NIOS lesson adaptation project
by Embrace **Volunteers**
(A community initiative of Harchan Foundation Trust)

CHAPTER – 3
FOOD GROUPS

KWL Chart

What does the child KNOW	What does the child WANT to know	What has the child LEARNT
	Food Groups	
	Food Exchange	
	Pyramid of Food	
	Balanced Diet	
	Meal Planning	

Embrace
The power within you!

Keywords and Meanings

Keywords	Meanings
Carbohydrates	Energy giving foods
Proteins	Body building foods
Pulses	Protein rich foods
Legumes	Protein rich foods

Embrace
The power within you!

MIND MAP

FOOD GROUPS

FOOD EXCHANGE

CEREALS

PULSES

FOODS

FOOD PYRAMID

VEGETABLES, FRUITS

FATS AND SUGAR

MILK, EGG, MEAT

MEAL PLANNING

BALANCED DIET

Embrace
The power within you!

Classification of foods

Foods

Function →

Energy Giving Food	Body Building Food	Regulatory and Protective Food

Nutrient →

Carbohydrates, Fats	Proteins	Vitamins and Minerals

Food →

Rice, Oil, Potato, Butter	Dals, groundnut, chickpeas, green gram	Fruits , Vegetables

Embrace
The power within you!

Food exchange

Replacing one food with another food which is equally rich in the same nutrients

Roti with Subzi → ← Pongal with Chutney and Sambar

Tea → ← Coffee

Embrace
The power within you!

Five Food Groups

Food Groups	Food	Nutrients present
Cereals, Grains	Rice, wheat, ragi, jowar	Carbohydrates, Proteins, Fibre, Vitamin B
Pulses and Legumes	Dals, rajmah, soyabean, green gram	Carbohydrates, protein, fibre
Milk, Egg, Meat products	Curd, Paneer, cheese, egg, fish, meat	Proteins, Fats, vitamins, minerals
Fruits and vegetables	Mango, banana, spinach, amla, beans, carrot	Vitamin A, Vitamin C, Fibre
Fats and Sugar	Butter, ghee, oil, sugar, honey, jaggery	Carbohydrates, Fats

Embrace
The power within you!

Characteristics of food group

Cereals:

❑They are the main source of energy in our diet.
❑ Whole cereals and grains has good amount of fibre which is good
   for digestive system.
❑Fibre prevents life style diseases.
❑Cereals should be eaten in unrefined way to get good amount of fibre.
❑Cereals are rich vitamin B complex.

Ex: We should use wheat flour instead of madia, Daliya and brown rice
 instead of polished rice.

Characteristics of food group

Pulses and legumes:

▪ These are main sources of protein. Ex: urad, rajmah, arhar and bengal gram.

▪ They have good amount of vitamin B ,calcium and iron.

▪ Pulses and cereals should be included in every meal to obtain good
 quality of protein.

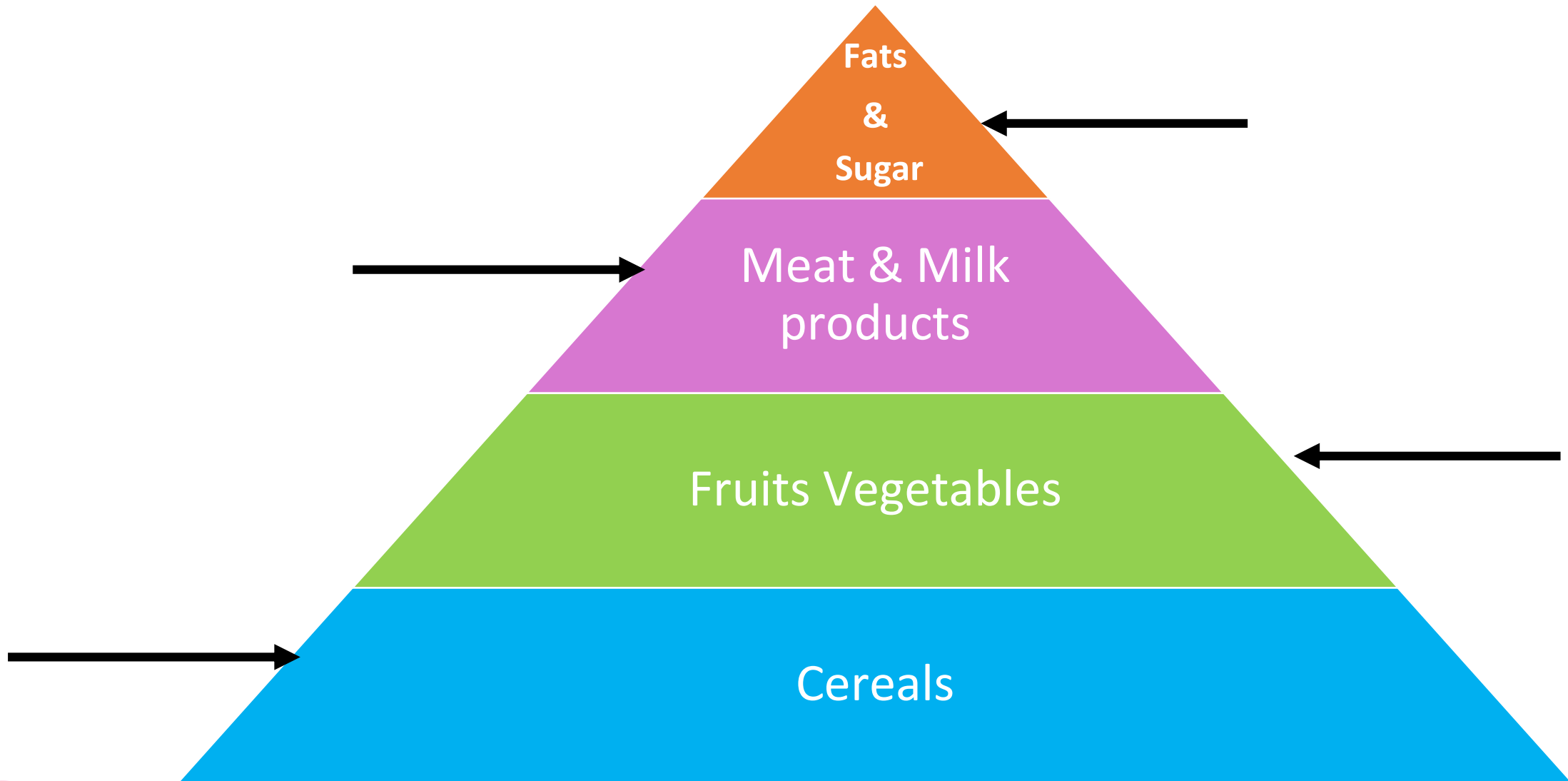Ex: Soya nuggets can be added for variety in the food.

