Unit 1- AOS2- Health and Nutrition
Subtitle
In this outcome you will learn:

- The function and food sources of major nutrients important for health and wellbeing
- The use of food selection models and other tools to promote healthy eating among youth, such as the Australian Guide to Healthy Eating, the Healthy Eating Pyramid and the Health Star Rating System
- The consequences of nutritional imbalance in youths’ diet on short- and long-term health and wellbeing
- Sources of nutrition information and methods to evaluate its validity
- Tactics used in the marketing of foods and promoting food trends to youth, and the impact on their health behaviours
- Social, cultural and political factors that act as enablers or barriers to healthy eating among youth, including nutrition information sourced from social media and/or advertising
Topic 4- Nutrition and youth health and wellbeing
Introduction to nutrients-

• Nutrients are substances that provide nourishment essential for the maintenance of life and for growth.

• When we eat, foods are broken down in the process of digestion to release nutrients.

• The body then uses these nutrients for many functions including the efficient functioning of the body and the prevention of many diet-related diseases.

• Some foods have more nutrients in them than others. The best way to maintain a balanced diet is to eat a wide variety of foods (see figure 4.2).
Nutrients and food sources

- **Work Requirement**: use pages 80-94 of your textbook, as well as the following clickview to fill in the Nutrients Table in your booklet.

- **Clickview**: Nutrients- The Basics
Examples of carbohydrates are

- Sugars and fats
- Starches and sugars
- Starches and fats
- Starches only
Iron is a mineral that is vital for the formation of

- teeth
- Red blood cells
- Healthy skin
- Skin tissue
In Australia the best source of vitamin D is

- Sun light
- vegetables
- fruits
- fats
What is a good source of protein?

A: Honey  B: Butter  C: Apples  D: Meat
Which vitamin helps to release energy from CHO, lipids and protein?

A: Vitamin C
B: B1, B2, B3 & B6
C: Vitamin D
D: Vitamin A
Osteoporosis is a disease that is developed because of a lack of 

- Iron
- Calcium
- Fibre
- Phosphorus
This nutrient assists with the transport of food in the intestinal tract and assists with waste removal from the body.

- Lipids
- Fibre
- Vitamin B12
- Sodium
Which nutrient helps with growth, repair and replacement of body tissue?

A: Carbohydrates  B: Fibre
C: Protein  D: Iron
Normal vision is maintained by which vitamin?

- Vitamin A
- B group vitamins
- Vitamin C
- Vitamin D
This vitamin is necessary for red blood cell formation and maturation.

Vitamin C
Vitamin D
Vitamin B12
Vitamin A
A good source of calcium is

- Table salt
- Red meat
- Milk
- Eggs
This Vitamin assists in the healing of wounds and helps to absorb iron.

Vitamin A

Vitamin B

Vitamin C

Vitamin D
Anemia is a disease that is developed because a lack of

- Calcium
- Iron
- Protein
- Sodium
An example of a complex carbohydrate is **Pasta**
What is one of Gemma's favorite foods?

A: Chocolate  B: BBQ pizza
C: Ice-cream  D: Cheesecake
Food Selection Models and other tools to promote healthy eating among youth

Food selection models are tools that help youth to select foods that will meet their nutritional needs and to avoid consuming too many energy dense foods.

Examples include-
- Australian Guide to Healthy Eating
- Health Star Rating System
- Healthy Eating Pyramid
Check your health

eatforhealth.gov.au

Go to the above website and use the nutrition calculators to work out-

- Daily energy needs
- Nutrient requirements
- Average number of recommended serves
- Food balance- game!

Work Requirement- Dietary Analysis
FIGURE 4.30 A balanced diet does not mean eating the same amounts of all foods — some foods should only be eaten in moderation.
Youth food choices are influenced by:

- Cultural traditions
- Family structure
- Lifestyle
- School, work and leisure commitments
- Meal patterns
- Health issues (allergies and intolerances)
- Food availability
Young persons should develop and maintain healthy eating habits in order to:

• Reach their full growth potential
• Have a strong immune system in order for them to fight illness
• Build good habits that will continue into adulthood
• Prevent short and long term conditions that relate to nutritional imbalances:
  • **SHORT TERM**- obesity, insulin resistance, anaemia, dental caries
  • **LONG TERM**- obesity, CVD, diabetes, colorectal cancer, osteoporosis
Common food behaviours during youth
Skipping meals—particularly breakfast

- Can result in deficiencies in vitamin A, folate, fibre, iron and calcium (increases risk of osteoporosis later in life)
- Restriction on energy intake can affect metabolic rate
- Reduced energy levels
Eating outside the home—fast foods

- Higher KJ intake in fast foods = unbalanced KJ input/output
- High intake of saturated fat, sugar and salt = higher risk of obesity, diabetes, CVD
- Eating more junk food = eating less fruits and vegetables and drinking less milk
- Leads to low intake of fibre, vitamins and minerals
Inadequate intake - fruits, veggies and dairy

- Missing out on vitamins, minerals that are essential for all body functions and growth
  
  E.g. production of soft and hard tissue and blood

- Greater risk of lots of diseases such as heart disease, cancer, stroke, arthritis, high blood pressure, osteoporosis etc.

