

# [Nutrition quiz final essay](https://assignbuster.com/nutrition-quiz-final-essay/)

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Part 3: Explain the difference between a “ necessary” and “ essential” nutrient. Required for the body to function and survive; cannot be synthesized by the body (essential); important for repair and growth but the body can function for a while without it. Part 4: How would you explain what a calorie is to an 8-year-old so that they understand? A piece of energy. Part 5: Explain how the Atkin’s Diet violates the characteristics of a healthy diet. (This question requires you to learn about the Atkins Diet and the characteristics of a healthy diet)There is a limited amount of grains and carbohydrates, and an excess of protein. It is not balanced.

Risk of heart disease. Initially there is water loss, then as normal fat production. Low fiber so poor digestion, bowel movements and nutrient production. Part 6: Why is the new Food Guide Pyramid an improvement over the old Food Guide Pyramid? Be sure to explain specific changes and why these changes are an improvementIn the USA there was a change to the pyramid.

Firstly, a kid’s version was developed. Visually, the pyramid is now a rainbow of equal vertical stripes, to reflect the diversity of food needs. Some of the bands are different widths (e.

g., yellow= fats) to represent groups which should not be indulged in. The previous horizontal restricted some foods and emphasized others. The new pyramid emphasizes variety. Meats, fish and beans are clustered together to represent a significant segment of proteins. It is suggested to have foods of every color each day. The bands become narrower from right to left to represent a decreasing gradient of recommended intake.

The staircase represents exercise. Part 7: List the credentials and qualifications of valid nutrition experts. Dietitians and nutritionists need at least a bachelor’s degree in dietetics, foods and nutrition, food service systems management, or a related area. College students in these majors take courses in foods, nutrition, institution management, chemistry, biochemistry, biology, microbiology, and physiology. Other suggested courses include business, mathematics, statistics, computer science, psychology, sociology, and economics.

Part 8: What is the difference between DRIs and Daily Values? Why are Daily Values used on food labels? Daily Recommended Intake will be replacing RDA’s. Revision of the RDA’s led to a new set of nutrient values: DRIs. There are four types of DRI reference values: the Estimated Average Requirement (EAR), the Recommended Dietary Allowance (RDA), the Adequate Intake (AI) and the Tolerable Upper Intake Level (UL). Dietary Reference Intakes Definitions: 1)      Recommended Dietary Allowance (RDA): the average daily dietary intake level that is sufficient to meet the nutrient requirement of nearly all (97 to 98 percent) healthy individuals in a particular life stage and gender group.

2)      Adequate Intake (AI): a recommended intake value based on observed or experimentally determined approximations or estimates of nutrient intake by a group (or groups) of healthy people, that are assumed to be adequate—used when an RDA cannot be determined. 2)3)      Tolerable Upper Intake Level (UL): the highest level of daily nutrient intake that is likely to pose no risk of adverse health effects for almost all individuals in the general population. As intake increase above the UL, the potential risk of adverse effects increases. 4)      Estimated Average Requirement (EAR): a daily nutrient intake value that is estimated to meet the requirement of half of the healthy individuals in a life stage and gender group—used to assess dietary adequacy and as the basis for the RDA.% Daily Value (%DV) is a reference number based on the Recommended Dietary Allowance (RDA). Values are meant to aid consumers in food selection according to nutrients.

%DV on Nutrition Facts of labels informs adult percentages for a serving. The DVs are based on a 2, 000 calorie diet so that across people %DV varies. The FDA formulated the DVs to represent two nutrient values; 1)      Daily Reference Values (DVRs)2)      Reference Daily Intakes (RDIs)Generally, %DV that is less than 5% is considered to be low, and over 20% is considered high.%DV on labels can be used to;\* compare product serving sizes; e. g., grams of protein, fats and sugars.\* to highlight the nutrient content (social responsibility?) of a product; enhance marketing (i.

e., meeting social expectations of a healthier lifestyle)\* create balanced lifestyles in terms of dietary intake; can keep having favorite foods with a responsible diet; %DV allows for tradeoffs amongst food and exercise; e. g., eat a mars bar, then walk 4 kmsPart 9: You are in a grocery store and have very limited time to carefully analyze the food labels of every item you pick up. You only have time to look at ONE item on an entire food label to determine if that food is healthy.

Of everything included on a food label, what is the ONE thing you would look at? You will only receive credit for this question if you THOROUGHLY justify your answer – that way I know that you understand the components of a food label and what information can be ascertained from each component. Sugar; the first thing I would check is how much sugar the product contains. I would prefer something less than 4g. And for the sugars to be honey, fruit or milk sugars rather than processed white sugar/glucose.