Characteristics of food group

Milk, egg and meat products:

✓These are rich in protein, fat , vitamin A and calcium.

✓Cheese and Paneer have mainly protein as nutrient.

✓Eggs are rich source of almost all nutrients except vitamin C, so it recommended
        for growing children, pregnant women and lactating mothers.

✓Meat, chicken and fish are sources of high quality protein, vitamin A and
        vitamin B.

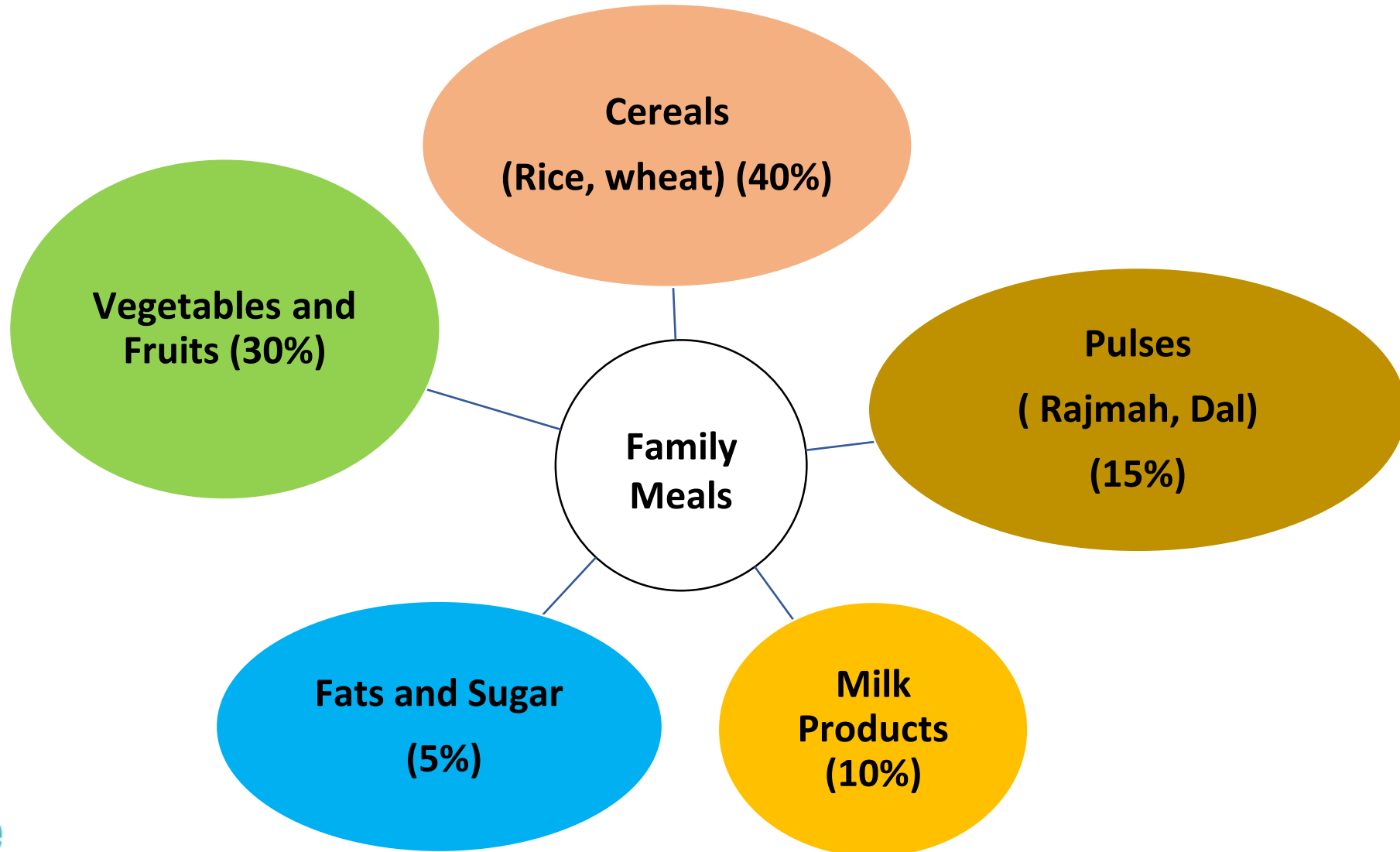✓It is advisable to consume cereals, pulses and milk products.

