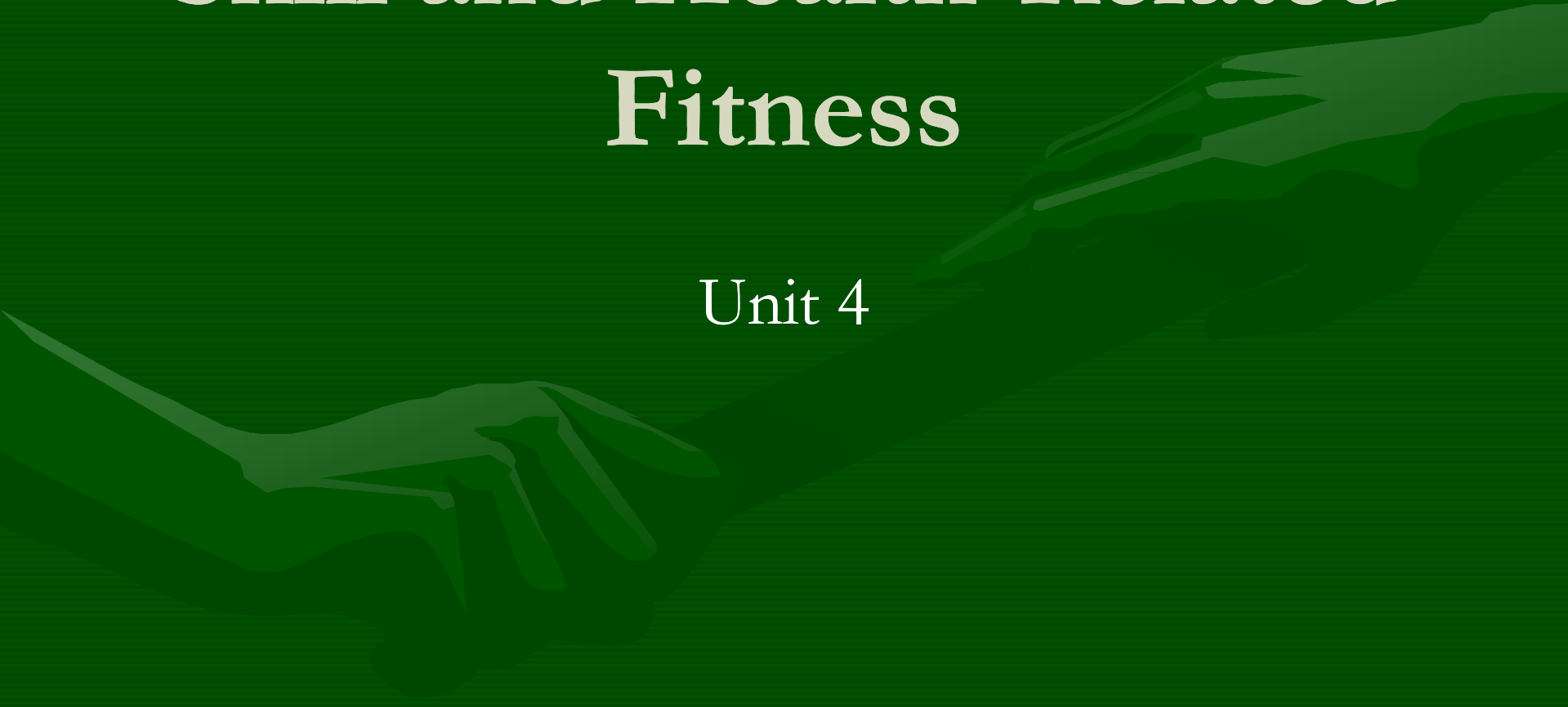


Skill and Health-Related Fitness

Unit 4

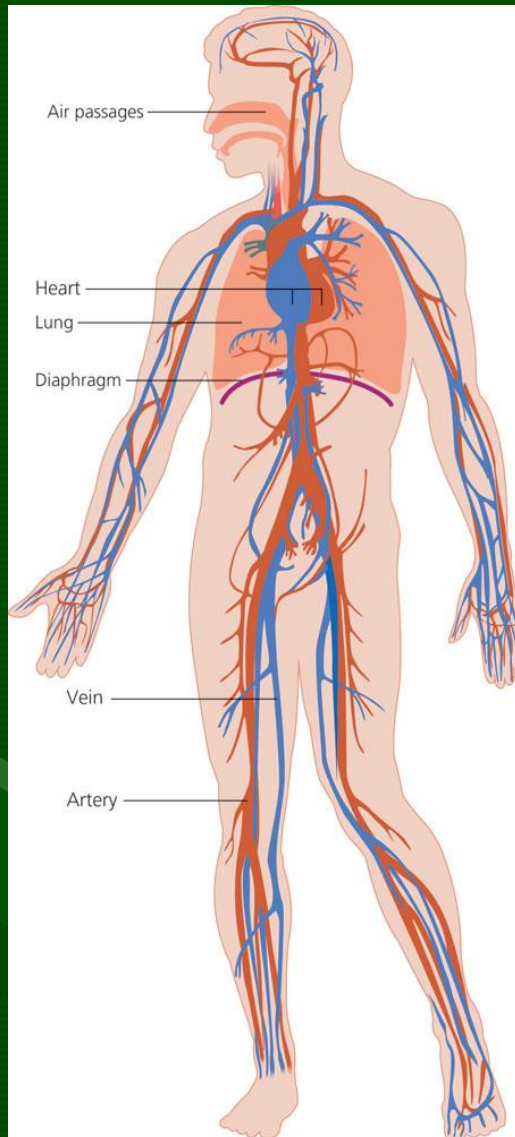


Let's Review...

- There are 5 Health-Related Fitness Components
 - Cardiorespiratory Fitness
 - Muscular Strength
 - Muscular Endurance
 - Flexibility
 - Body Composition



Cardiorespiratory Endurance

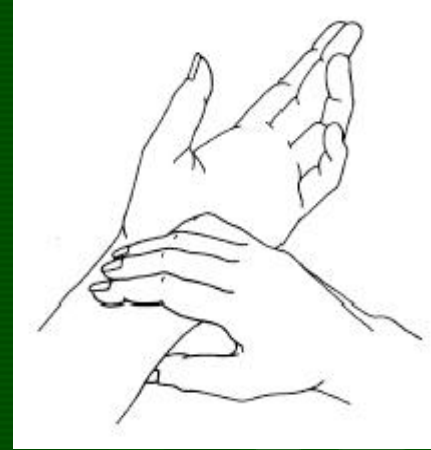


- Encompasses the heart, lungs, and all of the arteries, veins, and capillaries that connect them

Monitoring Your Heart Rate



Carotid Artery



Radial Artery

- At Rest: Count beats for either 30 seconds and multiply by 2 or count for 60 seconds to get the beats per minute
- During Exercise: Count beats for 10 seconds and multiply the result by 6 to get the beats per minute

Muscular Strength and Endurance

- Muscular Strength refers to how much weight you can do one time
- Muscular Endurance refers to how many reps you can do at a given weight
 - Strength training increases the number of myofibrils and the size of muscle fibers = *hypertrophy*
 - Inactivity reverses the process = *atrophy*
- Two types of muscle fibers:
 - Slow twitch – for longer strength and cardio exercise
 - Fast twitch – for quick strength and cardio bursts

