

BASIC CONCEPT OF BALANCED DIET

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BASIC CONCEPT OF BALANCED DIET

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Introduction

A balance diet can be defined as the one which contain **different types of food in such quantities and proportion that calories, energy and other requirements are adequately met** and a small provision is made for extra nutrients to withstand short duration of illness.

“A balanced diet provides all the nutrients in required amounts and proper proportions”. Balanced diet can be achieved by carefully selecting and combining food items from different food groups .The amount of food needed to meet the daily dietary requirements will differ according to age, gender, physiological status and level of physical activity. A balanced diet should have a variety of foods in moderation and proper proportions.

Hence, balanced diet should meet these aspects:

1. A BALANCE DIET CONSISTS OF DIFFERENT ITEMS.

It includes a variety of food which ensures that all nutrients are supplied. This can be achieved by selecting items from each food groups (each food group supplies certain nutrients)

2. SELECTING ITEMS FROM DIFFERENT FOOD GROUP

Including items from each food group ensures that all the nutrients will be supplied.

3. A BALANCE DIET MEET THE NUTRIENTS NEEDS

Because of the amount and proportion of the food selected. This is based on the recommended dietary intakes laid down for the individual.

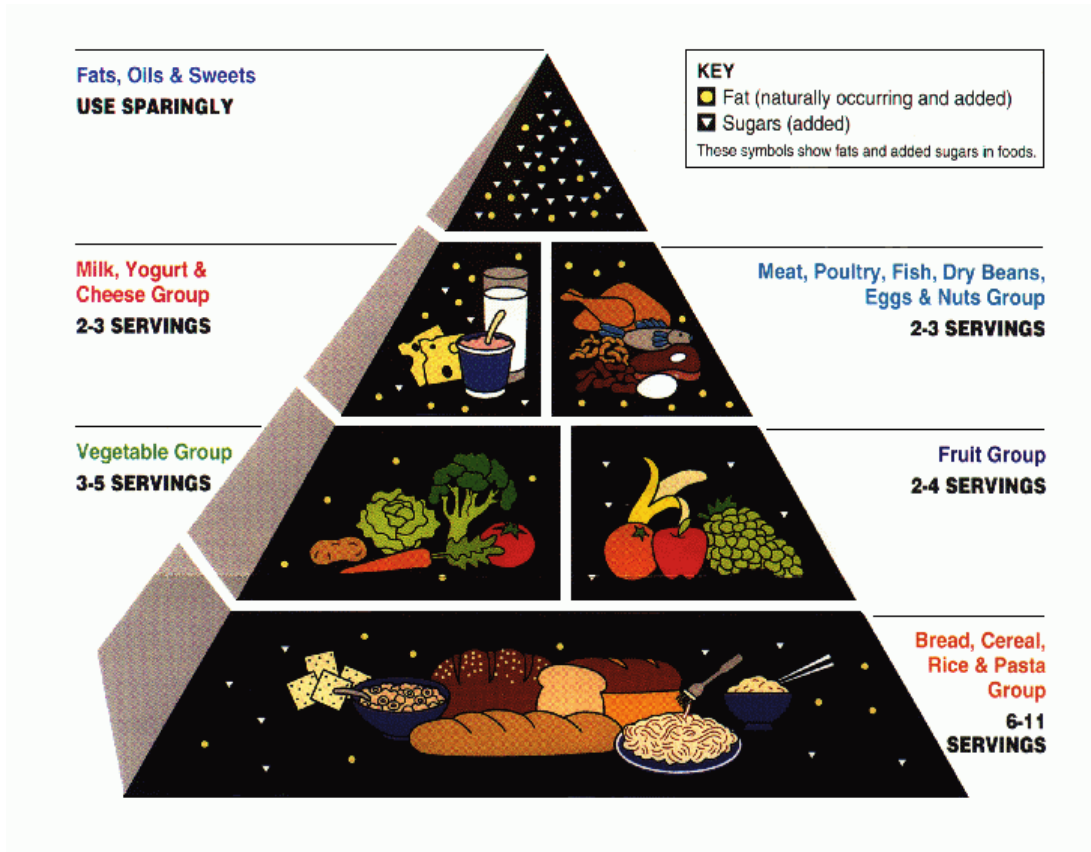
4. BALANCED DIET PROVIDE FOR PERIOD OF LEANESS (SAFETY MARGIN)

It is a safety margin or a little extra for those time when you do not need your nutrient needs adequately.

FOOD PYRAMID

It is a triangle diagram, representing the optimal number serving to be eaten each day from the each food group. Its purpose is to make healthy eating easier that is the correct amount of nutrients to maintain good health, or to get a balanced diet.

