

**Issues Raised**  
**Guidance for Users of DRIs**  
**Session 3**

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# Background

- 1940's-1989 RDAs/RNIs issued with limited guidance
- 1994 Expansion to multi-valued DRIs
  - Interest in providing more detailed guidance

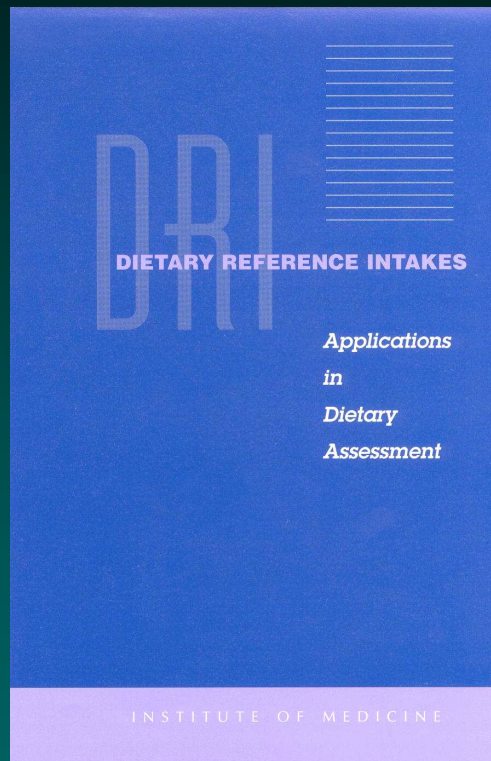
# Guidance for Users of DRIs

Guidance developed and set out in

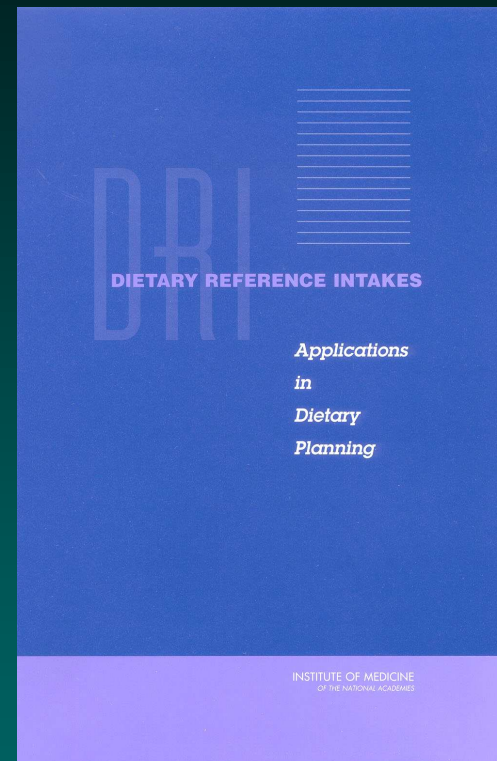
- 2001: *Applications in Dietary Assessment*
- 2003: *Applications in Dietary Planning*
- *Subcommittee on Interpretation and Uses of Dietary Reference Intakes*

Based on existing purpose as assessing and planning dietary intakes for groups and individuals

# Guidance Publications



2001



2003

# General Questions for Session

- *Given the expansion of DRI values and subsequent interest in providing guidance for their use .....*
  - What have we learned about the needed guidance?
  - What are the pros and cons?
  - What if anything needs “re-thinking,” further elaboration or more work?
  - How would changes in the conceptual framework for DRIs impact needed guidance? (*reactions to earlier sessions*)

# Identifying Key “Uses” Issues

- IOM/FNB
  - FNB symposia/meetings, EB sessions, DRI Chair’s Survey, special conferences (e.g., Northern Lights)
- 4 Background Papers
  - US Government
  - Health Canada
  - American Dietetics Association
  - Dietitians of Canada
- Comments to Background Papers posted on website

# Sorting Through “Uses” Issues

- Terminology: Overlap of ideas
  - “Uses” as purpose and nature of DRIs
  - “Uses” as the application of DRI values in general practitioner settings

(slide from Introduction)

## Issues Germane to Underpinnings & Roadmap Sessions 1 & 2

- Adequate Intake (AI)
  - Concerns about AI definition and the differences in the approaches used to develop AIs
- Concerns about relevance of UL to total diet
- Endpoints
  - Concerns about consistency and criteria selecting of endpoints
- “Characterization” / Reflections on context
  - Indication of uncertainty surrounding DRI values (vs. value as a range)
  - Discussion of match between DRI values and current estimated intake
  - Discussion of likely versus unlikely public health consequences of too little or too much
- Use of DRIs with diseased populations

# Issues Germane to General Guidance for Users

## Session 3

- Further methodological work, gaps, conceptual evolution or revamping
- Ease-of-use, practicality, perceived approachability

*Digress....*

How Current Guidance is Structured

# Basic Structure

- Guidance has reflected 4 possibilities:

Assessing Groups	Planning for Groups
Assessing Individuals	Planning for Individuals

- For each “box”
  - When to use EAR or RDA
  - How to use UL
  - What to do if AI is available instead of EAR/RDA
  - AMDRs, Energy

# Statistical Foundation

Based on statistical understandings

- Normal (versus skewed) distribution
- Probability paradigms
- Requirement distributions integrated with intake distributions

# Guidance Structure

## 1. Guidance for Assessing Groups

- Use EAR (not RDA)
  - -- *EAR cut-point method to assess prevalence of a nutrient inadequacy*
  - -- *Probability approach to assess prevalence of a nutrient inadequacy*
  - Conditions (“assumptions”) must be satisfied to use these methods
- Using the AI
- Using the UL
- Provides examples and discussions on interpreting outcomes

# Guidance Structure

## 2. Guidance for Planning for Groups

- **Goal: A low prevalence of inadequate intakes**  
“Minimize prevalence of intakes below the EAR”
- **An acceptable prevalence of inadequate intakes must be defined**
- EAR used in conjunction with usual nutrient intake
  - Identify usual intake distribution
  - Estimate a target usual distribution
- Dealing with skewed intake distributions
- Using AIs: serve as target for mean intake
- For UL: plan to achieve acceptably low prevalence of intakes above the ULs

# Guidance Structure

## 3. Guidance for Assessing Individuals

- *Qualitative*: Rules of thumb (*very likely, probably, cannot be assumed*) regarding observed intake and EAR/RDA or AI values
- *Quantitative*: Use EAR and estimate level of confidence about individual's intake being above individual's requirement (*z-score*)
  - Not relevant to AI
  - Can be used with UL (*z-score*)

# Guidance Structure

## 4. Guidance for Planning for Individuals

- RDA (not EAR)
  - Take into account special considerations (smoker, vegetarian, athlete)
  - Plan so RDA is met but intake remains below UL
- AI used in place of RDA, but greater uncertainty
- UL: Planning for intakes to meet RDA includes ensuring intake is below UL

# Issues Raised

Assessing Groups	Planning for Groups
Assessing Individuals	Planning for Individuals

- Does the concept of the 2x2 “box” work both conceptually and during implementation?
- Are there special issues if a program fits within more than one box?
- Guidance for planning seems to have limited implementation; why?

# Issues Raised

- What further work needs to be pursued to address the emerging world of statistical methods and their application to DRI guidance for users?  
(....particularly for individuals)
- To what extent is guidance limited by lack of research on relevant methodologies?

# Issues Raised

- Special Challenges
  - Planning and assessing the *total* diet – What are the issues and what are the options for enhanced guidance?
    - Problems mixing EARs and AIs
  - What are the issues related to a framework for individual-level and group-level applications?
    - Worthwhile to distinguish between these?
    - How do you make these distinctions clear?

# Issues Raised by Practitioners

- Difficulty in understanding DRIs
  - More clarity on intended uses of DRI components
  - More ‘practical’ guidance
  - More guidance on use with individuals
  - More tools, such as software
- Guidance on incorporation of **AI**, especially within context of total diet
- Seeking **clarity** on groups versus individuals, small vs large groups, etc

# Queries

- Is there the need/ability to offer “less complicated” guidance for “average practitioner?”
- What’s the balance between education and “simpler” guidance?

# Queries

- “Need versus Want”
  - Best science should be used to develop what is needed to meet the uses
  - ?Concern: Approach for what is needed would be changed in order to make guidance more simple
    - ? “tail wagging the dog”
  - ?Alternative: Work to better translate the appropriate approach and its outcomes

# Discussion Jumping-Off Points

- Is the guidance heading in the right direction?
- Is it consistent with purposes and goals of DRIs?
- What more needs to be done?