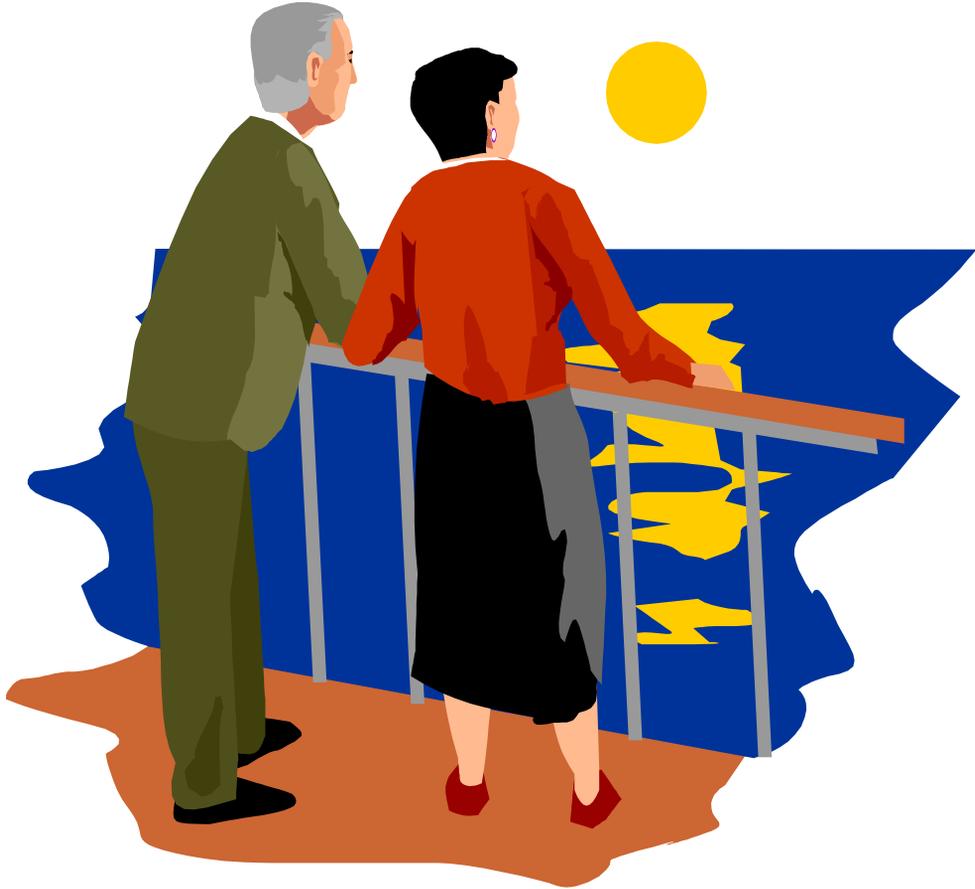

Geriatric Nutrition the essentials



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Introduction

- A healthy meal is important but it needs to be eaten to have real benefit
 - Nutritional care needs to be considered in the context of quality of life and the residents.
 - HOME
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Topics covered

- Physiology of ageing
 - Factors affecting nutrition
 - Nutrition for the elderly
 - The behavior of food
 - Complexity of nutrition in long term care
 - Dining rooms
 - Quality of care and life
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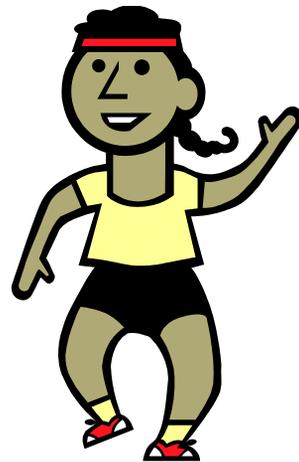
Nutrition is a Simple concept

