

Evaluation of Diet and Recommendations for Improvement

I am a 21-year-old, 5' 4" female, who weighs 128 pounds. I am currently a student and am involved in a lot of activities both on and off campus which leaves me little time to exercise. My BMI is 22 and I am currently satisfied with my weight. It would be ideal to weigh 120 pounds, which I weighed about three years ago, but I feel as though I'll never be able to reach that weight again. High cholesterol runs in my family so my family and I eat very little red meat. We try to limit our intake of cheese, butter, cream, egg yolk and meat to avoid raising our cholesterol even higher. Everyone in my family is on medication for this problem but I've found that it's very hard to eat healthy as a poor college student living away from home. I am not taking any vitamins or mineral supplements at this moment. I normally try to get all the vitamins and minerals I need from my diet but it doesn't look like I'm doing a great job of that looking at the outcome of this diet project.

Calculating my EER, the formula would look like this: $354 - (6.91 \times 21) + 1.12 \times (9.36 \times 58 + 726 \times 1.62) = 2134$. I require about 2,134 calories/day. Calculating the Harris Benedict equation, the formula would look like this: $655.1 + (9.6 \times 58) + (1.9 \times 162.56) - (4.7 \times 21) = 1422$. At rest, I expend about 1,422 calories but multiplying this number by my activity factor of 1.6, it then equals 2,275 which is the number of calories I should be eating per day according to this equation. These two numbers are very close to each other and only differ by 141 calories. This makes sense because these two equations are essentially saying the same thing although they use a slightly different formula to arrive at the final answer. According to page 8 of my diet project, my average daily energy intake is about 1,448 kcals and my estimated total energy output, when averaged, is 2,204 kcals. There is a pretty large discrepancy between these values of about 756 kcals. There could be many possible reasons for this large discrepancy. First of all, hunger comes in waves for me. There are days when I'm really hungry and days when I barely want to eat at all. And when I do eat, most days, I only get hungry once a day. Once I satisfy that hunger through one meal, the rest of the food I eat that day is because other people are eating or because I'm bored or for other miscellaneous reasons. So if I'm constantly doing something or not thinking about it, it's possible that my calorie intake for that day will be quite low. I do try to watch what I eat and I get very frustrated about not being able to consume a healthy meal. If I do not have healthy food in the house, like fruits or vegetables, instead of going out and spending money on those food items, I might choose not to eat at all because I don't want to consume junk food. I do try to eat small portions throughout the day and really like a variety of food. In terms of protein needs, I'm averaging about 56 grams a day and should be consuming about 58 grams a day. So it seems that I'm very close to eating enough protein pretty much everyday.

In terms of micronutrients, there are some that I met the EAR/AI for and others that I did not. The nutrients I was low in were: calcium, magnesium, zinc, Vitamin E, and Vitamin C. In order to meet the DRIs, I should definitely drink more milk or eat more dairy products, such as yogurt. This would increase my calcium very easily. Increasing my Vitamin C would work very well by drinking orange juice or just by eating more fruits and vegetables. Drinking orange juice enriched with calcium would work to both increase my Vitamin C and calcium consumption. Eating legumes, nuts, whole

grains and vegetables would help increase my magnesium consumption. Halibut, almonds, cashews and spinach are great ways to get magnesium into my diet. Eating similar foods, such as spinach, nuts, and certain oils such as sunflower, cottonseed and safflower oil would help to increase the amount of Vitamin E I'm consuming. Peanut butter has Vitamin E in it, and that's something I consume almost regularly in my diet. In order to get more zinc into my diet, I should be consuming more animal foods. Lean meats, especially beef, other red meat and shellfish are the best zinc sources. Plant sources of zinc, such as nuts, beans and whole grains are a healthier alternative for me because consuming red meat also raises my cholesterol. I don't recommend taking supplements for any of the nutrients I'm deficient in. I'm a firm believer that everyone should be getting their vitamins and minerals from food sources in any way possible instead of taking supplements. Eating food is a more natural way for people to get micronutrients and the body is better able to handle it in food form as opposed to supplement form. If, however, one is chronically deficient in a particular vitamin or mineral, then it may become critically important that they do take a supplement for that particular micronutrient. It does look as though I'm consuming enough fiber in my diet. The DRI is 14g/1000 kcals and my average fiber intake is a little over 20 grams of fiber per day. Since my average kcal intake was 1448, I was consuming, pretty much, the exact amount of fiber recommended.

My diet (composition of kcals) compares pretty well to the recommended dietary guidelines. Everything is within range except for the % of kcals from fat (which is 40% for me) and the % of saturated fat (which is 12% for me). In order to reduce the fat percentage in my diet, I should be eating more whole grains to increase my carbohydrate consumption and more lean protein from chicken and fish. My food intake pattern does not compare very well to the recommendations made by MyPyramid. I'm not eating enough of any group except for the fats, oils and sweets group. I'm way under my average intake of grains, vegetables, fruits, milk and meats and beans. As it stands now, my diet looks horrible! The Food Pyramid Analysis that showed up on my Diet Analysis Plus software gave me the number of *servings* I ate in each category (the old way of doing it) instead of the number of cups or ounces (the new way of doing it). So I converted the number of servings it gave me into the appropriate cups for vegetables and fruits (since ½ cup = 1 serving). I didn't have to convert grains, milk or meats and beans because 1 oz or 1 cup = 1 serving already. In terms of the oil category, mine also included fats and sweets which is why the numbers in that category were so high.

I do believe that half of my grains are whole because I only eat 100% whole grain bread and All Bran cereal. These grains seem to account for most, if not all on some days, of my grain consumption. In terms of the vegetable subgroup, I don't eat any dark green, orange, or healthy vegetables. The one salad that I consumed in the three days of this diet project consisted of iceberg lettuce which is the most nutrient poor vegetable I could have chosen to consume. I am definitely not making nutrient dense choices in each of the food groups. I would say the best choice I'm making is eating a lot of fiber in the carbohydrate products I choose to eat but that's about it in terms of eating healthy. My discretionary calories came from a cookie I ate, some alcohol I consumed, some sodas I drank and some creamy pasta I consumed. In order to make my diet be more like current recommendations, I need to consume more food in every one of the food groups on the pyramid - with special consideration given to the vegetable and fruit group.

Evaluating my current food behavior, I see that there is a huge discrepancy between what I want to eat and what I'm actually eating. I wake up every day thinking about what I'm going to eat and how can I improve my diet. My brain knows what to eat, but it's very hard to actually put that into action (especially because I live with my boyfriend and he does all the cooking). I learned that I need to change the way I eat because it's just not that healthy. I need to consume more fresh fruit and green, leafy vegetables. I should also be eating more fish to increase my protein and essential fatty acid intake. Drinking more milk will help increase my calcium consumption and increase the amount of cups needed in the milk category. I see that I really need to decrease the amount of foods I eat with excessive oils or sweets in them because I'm eating way too much of them right now. Discretionary calories are meant to be eaten after all other dietary needs have been fulfilled. I seem to be flipping this notion around and eating too many discretionary calories at the expense of all the other healthy food groups on the pyramid. What I really need to do is to find some tasty recipes that incorporate vegetables and fruit and concentrate on eating foods from those categories. It's critical to my health to change my diet and that's something I'm going to try to do right away.