

Periodization & Practice

Planning

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Famous Words I Live by:

“Any *FOOL* can coach another *FOOL* for a year or two.”

....Tony Wells -

Periodization:

LONG TERM PLANNING

***The rational,
organized structure
of training over an
extended period of
time.***

A Systematic Training Plan designed primarily to:

- 1. Allow the organism to reach the highest level of genetic potential.**
- 2. Ensure that “peak” performance is achieved at the time of major competitions.**
- 1. Offset the probability of injury.**

A Cyclical Program:

***Smallest training unit
to largest training
unit.***

***From a single training session to a
1-4 year training plan.***

Microcycle:

- 7-14 training units.
- Intensity and duration may vary.
- Requires double sessions on selected days if you plan 14 units.

Training Microcycle w/Speed

Characteristics for

100M - 400M Sprinters:

- **Monday** – Power & Speed development, Strength endurance, Acceleration – starts (load 80-90%).
- **Tuesday** – Technical Development, Flexibility & Mobility (load 60-70%), technique runs.
- **Wednesday** – Speed and/or Specific/Special Endurance, Speed Strength, (load 90-100%).
- **Thursday** – Restoration of the organism (rest, massage, sauna).
- **Friday** – Power & Speed development and specific endurance, speed strength development, development of sprinting technique.
- **Saturday** – Speed development, explosive strength, starting practice (load 80-90%).
- **Sunday** – Restoration of the organism.

Mesocycle:

- 6 to 8 microcycles = 6 to 8 weeks.
- The amount of time required for cumulative adaptations by the physiological systems to occur.

Macrocycle:

- A season plan.
- An accumulation of various mesocycles which form phases that lead to a macrocycle.
- May be semi-annual or annual
- A more extended example

How does periodization work?

1. Stress is applied to the athlete being trained by “loading” the body for a planned time period within each microcycle.
2. During this time the body is training hard and a *breakdown* of the component being trained is occurring.
3. After a planned recovery period the breakdown ceases and the body begins to recover, naturally adapting to the stressor that was administered.
4. When *appropriate* stress is applied the body will “*overcompensate*” during recovery.
5. During overcompensation marginal improvements are made.

How does periodization work?

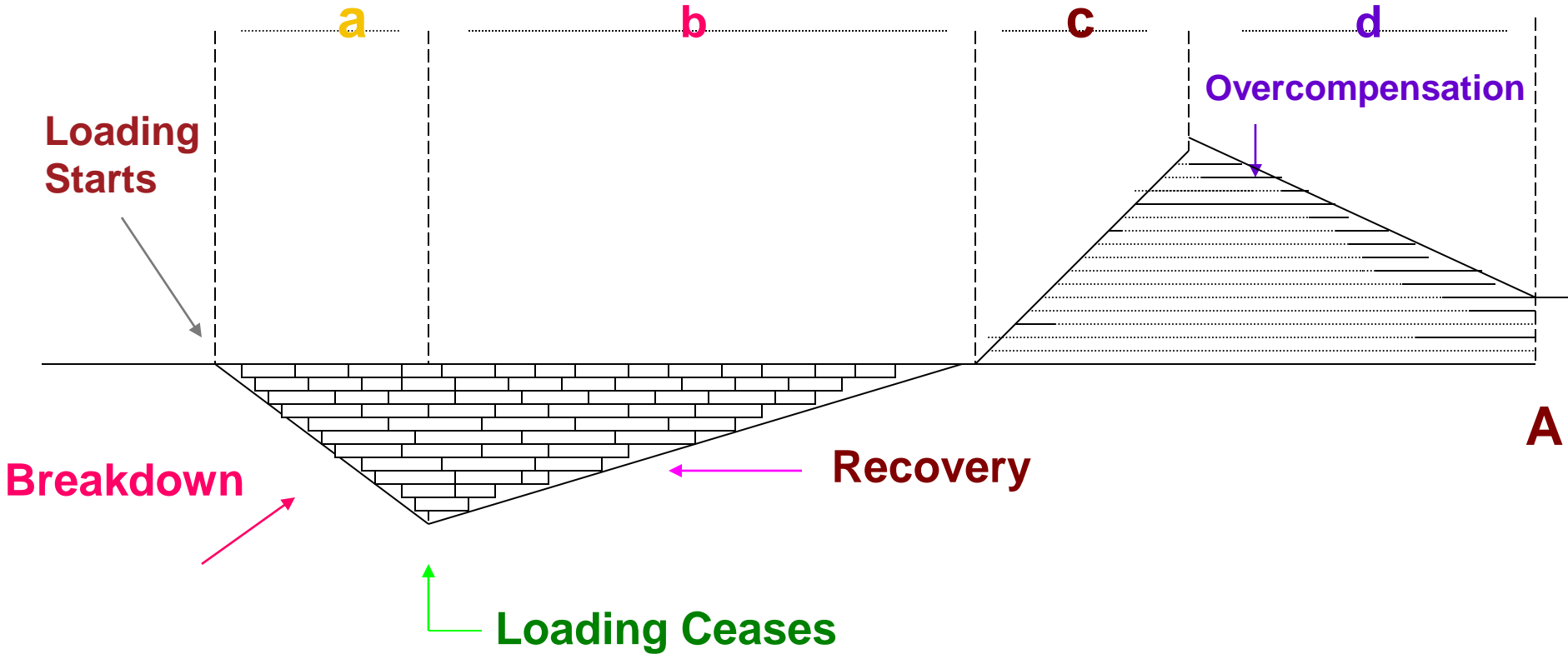
• Training should follow a wavelike pattern (see chart) in order for peak performances to occur during desired competitions.

