the center for Health Promotion & Wellness at MIT Medical

Aerobic Fitness
(Cardiorespiratory endurance)

- **Aerobic Fitness or Cardiorespiratory Endurance** - the ability to deliver oxygen and nutrients to tissues, and to remove wastes, over sustained periods of time.

- Any activity you do — from taking a walk to washing the dishes — requires oxygen. Regular aerobic fitness exercise increases your body's ability to use oxygen. How well you use oxygen is termed your "aerobic capacity." When your aerobic capacity is high, your heart, lungs and blood vessels efficiently transport and deliver large amounts of oxygen throughout your body. Aerobic exercise helps you in your daily activities.

- The key to achieving aerobic capacity is to find fitness training activities that you enjoy and can do regularly. Add variety and increase your motivation by trying different types of aerobic activity.

Physical Activity Goals for Health:

- Accumulate 30 minutes of moderate activity most or all days of the week (3-4 hours/week)
- All types of activity count:
  - Formal exercise
  - Daily activities
  - Sports or recreation

Physical Activity Goals for Aerobic Fitness:

- 3-5 days/week
- Intensity – 50%-85% of your maximum heart rate (see measuring intensity hand out)
- 20-60 minutes a day
- Walking, jogging, bicycling, swimming, rowing, dancing, skating, x-country skiing, stair master, elliptical machine

Physical Activity Goals for Weight Maintenance or Loss:

- To prevent weight gain you should try to achieve – 60 mins/day
- To lose or keep off weight you should try to achieve – 60-90 mins/day

Adapted from *The Clinical Training in Mind/Body Medicine*
Exercise: Everything you wanted to know and then some
Jim Huddleston, MS, PT
June 19-23, 2006

IMPORTANT – Warm up and Cool down every time you exercise

Warm up – How this helps

- Warming up prepares your body for aerobic exercise by increasing blood flow through your heart and lungs. This increase delivers more oxygen and sugar (glucose) to your muscles, which is necessary to get and keep you going. Your heart beats more rapidly and forcefully. You inhale and exhale more often. The temperature of your body slowly rises. Your muscles become warmer.

- **How you do it**
  Choose a warm-up activity that uses the same muscles you'll use during your workout. For example, if you're going to take a brisk 30-minute walk, walk slowly for five to 10 minutes to warm up.

- Avoid sudden or aggressive movements during your warm-up. Doing this type of movement before your body is warmed up can cause injury.

Stretch after your warm up and before your cool down:

- It's a good idea to stretch your major muscle groups after you warm up or before you cool down. Besides preparing your muscles for increased activity, stretching increases your flexibility and helps maximize the range of motion around your joints.

- **How you do it**
  If you only have time to stretch once during an exercise session, skip stretching after your warm-up and do it after your workout before you cool down. Your muscles will be warmer and more elastic.

Cool down after exercise: Transition your heart

- Taking time to cool down after your workout allows your heart, lungs and blood flow to return to normal gradually. This decreases strain on your heart and may help prevent muscle strain and soreness.

- **How you do it**
  For example, after a 30-minute session of brisk walking, cool down by slowing your walking pace for five to 10 minutes.

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