The non/low processed sugars would be slow release and the variety of food groups would contribute to optimum functioning and meeting calorie and nutrient needs. If combined with adequate water intake and exercise, foods low in processed sugar will provide longer lasting energy and building blocks for my mind and body. This will benefit me economically as well, because I will likely eat less and be healthier, as processed sugar depletes the body of man nutrients (e. g. vitamin C). I would try and select from foods likely to contain high protein with some carbohydrate and fiber, but low in sugar.

For example;§  Crackers and cheese§  Muslie bar with oats and nuts/fruit; no chocolate/topping§  Dolmades§  An egg muffin§  Spinach and cheese slice/vegetable pasties§  Low fat naturally flavored milk§  Nuts/fruit and nuts§  Protein bar§  Natural yoghurt and fruit/nutsPart 10: Explain the concept of nutrient density and provide an example. Ratio of nutrient content (g) to energy content (c/kj). An energy dense food is likely of empty calories (e. g., mars bar), whereas a nutrient dense food is high in complex calories (e.

g., vegetable lasagna). Hence, foods high in calories and low in nutrients have low nutrient density and vice versa. Can also be defined as nutrient a ratio of food energy from carbohydrate, protein or fat, to the total food energy. Calculate nutrient density (in percent), divide the number of calories or joules from one particular nutrient, by the total number of calories or joules in the given food; multiply this by 100. Alternatively, nutrient density is the ratio of the nutrient composition of a given food to the nutrient requirements of the human body. Therefore, a nutrient-dense food is the food that delivers a complete nutritional package. Part 11: Relate the importance of variety in a diet, especially with regard to fruit and vegetable choices, to the discovery of phytochemicalsNatural bioactive compounds are present with phytochemicals; synergistic effect with nutrients and fiber.

Colored fruit and vegetables contain the most phytochemicals. Thus a variety of food s is required to expose the body to the 900+ phytochemicals known to exist. 5 – 9 servings of vegetables and fruits a day ensure adequate opportunities to ingest phytochemicals. Part 12: You are reading the label on an orange juice container and it states that 1 serving contains 25% of the Daily Value for calcium. Does this mean that 4 servings of this product will satisfy YOUR SPECIFIC calcium requirement for the day? (Before you answer this question you should know why Daily Values are used on Food Labels)Not so much my specific calcium needs, but the percentage of calcium in the product. I would need to work out my specific needs based on age, gender, lifestyle (calorie intake/physical needs) and tastes. The %DV is based on a 2, 000 calorie diet, and mine is 3, 500 at present.

The juice contains 250 mg of calcium, which may not suit my needs. $ servings would give me 1, 000 mg, again this may not be adequate. For example, if I am smoking or an older woman I may need more vitamin C. Part 13: Consider the following advertisement and identify 4 indications of quackery: Do you want to increase your muscle mass but don’t want to spend hours at the gym? One must move or be moved in some way for fat to burn and for muscle to increase in density and shape. Well now you don’t have to! The secret that professional weight lifters have known for years is now available to you.

Power Boost is a doctor-approved, fitness trainer-recommended supplement that will result in larger, leaner, and stronger muscles, GUARANTEED. Nothing in life is guaranteed. The nutrient values within the product are not tailored to personal lifestyles and nutrient needs, so it unlikely that the results will occur for everyone, especially if no exercise is taking place in some form.

Power Boost is an all natural formula made from organic plant extracts and is recommended by 9 out of 10 athletic trainers. A well-known university tested Power Boost on 20 healthy college males who regularly weight train. The well known university is not referenced so that the reader can make an independent check to verify what is claimed. They were asked to follow their regular weight training regimens, and 10 of them took Power Boost at every meal while the other 10 took a placebo.

After 3 weeks the subjects were asked how strong and motivated they felt during workouts and if they noticed any improvement in muscle tone. The individuals in the experimental group reported higher energy and increased muscle mass than those in the control group. What other product can offer these types of results? Order today and turn your flab into muscle! Fat does not turn into muscle.

Fat cells and muscle cells are completely different in structure and function. Muscle sits underneath fat tissue and will be prominent when there is low body fat. It is more the case of fat loss and muscle building and toning. Fat feeds muscle with its energy. Part 14: Name 2 things wrong with the design of the experiment that the `well known university` used to test Power Boost. There was no random sampling, no random assignment to groups.

The sample was skewed in terms of gender. It is not known the mean age or the range of ages of students. There was no pre-testing of muscle mass and motivation level.

The data collection was highly subjective and the instrument not described to ascertain reliability and validity. It is not made known to the extend of difference between groups or if the finding was significant.