

UNIT 7: MENU PLANNING

Planning of Nutritionally Balanced Menu

Meal planning involves planning a balanced meal that is colourful, attractive, appetizing, and palatable and within the economic means of the individuals concerned. A balanced diet is one that provides all the nutrients in the amount and proportion required according to one's age, sex, and activity.

Meal planning is defined as a simple process which involves the application of the knowledge of food, nutrient, food habits, likes and dislikes to plan wholesome and attractive meals.

- Meal planning involves decision making regarding what to eat how much to eat each day at each meal.
- The meals planned should not only ensure that nutrients are adequately met but also be flexible enough to take advantage of availability and lower prices of seasonal foods and meet the needs and choices of family members.

As the health of an individual or a family depends on how well they are fed within the given resources, effective meal planning is a great challenge to every meal manager.

Aims

- To meet the nutritional needs of an individual who will be consuming the food.
- Plan meals within the food cost.
- Simplify the purchase, preparation, and storage of meals.
- Provide attractive, appetizing meals.
- Save time and money.



Essentials of Meal Planning

The major objective of planning meals is to achieve nutritional adequacy along with the consideration of food availability, food habits, food preferences, purchasing power, and many other factors.

Nutritional Adequacy

The first prerequisite of a good meal plan is to meet the nutritional needs of the individual and the family as a whole. No single food can meet all the nutrient requirements. A combination of different foods needs to be included in the diet.

For convenience in meal panning, different foods have to be been grouped under three food groups based on their function and major nutrient contributions.

Energy Giving Foods, Bodybuilding and Protective Foods

Energy Giving Foods

- This group includes foods rich in carbohydrates like cereals and their products, starchy roots and tubers and sugar and those rich in fat like nuts, fats, and oils. Therefore, the energy in our diet is mainly contributed by this group.
- Cereals and nuts in addition to energy, contribute a significant amount of proteins, minerals and B group vitamins.
- Fats sugars besides being energy-dense and palatability to the diet.

Bodybuilding Foods

- This group includes food which provides proteins that are important for tissue building and maintenance.
- Foods of animal origin like milk and its product, eggs, meat, fish, provide proteins of good quality.



- Plant protein foods like pulses, legumes nuts, and oilseeds have a relatively inferior quality of protein.
- The foods of this group in addition to protein also contribute energy, vitamin A, vitamins of B groups and minerals.

Protective Foods

- This group includes foods that provide an ample amount of vitamins and minerals for the protective regulatory function of the body.
- All vegetables and fruits (except starchy roots and tubers) and fruits comprise this group.
- Amongst vegetables, most of the GLV's are a good source of iron, calcium, beta carotene, vitamin C and dietary fibre.
- Deep yellow and orange-coloured fruits and vegetables are particularly rich in beta carotene and citrus fruits in vitamin C.

Hence, the selection and inclusion of some foods from each of these food groups in every meal are important to provide all the essential nutrients for various body functions and to make the diet well balanced.

The nutrient needs of each member of the family depend upon age, sex, activity, physiological stress, etc. Modification is done in the same meal for different individuals.



Food Cost and Economy

One must plan meals and buy food wisely to achieve maximum nutrition from the spent. E.g. As a source of protein pulses as compared to animal foods are relatively cheaper.

For economizing in meal planning, the following characteristics are important:

- Compare the prices of food items to make the best buy of money spent.
- As far as possible buy food from fair price shops etc.
- Buy only non-perishable foods in bulk.
- Use seasonal foods as they are not only economical but nutritious also.
- Cook the right amount to minimize wastage.
- Go for economic substitutes within the same food groups. E.g. Choosing cereals and millets instead of bread and pasta.
- Make proper use of leftovers.

Acceptability of Meals

Acceptability of meals is as important as meeting nutritional needs and keeping the food cost within the budget. To make meals acceptable, the following considerations are important during planning,

<u>Likes and Dislikes</u>: While planning meals it is very important to keep in mind the likes and dislikes of family/people.

<u>Variety</u>: The meals should have variety in colour, texture, and flavour for better acceptability.

