

# SAG Conference Volleyball Strength & Conditioning

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# Kari's Training Values

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1. Well balanced fit athlete
  2. Train to prevent injuries that the particular sport tends to cause
  3. Sport specific training for performance enhancement
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# Where Are Your Athletes?

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Talented  
Tapped Out

Talented  
Athletic Potential

Untalented  
Athletic Potential

Untalented  
Tapped Out

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# Common Injuries??

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- Weak link becomes favorite!!
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# Volleyball Strengths

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- Powerful Legs
  - Strong Core
  - Powerful Upper Body
  - Stable Ankles
  - Fast Feet
  - Coordinated
  - Muscle Balance
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# Volleyball Weaknesses

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- Poor Shoulder Stability
  - Poor core Strength, Stabilization
  - Limb Lengths
  - Ankle Instability
  - Sport induced overuse injuries, ie. Impingement, Infraspinatus imbalance, Patellar tendonitis, Lower back pain.
  - Poor Cardiovascular Fitness
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# Common Athlete Comments:

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- ❑ "Give me some exercises to make my vertical higher."
  - ❑ "I need faster feet."
  - ❑ "Why do we have to run? There's no running in Volleyball."
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# Fitness Specific to Volleyball

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- Core Strength
  - Flexibility
  - Muscle Balance
  - Strength/Power
  - Speed/Coordination
  - Anaerobic Alactic/ Aerobic Energy Systems
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# Core Strength

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- ❑ Static Holds ie. Plank, Side Plank, Bridges
- ❑ Abdominal Strength in conjunction with Hip Flexor Strength.
- ❑ Back Extensor focus with rotational elements.
- ❑ Perturbations to Train nervous System.
- ❑ Powerful Core Exercises-only when sufficient stabilization and strength attained.

# Progressions

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- ❑ Stable surface, Static Contractions-Dynamic contractions- Muscle/body awareness.
  - ❑ Stable surface advancements ie. Power, load
  - ❑ Labile surface, Static Contractions & Dynamic Contractions
  - ❑ Labile surface advancements ie power, load
  - ❑ Perturbations
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# Flexibility

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- Chest Stretches
  - Rotator Cuff, Neck, Shoulder complex.
  - Deep Hip Rotators
  - Quad/ Hip Flexors
  - Hamstrings
  - Calves
  - Back
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# Muscle Balance

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- ❑ Chest: Mid Trap Fibres, Rhomboids, Rotator Cuff.
  - ❑ Abdominal wall: Back Extensors: Hip Flexors
  - ❑ Quad/Hip Flexors: Hamstring :ITB/Abductors: Adductors.
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# Strength/Power

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- Powerful Jumps
  - Powerful Hits
  - Explosive Movements
  - Olympic Lifts
  - Power Tempo Squats, Bench, MB etc.
  - Plyometrics
  - Complex Training??
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# Speed/Coordination

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- Sprint Training
  - Olympic Lifts
  - Agility Training
  - Footspeed
  - Handspeed
  - Pattern Training
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# Energy Systems (Anaerobic Alactic/Aerobic)

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- Sprint Training
  - Longer Aerobic Training
  - Intervals
  - How often?
  - How intense?
  - Running/Track/Biking/Other??
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# Five Ways to make a better young volleyball athlete:

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- ❑ Dynamic Warm-up
  - ❑ Consistent progressive core training
  - ❑ Glute activation for hip function
  - ❑ Fitness
  - ❑ Shoulder muscle balance
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# Dynamic Warm up

