Body Toning: Lecture 1

Components of fitness:

Cardio-respiratory fitness: The ability to perform exercise using large-muscle groups at moderate to high intensity for prolonged period of time.

Tests: step test, mile and a half time

Muscle strength and Muscle endurance:

Strength: amount of force a muscle or group of muscles is capable of exerting

Endurance: ability to exert force repeatedly without fatigue.

Tests: sit ups and push ups

Flexibility:

A measure of the range of motion, or the amount of movement possible, at a particular joint.

Test: sit and reach

Body Composition:

Ratio of lean mass (bone, muscle and vital organs) to fat mass.

Test: BMI, and percent body fat:

Most accurate method to measure this is Hydrostatic weighing

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Set - a **sequence** of one or more complete performances of a movement. The number of times you perform a certain lift.

Rep - a **single** complete performance of a movement. The number of times you repeat the motion within a set.

concentric

done as the muscle contracts; "concentric strength" is the weight that can be lifted working against gravity

produce force while muscle shortens

eccentric

done as the muscle extends or relaxes; "eccentric strength" is the weight that can be lowered under control

produce force while muscle lengthens

isometric

not involving contraction or extension; isometric exercises are done by tightening the muscles without moving any part of the body, such as by pushing against a brick wall instead of lifting a weight

produce force when there is no movement

Body toning: lecture 3

Weight Resistance Training Benefits

More Attractive body

Increased strength and power

Enhanced metabolism

Improved sports performance

Enhanced self-image

A competitive outlet

Improved quality of life by:

Aid in the performance of activities of daily living

Help keep skeleton in proper alignment

Prevent back and leg pain

Provide support for good posture

Improved bone and muscle health with the aging process

Participation in strength training prevents muscle and nervous system degeneration

Body Toning lecture 4

FITTE Factors

F – Frequency – 4- 6 days alternate upper lower body,

I – Intensity – To get big – base this on 1 Max Rep

To improve overall body toning increase reps, decrease resistance

T – Time - however long it takes to get through large muscle groups and auxilery lifts

T – Type – Anaerobic – non Cardio activities – whole body activities

E – Enjoyment – If you enjoy what you do, you will stick to it better

Body toning Lecture 5

Leading causes of death in the United States

1. heart disease Age 65+

2. cancer Age 35 – 64

3. stroke Age 65+

4. chronic respiratory disease Age 65+

5. Unintentional injury Age 1 – 34

6. Diabetes Age 65+

7. Pneumonia/Flu Age 65+

8. Alzhiemers Age 65+

9. Kidney Disease Age 55+

10. Blood disease Age 65+

Fit Walk Lecture 5

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Fit Walk Lecture 5

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Body toning lecture 6

Heart Disease # 1 killer in the Unites States

Controllable risk factors: Smoking, Cholesterol (LDL below 160, HDL above 60)

Diabetes, High Blood Pressure (120/80 ideal), inactivity, Obesity (women BMI 19-24, Men 12 – 21) Can be controlled with exercise and diet

Un-controllable risk factors: Age, gender, family history

Fit Walk lecture 7

Life Saving Tests:

- Colonoscopy Age 50

- Pap Smear Age 20 or when sexually active

- blood Pressure Every age, become familiar with this

- mammogram Age 35 get baseline, then after age 40, self breast exam monthly

- Cholesterol Age 20 become familiar with this

- Prostate PSA blood test men after age 50

Fit Walk lecture 7

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Lecture 8

Fats sugars

meats

dairy

Food Guide Pyramid:

Fats, sugars, extras – use sparingly

veggies

Fruits

Meats, beans, protein – 2 – 3 servings

Dairy, cheese – 2 – 3 servings

Vegetables – 3 -5 servings

Breads, grains, cereal

Fruits – 2 -4 servings

Breads, Cereals, grains – 6 – 11 servings

Try to eat nutrient dense foods. Foods containing fiber, vitamins and minerals are good food choices. Foods containing fats and sugars are less food dense.

Fiber is indigestible food items. They come from plant products, and have a high nutrient value as they protect us from several cancers.

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Body Toning Lecture 9:

Nutrients: Constituents of food that sustain us physiologically.

**Water**: The most abundant nutrient we have. Our body is 50% - 60% water.

* It bathes our cells
* Aids in fluid and electrolyte levels
* Maintains our ph
* It is a major component of our blood. Carries oxygen and nutrients to the tissues.

**Protein**: 2nd most abundant nutrient.

Our body breaks down protein into amino acids 9 (the building blocks of proteins). There are 20 linkages of amino acids. Essential amino acids are obtained from food, and there are 9 of these. The remaining amino acids are produced by the body.

* Developing and repairing bond, muscle, skin and blood cells.
* They are the key element of the antibodies that protect us from disease, and enzymes that control chemical activities
* They are the key element of hormones that regulate body function
* They transport iron, oxygen and nutrients

These proteins come complete in meat (beef, chicken, fish etc)

When a person chooses to be a vegetarian, they must **combine complimentary proteins**. This means they must combine foods from Legumes, grains, nuts and seeds, green leafy vegetables. By combining these, they will obtain the essential amino acids to complete proteins.

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Body Toning Lecture 10:

Nutrients continued:

**Carbohydrates**: Carbohydrate-rich foods are the primary source of energy for all body functions. Your body breaks down carbohydrates into fuel for use by your cells muscles – that’s why eating a moderate amount of carbohydrates is necessary for most people.

Simple Sugars : fruits

Complex Sugars: grains, cereals, dark green leafy vegetables, yellow fruits and veggies

Avoid or decrease: sodas, candies, sweets

Increase: Fruits and dairy (low fat, or non-fat)

**Vitamins**: 13 compounds have been classified as vitamins. Fat soluble (stored in fat cells) are A,D,E and K

* Maintain nerves
* Skin
* Produce blood

**Minerals**:

Without minerals, vitamins could not be absorbed.

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