



Role of Nutrition in Maintaining Health in the Nation's Elderly

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Evaluating Coverage of Nutrition Services for the Medicare Population

Dietary Reference Intakes 1997-2002



Institute of Medicine
Food and Nutrition Board



Medicare Population and Nutrition Services

- Poor nutritional status
- Treatment (prevention) of chronic disease
- Many chronic diseases are nutrition-related
- Evidence that nutrition is effective
- Consideration of Medicare Program for coverage of nutrition care

Strength of Evidence?

- Observational studies
- Consensus documents
- Systematic reviews
- Some clinical trials evidence
- Extensive clinical trials evidence
- Overall strength of evidence
supportive/strongly supportive

Findings of Nutritional Efficacy

- Dyslipidemia
- Hypertension
- Heart failure
- Osteoporosis
- Diabetes
- Pre-dialysis
kidney failure
- Undernutrition

Summary of Evidence Supporting the Use of Nutrition Therapy for Medicare Beneficiaries in Specific Conditions or Diseases

Types of Evidence

Conditions	Observational Studies	Consensus Document	Systematic Review	Some Clinical Trial Evidence	Ext Clin Trial Evidence	Overall Strength of Evidence Supporting Nutrition Tx
Dyslipidemia	③	③	③		③	Strongly supports
Hypertension	③	③	③		③	Strongly supports
Heart failure	③	③	③	③		Supportive
Diabetes	③	③	③		③	Strongly supports
Pre-dialysis kidney failure	③	③	③	③		Supportive
Osteoporosis	③	③	③		③	Strongly supports
Undernutrition	③			③		Supportive

Nutrition Support Evaluations

- GI
- HIV / AIDS
- Cancer therapy
- Renal failure
- Critical illness
- Perioperative
 - (Abd, hip fx)
- Gen'l population vs. elderly
- Insufficient data
- Efficacy
- Not supportive

Medicare Report \geq 65 year old

- Prevention or treatment
- Care setting
 - Acute care (NSS)
 - Ambulatory care
 - Post-acute/long-term care
 - Community-based
- Individual or group-based care
- Provider of nutrition services

Poor nutrition, but . . .

- Common in older Americans
 - ~45% community dwelling, inadequate intake
- Conditions that are nutrition-related
 - 87% with DM, hypertension, dyslipidemia or combination
- Diagnosis and treatment of disease
- Prevention services
 - 1980 - pneumococcal pneumonia vaccine
 - 1997 - diabetes self mgmt education;
commissioned this report

What Did We Learn?

- Very little high quality scientific evidence for people >65 - clinical trials!
- Very little evidence for people >65
- Very little gender-specific, with exceptions
- ~90% with nutrition-related diseases
- Medicare mandate: diagnosis and treat AND - prevent disease?

Recommended Dietary Allowances (RDA)

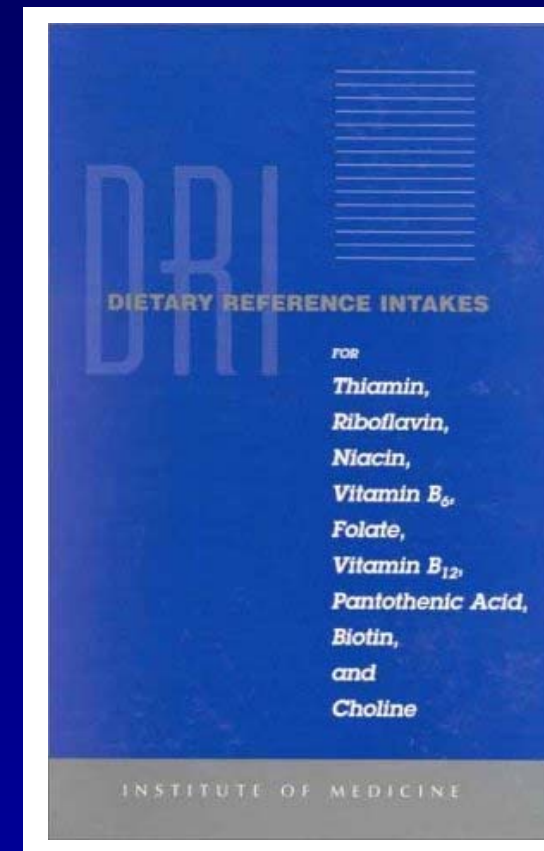
10th Edition, 1989

1st Edition, 1943

- Standards for good nutrition (1943)
- Level of intake of essential nutrients, based upon current scientific knowledge to be adequate for practically all healthy people
- Adult age ranges by gender
 - 19 to 24
 - 25 to 50
 - 50+

Dietary Reference Intakes (DRI)

- 1997-2002
- Revisions by nutrient groups
- Promote health and prevent diseases
- Adult age ranges by gender
 - 19 to 30
 - 31 to 50
 - 51 to 70
 - 70+



Review of Scientific Evidence

- Age challenge
- Age and gender challenge
- Findings by life stage and gender group
- Tolerable Upper Intake Levels
- Research recommendations for each nutrient

Tailoring Requirement for Specific Groups and Individuals

- Body size - Wt (Wt, Ht, BMI)
- Age and physiological stage (pregnancy / lactation)
- Energy intake

Age . . . Requirements Change

- Vitamin D
 - needs increase after 50
- Vitamin B₁₂
 - needs increase after 50
 - gastric acidity and bioavailable
 - supplements or fortified food

Age . . . Requirements Change

- Folate
 - Need for pre-conception female
 - May help CVD
 - Fortification program ~1998
 - Intake ~2X the goal
 - Is this okay?

Summary

- Very little information: age, gender
- Very high rate of nutrition-related illness
- Most illnesses are chronic
- Drug / nutrient interactions
- Efficacy studies
- Safety studies
- Medicare model shift - clinical trials
- prevention