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- Jog
  - Any progressive mix of stimulating movements
  - For example backwards jog, carioca, defensive shuffle, skips, high knees, lunge with rotation, ground sweeps, arm rotations, sprint bursts, trunk rotations, hip flexions, abd, add, ext, lunges with rotation etc.
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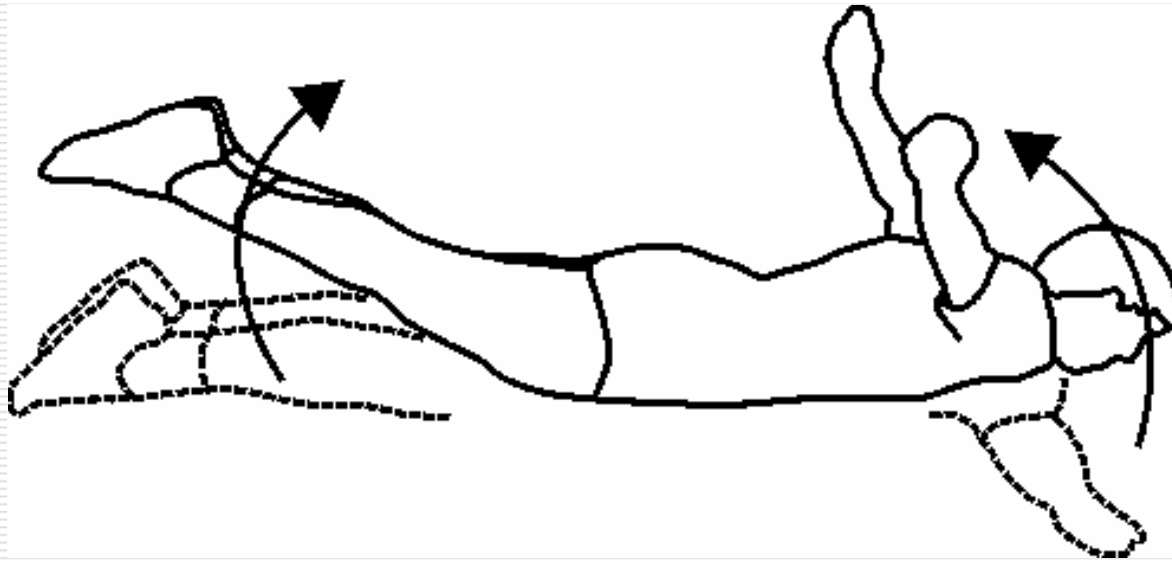
# Consistent Progressive core Training

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- Planks (front, side, reverse)
  - 45-60 degree curl up
  - Med Ball throws???
  - Supermans (add rotations & retractions)
  - Ball bridges, planks
  - Ball curls & obliques
  - Standing and sport specific core work
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# Superman

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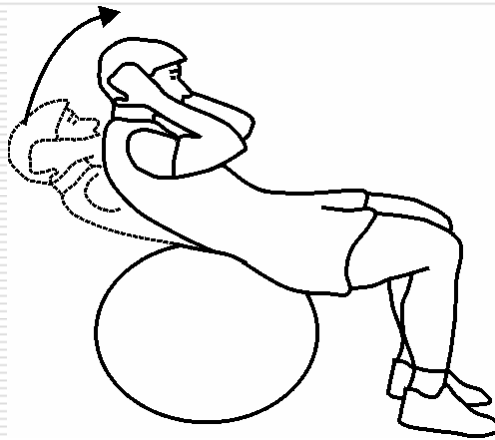


