Cardiovascular Activity Techniques

Introduction

- Aerobic exercise requires:
  - Proper technique
    - for injury prevention
  - Variety
    - for injury prevention
    - choices to work around physical limitations
    - reduce boredom
    - maintain participation

Cardiovascular Activity Techniques

Readings:

- NSCA text: Chapter 14 pp 329 – 344
  - You are not responsible on a test for the details of technique for the exercise modalities listed in the text.

Cardiovascular Activity Techniques

General considerations for aerobic exercise...

- Hydration
  - "Hydrate before, during, and after exercise"
    - "Drink before the onset of thirst"
  - Also consider articles by T.D. Noakes criticizing above Noakes TD. (2007) Drinking guidelines for exercise: what evidence is there that athletes should drink "as much as tolerable", "to replace the weight lost during exercise" or "ad libitum"? J Sports Sci. 25(7):781–796

Water fine for duration < 1 hr

Shoes

- Shock absorption and support wear out before the shoe appears "worn out"
**Warm-Up, Cool-Down**

- **Warm-up**
  - 5-10 min progressive increase in intensity to bring heart rate (HR) up to target

- **Cool-down**
  - 5-10 min progressive decrease in intensity to bring HR towards resting level

- More details on “warm-up” in stretching & warm-up unit

- Actual aerobic “workout” detailed in subsequent unit

---

**Variety, adding different exercises**

- Remember that a “fit” person in one activity will stress different tissues (muscles, tendons, ligaments, joint surfaces) in another activity, and so must work at a reduced intensity &/or duration when initiating training using a different exercise modality
  - e.g., have a fit runner, biker, & swimmer switch work-outs

- This caution becomes much more evident and important as a person ages

---

**Modes of aerobic exercise**

- **Machines**
  - Examples:

---

**Modes of aerobic exercise**

- **Non-machine**
  - Examples:
Modes of aerobic exercise

- Low impact
  - Who is this good for?
  - Examples:

Further consideration:
- Development of balance and coordination (in addition to aerobic capacity)
- Which modalities support this goal best?