Subject: Home Economics   Year/Level: 12

Strand	Food and Nutrition
Sub Strand	Food Planning & Product Development
Content Learning Outcome	1. Define BMI and identify the factors that affect BMI. 2. Identify the types of menus.

MEASURING BODY FAT

- Body mass index (BMI) is measure of body fat based on height and weight.
- The higher the BMI, the greater the risk of some diseases, including high blood pressure, coronary artery disease, stroke, osteoarthritis, some cancers, and type 2 diabetes.

Meaning of BMI Numbers:
Underweight =   < 18.5
Normal weight =   18.5 – 24.9
Overweight =   25 – 29.9
Obesity =   30 or > 30

BMI Limitations
- BMI is accepted as a reliable indicator of total body fat. The score is valid for both men and women over the age of 20, but it does have some limits. The limits are:
1. It may overestimate body fat in athletes and others who have a muscular build.

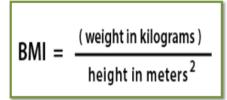2. It may underestimate body fat in older persons and others who have lost muscle mass.
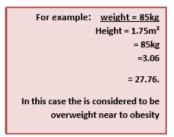
Factors that affect BMI
1. **Age**: energy needs are increased during growth spurt. BMI reduces, as one gets older. After 20 years, it drops by 2 per cent per decade.
2. **Gender**: Men have a greater muscle mass and a lower body fat percentage. Men therefore have a higher BMR.
3. **Genes**: Some individuals are born with a fast metabolism others with a slower metabolism.
4. **Exercise**: Exercise helps raise your BMR by building extra lean tissue. Lean tissue is more metabolically demanding than fat tissue.
5. **Weight**: The heavier you are, the higher your BMI
6. **Body Surface**: A tall thin person will have a higher BMI than a shorter, fatter person. BMI also increases in pregnant women.
7. **Body Fat Percentage**: The more lean tissue on the body, the higher the BMI, the more fatty body tissue, the lower the BMI. Men generally have a 10-15% faster BMI than women.
8. **Diet**: Starvation or serious abrupt calorie-reduction can dramatically reduce BMR by up to 30 percent. Restrictive low-calorie weight loss diets can cause your BMR to drop as much as 20%.

Temporary factors affecting BMI include:
1. **Fever**: Fevers raises the BMR.
2. **Stress**: Stress hormones also raise the BMR.
3. **Temperature**: Both the heat and cold raise the BMR.

BMI Calculation

For example: weight = 85kg
              Height = 1.75m²
                     = 85kg
                     =3.06

                     = 27.76.

In this case the is considered to be
overweight near to obesity

TYPES OF MENUS
1. 3 course
- A full course dinner is a dinner consisting of multiple dishes, or courses.
- In its simplest form, it can consist of three or four courses, such as hors d'oeuvre, soup, entrée, main course and dessert.

APPETIZER   ENTREE   DESSERT

2. A la carte – a list of food items each priced and served separately.

3. Table d'hote – a restaurant meal offered at a fixed price and with few if any choices.

4. Cycle
- A cycle menu is a series of menus planned for a particular period of time, for example 4 weeks.
- The menu varies for each day of the cycle. At the end of the cycle the menus are repeated.

Sunday	Monday	Tuesday	Wednesday
Melon Slice Scrambled Egg Bread and Butter Coffee/Tea/Milk	Pineapple Slice Chicken Arrozcaldo Bread and Butter Coffee/Tea/Milk	Mango Slice Ham and Egg Bread and Butter Coffee/Tea/Milk	Fruit Cocktail Oatmeal with Raisins Toasted Bread and Jam Coffee/Tea/Milk
Sinigang Soup Pork Sinigang with Vegetables Rice Banana	Beef Stock Grilled Pusit Rice Pinakbet Maja Blanca	Sotanghon Soup Roasted Chicken Rice Macaroni Salad Orange slices	Egg Noodle Soup Chicken Pastel with Carrots, Potato and Button Mushrooms Rice Coleslaw salad Melon Slice
Corn Soup Chicken Saute with Stir Fried Vegetables Rice Papaya Slice	Carrot Soup Sweet and Sour Pork Rice Chop Suey Sago't Gulaman	Chicken Stock Steamed Alimasag with Malunggay Leaves Rice Chayote Guisado Leche Flan	Cream of Mushroom Soup Relyenong Bangus Rice Steamed Vegetables Ginumis
Corn on Cob	Chicken Pasta	Pancit Canton	Egg Sandwich

5. Du Jour Menus – served in a restaurant as a special item on a particular day. Happening or popular at a particular time.

Activity
1. Calculate your BMI. Note: your weight in kg and height in meters.
2. Discuss two factors that affect body mass index.
3. Differentiate between a la carte menu and cycle menu.