Slide 1: Welcome back after seeing what is a balanced diet and what are the foods that are present in various food groups, how they are divided into food groups, so we should also know how to use a food guide for meal planning. So let us see what is the way of using these food guides.

Slide 2: So the amount and type of food that we eat on daily basis is very important for health and performance of an individual. So if you want to be healthy and perform well for the whole day, your food should be very good right from your breakfast. A good diet helps our body to stay healthy and it gives us energy for exercise, and your physical activity or daily routine. So like a car our bodies require fuel. if you don't put fuel in a car, it does not run, so there... similarly if you don't put fuel that is the energy in terms of food, we have to slog doing some work. So after some time there is lack of concentration, work is hampered. So using wrong type of foods or wrong amount of foods, will seriously affect our performance, just like a vehicle.

Slide 3: Now what is a food guide? It is a practical tool, which is used in meal planning and after planning we also have to evaluate the meal, so that is the food guide. And it helps us to make a healthy food choice and it tells up, as all the food groups our... that body needs and how many servings of each food we need to keep healthy and fit.

Slide 4: Now how to pan a meal using this food guide. So we have to include food from the five broad food groups, because when we take the physiological functions and the food groups, it is difficult to make choice. So the 5 basic food group is the best to select the foods, so we include foods from each of these five food groups, then choose minimum number of servings from each food group, whatever is the minimum. I have said, the cereal grain should contain 6 to 11, therefore whatever minimum number is there, you have to select from each group and make choices within the group, each group you can take the... suppose it is cereal, you have rice, wheat, then you have ragi, you have bajra, and so on. So you can select 1 or 2 varieties from each group, then include one group from protein group, every meal should contain one food from the protein group. It can be either from the pulses or from the milk and meat products and when we say fruits and vegetables, sometimes the fruits and vegetables which are not available seasonally, becomes very costly, therefore use seasonal fruits and vegetables, whatever is available seasonally, vegetables and fruits can be selected from those and consumed.

Slide 5: Now way to use a food guide? So this is used for planning the meals. So every meal requires a planning. You cannot just go into the kitchen and take something and book. It require some planning to make a very good meal for the family so when you plan the dietary needs of different members of the family, different members of different age groups and different body composition are present in their family, so we can meet the dietary needs. Then we can also evaluate the present dietary, what is the type of meal we are giving to the family, whether it is meeting all the nutrient requirements, and then modify it according to the changes that is required, and check the diet plans of institutions. If it is for a large institution

like a hostel or a hospital, or hotel you can just go and check whether the meal plan that is going on is Right, whether it is including all the food groups, and whether it is a healthy diet.

Slide 6: Now when you plan a meal, your meal cannot be exhaustive and whatever you feel like, you cannot have it, but it should be according to the budget that the family has or an institution has, we cannot go beyond the budget and make it an expensive meal. So you have to make the best use of money to make the needs of the, I mean all the family members need should be fulfilled by using or selecting good foods. Make daily menus for a week. You can prepare a timetable for a week, everyday from Sunday to Saturday, whatever is to be planned, you can prepare and based on this you make the food purchases. So for the entire week if you go to the market and purchase at a single time, you can get everything and the money spent for going and purchasing also will be reduced. And when making daily menus you should involve the entire family members and take their likes and dislikes also into consideration. Then steps help in best returns of the food money. So there are certain steps in meal planning, where if you follow the right steps, then the, it also saves lot of food money and you get best returns. There is no wastage of food, there is no throwing of excess food, so there is no wastage, you save the money on food. Then buying staple foods. So whenever the season comes, you buy the staple foods in large quantities and store them using the good storage practices, so that sometimes there is a rise in the prices of the grains, which cannot be affordable, therefore these should be selected. Buying the milk and milk products from government dairy outlets is the best way to get milk products at a cheaper rate and also the quality of the milk will be the best.

Slide 7: Then when you buy fruits and vegetables instead of buying from a small vendor, if you go to the main market, the cost of the fruits and vegetables can be reduced a lot and sugar, jiggery, spices, oils, all these should be bought at least for a month in a bulk from wholesaler. Because there is a lot of difference in the price between a wholesaler and the retailer, which will be an expensive part of the consumer. Then you can make butter and ghee at home, when you get milk from the government shop and it has fat, you take out the fat and then make into butter and ghee at home. When you buy butter and ghee it is expensive. Then prepare spice mixes at home. Imagine that, it can be an adulterated spice mix or the proportion may not be right, whatever proportionally right spice mix can be made at home. Then buy seasonal fruits and vegetables to reduce the cost.

Slight 8: And nutrition education also is very important tool for selecting the foods. So nutrition education is a systematically planned set of activities, so it is an essential component for improving the nutritional status of population. So unless we educate the people what you have to eat and what is the right food and what happens if you do not select the right food, what are the deficiency diseases you will get into because of wrong selection of food, can be given and it is for the well-being of the people in general. So nutrition education can be given through various media like it can be one to one or it can be in a group discussion or it can be in a mass media.

