



Nutritional Requirements of Special Populations

WISHH

World Initiative for Soy in Human Health

Enhancing human well-being through soy

[Modulations]

- ➔ Fluids:
 - ☑ safe supply, use in preparation
- ➔ Calories:
 - ☑ primary sources
- ➔ Protein:
 - ☑ spare for use as protein
- ➔ Micronutrients:
 - ☑ balanced

Considerations

- ➔ Pre-existing malnutrition
- ➔ Lifecycle stage
- ➔ Disease:
 - ☑ type and stage or severity
- ➔ Medications/treatments:
 - ☑ potential interactions

[Children]

- ➔ Pre-existing malnutrition
- ➔ Age
- ➔ Disease or injury
- ➔ Medication interactions

[Adults]

- ➔ Pre-existing malnutrition:
 - ☑ Type: marasmus, cachexia
- ➔ Sex
- ➔ Pregnancy, lactation
- ➔ Activity level
- ➔ Disease and injury
- ➔ Medication interactions

[Pre-Existing Malnutrition]

➔ Marasmus

- ☑ Requires catch-up for calories, protein

➔ Cachexia

- ☑ Requires catch-up with emphasis on protein

[Lifecycle Stage]

- ➔ Newborn, toddler, adolescent
 - ☑ Higher calorie, protein per kg needs
- ➔ Pregnancy, lactation
 - ☑ Higher calorie, protein, micronutrient needs

[Sex Differences]

➔ Men

- ☑ More calories, protein, some micronutrient differences

➔ Women

- ☑ Fewer calories, protein than men
- ☑ Higher calories, protein for pregnant, lactating women
- ☑ Altered micronutrient needs in pregnancy, lactation

[Activity Level]

- ➔ Bed bound:
 - ☑ Declining basal metabolism needs (check goals)
- ➔ Sedentary, light activity
 - ☑ Additional calories
- ➔ Moderate activity
 - ☑ Additional calories, protein
- ➔ Heavy activity
 - ☑ Additional calories, protein, micronutrients likely

[Disease or Injury]

➔ Acute

- ☑ More calories and protein with emphasis on protein

➔ Chronic

- ☑ Take into consideration baseline nutritional status
- ☑ Maintenance requires emphasis on calories
- ☑ Rehabilitation requires emphasis on protein

Medications

- ➔ Acute disease, injury
 - ☑ Modulation of food types
- ➔ Chronic disease
 - ☑ Adequate calories, protein for goals and volume tolerances
 - ☑ Considerations for symptom management
 - ☑ Considerations for long-term effects of medications

Food Basket Calculations

- ➔ Determine goal:
 - ☑ Full food supply or supplemental feeding
- ➔ Enter average family characteristics
- ➔ Enter commodities likely to meet needs
 - ☑ Test needs with percentages met with food basket
- ➔ Enter distribution and time strategy
- ➔ Adjust cost estimates