anaerobic energy production. Both of these activities can be sustained for an hour or more.

Chain drilling, of course, involves drilling with no breaks in the action. One wrestler, for example, drills a takedown and his or her partner drills a stand-up. I have found it works better to alternate. The first wrestler drills the takedown, then the other hits a stand-up followed by a takedown. This works for mat wrestling as well.

Too often, wrestlers drill a takedown, let the drill partner get up, look around at the other people practicing and drill another takedown. This does little for conditioning and is a poor use of time. There should be no rest in the action, when drilling is used for conditioning. This is not to say you should go 100%. The key is to emphasize the seven

basic skills. Drill with the speed and position goals of a match; make each other work, but don't clamp down like in a match.

One of the most valuable aspects of this drill is that it teaches wrestlers to battle for position. The quicker you can get into good position following a takedown or an escape, the less tired you will become. The only way to survive chain drilling against a good wrestler is to race to get hand control and position when he or she is taking you down, and race to cover the hips and top. Make your partner carry your weight, but allow the stand-up, switch, etc. Over time, good position becomes second nature.

Grind matches can also be useful for developing aerobic fitness, but they are more valuable as an activity that develops mental and physical preparation for the end-of-the-season peak. I first learned about grind matches during a winter training camp at the USOC. Coach Steve Fraser incorporated matches of 60-, 75-, and 90-minutes into the workouts to teach wrestlers to be relaxed while still giving an all-out effort. This type of training develops mental toughness. Grind matches can benefit both high school and college wrestlers, but the duration of the matches may need to be decreased with less experienced wrestlers.

During each grind match, the goal is to wear your partner down mentally and physically. Never let your training partner off the ropes. Even if a wrestler is winning, the pain of the match is always present. Champions are wrestlers who make the choice to push through this pain even when they have already broken their opponents. The same pain is present in a match.

This being the case, late December and early January are appropriate times to incorporate grind matches into your practice schedule. Grind matches continue to build upon the continuous action developed through chain wrestling, but the intensity is higher, requiring the lactic acid system to create energy. This is one of the ways to use wrestling as a conditioning exercise to prepare for the end-of-the-season peak.

Both grind matches and chain wrestling should be incorporated into the wrestling workouts at this stage of the season. Nevertheless, each should be tapered by the second or third week of January, when maximizing lactic acid system training becomes the top conditioning priority. A following article in early January will focus on making the transition to lactic acid training.