Eating (food)
nutrients



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Life
Activity
Have fun



Simple concept which is more complex in long term care

- Nutrition must deliver the following
 - Enjoyable
 - High quality
 - Food that people like to eat
 - May not conform to nutrition policy or recommendations
 - Provides end of life quality of care
 - Fit within the framework of long term care and home like environment



Heterogeneous population

- Young old (65-74)
 - Old old (75-84)
 - Very old 85+
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- Healthy or very unwell at any point of ageing further makes care very complex
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Physiology of Ageing

- Increase risk of chronic disease
 - Diabetes
 - Heart Disease
 - Chronic renal failure
 - Arthritis
 - Parkinson
 - Dementia
 - Malnutrition

 - Body composition changes & decrease weight

 - Functional changes
 - Hand and arm function
 - Weakened grasp
 - Gait disorder
 - Harder to move around and organise food
 - Hard to open food
-

Physiology of Ageing

- **Gastrointestinal changes (GI)**
 - Decreased GI secretion and absorption
 - Motility and tone
 - Liver efficiency
 - Decreased absorption of nutrients
 - Constipation
 - Diarrhoea
 - Gastric ulcers
 - Heart burn
 - Decrease insulin secretion
 - **Swallowing difficulties**
 - **Ill fitting dentures and mouth diseases**
 - **Sensory changes**
 - Number of taste buds decrease
 - Vision
 - Smell
 - Hearing
 - **Dehydration**
 - **Effects of polypharmacy**
 - Drug nutrient interaction
 - E.g. Thyroxin decreased iron absorption
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Body nutrition

- Protein is the building blocks of life
- Carbohydrates and fats provide energy
- Vitamin and minerals – enzyme formation, hormones, chemical in body, bones
- Fibre keep us regular
- Antioxidants to balance the oxidation system in the body
- Water to hydrate and is essential for all body functions



Nutrition

Energy

- Energy balance for the elderly
- Elderly need less energy (reduce food intake)
- Need the same amount of nutrients (often more)
- Meals need to be nutrient dense.
- Poor food choices can also lead to increase in energy and this can cause obesity.
- Malnutrition is a problem, obesity cause the same problems.
- Energy is found in all foods across the food supply



Protein

- Protein requirements can increase in many older people as a result of stresses. These stresses include:
 - Infections
 - Bone fractures
 - Surgery
 - Burns
 - Wounds
 - Weight loss
- Older people may require more protein as lean muscle mass decreases.
- Important to eat good sources of protein. Protein can be divided into complete and incomplete. Complete proteins are the better option as they will deliver better proteins to the body.
- Protein found in meats, dairy, vegetables, soy products, legumes, eggs



Fat

- Fat contains the most energy (calories/kilojoules) per gram of all nutrients.
- Fat is important when kilojoules or calories are limited due to a decreased in food volume.
- It is important for fat soluble vitamins to be absorbed to have some fats in the diet. It is important to eat good sources of fat.

- Monounsaturated fats
- Polyunsaturated fats
- Saturated fats



Carbohydrates

- Carbohydrates need to be the nutrition type. These provide valuable sources of other nutrients apart from carbohydrates.
 - Meals and snacks throughout the day should be based of these types of foods.
 - Fibre plays an important part. Eating a diet with good sources of both insoluble and soluble fibre is important.
 - Older people should eat sugar in moderation.
 - Sugar can increase the palatability of foods.
 - Helps to maintain the health and strength of the digestive tract by reducing the risk of constipation and other conditions of the large intestine.
 - Older people may select lower fibre foods as they tend to be easier to chew.