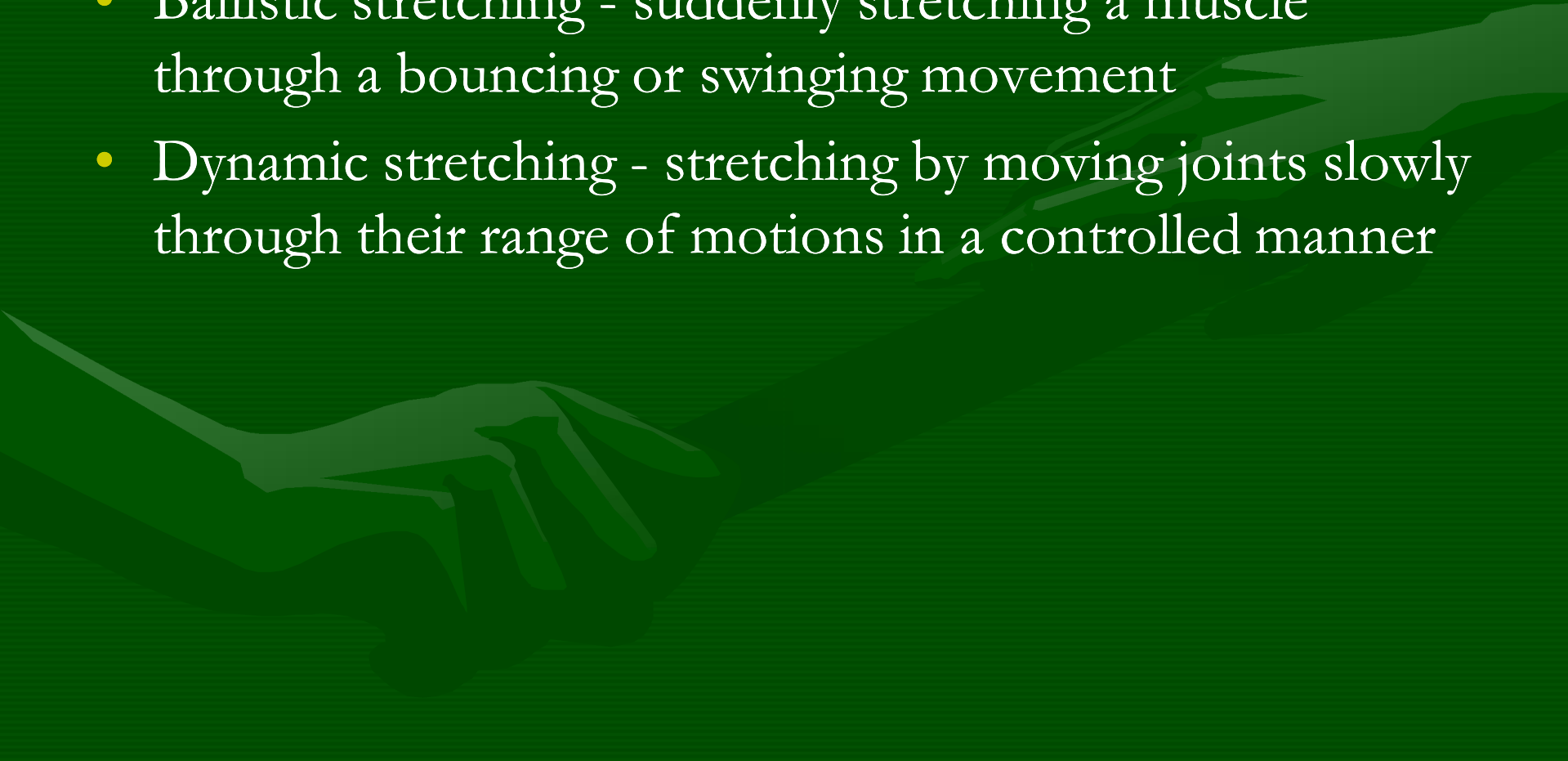
Flexibility Depends on...

- Joints vary in direction and range of movement
 - Joint capsules are semi-elastic structures that give joints strength and stability but limit movement
- Muscle elasticity and length also contributes to joint flexibility



Types of Stretching

- Static stretching - slowly stretching a muscle and holding the stretched position
- Ballistic stretching - suddenly stretching a muscle through a bouncing or swinging movement
- Dynamic stretching - stretching by moving joints slowly through their range of motions in a controlled manner



Body Composition

- Body composition = the body's relative amounts of fat mass and fat-free mass (bone, water, muscle, connective and organ tissues, teeth)
- Essential fat = crucial for normal body functioning
 - 3–5% of total body weight in males
 - 8–12% of total body weight in females
- Nonessential fat = adipose tissue

Skill Related...

- Skills that help a person perform motor tasks (tasks involving motion)
- What are the six skill-related fitness components?
 - Agility
 - Balance
 - Coordination
 - Power
 - Reaction time
 - Speed

Understanding the Skill-Related Components of Physical Fitness

- Agility – ability to maintain control of the body while changing direction
- Balance – a type of coordination that allows you to control your body while stationary or moving
- Coordination – ability to use the senses to produce smooth and accurate movements
- Power – ability to combine strength and speed in a movement
- Reaction Time – time required to start a movement after being alerted to the need to move
- Speed – ability to move your total body quickly from one point to another

Factors Determining Your Skill-Related Fitness

- Heredity – inherited characteristics which make a high level of skill-related fitness possible
- Practice – willingness to devote more time to practice in order to improve faster and reach full potential
- Specific Training – working on specific skills and skill-related components (ex. To improve agility, reaction time, and speed to play tennis, practice footwork drills without hitting a ball)