



Exercise Basics – Getting Started Recommendations

Water Intake

- Drink approximately 8 to 12 (8 oz.) cups of water over the course of the day.
- Carry a water bottle; do not drink water only at meals or much of it will go straight to your bladder and then as your meal digests in the following 1-2 hours your body will dehydrate.
- By the time one feels thirsty, one is already dehydrated.
- 96% of fatigue during exercise is due to dehydration.

Breathing

- It is essential to maintain proper breathing patterns while performing exercises.
- Breathe out while engaging the muscle (during the concentric movement) and breathe in when relaxing or returning to the starting point (eccentric movement.)
- For pressing or extending exercises: (moving the weight away from your body)
 - Exhale when you push and inhale when you return to the starting position. These movements include leg extensions, press machines, overhead shoulder presses, back and lateral shoulder flies and triceps presses or extensions.
- During pulling exercises: (Moving the weight toward your body)
 - Exhale when you pull and inhale when the muscle is lengthening. These movements include hamstring curls, rowing motions (seated or bent over), lat pull-downs, chest flies and biceps curls.

Frequency, Duration, Intensity of Stretching

- Stretch until you feel slight/ mild tension in the muscle you are targeting and hold for 30-60 sec. (Note: No Bouncing and No Pain).
- Breathe easily while stretching (don't hold breath)
- If pain increases while stretching, it means you are overstretching.
- Stretch regularly (3-5 times per week) and allow 3 to 4 weeks for noticeable benefits.

Exercise Tempo

- One must make certain to perform exercises slow and controlled. It is important to concentrate on the area or muscle that one is focusing on in a given exercise (i.e. 3 sec during the concentric movement/ 2 sec at point of contraction/ 3sec during the eccentric movement/ 2 sec upon returning starting point.)
- For example: while performing a biceps curl; take 3 sec to curl, 2 sec at top, 3 sec on the way down and pause at the bottom for 2 sec.
- During rehabilitation training, all exercises should be performed at the same tempo.

Good Pain vs. Bad Pain

- Good pain: muscle burning, bearable muscle soreness, muscle fatigue.
- Bad pain: pain in joints (i.e. knee), persistent pain, sharp shooting pain, unbearable soreness or muscle aching.
- It is important to know ones body some pain can be worked through and is beneficial; other types of pain can signal a new injury or an aggravation of an old injury. In the later case, the movement that causes the undesirable pain should be discontinued or the resistance (i.e. weight) should be decreased.

Proper Body Posture

- When standing: feet should be shoulder width apart, knees straight but not locked, shoulders back, and head upright positioned over shoulders.
- When sitting: sit up tall, feet shoulder width apart and in line with knees, shoulders back, head up positioned over shoulders.
- When lying down: make sure head and shoulders are supported on surface, feet positioned in line with knees.
- It is important to make certain that one is in a comfortable position before attempting to perform an exercise.
- Ideal sleeping position is either on one's back with one pillow supporting head or on side with knees bent. For additional comfort, a pillow may be placed under knees when lying on back or between knees when on side.

Cardiovascular Activity as Part of the Healing Process

- The aim of aerobic exercise is to increase heart rate to the training range (i.e., 115 to 140 beats per minute, and keep it there for 30 minutes, at least three times a week.)
- A workout on a stationary exercise bicycle may be ideal for a patient with knee arthritis.
- When disease of weight-bearing joints is severe, swimming or water exercises has proven an excellent choice. A seriously deconditioned individual may well start with walking sessions of 5 minutes or less, lengthened by no more than 10% per week.
- 3 separate 10-minute aerobic sessions seem to be as effective in improving fitness and health risk profiles as a single 30-minute session.

Exercise Benefits on Overall Health/ Life Span, Improved Sleep

- Done properly, exercise can "extend the healthy life span and push chronic diseases out toward the end" according to the director of Health Watch.
- Regular resistance training can prevent or reduce the effect of osteoporosis. It has been found that an active 60 year old and an inactive 30 year old will have equal physical work capacity.
- Research shows that many of the problems once attributed to aging: slowing down, declining muscle strength and fatigue are actually the result of a sedentary lifestyle. 80% of the health problems once associated with aging are now thought to be preventable or postponable if a person keeps fit.
- Working out helps one fall and stay asleep more easily, and it increases the amount of time one spends in the deepest stage of sleep.

Appropriate Attire (i.e. footwear)

- One must make certain that their attire is comfortable and allows for full range of movement (i.e. cotton shirt, shorts or athletic pants, close toed shoes.)
- Wear athletic shoes (i.e. running shoes) and wear them no longer than 6 month.
- When choosing appropriate footwear have an employee assist you in choosing the right shoe for your activity and have the employee size your foot.
- Many low back, ankle, knee and hip problems can be the result of wearing either the “wrong” shoes or worn-down shoes.

Goal Setting: Expectations for Improvement/ Functionality

- Too much stress on an area can damage new structures and significantly slow the healing process.
- Make certain to follow the exercise prescription given to you.
- Avoid doing too much too soon.
- The goal of treatment is to prevent new tissue disruption, prevent muscle atrophy and joint deterioration in the injured area, and finally, increase tissue function.

References

- Clark, M.A., Corn, R., Parracino, L.A., (2002) *Optimum Performance Training for the Fitness Professional*. USA: National Academy of Sports Medicine.
- Baechle, T., Earle, R. (2000) *Essential of Strength Training and Conditioning*. U.S.: National Strength and Conditioning Association.