 Ex: Dal-rice, idly-sambar, dal-roti, dosa-sambar along with curd and butter milk is excellent examples of high protein quality meals.

Food pyramid

Balanced diet

Diet that contains all the nutrients in the right quantities

Cereals (Rice, wheat) (40%)

Vegetables and Fruits (30%)

Pulses (Rajmah, Dal) (15%)

Family Meals

Fats and Sugar (5%)

Milk Products (10%)

Embrace
The power within you!

Balanced diet

Meal Planning

Meal planning is a process of making a plan about what we should eat each day in every meal.

Importance of meal Planning:

➤ To give the body all the required nutrients.

➤ To include food from all the five food groups.

Skills needed for Meal Planning

- Skills to use the affordable, seasonable, locally grown, fresh and nutritious food and give variety.
- Skill to fulfill the nutritional needs and likes of every family member.
- Skill to use under utilized foods such as leaves of carrot, radish, beetroot.
- Ability to use the left-over food items.
- Skills such as
  - Goal setting
  - Planning
  - Problem solving
  - Decision making to save time, energy and money

Factors affecting meal planning

Factors	
Age	The nutritional requirements vary with age so the type of food, its quantity and quality also change.
Weather	In winters our body needs more energy to maintain the body temperature. So energy rich foods like peanut chikki, etc help us to maintain body temperature.
Sex	A man requires more protein and energy than a woman. So sex should be considered while meal planning.
Occupation	We must consider the nature of occupation of each family member while planning meals.

Embrace
The power within you!

Factors affecting meal planning

Factors	Description
Physiological needs	While planning a meal, physiological needs of individual family member should be kept in mind e.g A growing adolescent needs more protein and energy rich food.
Seasonal availability	Seasonal food items are fresh, nutritious, less expensive and easily available than the off season food items.
Price	Income of a family has a direct impact on meal planning. One can plan balanced meals without increasing the budget. For example, use groundnuts instead of cashewnuts and almonds;

Embrace
The power within you!

Family Meals

Family meal or Thali meal is the meal for the family. It should contain one food item from each of the five food groups in every meal.

Sample

Five Food Groups	Meal 1	Meal 2
1. Cereals	Chapathi	Rice
2. Pulses	Arhar dhal	Urad dhal
3. Milk, eggs, flesh products	Paneer curry	Chicken curry
4. Fruits and Vegetables	- Potato and beans sabji - Tomato and cucumber salad - Guava	- Potato and peas sabji - Tomato and cucumber salad - Orange
Oil, ghee and sugar	Used for cooking	Used for cooking

Embrace
The power within you!

List of Volunteers
Embrace-NIOS lesson adaptation project
(A community initiative of Harchan Foundation Trust)

Mentors (Volunteers) : Banu Arjun, Hema Bhatia, Indumathi , Kalpana Sankar, Priya Balasubramanian, Renu Goyal, Sowmya Srikumar, Viraja.

Special educator/Parent Volunteers:

Beverly Sujit ,Chantelle Saldana, Gayathri,Haritha Meda,Jaishree Muralidharan, Madhushree Bhat, Meenakshi, Nisha Narayanan, Pavithra, S. Arjun , Savita Sharma Bhardwaj, Sathyabhama Naryanan, Selvarani, Shakkeela Narikkoottungal, Shweta Taneja, Sucharitha Karthik, Suja Varghese, Sunitha R , Rohitesh Sharma , Tinu Anna Sam.

" volunteers don't necessarily have the time, they just have the HEART."
~ elizabeth andrew

Thank You Volunteers.

Embrace

Image/Content Credits

Slide No	URL
10	https://veggiesavvy.com/wp-content/uploads/2016/09/Food_Pyramid_Vegetarian_Food_Guide.jpg