Behavior, Culture and Supplements
Objectives

• What behavioral themes are emerging?

• How can emerging theoretical constructs be conceptualized, measured and validated?

• What environmental triggers have contributed to the growth in dietary supplement use in the elderly?
Global presence of dietary supplement use

Dietary supplements are used around the world

• Native Americans and Mexican Americans
• Eastern versus Western traditions
• US, Canada, Europe, Asia
Global patterns of dietary supplement use

Vitamins, minerals, herbals, pills, sport drinks, Liquid supplements

• History, climate, location

• Culture

• Unlikely will find discrete, simplistic patterns of supplement use across the globe
Values and Social Norms

What are some of the values and beliefs on which Americans base decisions and behaviors, and how have these values changed over time?

• Youth
• Thinness, beauty
• Immediacy—I want it now
• Choices, freedom to choose
Environmental and societal factors: Changing norms

- Role of TV and advertising
  - Exposure to ideas, images, product ads....

- Transportation—cars and the suburbs
  - Expanded access to products and choices
  - Rather than the corner store, the mega-mall
Increasing rates of education:

- Better trained workforce
- Employment opportunities and higher incomes—thus increased buying power
- Increased information seeking
- Increasing use of technology
Societal change triggers:

• Right to know movements

• Changes in federal policy—e.g. 1994 Dietary Supplement and Health Education Act-restricting FDA

Regulatory status of Dietary Supplements was, in part, a response to consumer and industry demands for product information and choices
A Place for Theory:

Expectancy theories—

Health Belief model—

• Susceptibility
• Severity/threat,
• Cues to action
• Outcome expectations
• Barriers/incentives to adoption
Case illustration

How might the health seeking behavior of a woman who has undergone surgery for breast cancer differ from the woman who has not had cancer?

Theory would suggest behavioral differences in susceptibility, outcome expectations, etc
Motivations Given 1:

- Health, Health Maintenance
  1. At which age, if any, does motivation decline, for age / gender segments?
  2. Insurance—”just in case”—healthy habits folks
  3. Counterbalance poor dietary practices
Motivations Given 2:

Response to acute or chronic conditions
- Colds, immunity—Echinacea
- Depression, anxiety—St. John’s Wort
- Improve memory—Ginkgo biloba
- Hyperlipidemia—Garlic
- Prostate enlargement—Saw Palmetto
- Joint pain—Chondroitin sulfate
- Hot flashes—Red clover
Motivations Given 3:

- Anti-aging, antioxidants and Food as Medicine

Can use of some products slow or reverse the aging process?

Scientific American, May 2002
AARP, June 2002
Motivations Given 4:

• Concern about the adequacy of agricultural practices and the safety of the food supply
  – Nutrient depletion
  – Use of pesticides/herbicides
  – Introduction of genetically modified (GMO) foods
Motivations Given 5:

- Mind-body-soul spiritual perspective

  Dissatisfaction with the extent of traditional Western medical care and lack of holism

  Desire for autonomy in self care
Perceptions of CAM

Eisenberg et al. 2001:

Why not disclose CAM therapy to MD?

• “It wasn’t important for the Doctor to know”
• “It was none of the Doctor’s business”
• “The doctor would not understand”
Categories of Users:

• Health promotion, CAM for insurance

• Dissatisfaction with extent of traditional medical care, lack of holism

• Treatment of real or perceived symptoms dissonant with health—memory lapses, depression, joint pain

• Cancer survivors, others with chronic conditions
Cancer Survivorship Literature

Aziz, J Nutr, 2002

• Issues facing cancer survivors may not be the same as those in treatment, including self concept, body image, personal autonomy, coping

• Importance of Quality of Life issues
Medical conditions and DS Use

The VITAL Study


• 45,000+ in Washington state, ages 50-75
• # supplements used increased with age in men, but not women
• DS use higher in 13 of 21 medical conditions
Self-treatments:

Abouta et al…

• If low energy or depressed, more likely to use zinc or folate, often found in B vitamin complexes (Energy boosters)

• men with benign prostatic hyperplasia more likely to use selenium—

• CAD more likely to use Vitamin E
Summary: Research Gaps 1:

- Measurement of motivational constructs
  - Diet quality perception accuracy
  - Triggers for use for acute, time limited conditions versus for chronic conditions
  - Spirituality
  - Autonomy in self care
  - Acculturation differences
Research gaps 2:

• Cohort or other longitudinal analyses to distinguish between the behavioral differences observed across age, cohort and time in cross sectional analyses.

• Quality of Life measures of relevance
Need for Decision Analysis

Consider a multi-step decision analysis related to the use of Dietary Supplements

Step 1—yes/no—decide to try

Step 2—Given initial trial, decide to continue, reject, or substitute a similar product, based on efficacy, acceptability, side effects
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