- Timing high stress workouts to occur 48 to 72 hours *BEFORE* competition is the most effective way to allow for adaptation and sufficient recovery during the

Overcompensation (Supercompensation)

The physiological response by the body to physical training. It signifies an overreaction by the body to training stress and causes an improvement in performance by allowing the body to cope with a greater training stimulus.

The Role of Recovery



Periodization Phases of the Mesocycle: Preparation Phase

General – Training to train – progressive - low intensity to high intensity – endurance and strength.

Specific – Training for competition - transition to competition – improvement of technique – unite all training components (speed, strength, flexibility, coordination, endurance) to prevent injury.

Periodization Phases of the

Mesocycle:

Competition Phase

Pre – Competition

- Early competitions to test technique and physical fitness.
- Prepare for main competition phase.
- If progressing successfully, athlete should equal previous *personal best* or be within 2.5% of PB within the first five races.

Periodization Phases of the Mesocycle:

Competition Phase

Main - Competition

- Develop and maintain competitive performance- competition specific training
- Training volume goes down while intensity goes up – athlete should improve PB 6-8 weeks into this phase

Periodization Phases of the Mesocycle: *Competition Phase*

Unloading: Regeneration of central nervous system combined with imagery & mental training prior to major competitions of the year.

*Periodization Phases of the
Mesocycle:*
Transition Phase

- A period of 3 to 6 weeks of active rest prior to the start of the season.
- General training.

Double Periodization :

The most effective method of periodization occurs when the athlete “peaks” twice during one season (i.e. indoor and outdoor).

- *A double “peak” yields 1.98% improvement during the second peak while a single peak yields only .98% overall.*

Sample Periodization Program

(12 weeks):

6 Microcycles/2 Mesocycles/1 Macrocycle

Food for Thought:

- Organize training cycles so that peak cycle begins at most important meet and count backwards to start training date. Training must be holistic by bringing all event components to the starting line at once.
- It takes 6 to 8 weeks to develop any component and 6 to 8 weeks to hold the component. **Example:** For a June 1 peak competition date count 12 weeks back from June 1 to determine training plan.

Other influential components of any program include:

- Choice of exercises
- Order of exercises
- Resistance or load
- Number of sets* & repetitions per exercise
- Type of contraction – eccentric or concentric
- Speed of movement
- Rest periods between sets
- Rest periods between training sessions

