

Week 5: Muscles / GI Tract

GE 345 Physiology/Kinesiology

Name

This week's activity covers last week's lecture on the muscular system.

Paraphernalia

Paper and contrasting color chalk
Tape Measure
Calculator

Stopwatch or Timer
Subjects and Testers (volunteers)

Today's Activity

We will test anaerobic power via a vertical jump in a variety of situations. Power is the amount of work one can achieve over time, and is generally (but not always) directly related to muscle strength.

Starting Point: The subject will rub chalk on one finger and stand with both feet flat on the floor. Then, reach up as high as possible without going up on the toes and mark the paper by tapping the chalked finger on it.

Vertical Jump Height: The subject will attempt to jump as high as possible, marking the paper at the apex of the jump. To measure jump height, measure from the starting point to the height of the jump mark.

Rebound Jumps: The subject starts on a chair, jumps down from the chair, then immediately jumps as high as possible, marking the paper at the apex of the jump.

Fatigue: The subject will do a wall sit to exhaustion, then a vertical jump immediately after coming out of the wall sit. To do the wall sit, lean against the wall, knees and hips bent to 90 degrees, thighs parallel to the floor. Record how long the subject can hold the wall sit, and the post-sit vertical jump height.

Recovery: 3:00 after the wall sit, the subject will do one last jump test.

Wild Predictions: What is an activity without wild speculation or educated guesses on our part? Predict who will have the best jump/time and why you think so BEFORE we start testing. The rebound, fatigued and recovery jumps will be equalized by presenting them as a percentage relative to the first jump. Remember – you're not docked if you write the wrong answer, but you are if you leave it blank!

Vertical Jump:

Rebound Jump:

Wall Sit Time:

Fatigued Jump:

Recovery Jump:

Results

Name	Height / Weight	Vert Jump	Rebound Jump	Wall Sit Time	Fatigued Jump	3:00 post-sit

Due Next Class

Describe the types and purposes of movements in the gastrointestinal tract.

In which portions of the GI tract does the most absorption take place?

Some nutrients are absorbed through diffusion, while others are absorbed through a co-transport mechanism. Describe how the co-transport mechanism works.