Physical Activity For Life

Staying Healthy
Dr. Tia Lillie
“Every U.S. adult should accumulate 30 minutes or more of moderate-intensity physical activity on most, preferably all, days of the week”

150 Kcals.

Surgeon General’s Report on Physical Activity and Health:
http://www.cdc.gov.nccdphp/sgr/sgr.htm
Popular Activities
(Top 10 List from Surgeon General’s Report)

1. Walking
2. Gardening
3. Stretching
4. Resistance Exercises
5. Jogging
6. Aerobic Dance
7. Cycling
8. Stair Climbing
9. Swimming laps
10. Tennis
Characteristics of Popular Activities

- Individual or small groups
- Self-promotional
- Little skill needed
Popular Sport Activities
(Top 10 List from Surgeon General’s Report)
1. Tennis
2. Bowling
3. Golf
4. Baseball/Softball
5. Racquetball
6. Basketball
7. Volleyball
8. Soccer
9. Football
10. Others
Characteristics of Popular Sports

- Lifetime sports
- Primarily individual
- Wide levels of ability (handicap system)
Self-Management Skills to Promote Interest in Activity

- Make efforts to improve skills & confidence in activity
- Choose non-critical and self-promotional activities (e.g. walking)
- Accept your self and your abilities and reduce level of self-criticism
Ways To Incorporate More Physical Activity Into Ones Lifestyle

- Take the Stairs
- Park in the farthest parking spot
- Do a wall squat as you brush your teeth
Wearing a Supportive Shoe is Important

- 1. Running
- 2. Court
- 3. Aerobic
- 4. Walking
- 5. Tennis
- 6. Cross trainers
Dressing for Activity

- Wear loose comfortable clothing
- Light color
- Winter – layer clothing
- Wear Socks – prevent blister, absorbent
- Reflective Gear
Warm-up / Cool-downs

- **Warm-up** - Prepares the body for exercise/physical activity (dynamic stretching).

- **Cool-down** – Helps the body to recover, returning the blood from the working muscles to the heart.

- **Static stretching** - at the end when your muscles are really warmed up (↑ flexibility).
Principles of Physical Activity

- **Overload** = Doing more than normal! Progress @ a steady gradual increase

- **Specificity** = concentration within a specific area skill/health or specific muscle group

- **Reversibility** = Use it or lose it!

- **Dose-Response** = Larger doses of physical activity has greater benefits

- **Diminishing Returns** = The more you gain, the harder additional benefits are to achieve
Safety
Microtrauma

- An injury so small it is not detected at the time it occurs

- Injury occurs from chronic repetitive movements

- Later in life, microtrauma becomes apparent = problems of tendonitis, bursitis, arthritis, or nerve compression
Chronic Injury

- Many chronic injuries happen as a result of overtraining. This usually results from violating the law of progression and doing too much exercise or doing additional additional exercise without ample recovery.
Acute Injury

- A stress, strain or injury that produces an "ouch" at the time of injury or within several hours

- Common examples:
  - Sprains - ligaments
  - Strains - muscles/tendons
  - Fractures - bones
Treatment of Injuries

R  Rest
I  Ice
C  Compression
E  Elevation
Anatomical Terms

- **Hyperflexion**: bending a joint more than normal. Closing the angle at the joint

- **Hyperextension**: opening a joint angle (i.e., returning it past the normal anatomical position)
Valsalva Maneuver

- Increased pressure in the thoracic region with resultant problems associated with subsequent fainting or dizziness
Examples of Bad Exercises and Safer Alternatives

- Neck stretches
- Back stretches
- Abdominal exercises
- Hamstring exercises
- Shin exercises
- Bench press exercises
- Quadriceps exercise
Specific Guidelines

- Stretch chest muscles, hip flexors, calf and hamstrings, lower back and medial thigh rotators

- Strengthen the abdominals and the shoulder muscles, upper and lower back extensors, shin muscles and lateral hip rotators
General Exercise Guidelines

Avoid

- Hyperflexion of knee or neck
- Hyperextension of neck, knee or low back
- Twisting or lateral force to the knee
- Holding the breath during exercises
- Stretching already long / weak muscles
- Shortening already short / strong muscles
- Passive neck stretches and any ballistic passive stretches
Neck Stretches

BAD

Full Neck Circling

GOOD

Partial Circling - Head Clock
Back Stretches

BAD

Shoulder Stand Bicycle

GOOD

Leg Hug
Abdominal Exercises

BAD

Double Leg Lifts

GOOD

Reverse Curl
Bench Press Exercise

BAD
Bench Press - Back Arched

GOOD
Bench Press - Knees Bent
References