- 2 portions of FRUIT and 5 of VEG everyday
Consuming soft drinks and energy drinks

• Empty KJ....no nutrients other than CHO in form of SUGAR!

• Consuming soft drinks can also increase urination of minerals like calcium, magnesium, zinc and sodium (means your body is losing these more quickly than normal)

• Can lead to dental decay, obesity, diabetes
Reduced energy levels and its impact on health and well-being

• What impact does the reduced energy levels have on the following?
  • **Social health and well-being**
    Not wanting to socialise as much, being moody, tired
  • **Physical health and well-being**
    Reduced exercise, poorer food choices
  • **Mental health and well-being**
    Lack of concentration at school
Long term consequences of nutritional imbalance

Produce a **mind map** that outlines the long term consequences of nutritional imbalance - using the five sub headings on pages 103-104
Sources of nutrition information and strategies to evaluate its validity

- Finding reliable nutritional information can be challenging. There are a variety of sources including- Television, magazines, the internet, social media, medical practitioners, dietitians and nutritionists

- According to the United States Academy of Nutrition and Dietetics, television, internet and magazines were the most popular sources of information, while medical professionals were the least likely to be consulted.
Evaluation - use pages 105-107 of your textbook and answer questions 1-5

4.7 Activities

Test your knowledge

1. (a) Explain the difference between a dietitian and nutritionist.
   (b) Who would you visit if you needed advice regarding a nutrition-related disease? Why?
2. Why is it useful to understand when a TV presenter is presenting a testimonial while reporting on nutrition information?
3. What are the three things to consider when reading nutrition-related articles?
4. Why is it best to source information from the internet with a URL finishing in .org,.au, or.edu?
5. Identify two other clues you can use when assessing the validity of a nutrition source.
Food Trends and food marketing tactics and their impact on youth health and well-being

- Use pages 108-112 to create a table to summarise the information

<table>
<thead>
<tr>
<th>Food Trend/Marketing Tactic</th>
<th>Description</th>
<th>Purpose</th>
<th>Example</th>
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<tr>
<td>Immersive Marketing</td>
<td>Involves integrating advertising into a complete experience</td>
<td>Create an emotional relationship between the consumer and the brand</td>
<td>My coke rewards program</td>
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<td>Infiltration of social media</td>
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Enablers and barriers to healthy eating: Social, Cultural and Political

There are many factors that affect the food choices that young people make. These factors can all interact to determine the health behaviours and ultimately the health status of young people.

**FIGURE 4.42** Social, cultural and political factors all have an impact on food selection.
Social Factors

Eating is often considered a social activity. There are therefore many different social factors that can act as either enablers or barriers to healthy eating among youth. Copy figure 4.43 – pg 114

**FIGURE 4.43** Social factors that act as enablers or barriers to healthy eating.
Family and Friends

Family-

Food intake, patterns and behaviours associated with healthy eating are generally developed through the family network. If they make good food choices, you are more likely to and visa versa.

Friends-

The peer group becomes increasingly more important as young people gain their independence and spend more time away from the family home. Just like family, the peer group can act either as an enabler or a barrier to healthy eating.
Family and Friends

THINK/PAIR/SHARE

Make a list of ways that family and friends can and have influenced food choices

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Socioeconomic status:

Income-

Cost can be a major enabler or barrier to healthy food consumption. Low-income groups can often find it difficult to achieve a balanced healthy diet.

Energy-dense processed foods are often less expensive than nutritious fresh food, and therefore can become the food of choice for those on low incomes.

Those with a higher income have increased choice of food, and are also more likely to consume nutritious food products that may be more expensive.
Socioeconomic status:

Education:

Access to quality education and health literacy are strongly associated with healthy food behaviours.

Education levels not only increase the chance of adopting healthy eating habits, but also increase the young person’s ability to learn. Healthier students tend to perform well and achieve higher levels of education.
Socioeconomic status:

Occupation-

Employment conditions can influence food choices through the impact of time available outside of work for meal planning and food shopping.

Discuss how the following can impact on food choices-

1. Shift work
2. Kitchen facilities
3. Stressful work
Socioeconomic status:

Work Requirement-

Article Analytwist........
Cultural Factors

Copy and finish the mind map into workbooks from pg 117 and 118
Political Factors

Complete the assessment task relating to Political factors that act as enablers or barriers among youth and their food choices.

FIGURE 4.51 Political factors and their influence on healthy eating among youth
Extension and Exam Preparation

• Complete the extension work by yourselves and we will do the exam preparation under exam conditions