



Tools to Calculate Dietary Needs

The “Science Behind Jello”

[Dietary Needs: Basics]

- ➔ Maintenance of adequate body functions
- ➔ Alterations and special needs
 - ☑ Lifecycle stage, age
 - ☑ Sex, pregnancy/lactation
 - ☑ Disease and injury
 - ☑ Food/nutrition security

General Maintenance

- ➔ Baseline recommendations for comparisons for sex, age, pregnancy/lactation, growth, development...
- ➔ Food and/or supplementation
 - ☑ Old Biz Adage: “find a gap and fill it”
 - ☑ What we think we know
 - ☑ What we don’t know
- ➔ Upper limits and toxicity

[Alterations: Lifecycle]

- ➔ Pregnancy
- ➔ Infancy
- ➔ Childhood
- ➔ Adolescence
- ➔ Adulthood
- ➔ Older adulthood
 - ☑ “Pauses” and other changes

Alterations: Sex, Pregnancy, Lactation

- ➔ Nutrient needs based on body composition and hormonal differences
- ➔ Pregnancy increases some needs, challenges nutrient tolerances and immunity
- ➔ Lactation increases needs for energy, protein, micronutrients

[Alterations: Disease/Injury]

- ➔ Malnutrition
- ➔ Catch-up growth, development
- ➔ Disease
 - ☑ The body's nutritional response
 - ☑ Blunting effects of chronic disease
 - ☑ Rehabilitating function and volume

[Alterations: Securities]

- ➔ Food availability and food choices
 - ☑ Limitations and alternatives yield a variety of quality for nutrients
 - ☑ Current vs. adequate or optimal intake
 - ☑ Supplemental vs. total nutrient needs

[Summary]

- ➔ Nutritional intervention is both preventive and care/treatment oriented
- ➔ Calculations for individuals, families, communities, and countries require knowledge of demographic characteristics, what can alter nutrient needs, and availability/choice issues
- ➔ Basic schemes tailored to targeted areas and populations can be the foundation for estimating nutrient needs