Authored by Mike Seese
412-722-7233

Periodization

There's a reason that **Olympic athletes and every professional athletic team use periodization** when conducting strength and conditioning for athletes. It works, and it works well. Periodization is nothing more than cycling through different phases of training based on goals. It is also typically aligned to specific nutritional plans to best support a phase. For example, if you exercise a strength phase for two months, you'll typically work in 3x3 or 5x5 resistance training structures, a high volume of anaerobic training, and plus up on calories to support muscular growth and repair. Alternately, if you're following an endurance phase, your resistance training structure will shift to higher numbers of sets and repetitions, and your calorie count will probably be significantly lower. People commonly say "bulk" or "shred" phases, and those are examples of periodization. However, most people don't look at a calendar and plan a year of training with logical progression and proper transitions.

To plan your own periodization, categorize your training into three periods:

1. Preparatory Phase (foundations)
2. Competitive Phase (adjusted intensity)
3. Transition or Sub-Max Phase (active rest period for body to realize gains and recover before the next preparatory phase)

You also need to consider the different windows of time:

- Macrocycle (annual plan)
- Mesocycle (any phase of 2-8 weeks)
- Microcycle (week)

I'm not a professional athlete and I don't compete in anything. Is this still important for me? Yes, if you care about getting the most out of your workouts and achieving your goals, periodization matters.

How do I plan this? If you look at a calendar, divide the year into blocks of about two months. Each two-month period is a phase. The prep and competitive phases will last about two months each, potentially. The transition phase really depends on the athlete or person who is training. Transition or Sub-Max phases need to be two weeks for the professional or collegiate athlete (or experienced

fitness guru), or they can be as long as 1-2 months for beginners. Below is a sample overview:

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Preparatory		Competitive		Transition		Preparatory		Competitive		Transition	
Foundation (aerobic, etc.)		Strength Program 5x5		50% Effort work capacity		Foundation (aerobic, etc.)		Power & Speed		50% Effort work capacity	

Remember, this is just one sample of what your periodization could look like. I personally believe the transition period should be as close as possible to two weeks, but everyone is unique.

Strength

Strength programs and phasing are typically characterized by lower rep counts per set and a high % of one repetition maximum ability. Typical strength programs run 3 x 3 or 5 x 5, maybe as high as 3 x 6-8 set and repetition schemes, with the intent of progressively increasing load with small percentages each week (the 2.5 and 5 lb plates that most people at the gym don't use, are the most helpful in growth). Helpful techniques are **drop-sets and rest-pause sets**. These two techniques alone are critical for growth.

- Drop-Set: at the completion of a set, drop the weight 33% and immediately execute the same set and reps with the new weight
- Rest-Pause Set: At muscle failure, rest for 30 seconds, and then continue work even if it's only 1-2 more reps. Continue rest-pause until you achieve all planned repetitions

During strength programming, it's important to consume sufficient and proper calories to support muscular growth and repair. Most people associate this with a "bulk" phase, and it usually is, based on dietary programming.

Cardio should mostly consist of anaerobic programming like HIIT. Anaerobic training pairs well with strength training, supporting muscular growth and recovery while challenging maximum cardiac output (basically how much blood your heart pumps in one minute). Aerobic cardio has been shown to detract from muscular growth and recovery during strength work.

Authored by Mike Seese
412-722-7233

Power and Speed

Training for power and speed can be combined with a strength phase. The key here is to emphasize tempo of movements, incorporate some training aids (bands, chains, etc.) to enhance power, and include sufficient **plyometrics** in workouts. Simply put, plyometrics are functions in which muscles exert maximal effort in a short amount of time (think long jump, box jump, etc.). Plyometrics helps build strength and reduce risk of injuries. The focus here is on speed and timing of repetitions more-so than rep counts. However, rep counts are typically 10-30 with bodyweight or light weight. Exercises such as barbell squat jump should be kept within a 6-8 rep range (and focus on proper form and landing).

Caloric consumption during this phase really depends on your bodyweight and aesthetic goals. You can plus up on calories for more mass, or just as easily enter a caloric deficit and shred.

Cardio is typically balanced between aerobic and anaerobic work, with a higher concentration of anaerobic work.

Hypertrophy

Building muscular mass, or hypertrophy, is one of the most common goals of the public at large. Rep schemes are typically 3 x 8-12. Where people fail with these rep ranges, however, is doing the same amount of weight with the same reps every week. You should be trying to get all 12 reps at a certain weight. When you get 12, you add weight and start at 8 reps again, working back to 12. The process repeats, and this progression and overload results in muscular mass. Additional techniques in this phase which are helpful include super-sets and tri-sets.

You can't build muscle mass without a caloric surplus. You'll need to increase caloric intake, and you'll probably want to keep your macro ratios "clean" so you don't put on fat.

You'll want to focus on anaerobic cardio. Aerobic work is okay, but it will take away from your muscular mass in extremely high amounts.

Authored by Mike Seese
412-722-7233

Endurance

Endurance phases involve high rep counts, long endurance activities, and typically are sought-out by endurance athletes like Tri-Athletes. Rep counts surge into 3 x 20-30 or even higher. It's critical to focus on form and forget about the amount of weight during these sets. As you get tired, you'll want to cheat in form, and that will result in injury (if not avoided).

Endurance phases usually incorporate caloric deficits or maintenance to achieve the lightest possible bodyweight capable of the longest and most efficient cardiac output (think cyclists). Many recreational athletes shred during this phase.

Aerobic cardio is, of course, the staple in an endurance phase.

Sub-Max Period (Transitions between phases)

Most athletes overlook the Transition phase. After 2-3 months of intensive training, the body benefits from 2 or more weeks of 50% effort. This has psychological benefits as well as physiological benefits. Admittedly, the hard worker in all of us wants to power through from program to program; however, numerous studies show that this isn't effective for optimal, long-term growth.

Take at least 2 weeks to Sub-Max your efforts after difficult programs. Your body, and gains, will thank you for it.