

Cardiorespiratory Activities with a Purpose: Increasing Motivation & Learning!



Monica O'Rourke, PhD, David Pearson, PhD, & Samuel Baird
California Baptist University
Department of Kinesiology
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Here's Your Session Outline!

- What's the Big Idea?



- Cardio activities with a purpose vs. Aimless running
 - On purpose: dynamic warm-up, brain break, personal challenge, personal fitness



- 3 Types of Strategies -ACTIVITIES!

- Challenge by Choice • Thematic Cardio • Run for Fun!



- Cardio for Life: Cognitive Teaching Tips

- Q & A, Idea Exchange

- Resources

- “How to” activity handouts, station cards, & PP on SHAPE website



“Sitting is the new smoking”



Sedentary time and its association with risk for disease incidence, mortality, and hospitalization in adults: a systematic review and meta-analysis

(2015) Annals of Internal Medicine

Quick Cardio Gets us Up

(and up is where we need to be!!)



Copy Cat



Born out of the “squeeze game!”



TEACHERS...

Not everyone likes to run Research Says...

- Negative SSPEE=Negative AATPA (N=777)
- Infamous “take a lap” rarely promotes lifelong enjoyment of running or cardiorespiratory fitness
- ACSM & NSCA recommend dynamic warm up over stretching

(ACSM, 2014; NSCA, 2008; O’Rourke, 2011)



Can a little *creativity* have a lasting Impact?

How to NOT run a lap?

and *still* increase heart rate & aerobic capacity!



Cardio Respiratory Activities Students Will Enjoy!

Be “on purpose”

(dynamic warm-ups, brain breaks, personal challenges & fitness)

