

# Homework 10

# You Are What You Eat

The Hernandez twins do not like breakfast. Given a choice, they would rather skip breakfast and concentrate on lunch.

When pressed, the only things they will eat for breakfast are Sugar Glops and Sweetums cereals. (The twins are allergic to milk, so they eat their cereal dry.)

Mr. Hernandez, on the other hand, thinks his children should eat breakfast every single morning. He also believes that their breakfast should be nutritious. Specifically, he would like them each to get at least 5 grams of protein and not more than 50 grams of carbohydrate each morning.

According to the Sugar Glops package, each ounce of that cereal has 2 grams of protein and 15 grams of carbohydrate. According to the Sweetums box, each ounce of that cereal contains 1 gram of protein and 10 grams of carbohydrate.

So what's the least amount of cereal each twin can eat while satisfying their father's requirements? (Mr. Hernandez wants a proof that his criteria are met, and the twins want a proof that there's no way they can eat less.)

