

SANGAM SKM COLLEGE – NADI

LESSON NOTES-WEEK 1

YEAR 12

HOME ECONOMICS

FOOD PLANNING AND PRODUCT DEVELOPMENT

MEASURING BODY FAT

- **Body Mass Index (BMI)** is a measure of body fat based on height and weight.
- The higher the **BMI**, the greater the risk of some diseases, including
 - ❖ Coronary artery disease
 - ❖ High blood pressure
 - ❖ Stroke
 - ❖ Osteoarthritis
 - ❖ Some cancers
 - ❖ Type 2 diabetes

BMI NUMBERS AND THEIR MEANINGS

- For adults older than 20 years.

< 18.5	Underweight
Between 18.5 - 24.9	Healthy weight
Between 25 – 29.9	Overweight
30 and above	Obese

$\text{BMI} = \frac{(\text{weight in kilograms})}{\text{height in meters}^2}$	<p>For example: weight = 85kg Height = 1.75m² = 85kg = 3.06 = 27.76.</p> <p>In this case the is considered to be <u>overweight</u> near to obesity</p>
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BMI LIMITATIONS

- Many body fat in athletes and individuals of muscular built.
- Many underestimate body fat in older people and individuals who have lost muscle fat.

FACTORS THAT AFFECT BMI

- BMI basically helps to determine the correct body weight in relation to the height of different individuals, ie, an individual with a particular height must have a particular weight range that would be considered to be a healthy weight range in relation to his/ her height.

- After 20 years of age, height is constant, does not change.
- Therefore the BMI of an individual depends on weight loss or weight gain.

REVIEW QUESTIONS :

1. What is BMI?
2. Identify two diseases that can occur if the BMI is higher than normal
3. What would be the BMI for a healthy person over 20 years?
4. Calculate the BMI for John who weighs 95kg and is 1.72mtrs in height

BASAL METABOLIC RATE OR BMR

- ❖ Basal metabolic rate is the minimum energy that is required to maintain the body's basic processes and functions while the body is at rest. (during sleep)

FACTORS THAT AFFECT BMR

AGE: energy needs increase during growth spurt. BMR reduces as one gets older. After the age of 20 years it drops by 2% per year.

GENDER: males have greater muscle mass and lower body fat percentage. Males therefore have a higher BMR.

GENES: Some individuals are born with fast metabolism and others a slower metabolism.

EXERCISE: Exercise builds more lean tissue which is metabolically more demanding than fat tissue. An active person has a higher BMR.

WEIGHT: The heavier you are the higher your BMR. (LARGER BUILD)

BODY SURFACE: A tall thin person will have a higher BMR than a shorter fatter person. BMR also increases in pregnant women.

BODY FAT PERCENTAGE: The more lean tissue the body has, the higher the BMR, the more the fatty tissue, the lower the BMR. Males generally have a 10-15% faster BMR than females.

DIET: Serious abrupt calorie reduction or starvation reduces BMR by up to 30%. Restrictive low – calorie weight loss can cause BMR to drop as much as 20%.

TEMPORARY FACTORS AFFECTING BMR

- ❖ Fever raises the BMR
- ❖ Stress hormones raise the BMR
- ❖ Both hot and cold weather raise BMR

REVIEW QUESTIONS:

1. What is BMR?
2. Discuss how the following affect our BMR?
 - a. Age
 - b. Body surface
 - c. Weight
3. Why do men have higher BMR than women?
4. Identify other temporary factors that contributes to BMR.

Sangam S.K.M College – Nadi

Home Economics Department

Year 12

Week 2 – Lesson notes

Strand : HEC 12.2 Food and Nutrition

Sub- strand : HEC 12.2.6 Food Planning and Product Development

Content Learning Outcomes :

- Selecting ,planning and serving meals

TYPES OF MENUS

I. THREE COURSE MEAL

- A full course Dinner (usually Dinner) consisting of multiple dishes or courses.
 - Consists of three or four courses such as:
 - ✚ Hors d'oeuvre /entrée/ starter eg, fritters, salads, grilled clams in butter sauce, soups served with croutons
 - ✚ Main course: meat is served with a carbohydrate and vegetable side dishes. Meat is the main dish. Eg, rack of lamb, served with roasted baby potatoes and blanched vegetables and white sauce.
 - ✚ Dessert. A sweet dish to conclude the meal, eg, cheesecake, pies etc, fried ice cream with banana fritter.
1. A la carte – a list of food items, all priced and served separately.
 2. Table d' hote - a restaurant meal offered at a fixed price with a few if any choices.
 3. Cycle – a cycle menu is a series of menus planned for a particular period of time, for example 4 weeks, as in a hostel, or boarding school menu. The menu varies for each day of the cycle. At the end of the cycle , the menu is repeated.
 4. Du Jour Menus- served in a restaurant as a special item on a particular day or happening at a particular time.

