

Research Question List for Cystic Fibrosis Systematic Review

1. In participants with CF, how does medical nutrition therapy (MNT or nutrition counseling) provided by a registered dietitian or international equivalent affect specified nutrition-related outcomes?
2. In participants with CF, which nutrition screening and assessment methods are valid and reliable compared to reference standards, as measured by validity and/or reliability studies?
3. In participants with CF, what is the longitudinal relationship (≥ 3 months) between nutrition assessment parameters (see list below) and hard outcomes (FEV1, Quality of Life or mortality)?
 - a. high or low in dietary fat \leq 40%
 - b. fat type (SFAs, PUFAs, MUFAs, EFAs)?
 - c. high or low dietary protein ($>20\%$ or $<10\%$)
 - d. dietary protein type (plant vs animal)
 - e. high or low dietary carbohydrates ($>65\%$ or $<45\%$)
 - f. high or low fiber
 - g. specific dietary patterns
 - i. Mediterranean diet
 - ii. Vegetarian or Vegan diet
 - iii. Low glycemic index/load diet
 - h. food groups
 - i. ≥ 5 servings of fruits and vegetables per day
 - ii. ≥ 3 servings of whole grains per day
 - iii. ≥ 8 oz of fish/seafood per week
 - iv. ≥ 3 servings of dairy products per day
 - i. \leq 10% of calories from added sugars
 - j. meal frequency/eating at least 3 times each day
 - k. In patients with CFRD, what is the effect of refined carbohydrates, including juice, soda and candy, on glycemic control (HbA1C and glucose fluctuations)?
 - l. Infants with CF: exclusive breastfeeding, mixed feeding or formula feeding
4. In participants with CF, what is the accuracy of using energy requirement formulas to determine EE, compared to indirect calorimetry or doubly labeled water (DLW)?
5. In participants with CF, what is the relationship between dietary intake and specified nutrition-related outcomes?
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 - c. high or low dietary protein ($>20\%$ or $<10\%$)
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6. In participants with CF, what is the effect of CFTR modulation therapy on weight/growth parameters (BMI, BMI change, weight change, BMI z-score, height-for-age z-score, weight-for-age z-score) and body composition (fat mass and fat free mass)? How is this relationship modified by dietary intake?