Aging and Nutrition
Nutrition for the 21st Century

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NSU - GREAT GEC
YOU ARE WHAT YOU EAT
GOOD NUTRITION + REGULAR EXERCISE = POSITIVE AGING AND INCREASED LONGEVITY
“AS WE AGE, physiological changes challenge our ability to have good nutritional intake and positive nutritional status”
- Sedentary lifestyles + associated reduced exercise result in reduced lean body mass
- Loss of sensory activity – “we eat with our mouth, nose, ears, and eyes”
- decreased dentition;
- dry mouth; and
- reduced saliva flow
- Low fluid intake;
- Dehydration;
- Disregard for food intake
GI Changes

- Prolonged satiety
- Reduced appetite
- Reduced acid secretion
- Slow motility ➔ constipation
  (increased use of laxatives that may reduce nutrient absorption)
A Less Efficient Immune System

- fewer T-lymphocytes are produced
- chronic diseases increase the chances of reduced immunity
Impaired Cognitive Function

- dementia
- depression
- mental illness
- alcoholism
Social Factors

- change of financial status
- change of employment status
- housing changes
- driving status
- circle of friends may change
- changes in sexual activity
How YOU Can Examine Your "nutritional environment"

A. Social Status
B. Mental Status
C. Oral Status
D. Financial Status
How YOU Can Examine Your “nutritional environment”

E. Presence of Disease
F. Use of Medication
G. Food Intake, Exercise and Weight Changes
H. Blood Values (Annual Physical)
So What Do We Do?

- Energy needs (generally will be lower)
- 50 - 30 - 20
- Increased mineral and vitamin requirements
- Lots of water and fluids
Major Nutrition-Related Health Concerns

The majority of older adults are not undernourished, and in common with other age groups exhibit an increase in the prevalence of overweight and obesity and associated health problems.
Major Nutrition-Related Health Concerns

Thus type 2 diabetes, cardiovascular disease and cancers are the main causes of morbidity in this age group, and should be addressed by healthy eating and lifestyle interventions in younger adults.
<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Energy/protein</th>
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**Who is at risk of poor intake?**
inactive, poor appetite, frail elderly, institutionalized, post-trauma

**Possible health consequences**
poor general nutritional intake, weight loss, low plasma albumin, poor wound healing, depressed immune status, high risk of mortality
Key Nutrients to Monitor as We “Grow Up”

**Nutrient**
B vitamins (incl. folate, B6, B12, thiamin and riboflavin)

**Who is at risk of poor intake?**
in cases of atrophic gastritis, heavy drinkers, poor diet, especially low intake of milk, green vegetables

**Possible health consequences**
raised levels of homocysteine, link with cardiovascular disease and Alzheimer’s disease, impaired cognitive function, megaloblastic anaemia
Key Nutrients to Monitor as We “Grow Up”

Nutrient
Vitamin D

Who is at risk of poor intake?
housebound/institutionalized

Possible health consequences
consequences for bone health, immune system and muscle strength, increased risk of bone fracture and loss of independence
Key Nutrients to Monitor as We “Grow Up”

**Nutrient**

**Iron**

**Who is at risk of poor intake?**
where there is poor dentition and low meat intake, use of NSAID drugs, causing gastric blood loss, institutionalized

**Possible health consequences**
poor iron status
Key Nutrients to Monitor as We “Grow Up”

Nutrient
Vitamin C

Who is at risk of poor intake?
lower socioeconomic groups, institutionalized

Possible health consequences
less resistance to infection, poor wound healing
Key Nutrients to Monitor as We “Grow Up”

**Nutrient**
**Potassium**

*Who is at risk of poor intake?*
low fruit and vegetable intakes - associated with poor dentition

*Possible health consequences*
low status, linked with high salt intakes contributes to hypertension, also poor muscle strength
Key Nutrients to Monitor as We “Grow Up”

Nutrient
Zinc

Who is at risk of poor intake?
low food intake, especially little meat

Possible health consequences
depressed immune function, increased susceptibility to infection, poor wound healing, reduced taste acuity
“A health promoting diet not only helps add years to life, but more importantly it adds life to years!”
What to do?

- Food Pyramid for Seniors
- 30 minutes or more of exercise daily
- M and M
  - “Moderation in All”
  - “Modification When Needed”
Medical Nutrition Therapy is a benefit in Medicare and Medicaid and some insurance companies.
Hot Nutrition Foods for Positive Aging

AVOCADO

- Monosaturated fats (can reduce bad cholesterol)
- High vitamin E (healthy skin, reduces menopausal hot flashes)
- Potassium (helps prevent fluid retention and high blood pressure)
Hot Nutrition Foods for Positive Aging

**BERRIES**
*(all black and blue ones)*

- Antioxidants (prevent free radical formation and aging)
Hot Nutrition Foods for Positive Aging

CRUCIFEROUS VEGETABLES

cabbage, cauliflower, broccoli, kale, turnips, brussel sprouts, radish and watercress

- Helps body fight against toxins and cancer
- Consume about ¼ lb/day, 1 ½ cups minimum)
Hot Nutrition Foods for Positive Aging

**GARLIC**

- 1 clove per day
- Helps to protect body against cancer and heart disease
- May also be a factor in reducing cholesterol levels and assist in blood thinning
Hot Nutrition Foods for Positive Aging

GINGER

- Can boost digestive and circulatory system
- May alleviate rheumatic aches and pains
Anti-Aging Food Recommendations

- Once per week
  - sweets
  - lean red meat
- Twice per week
  - free range poultry
  - deep sea cold water fish
Anti-Aging Food Recommendations

- **Daily**
  - Olive oil or fats from fish or poultry
  - Organic eggs
  - Whole fruits
  - Legumes and nuts
  - Green leafy vegetable
  - Whole grain cereals (barley, oats and bulgar)
  - WATER
Hot Nutrition Foods for Positive Aging

Nuts

Walnuts are rich in potassium, magnesium, iron, zinc, copper, and selenium

- Food for the digestive system
- Improves immune system
- Improves skin
- May help control cholesterol levels

**DO NOT EAT** Rancid nuts - may increase free radicals
Hot Nutrition Foods for Positive Aging

Soya

- Helps to maintain estrogen levels in menopausal women
- Reduces hot flashes
- May protect against Alzheimer's disease, osteoporosis, and heart disease
Hot Nutrition Foods for Positive Aging

Whole Meal Pasta and Rice

- Complex carbohydrates
- Fiber
- Food sources of iron and B vitamin
Hot Nutrition Foods for Positive Aging

**Watermelon**

- Vitamin A, B, and C
- Seeds are a good source of selenium, zinc, and vitamin E
Hot Nutrition Foods for Positive Aging

**WATER**

- The fluid of LIFE
- 8 glasses per day (minimum)
- Juices, low fat and skim milk, teas, gelatin, frozen yoghurt and foods also contain water
SUPERFOODS
high level of antioxidants

- Prunes
- Raisins
- Blueberries, Blackberries
- Strawberries, Raspberries
- Spinach
- Kale
TOP 10 NUTRITION POINTS FOR POSITIVE AGING

1. Balanced diet rich in fiber
2. Drink more water
3. Consume five small meals and snacks throughout the day
4. Reduce fat intake
TOP 10 NUTRITION POINTS FOR POSITIVE AGING

5. Reduce salt and sugar intake
6. Avoid caffeine, alcohol, cigarettes and drugs
7. Control portion size
8. Minimal consumption of processed foods
TOP 10 NUTRITION POINTS FOR POSITIVE AGING

9. Exercise regularly
10. Check your nutrient intake and supplement if necessary
THANK YOU FOR YOUR ATTENTION

??? ANY QUESTIONS ???

- DISCUSSION -

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