



FLEXIBILITY AND THE FITT PRINCIPLE



The five components of fitness are important for physical health. Each component is necessary to live a healthy and productive life. Understanding fitness levels in each component and how to improve or maintain them through the use of the **FITT Principle** will enhance overall health, performance and appearance.

Flexibility is the muscles' ability to move a joint through a full range of motion. As the body ages, the muscles, tendons and ligaments stiffen and become less flexible. For example, when the shoulder muscles stiffen, the ability to throw is hindered because the arm will not move through the entire motion. Staying flexible is important to health and performance. Improving flexibility decreases a person's risk of injury.

Stretching should be done after a mild warm-up to prevent injuries that can happen to cold muscles.

The **FITT Principle** is made up of four variables that can be adjusted to help reach fitness goals. The variables are: **Frequency** (sessions per week), **Intensity** (resistance), **Time** (minutes or repetitions) and **Type** (activity). Adjusting **Frequency, Intensity, Time and Type (FITT Principle)** provides a reason for the body to make positive changes in health, performance and appearance.

To improve flexibility it is important to remember the **FITT Principle**. Flexibility is enhanced by stretching the soft tissues (tendons, ligaments and muscles) of the joint. Stretching should be done after a mild warm-up and should be included as part of a cool-down. The **Frequency** recommended is a minimum of 3 sessions per week. The **Intensity** of the stretch should be held to the point of mild tension just below the pain threshold. The **Time** that a stretch should be held is at least 15 seconds for static stretches, 3+ repetitions for dynamic stretches or total time of 15-30 minutes for dynamic activity stretching. The **Type** is activities that produce static or dynamic stretches.

<u>Component of Fitness</u>	<u>Frequency</u> (Sessions per Week)	<u>Intensity</u> (Resistance)	<u>Time</u> (Seconds held /repetitions or min.)	<u>Type</u> Various
Flexibility	3+	mild tension	15 + sec 3+ reps 15+ minutes	static, dynamic, martial arts, yoga

Tip:

Dynamic stretches involve moving parts of the body continuously while gradually increasing reach, speed of movement or both gently through a full range of motion. **Static stretching** involves passively stretching a muscle to the point of mild discomfort by holding it in a maximal stretch for an extended period.

When used consistently with the FITT principle, flexibility leads to a complete picture of health, performance and appearance.



FLEXIBILITY AND THE FITT PRINCIPLE



Key vocabulary words that will be introduced during this unit are:

- **Dynamic Stretches** – Involves moving parts of your body continuously while gradually increasing reach, speed of movement or both gently through a full range of motion. Stretching performed while in motion.
- **FITT Principle** – A formula in which each letter represents a variable for determining the correct amount of physical activity F=frequency, I=intensity, T=time, T=type
- **Flexibility** – The muscles' ability to move a joint through a full range of motion
- **Frequency** – How often an activity is performed each week
 - o Flexibility - minimum of 3 sessions per week
- **Intensity** – How hard an activity is performed each session
 - o Flexibility - the point of mild tension just below the pain threshold
- **Static Stretches** – Involves stretching a muscle to the point of mild discomfort by holding it in a maximal stretch for an extended period
- **Time** – How long an activity is performed each session
 - o Flexibility - a stretch should be held at least 15 seconds for static stretches. Dynamic activity stretches should be a 15+ minute session.
- **Type** – Which activities are chosen
 - o Flexibility - static stretches or dynamic activity stretches