Training Overweight or Obese Clients

Training Concerns

1. Heat Intolerance
2. Movement Restriction
3. Weight-Bearing Stress
4. Posture Problems & Low Back Pain
5. Balance Concerns
6. Hyperpnea & Dyspnea

Training Concerns Heat Intolerance

- Excess fat adds insulation
- Staying cool under hot or humid conditions is more difficult

- How to address this?

Readings:

- NSCA text: Chapter 19 pp 501 – 505
Training Concerns Movement Restriction
- Difficulty fully flexing joint due to fat tissue
  - E.g., knee, elbow, torso flexion

How to address this?

Training Concerns Weight-Bearing Stress
- Stress on hard (joints) & soft (muscle, tendon, ligaments) tissues is great

How to address this?

Training Concerns Posture Problems & Low Back Pain
- Due to Body weight load + inadequate trunk musculature
  - Kyphosis (hunch back)
  - Weak abs, strong hip flexors due to moving leg mass = pull lumbar spine into excessive lordosis

How to address this?

Training Concerns Balance Concerns
- Lack of participation in physical activity facilitates lack of balance development

How to address this?
Training Concerns Hyperpnea & Dyspnea
- **Hyperpnea** = increased respiratory rate
- **Dyspnea** = labored or difficulty breathing
- More likely in obese clients due to low functional capacity for exercise and of respiratory system, and due to body mass that must be moved as chest expands
  - Discomfort breathing may lead to exercise avoidance
- How to address this?

Exercise Prescription Aerobic Conditioning
- Capacity may be low enough that low intensity continuous exercise (e.g., walking) is not possible.
  - Use low intensity interval training (walk:rest) (walk: body weight calisthenics) as start of progression
- Increase duration before intensity is increased

Exercise Prescription Aerobic Conditioning for overweight clients
Amount of exercise:
- 5-7days/wk, 40-60 min/day (NSCA text)
  - 5 days x 40 min/day = 200 min/wk (minimum target)
  - 7 days x 60 min/day = 420 min/wk (higher target)
Duration of exercise (from Aerobic Training Unit)


- Moderate intensity PA of 150-250 min/wk provides only modest weight loss (moderate, but not severe, diet restriction will improve weight loss)
- PA of >250 min/wk has been associated with clinically significant weight loss, and may support maintenance of weight loss

Duration of exercise for weight loss

To support weight loss, minimum durations of 200 - 250 min/wk moderate intensity aerobic are the goal

Exercise Prescription Resistance Training

- Can start with body weight exercises
- Machine or free weights
- Typical program design
  - 2-3 non consecutive days/ wk
  - 1-3 sets, 10-15 reps
  - Whole body, 8-10 exercises
  - Progressive increase

Exercise Prescription Flexibility Training

- Typical program design
  - Light stretching may be part of warm-up
  - Greater stretching at end of exercise session when body is warm
  - All major muscle groups
Supplemental Reading:

- Active at Any Size
  - WIN – Weight-control Information Network, NIH