

## Flexibility & Range of Motion

*Flexibility* refers to the ability of the joints and the muscles to move in a smooth and easy fashion. Each joint in the body is designed to move in certain directions, and normally can be bent (flexion) and stretched (extension) to a certain degree. The degree to which the joint can be flexed and extended is called *range of motion*. Many people who are inactive and who experience stiffness/spasticity or weakness find they may have a limited range of motion, with a reduced capacity for bending and stretching at least some joints. This can affect their ability to perform activities including walking.

Flexibility training stretches a muscle and tendon to its full length and moves the joint through its range. It reduces muscle tightness and prevents the loss of range of motion.

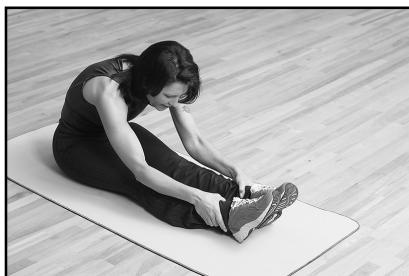
### Benefits of Flexibility Training

- Increases range of motion
- Decreases spasticity
- Reduces muscle soreness
- Increases blood flow to muscles
- Decreases activity-based injury
- Improves mobility and walking

### Types of Flexibility Training

#### Static Stretching

Static stretching holds a muscle to the point where tension is felt. It improves the flexibility of a specific muscle in order to correct any imbalances and altered movements by the joint.



An example of static stretching is holding a seated hamstring stretch.

## **Dynamic Stretching**

This type of stretching moves a joint through functional range of motion. It can be done on its own or used as a warm-up before an activity.

An example of dynamic stretching is lifting arms overhead with palms facing each other, either with or without weights. This type of stretch uses the body's movement to actively stretch the muscles in different directions that are functional for the body to perform daily activities such as lifting a child or lifting groceries.



## **Stretching Guidelines**

- Stretch every day
- Perform stretches slowly and hold each stretch for 20-60 seconds
- Stretch should elicit a comfortable, pulling sensation, but not pain
- Breathe normally while stretching and do not hold your breath
- Stretch two to three times per day especially for those muscles most affected by spasticity

## **Tips for Success in a Flexibility Program**

- If you take any medications to manage spasticity, take advantage of the “peak medication effect” by stretching when the effects of the medication are at its peak. Consult your physician for this information.
- Try to do your stretching in a quiet, comfortable setting that will allow you to focus on the movement without any distractions.
- Consult a physical therapist, occupational therapist, or exercise specialist with training in neurologic conditions to help you identify the appropriate stretching exercises for your specific needs.