The first pyramid was published in Sweden in 1970 .In 1992 USDA (united state department of agriculture) introduced food guide pyramid as a general plan of what to eat each day. The food guide pyramid is a valuable tool for planning a health promoting diet. By incorporating the principle of balance, variety and moderation, an individual can still eat their favorite foods while following the food guide pyramid. A balanced diet should provide 50-60% of the calories from complex carbohydrates which is the major part of the diet thus making it the base of the food pyramid. Therefore 6-11servings of cereals are recommended. Protective foods are essential in providing vitamins, minerals and fiber. Therefore 3-5 servings of vegetables and 2-4 servings of fruits form the next level of food pyramid. 2-3 servings of pulses, milk and milk products, egg, meat and fish form the next level of food pyramid to meet 10-15% of protein of the total calories. The tip of the food pyramid has sugars, fats and oils which are to be used sparingly since they are energy dense foods.



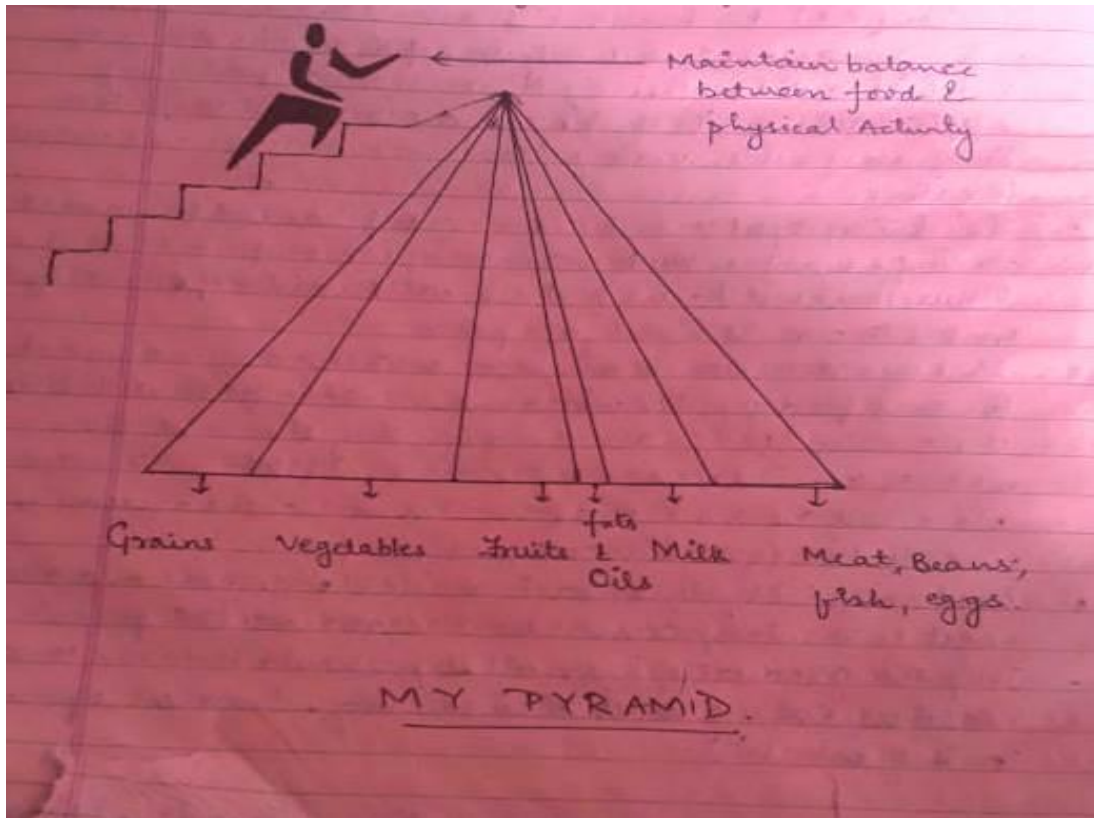
Source: Food guide pyramid, USD

It was updated in 2005 to “my pyramid” my pyramid helped them to choose food and amount that are right for them to balance with their physical activities. It is meant for any healthy person who is above the age of 2 years.

Important points:

- **Be active**, the person climbing stems and remind the person to be physically active
- Vary your choices, the six bands stand for the five food groups plus an area for oil. For health it is essential to consume a variety along and within these groups to get the way of nutrients needed by the body. Number of food and food groups supplies all the nutrients, fiber and other substances the body needs. Besides, variety adds flavors, interest and pleasure to eat
- **Think in proportion** the food groups bands differ in width, reminding consumers to eat more of some types of food than others. These widths are just estimates and not specifically the amount that is right for the person.
- **Take in moderation** : moderation is the key ,mind-set and every day eating habits should adapt moderation for each food group. The wider base stand for foods with little, no solid fats or added sugars, they should be eaten more of term. The narrower top stand for foods with more of these foods he can consume.
- **Customize**: My pyramid is available for kids and also for vegetarians. They can be used to a person's need.
- **Improve gradually**: small steps should be taken towards healthier eating and active living. Small steps add up to big benefits.