 - Examples of CHO – brans, wholegrain cereals, fruit, grains, legumes
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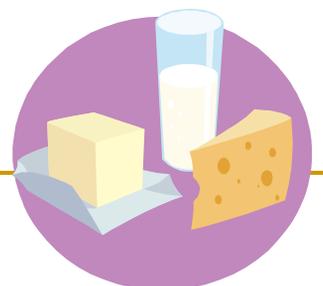
Calcium

- Extra calcium is needed as we get older to compensate for the increase rate of bone loss.
 - Calcium is stored by the body in the bones. If there is not enough calcium in the diet the body will take calcium from its stores. Calcium stores are also affected by increase protein, salt and medications.
 - Brittle bones break easily
 - Food rich in calcium need to be eaten daily.
 - Calcium sources – milk, custard, yogurt, cheese, ice cream, almonds, salmon bones
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Vitamin D

- Vitamin D is made by the sunlight on our skin. Older people who are unable to get out in the sun may suffer from a deficiency plus as skin ages this is also reduced.
- Older people who follow a low fat diet and are in doors are at risk.
- Vitamin D binds with calcium to allow it to pass into the bones. As renal function decreases with age, the level of circulating Vitamin D decreases.
- Vitamin D is not produced from sunlight going through glass.

- Sources – milks,
- sardines, cheese, eggs

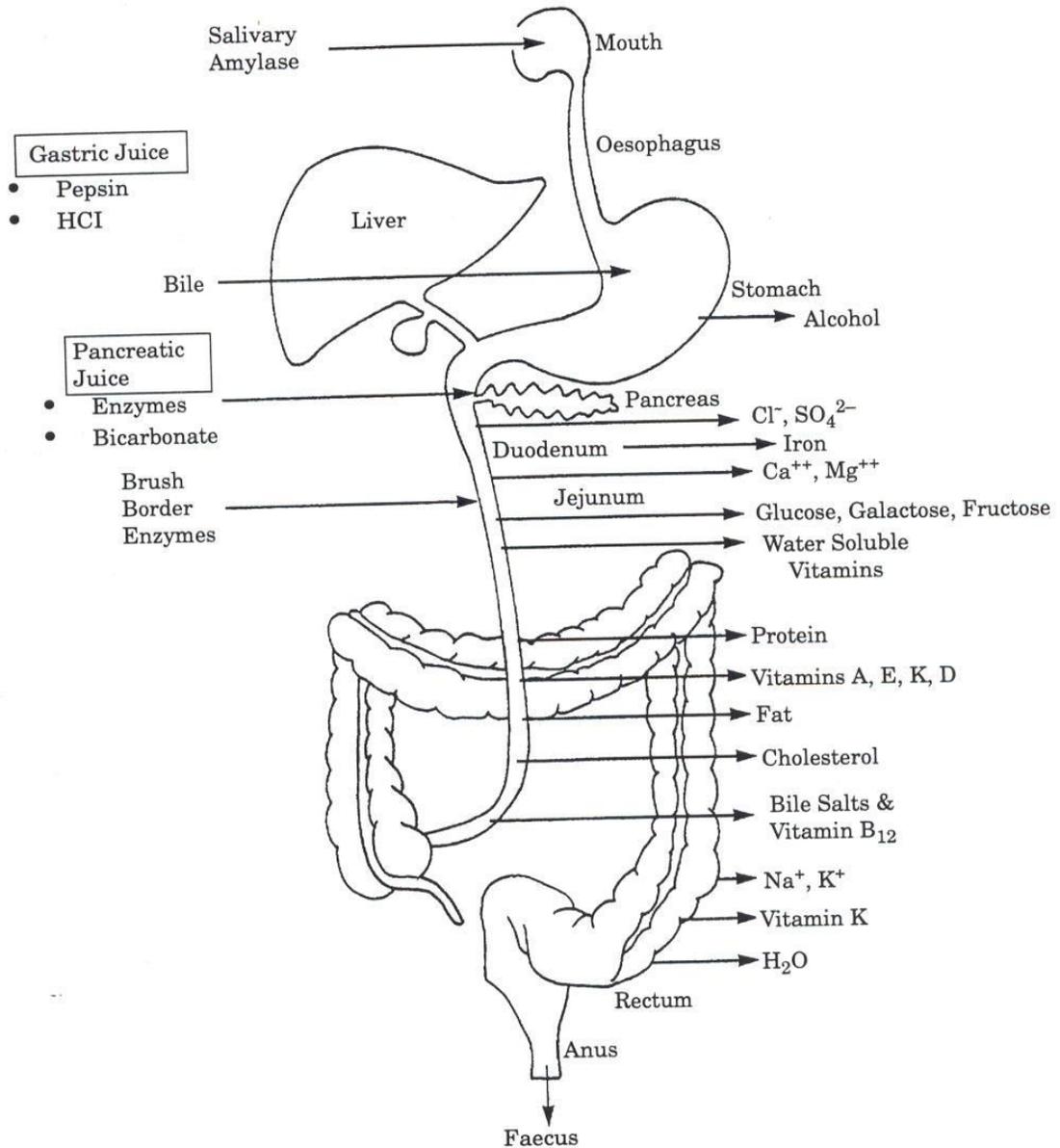


Thiamine

- The elderly are particularly at risk of Vitamin deficiencies with Thiamine deficiency a particular concern. Residents on vitamised diets are especially at risk.
- Early deficiency signs include:
- Often referred to as the “Tea & Toast” syndrome, Thiamine deficiency can mimic those of early dementia. The diet may look fine, but a diet with high refined carbohydrates and sugars increases the bodies need for thiamine and that’s where the deficiency may occur. To ensure thiamine deficiency does not occur the dietary intake needs a mixture of carbohydrates with good sources of fat and protein.
- Sources – meat, whole grains, dried beans, fish, spinach and cauliflower



Digestive system



