

## Warm up & Cool down by Vern Gambetta

Warm-up and cooldown are essential parts of the whole training process. It is helpful to think of the warm-up as preparation for training and cooldown as a reset to prepare the body for the next training sessions. The workout begins with the warm-up! The subsequent training sessions do not actually begin with that sessions warm-up rather it begins with prior sessions cooldown. Conceptually this is based on the unity of training sessions and that no workout stands alone.

Warm-up sets the tempo for the workout to follow. It is the bridge from normal daily activities to actual training. Conversely cooldown is the transition back to normal daily activities. There is too much emphasis in warm-up on raising core temperature and heart rate. The main physiological objective is neural activation, getting everything firing and connected to prepare for the more intense work to follow in the actual workout. From a psychological perspective the warm-up should almost be a ritual. This can serve as a security point or anchor for the athlete. Try to stay away from stationary bikes and stair steppers as part of warm-up because of the restricted range of motion. Above stay away from jogging. All jogging does is reinforce poor running mechanics. Use jump rope or progressive striding instead (See Example).

The warm-up can vary in length from as short as ten minutes for the warm-up before a second session to as long as thirty minutes. The length ultimately will be determined by the objective of the subsequent workout. The warm-up should be “active” not continuous. That distinction is important. Active refers to the fact that the warm-up consists of movements that are active as opposed to passive. Continuous means that there are no breaks between warm-up activities. Continuous warm-up means that warm-up goes for a set time with all the exercises fit into that period. This can be used occasionally, especially on a recovery day or on a work capacity emphasis day where the subsequent workout is of low neural demand. The warm-up should build progressively in intensity into the workout. The emphasis on joint mobility not on static flexibility. Flexibility is trained as a separate training unit, after the workout. In a cold environment proper clothing can greatly prolong and enhance the effect of warm-up. After warm-up it is especially helpful to be able to towel off, hydrate well and change into dry clothes for the actual workout. Of course, this may not be practical in many situations.

### **Active Multi-Stage Warm-up (Example)**

#### 1) Progressive Strides 6 – 8 x 50 meters

This serves to raise core temperature. These are not jogs but relaxed strides that serve to enhance good running mechanics. The last thing we want is to have the athletes start the workout by plodding. Start at 60 % and end at 80%.

#### 2) Leg Swings

a) Swing Forward & Back b) Side to side across the body (This dynamically loosens the hip girdle)

### 3) Mini Band Routine (12" band above ankles)

a) Sidestep b) Walk - Forward/Back c) Carioca d) Monster Walk (This is designed to strengthen and activate the small intrinsic muscles of the hip. This segment is a key factor in prevention of low back and groin injuries.)

### 4) Balance & Stability (Alternate Static and Dynamic)

Static - Single Leg Squat (Hold each position five counts)

a) Straight 2 x ea leg b) Side 2 x ea leg c) Rotation 2 x each leg

Dynamic - Balance Shift

Shift & Step Right - Shift & Step Left

Forward Step Right - Forward Step Left

Back Step Right - Back Step Left

(The single squat addresses static balance and the balance shift addresses dynamic balance. This segment serves to help with neural activation and increase body awareness.)

### 5) Walking Rotations (3 Kg Med Ball)

Wide Rotation x 20 - Forward & Backward

Tight Rotation x 20 - Forward & Backward

Side to Side x 20 - Forward & Backward

Figure x 20 - Forward & Backward

(This segment activates the core in functional positions)

### 6) Lunge & Reach Series (2 reps in each plane – Forward/Side/Rotational)

Reach Up Reach Out & Down Reach Across

This series is designed to work through wide ranges of motion to promote mostability.

### 7) Active Stretch

The emphasis here is active stretching in three planes of motion for the key target areas that are needed by that individual. Every individual should have their own routines based on their individual needs.

👁️ Crawls

Inchworm x 5

Spiderman x 5

(To work the core and reinforce opposition)

### 9) Hurdle Walks (Five Hurdles)

Hurdle Walks – Over

(This segment addresses dynamic hip mobility)

### 10) Coordination

Coordination One (Two reps of each exercise)

Skip

Crossover Skip

Sidestep

Carioca (low & long)

Carioca (short & quick)  
Backward run  
High Knee Skip  
High Knee Skip w/Rotation  
Coordination Two (Two reps of each exercise)  
Serpentine Stride 2 x 30 yards  
Crossover Skip with rotation 2 x 30 yards  
Angle Sidestep 2 x 30 yards  
Carioca Quick Change 2 x 30 yards  
360 Turns 2 x 30 yards (Four Turns)  
Line Touches 2 x 30 yards  
Forward into Backpedal 2 x 30 yards  
Backpedal, Turn and Go 2 x 30 yards

The coordination segment is just that, it is designed to promote coordination and body awareness. There are two modules coordination One which is more linear and coordination Two which involves more change of direction. Alternate the two based on the objective of the subsequent workout.

The cooldown is designed to calm the nervous system and restore muscles to resting length. Once gain – No jogging! Design a routine that fits your situation that includes a yoga flow routine, some easy crawls, rhythmic leg and arm swings and trunk rotations. My experience is that static stretching with holds up to twenty seconds is best done up to two hours post workout to alleviate soreness.

Don't forget the cumulative training effect from all these activities, it is significant especially in the area of development of foundational movement skills.

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