Variety can be achieved by:

• Selecting different foods from each food group.



- Avoiding the repetition of the same food from a particular food group.
- Including a variety of vegetables in meals to incorporate colour.
- Using different methods of cooking such as baking, boiling, frying, etc. to bring about variety in texture.
- Using attractive garnishes, toppings, and accompaniments such as papad, pickles, and relishes.

<u>Satiety Value</u>: The meals planned should provide adequate satiety to prevent hunger until it is time for the next meal. Sufficient amounts of proteins, dietary fibre and fat help to provide satiety in the meals.

<u>Time and Convenience</u>: Selection of dishes should be done according to the availability of time.

Food Habits and Religious Beliefs

<u>Food Availability and Seasonal Variation</u>: As far as possible seasonal and locally available food should be made use of. Vegetables and fruits in seasonal not only cheaper but have the highest content and best flavour.

Guidelines

- Include at least one or a minimum number of servings from each food group in each meal.
- Make suitable combinations for vegetarians, to improve the overall protein quality of the diet.
- Include uncooked vegetables and fruits in the meals.
- Include at least one serving of milk to ensure the supply of calcium and other vital nutrients.



Factors Influencing Meal Planning

Many factors influence the acceptability of a meal. Customers select what appeals most to them from a menu card based on individual likes and dislikes, budget, the popularity of items, etc.

However, while planning meals the following factors need to be considered:

Nutritional Adequacy

The most important consideration in menu planning is to ensure that the meal fulfils the nutrient needs of the individual consuming the meal. For example, if the meal is planned for industrial workers, it must meet the RDAs for that age group. Foods from all basic food groups should be included in each meal so that the meal is balanced and nutritionally adequate. Nutrient needs may be modified for hospital diets (therapeutic diets).

Economic Considerations

The spending power of the clientele has to be kept in mind and meals have to be planned within the budget. Low-cost nutritious substitutes should be included in the menu to keep the costs low. The food cost should be maintained if the organization has to run profitably.

Food Service

Menus should be planned concerning the type of food service, whether it is a cafeteria, seated service, buffet, etc.

Equipment and Work Space

The menu should be planned, keeping the available equipment and workspace in mind. Deep freezers, refrigerators, grinders, dough kneaders, deep fat fryers, boilers, etc. should be adequate.



Leftover Food

An effective manager should consider as to how leftovers could be rotated to obtain maximum profit. Adequate storage space and hygienic standards should be ensured to minimize the risk of contamination and spoilage of food.

Food Habits

Food habits of the customer is another important criterion which need to be considered as food served has to be acceptable to the customer. Special attention should be paid when a particular type of community is catered to. Religious considerations should be known to the meal planner.

Availability

Some fruits and vegetables are seasonal. During the season the cost is reasonable and quality is better. Today, practically all fruits and vegetables are available throughout the year because of advanced preservation technology. However, seasonal fruits and vegetables should be given preference. Regional availability influences menu planning. For example, fish and seafood are fresh and cheaper in coastal areas.

Meal Frequency and Pattern

The meal timings and number of meals consumed in a day, whether meals are packed or served at the table, also influences the selection of food items on the menu. The age, activity level, physiological state, work schedule, and economic factors need to be known before planning meals for institutional catering.



Variety

This is one of the most important considerations while planning meals. A variety of foods from different food groups should be included.

The term variety means:

- Variety in food ingredients
- Variety in recipe
- Method of cooking
- Colour, texture, and flavour
- Variety in presentation and garnish.

A meal should look attractive and be appetizing. A judicious blend of flavours, attractive colour combinations, and different textures make food enjoyable and interesting. The method of cooking used for different items on the menu should vary.

For example, two deep-fried items would make the meal heavy. Simple processes such as fermentation and sprouting not only contribute to improved flavour and digestibility but also enhance the nutritive value of the meal.

A well-planned meal that is nutritionally adequate would have a good satiety value and prevent the occurrence of hunger-pangs before it is time for the next meal. The nutritional adequacy of a meal in an ala carte service depends on the food choices made by the customer. The caterer must offer adequate, nutrient-dense foods to the clients, to choose from.