PERODOSATION M.P.Ed Unit- IV

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## Periodization

 Strategy to promote long-term training and performance improvements with preplanned, systematic variations in training specificity, intensity, and volume organized in periods or cycles within an overall program Jothhi Dayanadan

#### Periodization

 Periodization involves shifting training priorities from non-sportspecific activities of high volume and low intensity to sport-specific activities of low volume and high intensity over a period of many weeks to prevent overtraining and optimize performance

#### Periodizing Your Training Plan

- Dividing up your long-term training program into discreet blocks of time and varying both training intensity and skill set from one block to the next
- Working at different levels of intensity over time improves your overall fitness, teaches you to cope with fatigue both physically and mentally, makes training more enjoyable, lowers your risk of injury and helps you to avoid the dangers of overtraining.

#### Periodizing Your Training Plan

- Periodization introduces structure and efficiency to your training plan, allowing you to make the most of each workout session
- There's no wasting time on sessions that don't help you to reach your goal, which translates to better performance on event day 08.08.2021 Jothhi Davanadan

#### Periodizing Your Training Plan

- Periodizing your training plan involves two concepts:
  - Figuring out a workable timetable that fits you and your schedule
  - -Selecting the appropriate workouts for each time period that will help you achieve your fitness goals



#### **Periodization Cycles**

- Three time divisions of a periodized training plan:
  - -Macrocycle
  - -Mesocycle -Microcycle

## Macrocycle

- Macro = large
- Typically an entire training year but may also be a period of many months up to four years (for Olympic athletes).

#### Mesocycle

- Meso = middle
- It is the intermediate increment of time between the largest and the smallest
- There are several mesocycles in a macrocycle
- Each mesocycle lasts anywhere from several weeks to several months

## Microcycle

- Micro = small
- The smallest increment of time in the training plan, usually lasting from seven to 14 days (could last as long as four weeks)
- Two or more microcycles make up a mesocycle

<b>Training Period</b>	Typical Length of Ti	me Characteristics
Macrocycle	One training year	General plan Overall goals
Mesocycle	6-8 weeks	Detailed plan Specific goals
Training Phases	1-3 weeks	Endurance, Hypertrophy, Strength, Power
Microcycles	Daily	Fine adjustments for maintaining goals

#### **Periodization Cycles**

- Think of a workout session as the basic building block of the training plan; several workout sessions occur in each microcycle
- Mapping out a periodized training plan involves:
  - Put your goal or event on the calendar and work backward
  - Determine your macrocycle
  - Divide your macrocycle into mesocycles
  - Divide your mesocycles into microcycles
  - Plug workout details into your microcycles

#### **Training Phases Within Cycles**

- Preparatory Period
- Transitional Phase
- Hypertrophy/Endurance Phase
- Basic Strength Phase
- Strength/Power Phase
- Competition or Peaking Phase
- Active Rest Phase

#### **Preparatory Period**

- Longest phase (up to four months)
- Occurs when there are no competitions
- Emphasis of this period is to establish a base level of conditioning to increase the individuals tolerance for more intense training
- Conditioning activities begin at low intensities and high volumes; long slow distance running, low-intensity plyometrics, and high-repetition resistance training with moderate loads

#### **PERIODISATION OF TRAINING**

- Phases 1 & 2 PREPARATION
- Phase 1 General Preparation
  - General fitness work
  - This phase is usually known as "training to train"
- Phase 2 Specific Preparation
  - Specific fitness, ex. Speed, strength, skills and techniques
  - Intensity of training increases significantly
  - "training to compete"

#### **PERIODISATION OF TRAINING**

#### Phases 3, 4 & 5 - COMPETITION

- Phase 3 (pre-competition/ comp)
  - Beginning of competition season
  - Lots of fine tuning
  - Low level competitions
  - General training is reduced
  - Training is competition specific
- Phase 4 Competition
  - Competitions will occur every week
  - Leagues are in full flow, races, galas, etc
- Phase 5 Peak
  - The championship final (nationals, olympics, etc.)

#### What do you need to think about?

- Establish current year and long term priorities for athlete preparation.
- Consider
  - Physical preparation
  - Technical preparation
  - Tactical preparation
  - Mental preparation
  - Competitions
  - Other

#### **Transitional Phase**

- This phase is typically the first week of a mesocycle and is characterized by low-intensity and low-volume training
- It is common to place these weeks following mesocycles that end with high-intensity strength or power phases
- During this week assessments to measure progress should be performed to measure progress and identify adaptations achieved in the previous mesocycle

#### Preseason

- Leads up to the first event
- Later stages of the preparatory period and first transition period



#### **Off-Season**

- Period between the last event and six weeks (varies) prior to the first event of next year's season
- Includes most of the preparatory period





Jothhi Dayanadan

#### **Basic Concepts**



Over-Compensation is what training is all about-

 The athlete loads and recovers and you can take training to a higher level due to improved fitness.



#### Periodization Flow TERMS EXAMPLES Annual Plan Macrocycle Single Cycle, Bi-Cycle or Tri-Cycle Period Preparatory Competitive Transition Mesocycle **General Prep** Specific Prep Microcycle Week 1 Week 2 Week 3 Training Session Monday AM Monday PM Training Unit Warm-up Training Drills Warm-down

#### Single Cycle, Bi- Cycle or Tri- Cycles?

Month	Oct Nov Dec Jan	Feb March	May June	July	Aug	Sept	
Period	Prepara	tion ———	←Compet	tion—		Transition	
Meso	General Prep	Dunne	Pre- Comp	oump		Major Comp	Active Rest

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### PERIODS

Competition



#### 1) **PREPARATION**

# (Adaptation--- Training to train) 2) COMPETITION

(Application--- Training to win)

#### **3) TRANSITION**

(Regeneration/Recovery)

Transition

#### **GENERAL PREPARATION**

- Dominates the schedule
- General- 50%: related-30%: specific-20%
- VOLUME HIGH ↑ INTENSITY LOW ↓
- Fitness before skills
- Improving weaknesses
- Develop max strength and endurance
- Major changes in technique or using new equipment
- Weight loss
- NO Competitions

#### **SPECIFIC PREPARATION**

- · General: Related: Specific
- Hardest working mesocycle
- Technique must be schooled and stabilized as athlete has become stronger & quicker.
- 2 a days might begin here
- Testing occurs before, during and after mesocycle.



- VOLUME DECREASES INTENSITY
   INCREASES INTENSITY
- Develop and stabilize competition performance
- Maintain strength & fitness levels
- Avoid imprecise patterns due to fatigue
- Mimic time schedule & nutrition plan for major comp



- VOLUME LOW ↓ INTENSITY HIGH ↑
- General-20%: Related-30%: Specific-50%
- All physical capabilities should be at their highest levels
- Unloading occurs before competition
- Avoid panic and changing loads or intensities- sudden shifts are harmful to athlete.



- Gentle reduction of all loading
- Must be active
   – you do not want to lose all previous work
- Lots of cross-training
- Gets the athlete prepared for General Prep phase.

#### Single Cycle, Bi- Cycle or Tri- Cycles?

Month Period Meso

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