**FDNT 10 – Elementary Nutrition**

**Study Guide for Exam I**

**Nutrients and My Plate**

What is the definition of a nutrient?

Explain the difference between essential vs. non-essential nutrients

What are the DRI’s? (know what each of the acronyms stands for)

DRI requirements vary based on several individual characteristics. Know those different characteristics.

What does UL mean? Why is it important?

What is the difference between RDA and EAR’s?

Explain the difference between a nutrient dense food vs. an energy dense food.

What is meant by empty calories?

What is a phytochemical? Why are they important in the diet? Are they essential nutrients? Which types of foods contain phytochemicals?

Know the 6 classes of nutrients, and know which nutrients provide energy.

How many calories does each of the energy-containing nutrients provide per gram?

Know how to use MyPlate recommendations to assess a diet.

What are the benefits of using Choosemyplate.gov? What are some challenges?

What does malnourished mean?

Know the general rules for serving sizes (i.e. 1 serving of grain = 1 oz of grain, etc.) Refer to pgs 40 &41 in your text.

What things must a nutritional label contain?

Know how to read and understand a food label.

What is a “structure/function” claim?

**Scientific Studies**

What is an epidemiological study and how does it apply to nutrition?

Define: case controlled studies, experimental group, control group, placebo, blind, double-blind, meta-analysis

What are the important factors to check for in an article to see if it is based on a valid scientific study?

What does “peer reviewed” mean?

What are some ways to recognize bias in nutrition?

**Digestion and Absorption**

Define both terms (above).

How are the circulatory and immune systems related to nutrition?

Be able to locate and identify critical organs and tissues involved with digestion and absorption

Know the major functions of all digestive organs and accessory organs.

What are villi/microvilli and what is their role in absorption?

What is the difference between mechanical and chemical digestion?

How can bacteria be beneficial in the GI tract?

What is bile? Where is it made? Where is it stored? Into which organ is it secreted?

Explain GERD. What are possible treatments?

What is diverticulitis? What is the recommended treatment?

What is a major cause of stomach ulcers?

**Carbohydrates**

What are the functions of carbohydrates in the body?

Which cells particularly rely on carbohydrates for energy?

Which sugars (that were discussed in class) are monosaccharides? Which are disacchardies? What is the difference between mono- and disaccharides?

What is lactose intolerance? Cause? Symptoms? How do people with lactose intolerance get the nutrients they’re missing in dairy products?

What are the main food sources of simple sugars in the American diet?

What is the difference between whole grains and refined grains?

Why is fiber important in the diet? What foods is it found in? What are the recommended amounts of dietary fiber? What are the major differences between soluble and insoluble fiber? Be able to give an example of each type.

How are carbohydrates digested and absorbed?

How does soluble fiber decrease cholesterol levels in the body?

What is fortification?

What is the difference between whole grain, enriched and unenriched products?

Which vitamins (4) and mineral (1) are added to enriched wheat flour?

What is the difference between Type I and Type II Diabetes Mellitus? Be able to discuss both in detail including cause and treatment.

Is Type 1 or Type 2 more common?