# Plank, Ball curl, Curl up

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Keep position up



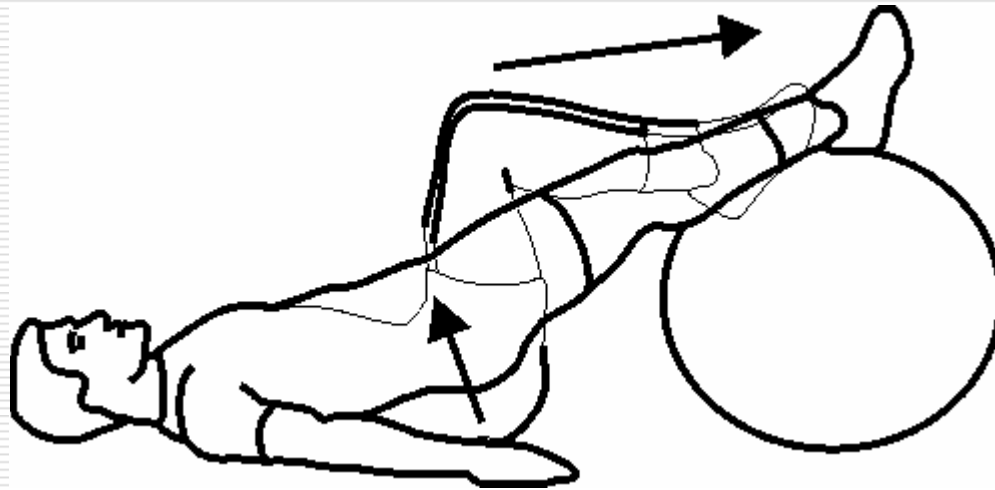
# Glute Activation for Hip Function

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- 1 Legged squats!!!!
  - Squats
  - Jump squats with Glute emphasis
  - Skating jumps
  - Flexibility focus
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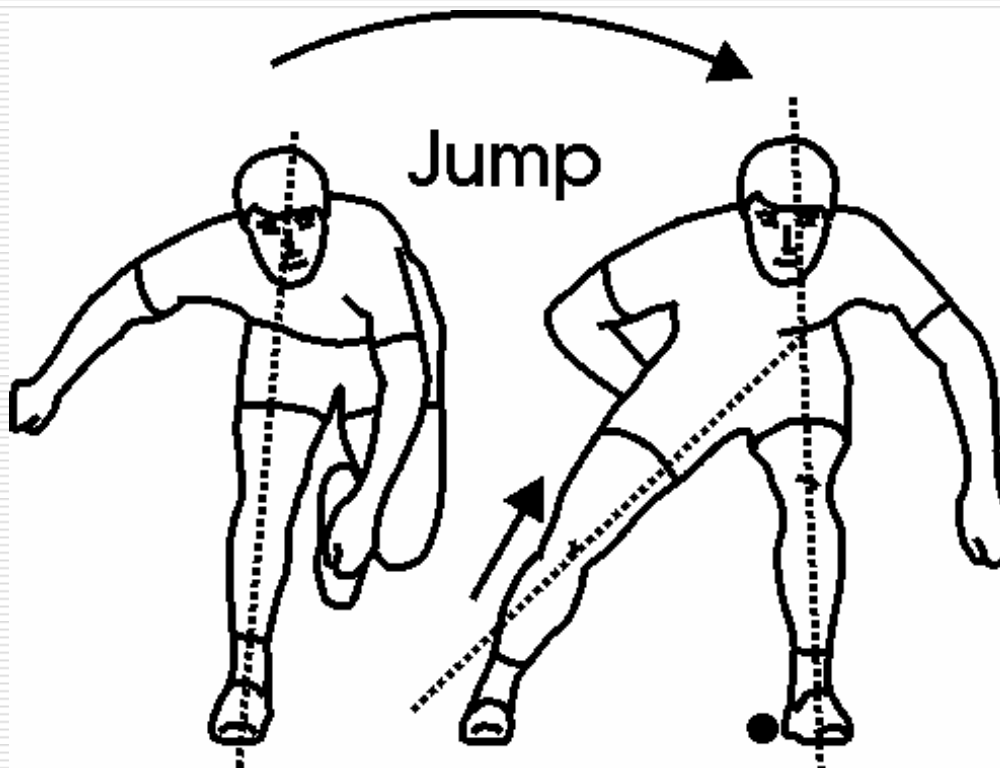
# Ball Hamstring Curl

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# Skating Jump

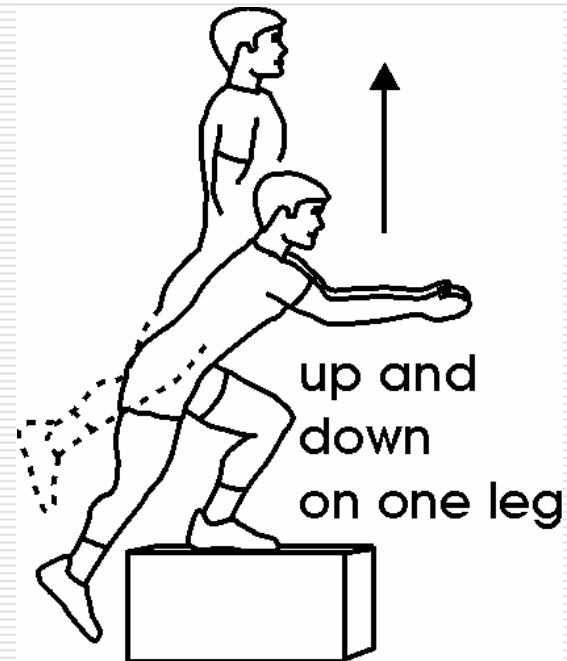
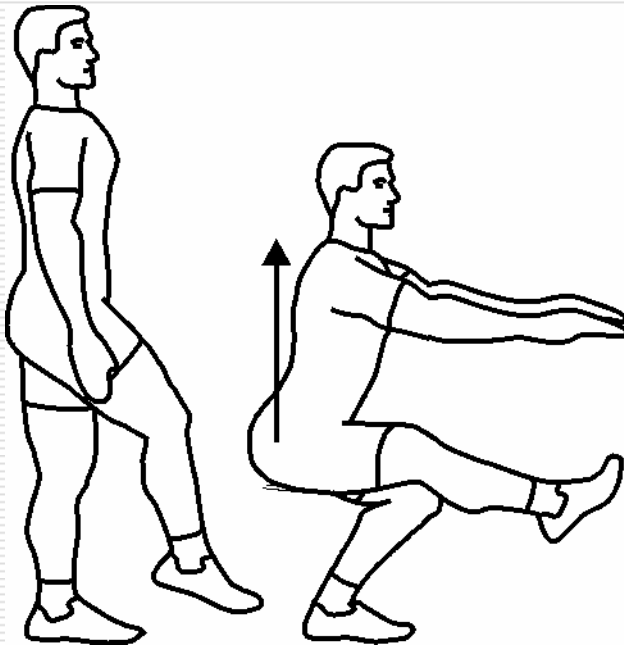
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# 1 Legged Squat