Hydration

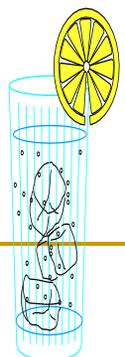


- Water is the fluid of life.
 - Water makes up about 60% of total body weight.
 - We obtain water from the foods we eat; however, the best place to get water is by drinking it.
 - By the time you are thirsty it is too late the body is already dehydrated.
 - This is because the human body thirst mechanism is poor and tells you too late that you are thirsty.
 - Therefore, you have to drink constantly throughout the day to ensure adequate fluid is obtained.
 - No matter how old you need to drink enough fluids.
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Why do we need to drink water?

Essential nutrient for our body

- Transport of nutrients around the body
- Helps keep the body cool
- Needed for body to function correctly
- Carries waste out of the body
- To replace the water lost from skin through sweating
- Replaces losses from breathing and kidneys through urination
- Digestion of food
- Production of hormones and enzymes



What happen if we have too little water

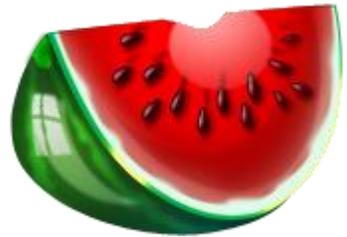
- Dehydration
 - Extra strain on kidneys
 - Constipation
 - Thirst
 - Difficulties in concentration
 - Decreased urine output
 - Dry mouth
 - Heart irregularities
 - Concentrated urine
 - Joint stiffness
 - Headaches
 - Nausea and/or vomiting
-

Other Fluids count as part of your daily intake

- Often people don't like the taste of water. Water can be drunk in many different ways!
 - Water with added cordial, fruit juices, pieces of cut up fruit, herbs
 - Tea/coffee – many different varieties of these exist from decaffeinated to herbal – too much can have a diuretic effect.
 - Soda water with added cordial, fruit juice, ginger cordial.
 - Tonic water
 - Mineral waters
 - Milk drinks such as Milo, Akta-vite, malted milk, Jarrah, Ovaltine, Nesquik (made on water)
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Foods with a high water content