Cardio for Fun

Thematic Cardio

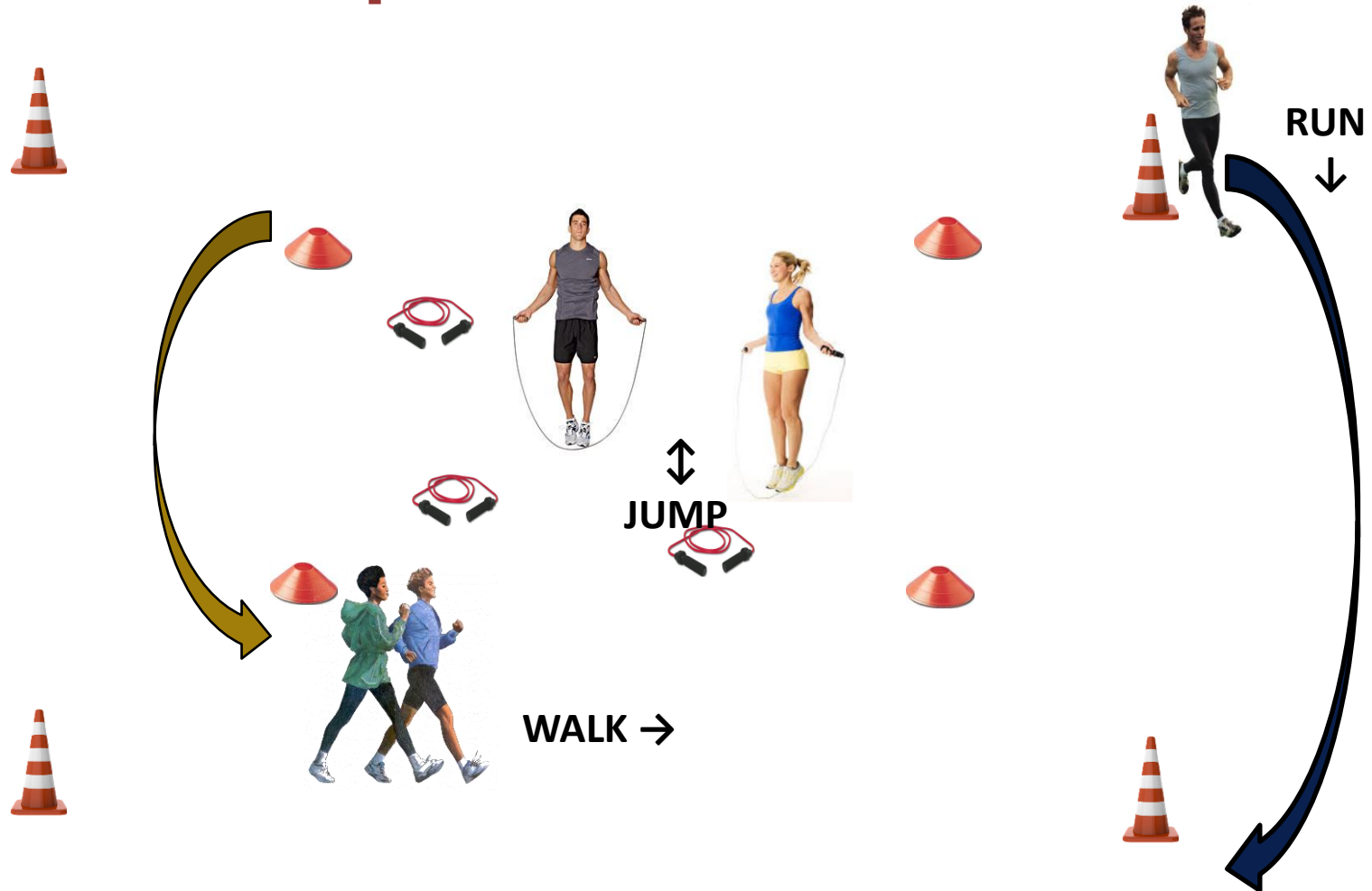


Challenge by Choice

Cardio Split

Music. Time. Action!

Students can switch at any time.



Thematic Cardio!

- Match the cardio activity to the lesson content
- Acts as an anticipatory set
- Can assist skill development and retention
- Time the content unit and cardio with current events to increase student interest (Olympics)
 - Knee Tap Game (combatives)
 - Mirror Activity
 - Cornering Drill
 - Balloon Kick
 - Grounders (softball)
 - Shuffle drills (football/basketball)
 - Level Changes (volleyball)



Cardio for Fun

Games are fun...and they don't involve any running...or do they??



Noodle Tag

Tennis Ball Take-a-ways

Clippers

Dead Bug

Video Games (what?)

- Geomotion or DD Revolution

Mud Run or Obstacle Course



Challenge by Choice!

- ▶ Let students make activity choices.
- ▶ Technique is Key!
 - Cardio Split
 - 45 Second Challenge
 - 20 Second Challenge
 - 20 Second Ultimate Challenge
 - Plyometric Challenge



Let's Talk....

Cardio for Life Cognitive Teaching Tips

- Big Ideas & you don't have to stop activity
- Take 2! (minutes) Warm-up, Closure, In between
- Define cardiorespiratory fitness
- Target heart rate
- Running/Powerwalking technique
- Proper breathing during exercise
- Proper Hydration
- Muscle & Bones
- Anything else you want to discuss!!



PENDULUM SWING

**INSTRUCTIONS**

- 1) START WITH FEET TOGETHER
- 2) SWING ONE LEG TO SIDE THEN BACK TOWARD MIDLINE THEN SWING OPPOSITE LEG OUT
- 3) MAINTAIN FORWARD POSITION OF BODY (REPEAT WITH DESIRED REPETITIONS)

CUES

- 1) KEEP UPPER TORSO TO FRONT
- 2) LEGS EXTENDED STRAIGHT
- 3) CORE ENGAGEMENT
- 4) BREATHING MECHANICS

BENEFITS

- 1) CARDIORESPIRATORY
- 2) STABILITY
- 3) FLEXIBILITY

MUSCLES

GLUTES, CALVES, ADDUCTORS, & LOWER BACK

Heart Rate Worksheet

RESTING HEART RATE

Resting heart rate (RHR) measurements provide some basic cardiovascular health status and program progress information. RHR is used to measure improvements in cardiovascular fitness. It usually decreases as cardiovascular fitness improves. A normal RHR may vary from as low as 40 beats per minute (bpm) to as high as 100 bpm. Women average approximately 75 bpm and men 60 bpm. The pulse indicates the heart beat and may be counted in beats per minute. American Heart Association recommends the carotid artery (in the groove on the side of the neck) to check the pulse. Resting pulse is best checked first thing in the morning before any activity and be counted for 60 seconds.