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❑ Not low enough!



# Fitness

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- Running (20-40 min) 2-3x/week
  - Sprints 10-20m (within practice?)
  - Dynamic warm up
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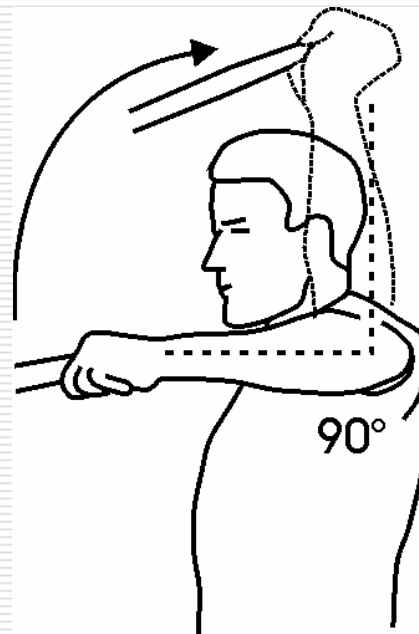
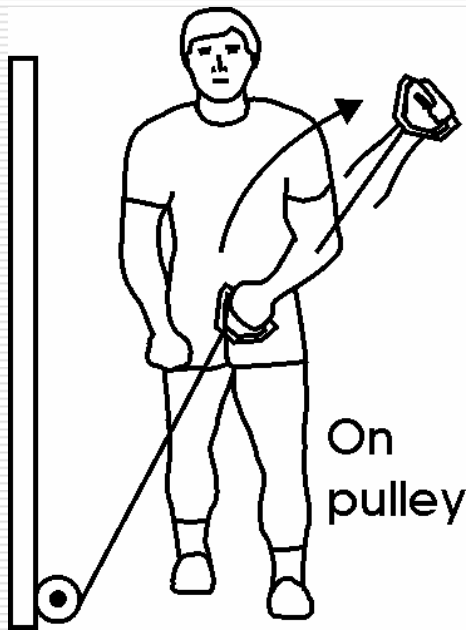
# Shoulder Muscle Balance

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- POSTURE
  - Blade retractions
  - Pectoral Stretching
  - External Rotations multiple angles
  - Wallslide
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# External Rotation 45deg, 80deg

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## WALL SLIDE

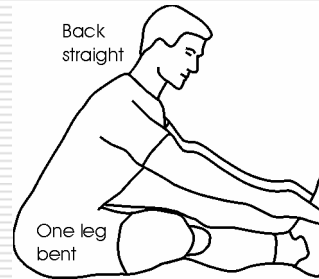
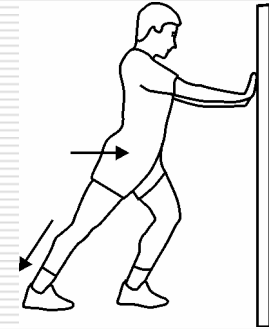
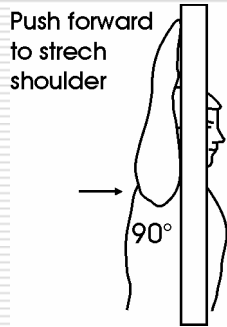


### KEY POINTS

- individual stands with heels and back against wall
- one foot is placed in front of the other to determine distance from wall to heels
- feet shoulder width apart
- low back flat against wall with shoulder externally rotated until elbows and back of wrists are against wall, elbows flexed to 90 degrees
- athlete attempts to slide hands up wall keeping low back, wrists and elbows pressed against wall

# Key Stretches

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# Conclusion:

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- ❑ Well balanced fit athlete FIRST
  - ❑ Sport Specificity SECOND!
  
  - ❑ Questions??
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Thank you