- Often some people will have difficulties consuming large quantities of fluid. Some foods have a high water content and should be used during the day to supplement fluid intake.
- Jelly
- Custard
- Mousse
- Yogurt
- Milo made on water
- Water melon
- Junkets
- Milk
- Sago/Tapioca
- Soups
- Ice-cream
- Fruit juices
- Marrows
- Tomatoes
- Fresh pineapple and strawberries
- Casserole/curries
- Green leafy vegetables
- Vegetables juices

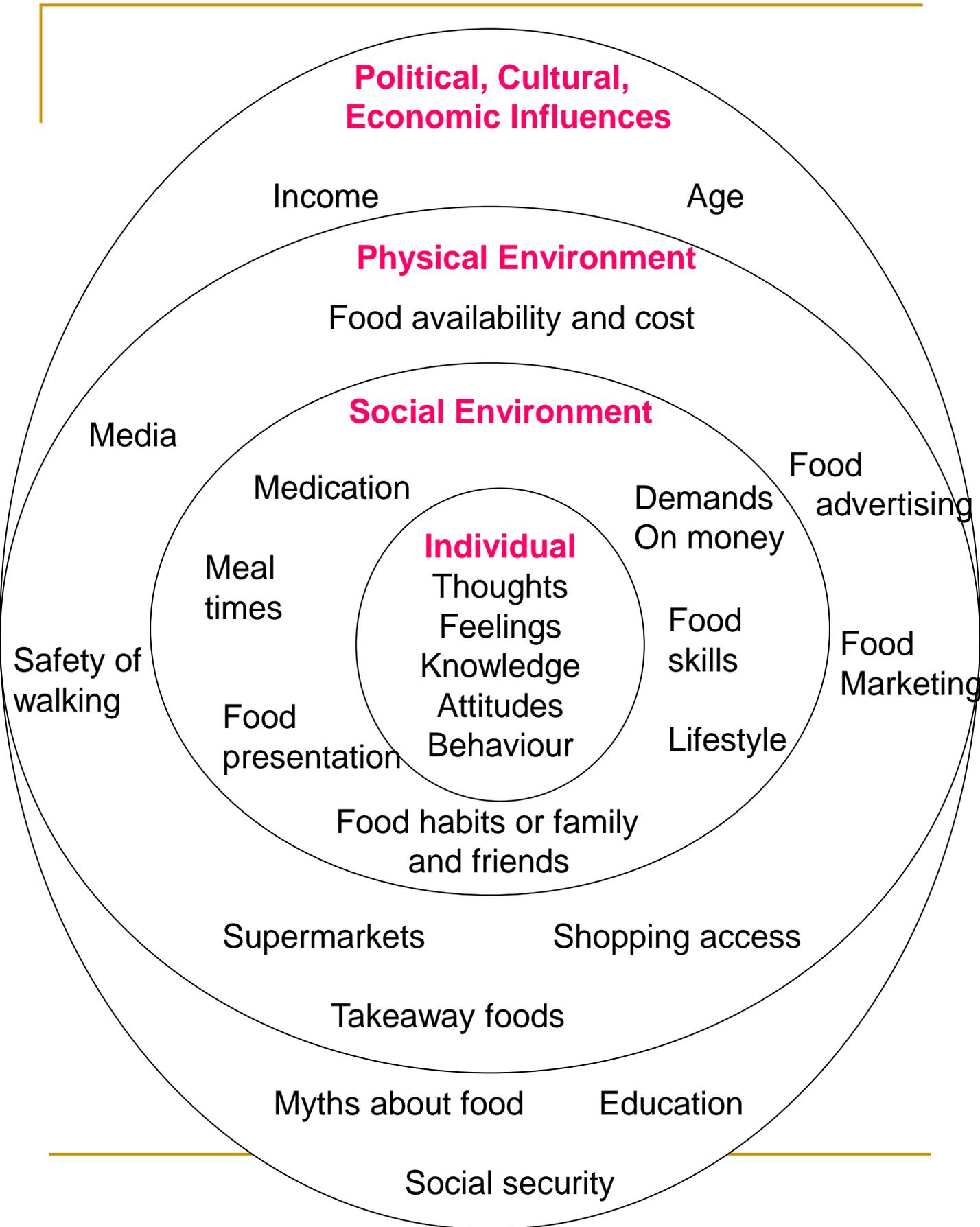


Fisk factors for malnutrition

- Socioeconomic and environmental
 - ❑ Living alone – social isolation
 - ❑ Limited finances
 - ❑ Lack of knowledge about nutrition
 - ❑ Difficult to get around
 - Psychologic
 - ❑ Depression
 - ❑ Cognitive impairment
 - ❑ Psychotic disorders
 - Physical
 - ❑ Impaired function
 - ❑ Physical disability
 - ❑ Disease causing wt lose
 - ❑ Multiply medications
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The behavior of food

- Food is very important to people in long term care
 - Often residents are very food focused
 - Meals are of great importance and often provide forward motion to a resident's daily life
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Political, Cultural, Economic Influences

Income

Age

Physical Environment

Food availability and cost

Social Environment

Media

Medication

Demands
On money

Food
advertising

Meal
times

Individual
Thoughts
Feelings
Knowledge
Attitudes
Behaviour

Food
skills

Food
Marketing

Safety of
walking

Food
presentation

Lifestyle

Food habits or family
and friends

Supermarkets

Shopping access

Takeaway foods

Myths about food

Education

Social security

Difficult to feed an individual and even more harder to food the group

- Food beliefs
 - Food issues
 - Preferences
 - Likes and dislikes
 - Ways that food should be consumed and cooked
 - Certain foods have value and meaning
 - Religious preferences
 - Habitual preferences
-

What happens when people go into care

- Access to the food supply changes
 - Cycle menu with limited choice
 - Set breakfast items
 - Set days for roast and fish
 - Set meal times
 - Set pattern for mid meal snacks
 - Set items of foods
 - Small amounts of foods available for residents to help themselves
-

How do we eat

Eyes (sight)



Nose (smell)



Taste



Memory



Resident enter long term care

