**Title:**

Dietary intakes and quality of Irish adults with cystic fibrosis: Comparisons to nutrition guidelines and HEI-2020

**Lay Title:**

What adults with cystic fibrosis in Ireland are eating; How their diets compare to nutrition guidelines and healthy eating scores.

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**What was your research question?**

Are Irish adults living with CF meeting CF and general healthy eating guidelines and recommended nutrient intakes and what is their overall diet quality like?

**Why is this important?**

As people living with CF (PwCF) live longer, it is important to focus not just on eating enough, but on eating well. In the past, high-calorie diets were encouraged to prevent weight loss, but now there is concern that some CF diets may rely too heavily on unhealthy, processed foods. A poor diet could increase the risk of long-term health issues like diabetes, heart disease, and obesity. This study helps us better understand how healthy the diets of adults with CF in Ireland really are.

**What did you do?**

Healthy adults living with CF (no recent hospital admissions) were asked to complete health-related questionnaires and a three-day food diary. We looked at what people ate using a computer program that shows how much energy (calories) and nutrients (like protein and vitamins) were in their food. We scored the diet in terms of its overall quality using a diet quality score to see if the adults in the study were eating a healthy, balanced diet. We also checked how many servings of different foods people ate and compared them to what the Irish Nutrition Guidelines say they should eat.

**What did you find?**

Of 68 PwCF who completed the three-day food diary, half did not meet CF energy recommendations despite more than one-third being overweight or obese. While they ate enough protein, carbohydrate intakes were too low and fat, saturated fat, and sugar intakes were too high. Fat-soluble vitamins D, E, and K1 intakes were too low without taking a supplement. When compared to Irish guidelines nearly all participants (95.6%) overconsumed energy-dense, nutrient-poor foods and over three-quarters ate too few fruits and vegetables. Additionally, their overall diet quality was poor meaning diets were not healthy and balanced.

**What does this mean and reasons for caution?**

This study shows that many adults living with CF in Ireland do not eat healthy, balanced diets. Some get enough calories, but much of their energy comes from fatty, sugary, processed foods that do not provide important nutrients. This kind of eating may increase the chance of long-term health problems like heart disease or diabetes, especially since PwCF are living longer now. While the study only looked at three days of eating, it is still the biggest study of its kind from a single country.

**What’s next?**

It is important to know why healthy eating is hard for PwCF. This might be because of unclear medical advice, the cost of healthy food, or that they have little time due to treatments. Changing long-time eating habits is tough, but understanding these challenges helps create nutrition advice that really works for their everyday lives.

**Original manuscript citation in PubMed**

<https://pubmed.ncbi.nlm.nih.gov/40645855/>