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12-22-2020

MS 110

POW 7

A medical professional is helping an individual balance their diet. The individual has asked for some certain foods to remain in their diet. They will always get 600 calories from carbohydrates. The individual says that they can be flexible about how many calories they consume in fats and proteins.

The goal of the diet is to keep the individual at 1,800 calories per day (600 of which come from carbohydrates).

a. Write an equation that models the amount of calories from fats "f" and protein "p" that the individual can consume in order to reach 1,800 calories. **$600(p)=1800$**

b. The diet being prescribed to the individual calls for calories from protein to be three times the calories from fat. Write an equation based on this information that relates calories from protein "p" to calories from fat "f". **$900p/1800=600$**

c. Use your equations from parts "b" and "c" to solve this system of equations and determine the amount of calories that the individual should consume from fats and proteins. **Calories from fats: 600, calories from proteins: 900**

d. If the individual no longer required 600 calories from carbohydrates, and instead said that they would be flexible about how many carbohydrates they would consume, how many variables would there be for this problem on calories? **2 variables**