AGING GRACEFULLY WITH THE RIGHT NUTRITION

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Introduction

Elderly people above the age of 65 years old, with good nutritional status are more than 2 times likely to age successfully.
Importance of the right nutrition

• **Malnutrition** in elderly
  • defined as a state of macro and micro nutrient deficiencies
  • Notable changes in weight and hydration status
  • Loss of muscle mass
  • Poor oral health
  • Functional decline in performing activities of daily living.

• Likelihood of chronic diseases like diabetes, heart diseases, high blood pressure

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# Causes of malnutrition

<table>
<thead>
<tr>
<th>Physiological issues</th>
<th>Socioeconomic issues</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Loss of appetite</strong></td>
<td><strong>A. Social isolation</strong></td>
</tr>
<tr>
<td><strong>B. Changes in gastrointestinal function</strong></td>
<td><strong>B. Low income</strong></td>
</tr>
<tr>
<td><strong>C. Poor dentition</strong></td>
<td><strong>C. Food insecurity</strong></td>
</tr>
<tr>
<td><strong>D. Swallowing impairment</strong></td>
<td></td>
</tr>
<tr>
<td><strong>E. Decline in cognitive function</strong></td>
<td></td>
</tr>
</tbody>
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Special considerations for older adults

1. Adequate calories
2. Protein
3. Bone health: Calcium and Vitamin D
4. Constipation: Fibre and Water

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Practical interventions

Monitor weight and oral intake

- Weigh regularly (i.e. once every 1-2 weeks)

Small but frequent meals

- If experiencing loss of appetite;
- Or nausea/vomiting

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High energy high protein snacks

- Red Bean Soup
- Tuna egg sandwich
- Creamy banana oats
- Yoghurt
- Sweet potatoes
- Chicken/Char Siew Pao

- Encouraged to take in between meals

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Protein foods

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Meal fortification (to increase calories)

- Spread thick layer of margarine or peanut butter on breads
- Cheese/eggs with bread
- Add 1 tablespoon healthy oils (i.e. Olive, Sesame, Canola) to meals/sauces
Practical interventions

Nourishing fluids

• Provides additional calories/energy
• Avoid drinking and eating at the same time
• Milkshakes, juice, cream soup, full cream or flavoured milk

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Practical interventions

Oral Nutritional Supplements

- Prevention/Treatment of malnutrition
- To boost calorie and protein intake
- Higher calorie/protein as compared to normal milk/juice products

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Social factors

• Eating alone VS eating in the presence of others

Swallowing difficulties

• Thickener in fluids
• Modified consistency of diet (i.e. chopped diet, pureed/blended diet)

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Chewing difficulties

- More fluids to cooking
- Chop food into smaller pieces and cook them longer
- Replace meats with tofu, eggs, minced meat
- Soft fruits like papaya, mango or banana
- Visit a dentist

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Bone Health

**Calcium**
- Bone strength
- Bone density

**Vitamin D**
- Increases absorption of calcium
- Muscle function
Practical interventions

Calcium (1000mg/day)
*Singapore Health promotion Board Recommended Dietary Allowance

Scenario 1

1 cup low fat milk (300mg)  
1 block silken tofu (270mg)  
1/2 a can of sardine fish – 80 g (270mg)  
1/2 plate chye sim (280mg)

= 1120 mg
Practical interventions

Calcium (1000mg/day)

*Singapore Health promotion Board Recommended Dietary Allowance

Scenario 2

1 cup high calcium soybean milk (450mg)
2 slices enriched bread (100mg)
1 small cake tau kwa (150mg)
1/2 plate kai lan (400mg)

= 1100 mg

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Practical interventions

Vitamin D (100 IU/day)
* Singapore Health promotion Board Recommended Dietary Allowance

3 matchbox size 90g cooked salmon (447 IU)
1 cup fortified milk (120 IU)
1 egg yolk (42 IU)

Recommended
5 – 30 minutes
of sunlight daily

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Sources of Fibre

- Fruits
- Vegetables
- Beans & Lentils
- Brown Rice
- Wholegrain Breads
- High Fibre Cereals
- Oats
Practical interventions

How To Increase Fibre

• Have a serve of vegetables at each meal
• Keep skin on fruits
• Replace snacks with a serve of fruit
• Choose wholegrain products instead of refined ones

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Prevent dehydration

• *6-8 glasses* of non-alcoholic fluids daily
• 1.5 – 2 litres per day

**Caution**
• Poor heart function
• Kidney disease
Practical interventions

**Fluids:**
- Water
- Soup
- Jelly
- Yoghurt, ice cream and custard
- Coffee/Tea
- Milk, Milo and Horlicks
- Juice
- Diet soft drink and cordial
Key Principles

1. Do not skip meals, aim for at least three main meals daily
2. Sufficient calories for weight maintenance
3. Ensure adequate protein foods such as lean meats, fish, tofu, beans, dairy products and eggs
4. Focus on high calcium and vitamin D sources
5. Two servings of vegetables and two servings of fruits daily
6. Nourishing fluids
7. Encourage eating with family members and/or friends
Thank you for your attention