II. TYPES OF SERVICE

BLUE PLATE-

- a plate, often decorated with blue willow pattern,
- divided by ridges into sections for holding apart several kinds of food.
- Also called *blue plate special*- a specially priced main course, as of meat and vegetables listed as an item on a menu, especially in an inexpensive restaurant.

SILVER SERVICE

- , with wine, (by course), in order, and then, lastly the water glass in front. includes serving food at the table.
- a technique of transferring food from a service dish to the guests' plate from the left.

- It is performed by the waiter using service forks and spoons from the diners' left.
- Silver service food is always served from the left, **drinks and plated meals from the right.**
- Meals are served to the diner from platters, not plated in the kitchen.
- The guest to the host's right is served first. (Usually a female guest)
- Service continues anti- clockwise.
- Plates are cleared from the right, again starting with the guest from the host's right.
- Glasses are stacked in a diagonal to the right and away

COUNTER SERVICE

Food is served on the counter by counter service assistant in a café, restaurant or food outlet.eg. at a pizza hut

GUERDON SERVICE

- Is a form of food service provided by restaurants to their customers.
- This type of service encompasses preparing food (primarily salads, main dishes such as stroganoff, of desserts) in direct view of the guests using a 'GUERDON'
- A guerdon is typically a trolley equipped to prepare, cook and serve food.
- There is a gas knob, chopping board, cutlery drawer, cold store (depending on trolley type) and general working area.

CARVERY SERVICE –

- a restaurant where cooked meat is freshly sliced to order for customers, sometimes offering unlimited servings for a fixed price.

REVIEW QUESTIONS

1. Which of the following describes a special dish served in a restaurant on a particular day?
 - A. Cycle
 - B. Du Jour
 - C. A la carte
 - D. Table d'hote
2. Define the following types of menu
 - a. A la Carte
 - b. Table d'hote
3. Differentiate between Silver Service and Counter Service
4. What is a GUERDON?

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Week 3 – Lesson notes (19/07 -23/07)

Strand : HEC 12 .2 FOOD AND NUTRITION

Sub strand : HEC 12.2.6 FOOD PLANNING AND PRODUCT DEVELOPMENT

Content Learning Outcome :

- Demonstrate skills of selecting ,planning ,preparing and serving meals.
- Establish culinary skills by developing meaals using local foods and resources

Cooking Methods

Baking

is a method of cooking food that uses prolonged, dry heat normally in an oven, but also in hot ashes or on hot stones.



Rules for cooking:

- Read your recipe carefully.
- Use right ingredients and proper equipment.
- Measure the quantities correctly
- Mix carefully.
- Spread batter evenly in pan; do not drop or knock pans to level.
- Use correct temperature

Suitable Foods :

Chicken ,Cake, Bread, Potatoes, Dalo, Palusami, Etc.

Pastry Making

Dough or paste consisting primarily of flour, water, shortening that is baked and used as a crust for foods such as pies and tarts.



Rules for cooking:

- Measure the ingredients carefully.
- Use good quality flour. ...
- Keep everything as cool as possible otherwise the fat may melt which would spoil the finished dish.
- Introduce as much air as possible during **making**.
- Allow to relax after **making** to allow the fat to harden.
- Handle the **pastry** as little as possible.

Suitable foods:

Pies, Tarts, Pizza, Samosa, Spring rolls etc.

Roasting

is a cooking method that uses dry heat where hot air envelops the food, cooking it evenly on all sides from an open flame, oven or other heat source. It can enhance flavour through caramelization and maillard browning on the surface of the food.

**Rules for cooking:**

- Bring your roast 30mins before putting in the oven
- Always pat meat dry then season it with herb or as your desire.
- If it is red meat it is always wise to sear the entire surface in the pan first.
- Place the meat on a rack in the roasting pan that enables the hot air to circulate for an even roasting

Suitable foods:

Red meat, Poultry, Game, Pork, Potatoes, Sweet potatoes, Parsnip, Carrots

REVIEW QUESTIONS :

1. Define the following cooking methods :
 - a. Baking
 - b. Pastry Making
 - c. Roasting
2. List and explain 2 rules for cooking in Pastry making
3. Give reasons for the following:
 - a. Meat should be seasoned with salt and pepper before roasting.
 - b. Place meat on a rack in a roasting pan in the oven.
4. Explain how food is cooked using Roasting method.