

A photograph of a baseball player in a white pinstriped uniform sliding into a base. The player is wearing a red helmet and is in a dynamic, low-to-the-ground position. The background is a blurred green field. The text is overlaid on the right side of the image.

# **Concepts of Athletic Training**

**FIFTH  
EDITION**

***Ronald P. Pfeiffer  
Brent C. Mangus***

## **Chapter 4**

### **Sports-Injury Prevention**

# Causative Factors

- Extrinsic Factors –
- Intrinsic Factors –

# Intervention Strategies

- Members of the Sports Medicine Team must identify causative factors.
- Pre-participation physicals are just one of the ways in which the Sports Medicine Team tries to decrease risk of injury.
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# Pre-Participation Exam (PPE)

- Purpose:

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# Injury Prevention and Preseason Conditioning

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# Conditioning Program

- General Conditioning:
  
- Sports-Specific Conditioning:

# Aerobic Fitness

A.k.a. – Power:

- Helps athletes avoid injuries that result from general fatigue
- Regular participation in running, bicycling, swimming



# Muscle Strength, Power, and Endurance

Strength:

Power:

\*more important in performance than strength  
because performance often time dependent\*

Endurance:



# Weight Training

Periodization:

Strength training improves muscle strength, reducing the risk of injury.

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# Flexibility



Static Flexibility:

Dynamic Flexibility:

# Stretching

Ballistic:

Proprioceptive  
Neuromuscular Facilitation  
(PNF):

Static:

Passive:

# Periodization

Organization of training into a cyclic structure, to attain the optimal development of an athlete's performance capacities.

- **Macrocycle:** one-year training cycle
- **Microcycle:** smallest component of training cycle (2-4 week periods)
- **Mesocycle:** several successive microcycles leading to a specific goal.
- **Transition phase:** 2-4 week period between training and seasons or between successive mesocycles.

# Modification of Extrinsic Factors

Practice/Competition Environment:

Facilities:

Protective Equipment: