Agenda

• Profile of Older Adults in Oregon
  – Food insecurity, undernutrition, overnutrition
• Genesis of the Revisions
• Main areas of revisions
• Tools to implement changes
An Aging Population

Figure 1: Number of Persons 65+, 1900 - 2030 (numbers in millions)

Note: Increments in years are uneven.
(Sources: Projections for 2010 through 2050 are from: Table 12. Projections of the Population by Age and Sex for the United States: 2010 to 2050 (NP2008-T12), Population Division, U.S. Census Bureau; Release Date: August 14, 2008. The source of the data for 1900 to 2000 is Table 5. Population by Age and Sex for the United States: 1900 to 2000, Part A. Number, Hobbs, Frank and Nicole Stoops, U.S. Census Bureau, Census 2000 Special Reports, Series CENSR-4, Demographic Trends in the 20th Century. The data for 2010 are from the U.S. Census Bureau Decennial Census.)
Older Americans Act

- Established the Administration on Aging (AoA).
- Mission
  - ...to promote dignity and independence of older people, and to help society prepare for an aging population...by serving as an advocate for older people, and by overseeing the development of comprehensive and coordinated system of care that is responsive to the needs and preferences of older people and their family caregivers.
OAA Nutrition Program
Purpose: Section 330

- **Reduce** hunger & food insecurity
- **Promote** socialization of older individuals
- **Promote** the health & well-being of older individuals
Adequate nutrition is essential for:

- Health
- Functionality
- Independence
- Quality of life
Inter-related Factors Affecting the Nutritional Well-Being of Older Adults

Nutritional Well-Being

- Money
- Medical Problems
- Exercise & Recreation
- Friends
- Diet Modifications
- Shopping Skills
- Medications
- Housing
- Religion
- Physiological Changes
- Cooking Skills
- Dental Chewing/Swallowing Skills
- Mental Disorders, Dementia
- Transportation
- Neighborhood
- Crime/Abuse
- Family
OAA Meals in Oregon FY 2011

Congregate: 983, 439
HDM: 1, 705, 483

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Total: 2, 688, 922
Factors That Influence Aging and QOL

1. Medical/Health Status
   - Presence of chronic or acute illness
   - Medication use
   - Sensory changes: taste, smell, appearance, texture
   - Oral health

2. Physical Function Status
   - Physical limitations
   - Balance
   - Physical strength and endurance
   - Physical activity

3. Cognition
   - Change in mental status
   - Depression
   - Emotional needs
   - Health/nutrition-related beliefs
   - Advertising

4. Environmental
   - Living situation
   - Economics
   - Cultural beliefs and traditions
   - Religious beliefs and traditions
   - Environment
   - Lifestyle
   - Access to food and food preparation
   - Socialization

Researchers estimate that food-insecure older adults are so functionally impaired it is as if they are chronologically 14 years older.

Food Insecurity—Occurs whenever the availability of nutritionally adequate and safe food, or the ability to acquire food in socially acceptable ways, is limited or uncertain.

Hunger—The uneasy or painful sensation caused by involuntary lack of food, which over time may result in malnutrition.

Nutrient Density—Providing substantial amounts of vitamins and minerals and relatively fewer calories.

OSU Ext. Service, EM 8828-E, 2006; Ziliak and Gundersen, 2011
Food Insecurity

• More likely to affect older adults who
  – Are living at or below the poverty level
  – Do not have a high school degree
  – Are African American or Hispanic
  – Are divorced or separated
  – Have a grandchild living in the household
  – Are younger (50-59)

• Ziliak and Gunderson, 2011
Older Oregonians and Hunger

• Show symptoms of dementia
• More prone to falling injuries
• More likely to be Diabetic
• Far less likely to be in excellent or very good health
• 5x more likely to suffer from depression
• Twice as likely to have at least 1 ADL limitation.

29th

5% of our seniors are food insecure.

Participation

- 89% of food-insecure older adults receive neither HDM nor congregate meals
  - Have limited awareness of available services
  - Live in areas with limited available services
  - Receive informal services through friends, family or other organizations
  - Choose not obtain government assistance
  - Receive other nutrition assistance like SNAP

Obesity Trends* Among U.S. Adults
BRFSS, 1990, 2000, 2010
(*BMI ≥30, or about 30 lbs. overweight for 5’4” person)

1990

2000

2010

Source: Behavioral Risk Factor Surveillance System, CDC
# Oregon Obesity, 2000-2001

**Data Source:** Oregon BRFSS 2000-2001

**Public Health Division**
Health Promotion & Chronic Disease Prevention

<table>
<thead>
<tr>
<th>County</th>
<th>Age-Adjusted Obesity Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Average</td>
<td>22.0%</td>
</tr>
</tbody>
</table>

## Oregon Obesity Percent

- **10%-19.9%**
- **20%-25.9%**
- **>=26%**

### Map of Oregon Counties

- Clatsop
- Columbia
- Coos
- Curry
- Josephine
- Jackson
- Klamath
- Lake
- Lane
- Linn
- Polk
- Marion
- Tillamook
- Lincoln
- Benton
- Yamhill
- Clackamas
- Wasco
- Hood River
- Gilliam
- Morrow
- Umatilla
- Union
- Baker
- Multnomah
- Wasco
- Wasco
- Wheeler
- Grant
- Jackson
- Klamath
- Lake
- Tillamook
- Washington
- Hood River
- Multnomah
- Wasco
- Wheeler

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**Notes:**
- The map visually represents the obesity percent data for each county in Oregon from 2000 to 2001, with the state average indicated as 22.0%.
- The map uses different shades to indicate the obesity percent age-adjusted levels: 10%-19.9%, 20%-25.9%, and >=26%.
Obesity in Oregon, 2006-2009

Oregon Obesity Percent
age-adjusted
State Average: 24.5%
10% - 19.9%
20% - 25.9%
>= 26%

Data Source: Oregon BRFSS 2006-2009
PUBLIC HEALTH DIVISION
Health Promotion & Chronic Disease Prevention
Obesity Prevalence by County, ages 55+

Source: 2006-2009 Oregon BRFSS
Interrelationships among Chronic Diseases

- Some cancers
- Obesity (especially abdominal obesity)
  - Diabetes (insulin resistance)
  - Atherosclerosis (abnormal blood lipids)
  - Hypertension (high blood pressure)
  - Stroke and heart attack
Prevalence of Selected Chronic Conditions Among Older Oregonians

- **ARTHRITIS**
  - 55-64 years old: 20%
  - 65-74 years old: 15%
  - 75-84 years old: 10%
  - 85+ years old: 5%

- **ASTHMA**
  - 55-64 years old: 30%
  - 65-74 years old: 25%
  - 75-84 years old: 20%
  - 85+ years old: 15%

- **HEART ATTACK**
  - 55-64 years old: 10%
  - 65-74 years old: 7%
  - 75-84 years old: 6%
  - 85+ years old: 5%

- **HEART DISEASE**
  - 55-64 years old: 50%
  - 65-74 years old: 40%
  - 75-84 years old: 30%
  - 85+ years old: 20%

- **STROKE**
  - 55-64 years old: 5%
  - 65-74 years old: 10%
  - 75-84 years old: 15%
  - 85+ years old: 20%

- **DIABETES**
  - 55-64 years old: 15%
  - 65-74 years old: 20%
  - 75-84 years old: 25%
  - 85+ years old: 30%

- **HIGH BP**
  - 55-64 years old: 60%
  - 65-74 years old: 70%
  - 75-84 years old: 80%
  - 85+ years old: 90%

- **HIGH CHOLESTEROL**
  - 55-64 years old: 40%
  - 65-74 years old: 50%
  - 75-84 years old: 60%
  - 85+ years old: 70%

Source: 2009 Oregon BRFSS
Percentage of Oregon adults with selected chronic disease and health behaviors who consumed five or more servings of fruits and vegetables per day, 2009.

Source: 2009 Oregon Behavioral Risk Factor Surveillance System
What about Malnutrition?

- Malnutrition: failure to achieve nutrient requirements, which can impair physical and/or mental health. May result from consuming too little food or a shortage or imbalance of key nutrients.
  - Undernutrition: Nutrients are undersupplied
  - Overnutrition: food and sometimes nutrients are oversupplied (obesity)
  - Protein-energy malnutrition (PEM): A condition resulting from long-term inadequate intakes of energy and protein that can lead to wasting of body tissues and increase susceptibility to infection.

- The prevalence of undernutrition and risk of undernutrition in community dwelling older adults (>65 years) have been reported to be 4.3% and 25.4%.
Underweight and weight loss

- Up to 12.5% of patients residing in the community with chronic disease are underweight
- Underweight (BMI <18.5) is associated with increased hospitalization, length of time in the hospital and higher risk for mortality
- Unintended weight loss is an important predictor of early institutionalism.
- The leading causes of involuntary weight loss are depression, cancer, cardiac disorders, lower socioeconomic status, functional disabilities and benign gastrointestinal diseases.

Genesis of Revisions

- Questions and discrepancies among the 2009 standards and monitoring.
- Clarify and modernize nutrition practices
- Workgroup
  - Met 4 times
  - Corresponded via emails and O4AD
Main areas of Revision

- Nutrition Education
- Menu Nutrient Requirements
- Donated Food
- Food Safety
• Matrix #12 (1 unit = 1 session per participant)

• “A program to promote better health by providing accurate and culturally sensitive nutrition, physical fitness, or health (as it relates to nutrition) information and instruction to participants, caregivers, or participants and caregivers in a group or individual setting overseen by a dietitian or individual of comparable expertise.” (AoA Title III/VII Reporting Requirements Appendix- www.aoa.gov)"
Explaination

• Each congregate meal nutrition site shall provide nutrition education at a minimum of quarterly.
• Home delivered meals shall provide nutrition education a minimum of one time per year. Nutrition education is required at the first nutrition risk assessment. Subsequent yearly nutrition education may be determined by local nutrition service providers.
Examples

– In a congregate setting, this may include reviewing main concepts of nutrition education materials prior to the meal.

– In a home setting, this may include reviewing educational materials that relate to the annual nutrition screening assessment or other relevant nutrition education topics with a homebound client.

– Intent is not to provide individual medical nutrition therapy

– Goal: provide basic, general nutrition education that meets the needs of seniors.
Other important considerations

– Shall be planned and directed by a licensed dietitian. Under the direction of the dietitian, individuals with comparable expertise or special training may provide such activities.

– State Unit on Aging Nutrition Website:
  – Materials reviewed by SUA RD
  – Base topics on needs of participants
    • Culturally appropriate
    • Large print
    • Demonstrations
Disclaimer

• The information provided in the nutrition education/reminder sessions may cause you to ask questions about your specific health conditions such as diabetes or medications. It is not the intent of these sessions to answer specific health questions.

• Specific health conditions may require a special diet tailored to meet your needs. If you have questions about your dietary needs or other personal health questions, talk to your dietitian or medial provider.
1. Eating healthy to prevent or treat disease(s)
2. Interpreting nutrition messages in the media
3. Hydration
4. Avoiding unintended weight loss
5. Changing nutrient needs with age or drug/nutrient interactions
### Acceptable Nutrition Education

- Healthy Eating for Successful Living
- Eat Better, Move More
- Eat Smart, Live Strong

### Not Allowed

- Any nutrition education activity that is not overseen by a dietitian.

### Newsletter or Brochure with Instruction

- Educational Cooking Demo (must include information and instruction on nutrition)
- Demo or lecture in conjunction with Senior Farm Direct Nutrition Program (SFDNP) distribution (if applicable)

### Table tent with instruction

- OSU Ext. program instruction
- Gardening and Cooking from the Garden programs (with a focus on nutrition)
- Field Trips (with instruction) to Farmers Markets
- Living Well with Chronic Conditions, week #4
- Arthritis Foundation Walk with Ease with added nutritional education supplement
<table>
<thead>
<tr>
<th>Acceptable Nutrition Education</th>
<th>Not Allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition information and instruction related to topics identified during the annual nutrition screening.</td>
<td>Any nutrition education activity that is not overseen by a dietitian.</td>
</tr>
<tr>
<td>Newsletter or brochure with Instruction</td>
<td>Newsletter or brochure without instruction</td>
</tr>
<tr>
<td>Nutrition Focused multi-media (DVD, video, podcast etc.) approved by contracting dietitian or State Unit on Aging dietitian.</td>
<td>DVD, video, podcast</td>
</tr>
</tbody>
</table>
Partnering

We encourage partnering with Oregon State University Extension, OSU, Living Well or OHSU Dietetic Internship.
Innovative Examples

• Utilizing cable and television access centers
  – Massachusetts
  – City of Salem Senior Center
• “Men Can Cook”
  – New York
• Nutrition through Gardening
  – “Bob’s Garden” Multnomah County
• Field trips to Farmers Markets
• Chef Charles Says
• BINGO!
• Nutrition Education is a cluster 3 Non-registered service and requires reporting service units
• Congregate: one unit=one session per participant
• HDM: one unit=one session per participant
• If one nutrition class is attended by 30 seniors, then 30 units must be reported. Newsletters or brochures along cannot be reported as nutrition education.
• Balance of undernutrition/overnutrition and ensure food security

• Why monitor specific nutrients?
  – Vague guidelines: 1/3 DRI and DGA
  – Changing profile: not tiny and frail; large and frail
  – 9/10 OAA have at least 1 chronic disease that nutrition and diet can help ameliorate.
  – Research to justify monitoring of nutrients
    – http://lpi.oregonstate.edu/infocenter/olderadultnut.html

• State Unit on Aging website: rationale for nutrient req.
Common Nutrient Deficiencies in Older Adults

- **Protein**: preserve lean body mass
- **B12**: peripheral neuropathy, balance disturbance, cognitive disturbance, inc. risk of heart disease
- **Fiber**: intestinal health, protection against heart disease and metabolic disease.
- **Calcium**: low intake of calcium from food; prevent osteoporosis and bone fractures.
- **Magnesium**: crucial role in some 300 different physiological processes, helps keep your immune system in top shape, your heart healthy, and your bones strong.
Common deficiencies

- Omega 3-fatty acids: protection against heart disease, diabetes and cognitive decline.
- Potassium: lowers BP by blunting the adverse effects of sodium. No RDA or DRI for K.
- D: absorb calcium, maintain bone density, and prevent osteoporosis, protect against some chronic diseases, including cancer, type 1 diabetes, rheumatoid arthritis, multiple sclerosis, and autoimmune diseases, linked to increased risk of falling.
Nutrient Recommendations to Avoid Deficiencies

- More fruits, vegetables, especially orange and dark green vegetables to increase intake of vit. C, carotenoids, folate, B6, magnesium, potassium and dietary fiber.
- Low fat dairy to improve intakes of magnesium, calcium, potassium, B12 and D.
- More whole grains, including fortified breakfast cereals, to increase intakes of vitamin B6, crystalline vitamin B12, magnesium and dietary fiber.
- Few foods high in sugar, solid fats and sodium.
- Fewer refined grains.
RD must certify and sign p. 15

• Each meal certified as having met the nutrient requirements should be served as written
• Food substitutions should be infrequent or similar nutritional value, not reduce or radically altered.
• Any departure from the certified menu must be documented and initialed and kept on file for 3 years.
• Appendix D p. 28. Menu planning and Nutrient Sources
Dietary Guidelines for Americans

• Balance Calories with PA to manage weight

• Consume fewer foods with:
  – Sodium, saturated and trans fats, cholesterol, added sugars and refined grains.

• Consume more of certain foods and nutrients:
  – Fruits, vegetables, whole grains, fat-free and low-fat dairy products and seafood.

• Reducing consumption of sugary drinks by drinking water instead.
<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Target Value</th>
<th>Compliance range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nutrient</strong></td>
<td><strong>Target Value</strong></td>
<td><strong>Compliance range AVERAGE OVER 1 WEEK</strong></td>
</tr>
<tr>
<td>Calories</td>
<td>700 kcals</td>
<td>600-850 kcals</td>
</tr>
<tr>
<td>Protein</td>
<td>19 g per meal</td>
<td>17-21 grams</td>
</tr>
<tr>
<td>Total Fat</td>
<td>&lt;30% calories</td>
<td>≤ 30% calories, averaged over one week</td>
</tr>
<tr>
<td>Saturated Fat</td>
<td>&lt;10% calories</td>
<td>No one meal may be more than 35% fat</td>
</tr>
<tr>
<td>Trans Fat</td>
<td>No trans fat</td>
<td>Nutrition label or manufacturer specification must indicate zero grams of trans fat per serving.</td>
</tr>
<tr>
<td>Fiber</td>
<td>&gt;10 gm</td>
<td>≥7gm</td>
</tr>
<tr>
<td>Calcium</td>
<td>400 mg</td>
<td>400 mg</td>
</tr>
<tr>
<td>Magnesium</td>
<td>116 mg</td>
<td>≥88 mg/meal</td>
</tr>
<tr>
<td>Zinc</td>
<td>3.7 mg per meal</td>
<td>3.1mg</td>
</tr>
<tr>
<td>Vitamin B6</td>
<td>.6 mg</td>
<td>.57 mg</td>
</tr>
<tr>
<td>Vitamin B12</td>
<td>.8 mcg</td>
<td>.79 mcg</td>
</tr>
<tr>
<td>Vitamin C</td>
<td>30 mg</td>
<td>30 mg</td>
</tr>
<tr>
<td>Sodium</td>
<td>&lt;500 mg</td>
<td>FY13: &lt;1500 mg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FY 14: &lt;1350</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FY15: &lt;1200</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FY 16: &lt;1050</td>
</tr>
</tbody>
</table>
What if my program doesn’t use computer analysis

- Nutritional analysis is best practice
  - Menu pattern is best used as a menu-planning tool rather than as a standard for nutrition adequacy or compliance tool
    - Better information about menus
    - Ensure compliance with standards
    - Decrease food cost
Menu Pattern

• Requirements for One Meal Daily

• 3 oz. edible cooked meat, fish, fowl, eggs or meat alternate
• 3 servings vegetables and fruits
• 2 servings starches/grains
• 1 cup low fat milk or equivalent
• Optional: fat, dessert*, coffee or tea

See p. 28-36 for technical assistance

Appendix D: Menu Planning and Nutrient Sources
Appendix E: Food Preparation Guidelines for sodium, total fat, saturated fat and Trans fat standards
Appendix F: Sample Menus Pattern and Worksheet
Sample Meals

- BBQ Chicken
- 100% whole wheat bun
- Baked Beans
- Tossed Salad
- Fresh Strawberries
- Fat Free Milk
Dessert Best Practices

- Dessert counts as part of the nutritional analysis
  - Consider calorie and solid fat limits
- If you receive donated bakery goods
  - Cut them in half or even smaller to offer appropriate portions
  - Limit to special occasions or 1x/week
  - Serve them after the meal
  - Do not send seniors home with extra pies, cakes, cookies etc.
  - Work with donors to offer healthy desserts
  - Liable for food safety concerns from donated foods
Sugary Drinks

- Linked to obesity and many health problems such as diabetes and heart disease.
- Strongly discouraged
  - Especially on occasions when high calorie, fat and sugar items are offered.
  - Sugary drinks include any beverage with added calorie sweetener; most commonly fruit-flavored drinks such as fruit punch or lemonade, soda and sports drinks.
Nutrient Analysis Software

- Food Processor, ESHA Research [www.esha.com](http://www.esha.com)
- Nutrionist Pro, First Databank [www.firstdatabank.com](http://www.firstdatabank.com)
- Food Works, Nutrition Company [www.nutritionco.com](http://www.nutritionco.com)
- Computation, [www.computation.com/](http://www.computation.com/)
Donated Food

• Safe, wholesome and able to be used as human food and not adulterated (ORS 616.235).
• Consider health issues and client perception
• Non-commercial canned, packaged items and homemade items shall not be permitted for use in a reimbursable meal.
  – develop appropriate policies or procedures for use of these items at their congregate meal site. See appendix H
• Game meat donated shall be inspected and determined fit for human consumption by the State of Oregon Department of Agriculture, the State Department of Fish and Wildlife or the Department of State Police (ORS 624.165 and ORS 619.095)
Hot Food

Food cooked from scratch to 140°F or reheated to 165°F degrees

Less than 3 hours since removed from temperature control device.

Yes

Food safe to serve

No

Discard food

Hot food items prepared the day prior, properly chilled and placed in refrigeration overnight to be reheated next day for delivery, including chilled or frozen prepackaged prepared hot food item meals can be held up to 3 hours. This is only when temperature is checked to be at 165 degrees directly upon removing it from temperature control followed by immediate plating, repackaging (if needed) and placing into thermal containers for delivery and discarded, if not delivered within 3 hours from the moment of removal from temperature control.
Cold Food

Cold food items can be held without temperature control for up to three hours provided it is temperature checked at 40 degrees or lower upon removing it from refrigeration and does not reach 70 degrees at any time from the point of removal from refrigeration to the time of delivery to the participant. Cold food with temperature above 70 degrees must be discarded.

Cold food held below 40

Less than 3 hours since removed from refrigeration

Yes

Is food less than 70

Yes

Food safe to serve

No

Discard food

No
Tools to implement change

- Nutrition Education
  - Utilize the SUA website
  - Work with your contract RD or SUA RD
  - Stay abreast of current nutrition trends in older adults
- Have a plan
- Train Staff
- Assess needs of clients
- Partner to maximize resources
- Accurate Reporting
Tools to Implement Change

✓ Start working today to meet nutrient requirements for FY 2014
✓ Work with suppliers and contractors to include nutrient requirements into bids and contracts
✓ Try new products
✓ Educate staff and clients
✓ Phase in changes slowly
✓ Work with your RD
More Tips

Have the right framework

✓ “Offering better quality and healthier meals”
✓ “Meeting the nutrition needs of today’s seniors”
✓ Avoid negative framing

• Create or update donated food and food safety policies
• Create or update nutrition education plan

• SUA is exploring methods to more effectively monitor compliance with the Older Americans Act
Thank You

Questions?

Contact information:
971-673-0606 (desk)
971-212-1110 (cell)

Kimberly.w.lacroix@state.or.us