No food contain all the essential nutrients, eating food from each of the food group ensure that all nutrient meets are met. For example people who have low energy allowance are advised to eat energy food from all food groups.



People with high energy allowances are advised to eat less- dense energy food.

There is no substitute to balance diet. The principle of balance diet is needed to follow throughout the life

Food Pyramid (ICMR)

Adequate diet which provides all the nutrients throughout our life to stay healthy. The Food Pyramid can help us decide the same. Cereals, millets, pulses and milk are major sources of most nutrients and these should be consumed **adequately**. Milk provides good quality proteins and calcium and must be an essential item of the diet, particularly for children. Vegetables and fruits provide protective substances such as vitamins/ minerals/ phytonutrients and should be

Consumed **liberally**. One must consume seasonally available and different colored fresh fruits and vegetables. Oils and nuts are calorie-dense, and are useful for increasing the energy density and quality of food.

Meat and meat products provide good quality protein and iron. Oils and meat and meat products should be consumed **moderately**. However, if the person is a vegetarian, he/ she can get most of the nutrients from a right combination of cereals, pulses, vegetables, fruits and milk. Lastly, as described in the last section, food items like burger, french fries, ice-cream, colas, chocolates, i.e. HFSS foods should be consumed **sparingly**. Bakery items are also included in this category.

