

Exam 4 study guide

[Health & Medicine](#), [Obesity](#)



Exam 4 Study Guide This is a Study Guide. It is not comprehensive. The purpose of this guide is to highlight some of the key points covered in Chapters 10, 11, and 12. Be sure to study all of your lecture notes, chapter assignments, and textbook.

Chapter 10-Nutrition, Fitness, and Physical Activity (~15-17 questions)

Understand the importance of physical activity in disease prevention Helps prevent disease even though your family history may carry certain disease with exercise you can help prevent it from taking over you. Know the ASCM recommendations for physical activity to improve health 150 minutes per week Know the ASCM recommendations to benefit from strength training 2 to 3 times a week different exercise Understand the relationship between intensity and energy sources Differentiate the terms aerobic and anaerobic exercise Where within the cell does anaerobic metabolism take place? Aerobic? What is the aerobic training zone? Relate nutrient intake with performance and composition outcomes Know how to read the label for a sports drink and what the important considerations are for which ones an athlete should consume. What is carbohydrate loading and supercompensation? What is an ergogenic aid? A substance an appliance or a procedure that improves athletic performance many vitamins and minerals and other substances in these supplements are involved in providing energy for exercise or promoting recovery from exercise What is meant by moderate intensity? Needed for the best health benefits noticeably increase heart breathing rate 50 to 70% of maximum heart beat biking riding jogging swimming Understand the role of exercise in weight management, both for weight gain and weight loss. Understand dietary needs for muscle growth and strength gains. Chapter 11 — Pregnancy and Infancy (~15-17

questions) Identify rates of infant mortality in U. S. as compared to other countries. Even though we are technology advance country we have a higher mortality rate than other countries Define the terms, “ healthy pregnancy” in terms of diet. Meeting the needs of fluid, electrolyte, vitamin and mineral needs(calcium, vitamin d, folate, vitamin b 12, iron, zinc) Identify the typically length of a pregnancy. Typical length is 36 weeks Discuss the importance of adequate nutrition before, during and after pregnancy and relate that to potential adverse health outcomes. Identify health consequences of low birth weight infants and relate that to nutritional behaviors. Infants are at increased risk for illness and early death. Discuss the importance of some weight gain during pregnancy. the blood volumes increase 50% the placenta develops in order to allow nutrients to be delivered to fetus and produce hormones that orchestrate other changes in the mothers body the amount of fat increase to provide energy needed late in pregnancy the uterus enlarges muscles and ligaments relax to accommodate the growing fetus and allow for childbirth and breast development in preparation for lactation Identify important vitamins and minerals as they relate to neural tube defects (NTDs). Folate is needed for the synthesis of DNA and hence cell division is critical because rapid cell division occurs in first few weeks of pregnancy. Low folate increase the risk of abnormalities in the formation of neural tube which forms the basis brains and spinal cord vitamin b 12 is essential for the regeneration of active forms of folate. Understand the concepts of gestational diabetes how it relates to infant/maternal health. A condition characterized by high blood glucose levels that develop during pregnancy, usually resolves after birth but the mother has

20 to 50 increase chance. b/c glucose in the mothers blood passes freely across the placenta when the mothers blood glucose levels are high the growing fetus receives extra glucose and hence extra calories Differentiate between the health risk associated with underweight, normal weight, overweight and obese mothers in relation to the infant. Underweight- increase risk of producing a low birth weight baby Overweight- compromise pregnancy outcome need for cesarean section and large gestational age baby increase mother long term risk for obesity and baby may be overweight In childhood normal- gain 11-16 pounds little gained in 3 months second and third one pound a week Discuss the importance of breast feeding from birth up to two years. Breast feeding after the first year continues to provide nutrition, comfort, and an emotional bond between mother and child Be familiar with recommendations on breast feeding. After the first year breast feeding is not necessary to meet the infants nutrient needs recommend exclusive breast- feeding for the first 6 months of life and breast feeding with complementary foods for at least the first year as long thereafter as mutually desired Describe the advantages and disadvantages to breast feeding and formula feeding. Breast feeding- gastrointestinal tract, acting as laxative, easily digested and absorbed antibody proteins and immune protection prevent growth of harmful microorganisms protect against viruses beneficial bacterium maturation of the infant gut and immune defense and enhance digestion. Formula- illness are not passed to baby no drugs will pass Identify when solid food should be introduced and identify which sources are most nutritional important. Gradually into the diet at 4 to 6 months Discuss if exercise during pregnancy is beneficial or detrimental to the health of the

mother and fetus. Can improve digestion; prevent excess weight gain, low back pain, and constipation, reduce the risk of diabetes and high blood pressure speed recovery from childbirth. Intense exercise can limit the delivery of oxygen and nutrients to the fetus intense excessive should be limited Chapter 12- Nutrition from 1 to 100 (15- 17 questions) Differentiate between nutrient and caloric needs from infants to the elderly and understand the factors that contribute to the differences in these requirements. How do eating habits develop over time and what factors play a role in appetite? What we choose to eat as adults depends on what we learned to eat as children. Caregivers, if family members and peers are eating the same food, Understand the differences between adult BMI and how child BMI is interpreted. BMI in adults is measured by body weight to height and universal while Child BMI is based more on percentiles. The BMI of an adult 29 would be considered overweight while in child it is considered underweight How does television viewing impact childhood obesity? Children are more likely to snack and not realize just how much they are consuming, it encourages them to be less active, more children are going to be prone to be overweight How does nutrition relate to hyperactivity? are result of situational factors. Caffeine stimulant that causes sleepiness, restlessness, irregular heartbeat lack of sleep overstimulation, desire more attention lack of physical activity . Identify some major negative nutrient related outcomes facing children, adults and the elderly Childhood obesity, hyperactivity, dental caries, physiological changes, acute and chronic illness, muscular degeneration, carotid artery disease, dementia, Alzheimer's, food insecurity , insufficient amount of vitamins and minerals Develop a sense of how nutrient intakes and also diet

and exercise contribute to the pathogenesis of diseases What factors contribute to the decreased caloric needs and increased nutrient density needs in older adults? What is the difference between life expectancy versus healthy life expectancy? life expectancy- the average length of life for a particular population of individuals healthy life expectancy- ???? What are the different types of liver problems that can arise from alcoholism? Rank them in order of severity. 1. Fatty liver accumulation of fat in the liver cells drink heavily 2. Alcoholic Hepatitis inflammation of liver caused by alcohol consumption reversible 3. Cirrhosis chronic and irreversible liver disease characterized by loss of function liver cells and accumulation of fibrous connective tissue What is binge drinking? Having more than five drinks for men and more than 4 drinks for women in a two hour period What is moderate alcohol consumption and what are the health benefits of moderate alcohol consumption? Two alcoholic beverages for men and one alcoholic beverages for women each day. Stimulate appetites improve mood and enhance social interactions reduce heart disease stroke reduce risk of death How long after alcohol consumption is the peak blood alcohol level reached? Peak blood alcohol concentration are attained approximately one hour after ingestion What are the two systems for alcohol metabolism? ADH- In people who consume moderate amounts of alcohol most broken down in the liver by enzyme alcohol dehydrogenase found throughout the gastrointestinal tract pretty consistent MEOS-great amount consumed second pathway of the liver microsomal ethanol- oxidizing metabolizes alcohol increase with more alcohol