BETTER BACKS FOR LIFE - PART III Maureen Hagan, BSc PT (Physiotherapy), BA PE; Charlene Kopansky, BSc, HK., BEd.

Brief Recap of Part I & II: In general, all training or exercise sessions include:

- 1. an appropriate warm up and stretch cool down
- 2. sports, activity and muscle specific conditioning,
- 3. progressive strength and endurance (refer to priorities for training and training pyramid)
- 4. daily flexibility and posture awareness (may require specific training)

POWER POSTURE SEQUENCE

- * "Chin retraction"
- * Shoulder "Scapular Set"
- * "Hip-Rib" Check
- * "Glut Max" Squeeze

Once the "power posture sequence" is learned and the body has developed an appropriate level of muscle strength and

endurance to maintain the posture, then it is time to focus on "Active Range of Motion". Keep in mind that maintenance of power posture requires ongoing practice.

ACTIVE RANGE OF MOTION SEQUENCE (AROM) Utilizing Muscle to Achieve Full Mobility - Adapted for Water by C. Kopansky

A series of exercises which promote development of muscular strength and endurance during movement include the following:

- * Standing back extension
- * Hip extension standing/ upright
- * Hip-Hinge I
- * Hip-Hinge II
- * Hip flexion/extension combo conditioner
- * Seated core push-pull conditioner

Always repeat the Power Posture Sequence to reinforce the proper position reflecting good alignment. Movements during exercise and daily living become safer when the power posture becomes a habit.

New Stuff

Following are more exercises to add to the Active Range of Motion Series of exercises included in Part I and II. Integration of a combination of the exercises discussed in the last few issues of Wavelink, into an aquafitness workout will contribute to a healthier back.

The following AROM Better Back Exercises can be integrated into the Stretch and Relaxation or Muscle Conditioning phase of a class.



Hamstring stretch:

- Perform during stretch and relaxation phase. Remain anchored. This move can
- be performed suspended with use of a flotation device or in chest deep water.

 In chest deep water, choose the option of holding on to pool wall if more stability is required. If buoyancy is a challenge and foot will not remain in contact with pool bottom, move to a slightly shallow-er depth or hold on to pool wall.
- assume power posture position, with standing leg soft and foot relaxed into pool bottom.
- lift other leg to just below surface of water, use a flotation device under thigh, just above back of knee, if lifting the leg is challenging.
 - keep lifted leg straight, in a parallel posi-
- tion, with knee unlocked.
- visualize the three hamstring muscles lengthening from the sit bones (ischial tuberosity) to just below the knee (posterior tibia).
- keep upper body "still", open chest and activate stabilizing body core muscles.
- focus on strong back and abdominal activation.
- hold for 16 32 counts, do a transitional movement between right and left sides such as half tempo narrow hamstring jogormarch or jumping jack, to keep body warm.
- to travel during this move, add arms such as CALA unison reverse breast stroke arms and hop on standing leg. Keep stretching leg relaxed and let it "drag" in the water.
- remain stationary for a deeper stretch, add deep breathing to relax the mind and body.

Visualize the lengthening of the muscles in the back of the thigh and deep breathe to aid the stretch. As you breathe out release any tension you may be harboring. As you breathe in imagine filling the whole mus-cle group with warmth and soft energy.

Standing dynamic torso spiral stretch:

- Perform during the stretch and relaxation phase. As an option, put this dynamic stretch between the right and left hamstring stretch listed above. This will keep the body relatively warm.
- Stand with feet comfortably apart in chest to shoulder depth water. Anchor the body by imaging the feet sinking into the pool bottom, (like sinking into sand on a beach).
- Assume the "power posture", then begin to gently and slowly move both arms just below the surface of the water, from side to side.
- Keep abdominals and back muscles acti-
- vated with a relaxed feeling.

 Allow hands to follow the arms with relaxed wrist, fingers and thumbs.
- Keep arms at chest height. Feel the water massaging the body, especially in the arm, shoulder, upper back, neck, hand and chest regions.
- Feel the spine twist gently as the arms pass the side of the body. Pay attention to the sensations of the spinal rotation always moving through a comfortable range of motion.

 - Keep the action strong but supple with a
- relaxed frame of mind.
- As an option, follow hands with eyes, looking over the shoulder at the end point of the sweeping action of arms.

Your vertebral discs will love you as the rotational action gives them a gentle massage.

Look for the "Scapular opening" stretches to build a Better Back, in the next issue of Wavelink.



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