

Hello students, welcome to this module on factors affecting meal planning in principles of meal planning unit under the subject nutrition a lifespan approach.

We will learn some definitions, importance of meal planning, points to remember while planning nutritionally adequate meals and the factors affecting meal planning.

At the end of this module you should be able to explain at least five factors which are affecting the meal planning and explain how families with low socioeconomic status can plan nutritionally balanced meals.

- **Balanced meal**- is a meal including different types of foods in such quantities and proportions that the need for calories, vitamins, minerals and other nutrients is adequately met.
- **Exchange list** is defined as a grouping of foods in which specified amount of all foods are of approximately equal proximate principles and energy content
- **food group** is defined as a number of food items sharing common characteristics.
- **Menu** is a list of dishes planned for preparation.
- **Menu planning** : planning of balanced meals that are colourful, appetizing, palatable and within the economic means.

#### Importance of meal planning.

We know that our body's main many functions like physical activity, mental exercise, growth or convalescence after an illness require various nutrients which has to be delivered by an array of foods that we eat. The Factors influencing the requirements of for various nutrients include age, gender, physique, physiologic conditions, the level of physical activity, the climatic conditions, growth, and pathological stress which also influence the need for various nutrients. Application of this knowledge to plan and also quickly calculate the nutritive value of the menus for various conditions served to the people under our care is important.

#### Menu planning.

It is a skill, and menu is a list of dishes applying for preparation and forms an essential part of all activities in the foodservice establishment. Menu/Meal Planning is a skilled activity involving planning of balanced meals that are colourful, appetizing, and palatable and within the economic means of the individuals concerned. It is a simple practical exercise which involves applying the knowledge of food, nutrient requirement and individual preferences to plan adequate and acceptable meals. It is essential to provide appetizing, nourishing and attractive meals to the people at a reasonable price. It helps to determine quantities of different foods accurately. It helps to avoid monotony in the menus. It aims for planning for adequate nutrition. planning will help determine quantities of different food security and it helps to avoid monotony in the menus and aims for eventually planning adequate therapeutic nutrition and normal nutrition.

Points to remember while planning nutritionally adequate meals.

The whole aim of planning a menu is to provide right kind of nourishment so it is eat right for right nourishment and hence there are certain factors which we need to focus on. for example, combining cereals and pulses because we know that there are some limiting amino acids in each of these food groups, if you combine cereals and pulses, the complete protein can be met. similarly in any of

the menu there needs to be inclusion of fruits and vegetables of almost around 500grams and we have to consider the different categories of vegetables, that is vegetable A&B and other vegetables you need to use fats and sugars carefully in your menu. There has to be an inclusion of lot of fiber. We have to also stick to use of traditional spices and condiments liberally because they have got a lot of active compounds in them which contributes to our health. For example, turmeric that we have been using in Indian is very effective. In fact its iron content is quite high. Apart from that it has got antiseptic properties and its curcumin is known Antioxidant and therapeutic agent, thus used in treatment of cancer patients.

Now one of the aim of meal is there has to be variety. We don't want any diet to be monotonous. Also need to consider foods having better bio availability of nutrients. For example, given a choice, include animal foods for iron rather than plant based foods, also our processing techniques which are there if you incorporate them while preparing food, can to a large extent help in enhancing the bio availability of the nutrients. For example, sprouting or germination or roasting or giving a treatment with some kind of dietary acids will definitely help, and the Golden rule of any meal is it has to be in moderation so that we are able to maintain our ideal body weight.

#### Factors affecting meal planning

The nutritional factors would be to know about the food groups which we have seen in our other modules. You need to know about different types of nutrients or the nutrient composition of foods. We need to know the recommended dietary allowance and there has to be a thorough knowledge on the exchange list because it's going to be a timesaving list which will enable you to plan your menus instantly.

Other factors include knowledge on family composition. Accordingly, we have to add or increase the serving sizes. We have to take into consideration the likes and dislikes or personal preferences. Apart from that occupation and lifestyle we are following will need to be considered. When we plan a diet, energy recommendation of a sedentary worker will be much less as compared to a laborer. Then the habits, the knowledge and attitude towards food are also important. Unfortunately, our large number of population & communities have inadequate or poor knowledge about nutrition and as a result of which they end up eating something which is contributing to excess of a particular nutrient/s or it is deficient in a particular nutrient/s. Of course, this calls for dissemination of information and behavior change modification as well. The other factor is social interaction. We know many of times, peers or the society has been influencing our diet. We've kind of forgotten our traditional recipes which are actually much more healthier and can contribute immensely to eat right campaign. Another factor would be the availability, convenience and economy. In fact, I would like to club this with even seasonal availability. Seasonal Foods, particularly the vegetables and fruits, we must consume because we have got ability, to digest them, tolerate them well. No one particular food is having all the nutrients, so we need to add variety. Now. There are certain positive and negative associations also with food and that also could affect our meal planning. Apart from the emotional comfort, we know that there are some foods which when we are happy, we prefer certain foods when you want to rejoice and now we have a preference for a particular food. But then, whether it is really required, whether it's going to provide you any good nutrients or its going to further cause harm, all these needs to be taken into consideration

when we plan our meals .many people are concerned about their body weights and hence they are ready to accept.More and more of information on nutrition, and in fact we know that people have gone for intermittent fasting or they have reduced their calories and that has been possible because of a proper meal planning.

As students of nutrition is very important for you to know how to proceed on meal planning, There are some steps to be considered So the first step would be to obtain the details of your client or your patient such as age,the gender, the physical activity level or PAL, the recommended dietary allowances ,the estimated average requirement for that person. Then you have to work out on the number of meals and their timings considering the schedule of your client, then you have to have a ready reckoner and the food list with you, which we have already studied with ICMR tables, and the exchange lists, and the third important step is planning the menu.

This particular picture is indicating in detail about the steps in diet or meal planning.That is, once you find out the energy and protein requirements, indicate number of each type of food exchanges to be included. You check if energy and protein requirements are being met and check if percent of energy from carbs or protein and fat are as per recommendations and further you go on to distribution of the exchanges between the meals. You list the meals according to lifestyle of the person ,distribute exchanges equally between the meals , the main meals will usually have more cereals and vegetable exchanges and pulse. Ensure that you have included different food groups so that there is variety. Then you move on to having a detailed menu wherein you to list the dishes to be served in each meal with ingredients. Check if main meals are providing satiety. Use imagination to think of nutritious, yet tasty and appealing recipes . Selection should be based on the income of the client that you are catering to. Please refer to the list of references which will enable you to get more insights and it will enable you to successfully plan good meals .

Thank you very much.