Slide 9: Then you can also influence the public policies to promote axis of variety of nutritious food to the people. So this is what is happening in the public distribution system. So where the nutritious food is being supplied to the people, but at the same time people are not ready to accept saying that it is not of good quality, though the quality supplied is good by the government. It is a general tendency of the people that whatever is cheap is not good. Then develop personal skills and motivation to adopt healthy eating practices. So you have to motivate the people to have a healthy eating habits. Then developed nutrition advisory services and nutrition education of the public. So you develop counseling centers, where an individual can come and get counseled about what to eat and what not to eat during times of health and illness also. Then participate in coordinated community nutrition programs. So there are so many community nutrition programs like the supplementary nutrition program, the ICDS is conducting a good supplementary nutrition program. So we have to participate in these programs to get benefit. We have take home ratio where the pregnant woman is taken care of, so all these can be utilized or unless education is given, the people will not realize what is the importance of these. Then improve the nutritional status or nutritional level in the community by giving proper nutrition education.

Slide 10: So nutrition education is so exciting and challenging. You keep on finding some results and you are excited and feel like giving more and more nutrition education. So here, what is the... what the food supply occurs is, it is on the basis of the nutrition educator recommendation. So it is every time, the government takes decisions from the nutrition educator and keeps on changing what... the require... based on the requirement of the people, the food supply is given. And here it also takes into consideration what the people want and based on their want also the change is made. So what people want is they want familiar easy, easy food is, you can buy easily, you can prepare easily, and ready to eat. Then it should be tasty and it should have a good value in terms of money and nutrients also and it should be healthy. So these are the things that people want and based on this, the food supplies should be made. And what they want should be given, the education should be given from the nutrition educator. So people should be educated that whatever food is supplied by the government is very good and they can consume it safely and keep themselves healthy and hear all the basic foods in abundance and you should... the people should know that fast foods are high in fat, sugar and salt therefore they are unhealthy, and sweetened beverages, it is very easy to offer sweetened beverage, whenever a guest comes, or anything or everything people buy those sweetened beverages and give. But these are only purely, I mean energy dense foods, they give only empty calories. So they are not good. Then more fruits and vegetables should be included in the diet, should use whole grains, or less processed grains, highly polished grains again, as we were talking about the nutrients that are supplied by various foods. Then they should use variety of foods and use less fat, less sugar, less salt and give a balanced food along with physical activity. It is not enough, if we have a balanced diet. So if you want to balance the energy in and out put, there should be enough physical activity.

Slide 11: Now there are certain fallacies. What is a fallacy? It is a false or wrong idea about foods. We have many fallacies in foods. We don't believe what the nutrition educator says, but whatever is the traditional belief has a stronger base on the people. So there are food quacks,

who exploit the ignorance and sell their product. You can see so many things, you eat this food you will reduce your body weight within two days, that is impossible, isn't it? You have taken so much of time to gain the weight, but it is impossible to lose weight within one or two days. And ignorance of basic scientific information by the people about the subject. So they believe whatever the quacks is. Then nutritional related myths, fads, and quackery promoting unscientific concepts for, they cause public confusion. Everyday an item comes in the newspaper, you eat this food, it is very good for health, next day the same food, they say it is... it causes cancer, so people get confused about what they have to eat and they make unwise purchases, therefore leading to bad health. So we... it is only exploiting their fears and false hopes.

Slide 12: For example if we see this, if many people say that cooking and processing of vegetables results in loss of nutrients. So they ask them to eat raw vegetables without cooking, and they gave so many examples of animals eating raw vegetables and all, but this is a wrong belief, because when you cook there are so many things, so many changes, unwanted the... substances that are lost and there are so many, I mean non-wanted substances, which are killed, while cooking. So it also improves the texture and flavor of the vegetables. Then many people say water is fattening. How water can become fat? I mean how can it increase the calories, because water has no energy value and therefore it cannot be converted into fat. It is only required for body fluids, the acid-base balance and water balance.

Slide 13: And there are certain misconceptions, potatoes are fattening. Many people avoid potato saying that it will increase the body weight, but there are some countries where potatoes are the staple food, are they becoming fat, no because this is one of the source of carbohydrate, it is a purely starch, so it can be used and does not cause any fattening. Then jaggery contributes more nutrients than sugar. What is the difference between jaggery and sugar, the sugar is more refined product of jiggery. So how does the jaggery change in its nutritive value. So many of the diabetics say, when they are not asked to eat sugar, they say okay we can eat jaggery and they start eating jiggery, but the amount of energy that is given from jaggery also is almost similar as sugar, so this is a misconception. Then sucrose is injurious to health. Sucrose also is a food item. It is a refined part of jiggery, but since sucrose is a disaccharide and it turn, gives the glucose very easily, we are advised not to take lot of sucrose and especially diabetes, because their blood glucose level increases immediately, they are not asked to take sucrose, but otherwise sucrose is also a food item, and it is not injurious to health when taken in moderate amounts.

Now selection of foods, now how do we select force? We have natural foods, health foods, and organic foods. So natural foods are, when you take they have no added chemicals, they do not have any preservatives, no emulsifiers, or antioxidants added to it for preservation. So they are very healthy and health foods, there are certain foods, which improve our health like, I was telling you some of the nutrients containing foods, which have antioxidants and prevent oxidation like that. There are health foods, which provide nutrients that are needed. Then organic foods are also good, because they are the purest form, grown without chemicals or pesticides or fertilizers and herbicides. So you can select these foods. The food selection for

meal planning is very important so all these factors can be taken from a food guide and taken very well for planning a meal to keep the entire family healthy. Thank you.	