DRIs: An evolutionary, iterative scientific synthesis

  - Multiple reference points: deficient, EAR, RDA, Upper Safe Range of Intake
  - Coverage: essential nutrients and important food components
  - Incorporated aspects of Committee on Medical Aspects of Food Policy Values 1991 report on DRV's for UK
  - FNB sought scientific review through symposium, public comments, other scientific meetings

Considerations for the 11th Edition

- More open and participatory process
- More transparent exposition of principles, scientific evidence, and derivation of values
- More flexibility to address multiple uses
- Research recommendations to identify knowledge gaps
DRI Research Recommendations:

Key questions

4 Is the DRI paradigm “right”?  
- EAR has much more importance  
  • Clear exposition of endpoint selected  
  • Identification of data on which EAR is derived  
  • RDA based on EAR + 2 SD  
  • Multiple uses  
- UL derived by risk assessment  
- If cannot establish EAR, then AI MDR  
  (implying paradigm doesn’t fit all nutrients)

If the DRI paradigm is “right” then, the research agenda priorities are clearer:

- Identify valid nutritional status endpoints for nutrients with public health importance that lack an EAR  
- Collect sufficient data to set EAR

But it’s not that easy!

4 Methodological issues
- Studies in infants and children  
  • Ethical study designs  
  • Extrapolations from breast milk and from observations in older age groups  
- New findings  
  • Genetic polymorphisms and nutrient requirements  
  – Evidence-based reviews  
  • What aspects are appropriate to setting DRI  
  • Other important food components
Funding the research agenda

- Nutrition research vs. other priorities in agency budgets
- Coordination among US and Canadian agencies
  - Mechanism to set priorities
  - Intramural vs. extramural programs (some research priorities will not be funded by extramural programs)
  - Survey content
  - Food composition analytical methods and data
- Incentives (or disincentives) for private sector research