My RHR: _____ Time of Day: _____

TARGET HEART RATE

Heart rate is proportional to the intensity of exercise. Measuring heart rate can determine if one is working too hard or not hard enough.

Maximum Heart Rate (MHR) - to be safe you should never work at your maximum heart rate. To determine MHR use the following calculation.

$$220 - \text{your age (e.g. 20)} = 200 \text{ BPM} \quad 220 - \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \text{ BPM}$$

AGE

MHR

My MHR _____

Training Zone (60%-85% of MHR) – this is the range most healthy people (no medical conditions) should exercise. Lower heart rate zones are recommended for people who are beginning exercise programs, have health risks or are pregnant. As fitness levels improve higher heart rates can be achieved. If you use a heart rate monitor when exercising your low and high training zone will help determine your level of intensity (working too hard or not hard enough).

For example: $\frac{200}{\text{MHR}} \times 0.60 = 120 \text{ BPM}$
MHR 60%

$$\frac{\underline{\hspace{1cm}}}{\text{MHR}} \times 0.60 = \underline{\hspace{1cm}} \text{ BPM}$$

low end of zone

For example: $\frac{200}{\text{MHR}} \times 0.85 = 170 \text{ BPM}$
MHR 80%

$$\frac{\underline{\hspace{1cm}}}{\text{MHR}} \times 0.85 = \underline{\hspace{1cm}} \text{ BPM}$$

high end

of zone

10-Second Heart Rate Zone for Exercise – If you are not using a heart rate monitor this heart rate zone can quickly evaluate your level by counting your pulse for 10 seconds and return to exercise rather than evaluating for a whole minute.

$$\frac{\underline{\hspace{1cm}}}{60 \text{ sec. pulse}} / 6 = \underline{\hspace{1cm}}$$

training zone

$$\frac{\underline{\hspace{1cm}}}{80 \text{ sec. pulse}} / 6 = \underline{\hspace{1cm}}$$

training zone



Did you know...

WATER:

- **helps balance bodily functions** (organs, digestions, etc.).
- **makes for health skin, hair, & nails!**
- **“oils” the bones for smooth movements.**
- **helps the brain think & gives you energy!**
- **prevents and reduces frequency of colds & flu!**

Drink A Lot of **Water** AND?



moic, 2015

PEE A LOT!!!



Water

Daily Fluid Intake

General Recommendations

Water Math!

16.9 ounces in an average bottled water.



Ladies
91 ounces



Gentlemen
125 ounces





Dehydration [lack of water]



Lack of water causes...

- **Excessive Fatigue [makes you tired]**
- **Dizziness and Lightheadedness**
- **Increased chances of getting sick**
- **Headaches**
- **Dry Mouth**
- **Muscle Weakness**



Quick Hydration Check



QUICK
You're
Hydrated!



Slow or Stays UP...
Drink More Water!



Skin with decreased turgor remains elevated after being pulled up and released

Skin turgor is the skin's ability to change shape and return to normal (elasticity). The quicker the better!

Skin turgor is a sign commonly used by health care workers to assess the degree of fluid loss or dehydration.



Did you know?



- **The warmer it is, the more fluids needed.**
- **More physically active = more fluid needs**
- **Vigorous exercise requires electrolyte replacement**
(coconut water is a great natural source of electrolytes!)



Electrolytes?

Fact or Fiction?



Handouts, Lessons, & Station Cards (on SHAPE website)



Thank you!

David Pearson, Professor of Kinesiology

dpearson@calbaptist.edu

Monica O'Rourke, Associate Professor of Kinesiology

morourke@calbaptist.edu