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

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Observational Studies</th>
<th>Consensus Document</th>
<th>Systematic Review</th>
<th>Some Clinical Trial Evidence</th>
<th>Ext Clin Trial Evidence</th>
<th>Overall Strength of Evidence Supporting Nutrition Tx</th>
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<tr>
<td>Dyslipidemia</td>
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<td>Heart failure</td>
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</tbody>
</table>
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 > 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)
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 B\textsubscript{12}**
  - 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