- Residents find it difficult to enjoy food upon entering a facility
 - People lose their appetite
 - People don't like the same types of foods anymore
 - Depressed or unhappy about their placement
 - Confused
 - Overwhelmed
-
- Get the happy ones – help and food supplied
 - Good to be with company
 - The above can be changed with support
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Summing up food

- Personal
- Social
- Ties itself to people
- Marks special events
- Marker of the passage of time
- One thing people can have input into
- Life giving

Menu planning can be difficult as you are feeding a group of individuals.

Complexity of nutrition in long term care

- People have to eat to be nourished
 - People all have their own personal food preferences and habits
 - Long term care is a home
 - Menu is planned for the group but need to meet the individual needs
-

What should eating and food be in an aged care setting

- Pleasurable, exciting, satisfying
- Look forward to meals
- If food is not eaten then what good will it do
- A missed meal is a missed amount of nutrients
- Need to think about the quality of some ones life

Support the eating process

Dining rooms

- Social hub of the long term care facility
- Need to be inviting space for resident to enjoy and want to use
- Dining room is the final destination of the menu
- Dining room is not set up correctly the menu can fail



Dining room

- Feeding assistance
- Feeding implements to support feeding
- Medications
- Seating
- Lighting
- Staffing
- Right menu items
- Textures
- Thickened fluids



Quality of life and care

- Essential for age care
 - Nutritional care will impact upon the quality of life of a resident
 - Balance between nutrition and quality of life
 - Resident is the first priority
 - Measure through resident satisfaction
-

The most important points

- Food needs to be eaten to provide any nutritional value
- Food supply is very controlled in facilities - budget
- Forget that food access is limited
- Efforts should be made to make eating an experience not just an essential part of the day

“We exist in the eternal now. The future constantly converts itself into now, then instantly becomes the past, like a stream rushing down a mountainside”

Questions

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