

HEA 151 Winter 2010
STUDY GUIDE FOR EXAM #2
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The following are items to study from lecture notes, including handouts and items in the book. This isn't an all inclusive list but at least gives you some topics to focus on. The exam will be just like the last one. No need to bring a scan tron. **BRING YOUR CALCULATOR!**

Good luck ☺ lisa

FATS

What is saturated, mono, poly

Oxidation/antioxidants- hydrogenation- trans fats

EPA/DHA (omega 3's) roles

Triglycerides- what are they? Goal for lab work (see handout)

Lecithin, do we need it as a supplement?

Choline- brain/eyes found in eggs

Cholesterol- sources (animal products ONLY)...NOT absorbed as much when it's prepared low saturated fat. Ex. Cook eggs with Pam or hard boil not butter on the skillet

How much does the liver make?

Total cholesterol = LDL + HDL + VLDL

Labs for these (handout)

Digestion enzymes, where absorbed

What is olestra?

Studies from Alaska, northern Canada, Greenland...lower heart disease from more fish

PROTEIN

Amino acids...what are they?

How many essential and non essential?

What is PKU?

Peptide bond= link

Digestion and absorption...where?

Sickle cell anemia

Roles of protein (9 of them)

Marasmus and kwashiakor

Do we need to combine beans and rice to have "complementary proteins" or is that old school thought?

LABWORK (handout)

Glucose, HbA1C, TRIG, Chol, CRP, blood pressure

DIABETES SPIEL (handout)

Roles of insoluble and soluble fiber with diabetes

What are Glut 4's?

15 grams of carb increase blood sugar how much?

METABOLISM/BIOCHEM STUFF

not a whole lot from here I promise ☺

Definitions- photosynthesis, anabolism, catabolism

Glucose breaks down into pyruvate- from there

...anaerobic pathway yields lactate/lactic acid..(burn in muscles)

or aerobic pathway yields Acetyl CoA

Carbs, fats and proteins all break down into Acetyl CoA which goes into the electron transport chain or TCA cycle creating energy/ ATP

What is ATP

ALCOHOL

Glycerol (OH) vs ethanol alcohol (ETOH)

What is considered ONE drink

Alcohol is ½ the proof. 100 proof = 50% etoh

Know some of the basic ETOH contents of beverages...beer, wine

Digestion –STOMACH first, NOT small intestine like everything else though it can be absorbed there too.

Why do people get more buzzed on an empty stomach?

Alcohol dehydrogenase enzymes

The liver can handle about 1 drink an hour...what happens when someone exceeds that?

How does the liver get fatty, fibrosis, cirrhosis

Potentially fatal effects when alcohol is mixed with medicines

How the body reacts to specific blood alcohol levels (table H7-2)

What is a lethal dose?

Too much ETOH causes overstimulation of gastric acid- ulcers

Cultural effects – what % of ER visits, suicides

Cultural effects- what % of fatal traffic accidents/homicides/domestic/fatal fires (the last group all has the same %)

EXCESSIVE ETOH CONSUMPTION IS THE THIRD LEADING CAUSE OF PREVENTABLE DEATH IN THE US.

Some of the calories in alcohol (handout)