Pour It To The Core

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Learning Objectives

- Expand your understanding of water-specific training techniques and refine your teaching skills.
- Learn and apply advanced training techniques to create added challenge and intensity variations to enhance functional fitness and performance of ADL's.

What is Advanced?

- Higher Intensity - *Fitness*
  - Aerobic Capacity / Muscular Strength
- Increased Difficulty - *Skill*
  - Complexity & Equipment
- Longer Workout - *Fitness*
  - Aerobic Endurance / Muscular Endurance

Review: Intensity

- The amount of energy expended or force applied during physical activity
- How hard a person works

Review: Intensity Variables

- Force and Acceleration
- Drag (streamline vs broad)
- Levers (short vs long)
- Hand & Wrist Positions
- Frontal Resistance (travel - assist vs resist)
- Buoyancy (elevation & propulsion)
- Cadence & Music

INTENSITY

Two types:

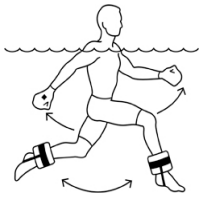
Biomechanic Metabolic

Training Objective:

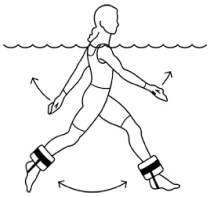
Balance the training overload for both types of intensity to prevent premature muscle fatigue

INTENSITY

X-COUNTRY SKI
Bent Leg



X-COUNTRY SKI
Straight Leg



Premature Muscle Fatigue

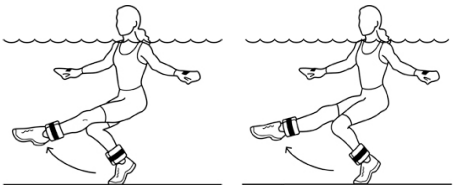
- Muscles work in opposing groups or pairs to facilitate movement about a joint.
- Unlike resistance created by gravity, water resistance is equal and opposite in all directions.
- Due to the water's 360 degree resistance, water exercise involves a higher degree of strength and endurance training stimulus for the skeletal muscles.

Advanced Exercises

- SIT KICK (series)
- LEG LIFT (power series)
- TUCK JUMP
- KNEE LIFT
- COSSACK KICK
- Elements of Change
  - Hand / Wrist Positions
  - Short to Long Lever
  - Multi-plane Patterns

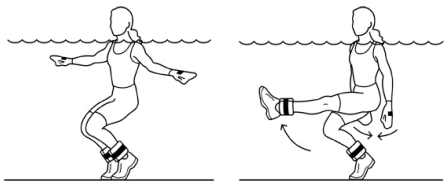
SIT KICK

Scull



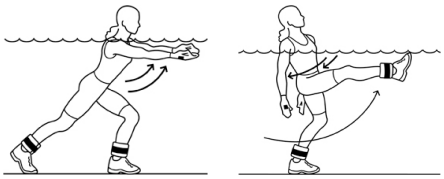
SIT KICK

Press Behind



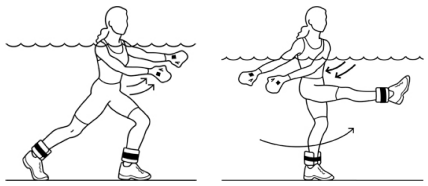
LEG LIFT

Power Scoop & Press



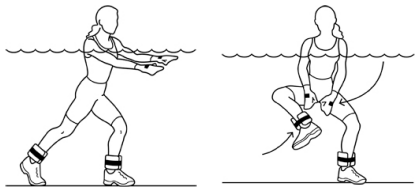
LEG LIFT

Power Sweep - DBL Arm



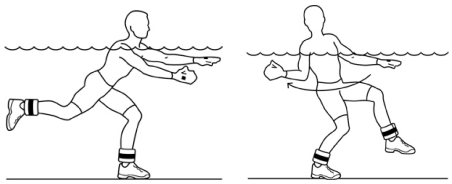
LUNGE

Instep Sweep - DBL Arm



ROCKING HORSE

LEFT Leg - Sweep Back - RIGHT



Aerobic Fitness

- Aerobic fitness is the ability to perform moderate to vigorous levels of physical activity without undue fatigue and the capability of maintaining this capacity throughout life.

Characteristics

- Large muscle groups:
  - Quadriceps
  - Gluteals
  - Hamstrings
- Continuous
- Rhythmic

Interval Training

- A ‘type’ of aerobic training
- Used to vary workout intensity
- Creates optimum training benefits
- *Modified* version used for water training

Modified Interval Training

- An intensity varied workout format comprised of aerobic work cycles.
- Each cycle combines one high intensity training period with one low intensity training period.
- Heart rates fluctuate between min. and max. levels of THR and stay within the target training zone.

Work to Recovery Ratio

- 1:3 - for Beginners
  - 30 sec's work / 90 sec's recovery
- 1:2 - for Intermediate
  - 30 sec's work / 60 sec's recovery
- 1:1 - for Advanced
  - (30 sec's work / 30 sec's recovery

Train within Limits

- Intersperse bouts of aggressive work with phases of 'active rest' and combine into sets repeating 2-3 times.
- Maintain 50-60% of age predicted max. HR during recovery periods.
- Raise intensity threshold to 85% of age predicted max. HR during work periods.

Elements of Effective Teaching

- Accurate Demonstration
  - What tools might you need?
- Clear and Concise Verbal Cueing
  - What are you going to say about each exercise?
- Observe exercise performance and correct exercise technique

Learn and Teach

- Choose a routine from Aqua Tech I or II
- Apply the Four P's
- Apply the HYDRO-FIT Method:
  - Teaching Progression -
  - Exercise Vocabulary -
  - Teaching Terminology -
- Practice It
- Learn It
- Teach It

Progression in H2O

- Set Up Position and Posture
  - Alignment and Range of Motion
  - Stabilization and Impact Level
- Adjust Surface Area and Lever Length
  - Hand and Wrist Position
- Cue the Direction of Force
  - Power Phase / Recovery Phase
  - Assist or Resist
- Increase / Decrease Force (muscular effort)
  - De-emphasize Speed
  - Use levels of Force (20%-80%)
- Vary the Movement Pattern
  - Stationary or Travel
  - Movement Direction