

Diet Project

My name is Erica Italiano and I am a student at Chico State. I am five feet seven inches tall, and weigh 155 lbs. My body mass index (BMI) is 24.3. This BMI is within a healthy weight range, yet I still am not happy with my weight. My ideal weight would be 140 lbs, which would give me a BMI of 21.9. I do have a chronic disease that influences my eating patterns. I have had diabetes for the past 10 years, which influences how much I eat, and what type of foods I eat. I do not take any vitamin supplements because as of right now, I do not see a need for them.

My estimated energy needs can be calculated in two different ways. One is the estimated energy requirements (EER) equation, which is:

$$\text{EER} = 354 - (6.91 \times 20\text{y}) + 1.12 \times (9.36 \times 70.45\text{kg} + 726 \times 1.7\text{m})$$

$$\text{EER} = 2336.64 \text{ kcals}$$

The other is with the Harris-Benedict equation, which estimates your resting energy needs and ultimately gives you your BMR:

$$\text{Harris-Benedict} = 655.1 + 9.6 \times (70.45\text{kg}) + 1.8 \times (170\text{cm}) - 4.7 \times (20\text{y})$$

$$\text{Harris-Benedict} = 1543.42 \text{ kcals}$$

$$\text{BMR} = (\text{Harris Benedict}) (\text{activity factor})$$

$$\text{BMR} = (1543.42) (1.5)$$

$$\text{BMR} = 2315.13 \text{ kcals}$$

These two different values give very similar answers. This is because they both are finding out how much energy your body needs to be sustained. Both of these values differ from my actual intake of energy. My average calorie intake over the three days of keeping food records was 765 calories less than the DRI. Yet when it comes to protein intake, I consumed a good amount. The DRI for protein for me is 56g, and my average over three days was 53g. I was only 3 grams short of the DRI, so I consider

that to be meeting my protein needs. I seemed to have met the estimated average requirements (EAR) for most of the micronutrients, but some were not met. Those that were not met were; calcium, magnesium, vitamin B6, and vitamin C. I can increase these micronutrients by eating more milk products which will provide me with calcium and magnesium. I can increase the B6 by eating more whole grains, and vitamin C by eating more fruits and vegetables. I would not recommend supplements because I do not believe in them. I think it is healthier to eat the nutrients from foods and not from pills. When it comes to fiber, I am close to the recommended amount. They recommend that women consume 14 grams of fiber per every 1000 calories. I had an average of 1571 calories, and I averaged 19 grams of fiber. Had I consumed an adequate amount I would have had 21 grams of fiber that day. I could improve my fiber intake by consuming more whole grains, or fruits and vegetables.

The recommended dietary guidelines have different percentages of how many kcals should come from each macronutrient. I did well with staying within these ranges. The only recommendation that I did not meet was for saturated fat; I consumed 12.4% of kcals from saturated fat, instead of keeping it to less than 10%. My food intake pattern was completely different from what MyPyramid recommends. I was lacking in all of the different food groups, except for discretionary calories. I also did not make half of my grains whole grains. Which is not normal because I usually only buy whole wheat bread, and other whole wheat cereals. I also did not do well with eating different vegetable subgroups. I try to make nutrient dense choices with my diet. I try to eat foods that are high in different vitamins and minerals, as well as ones that have a good amount of protein and carbohydrates. The discretionary calories that I ate most likely came from the extra sugars that I ate, possibly coffee too. Some ways that I could change my diet to be more like the recommendations would be to increase my whole grains, as well as my fruit and vegetable intake.

My food behavior is not the best, but I also feel that it could be worse. I learned that I need to pay more attention to eating healthier foods, which provide many different types of nutrients. This will help with my health throughout my life.