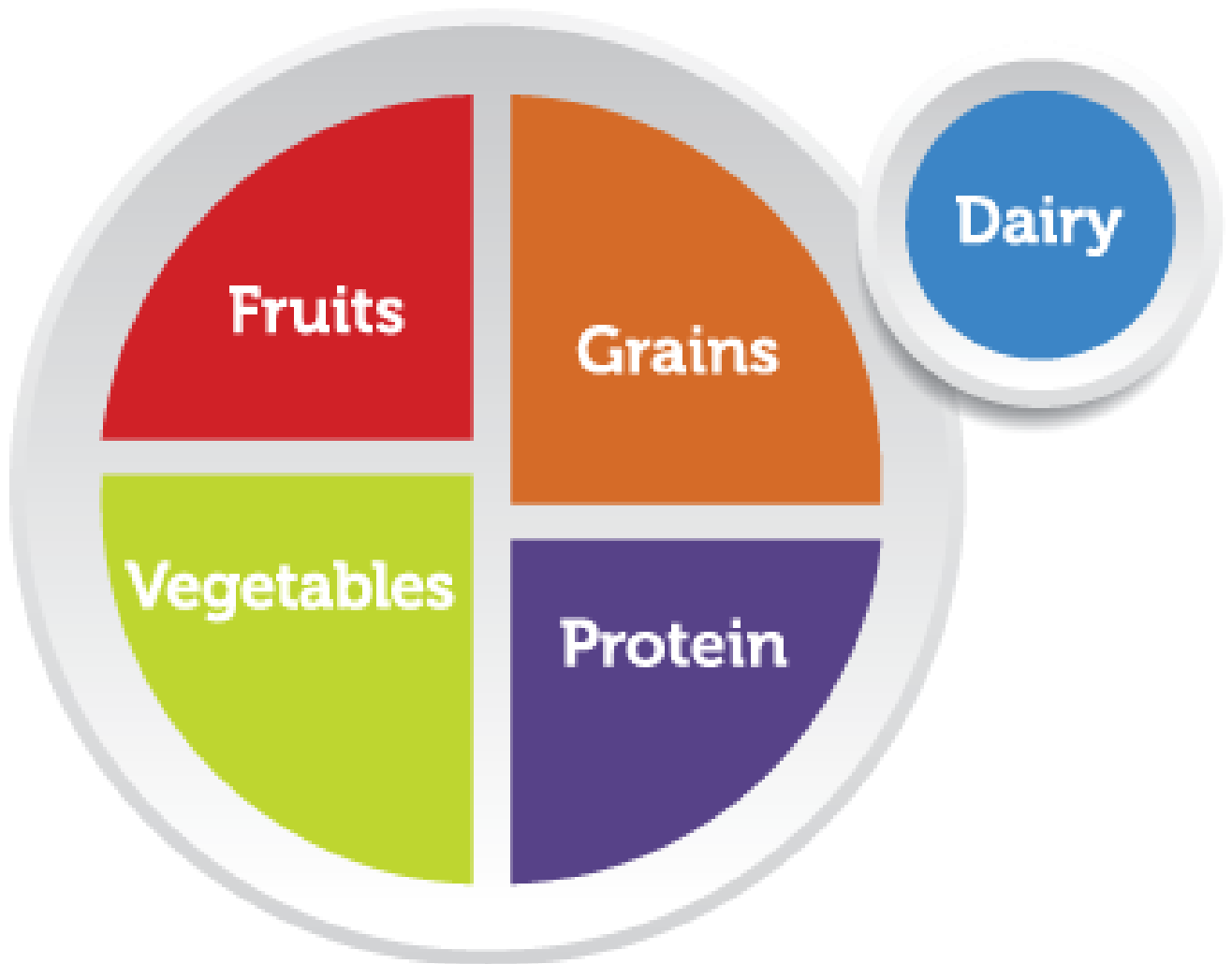


Food Pyramid

(Source: **Dietary guidelines for Indians, ICMR 2011**)

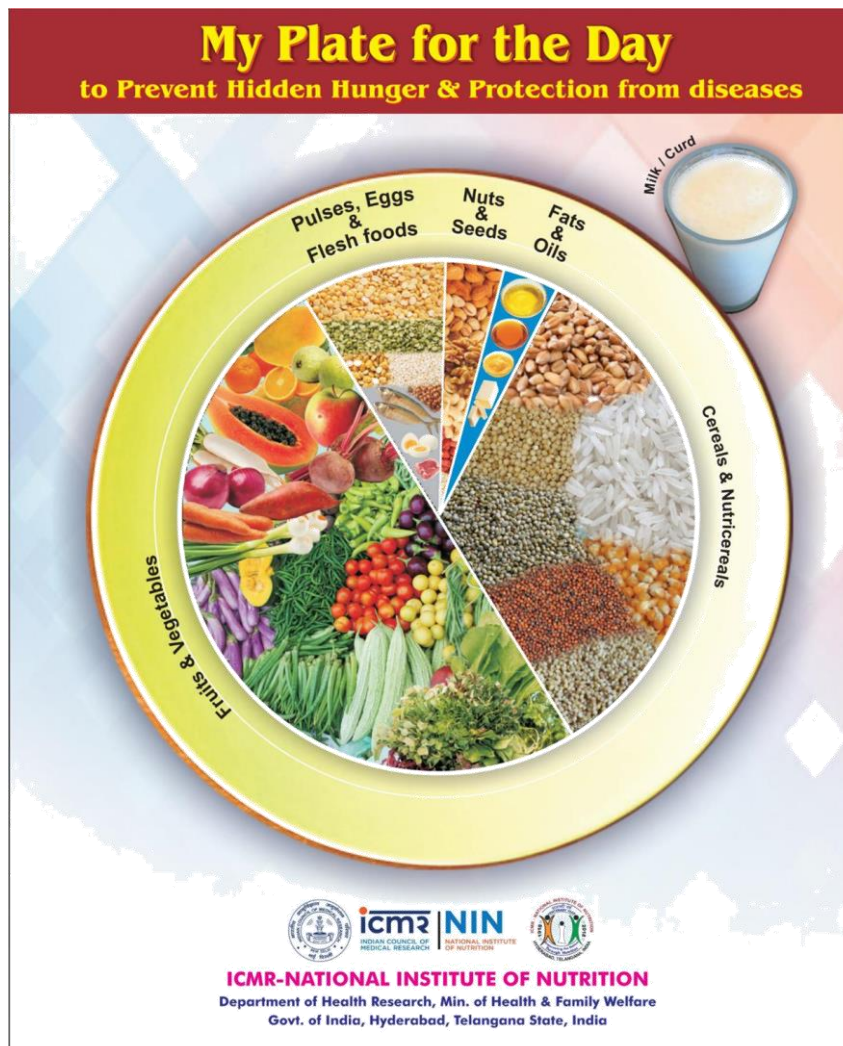
My plate:

My Plate is the current and latest [nutrition guide](#) published by the USDA, a [food circle](#) (i.e. a [pie chart](#)) depicting a [place setting](#) with a [plate](#) and [glass](#) divided into five [food groups](#). It replaced the USDA's [My Pyramid](#) guide on June 2, 2011, ending 19 years of USDA [food pyramid diagrams](#). My Plate is divided into sections of approximately 30% cereals, 40% [vegetables](#), 10% [fruits](#) and 20% [protein](#), accompanied by a smaller circle representing [dairy](#), such as a glass of [milk](#) or a [yogurt](#) cup.



Food is the basic necessity of life. Different food groups provide different nutrients. Right foods in optimum amounts are essential in meeting the nutritional requirements of individuals depending on their physiological state. Dietary requirements vary at different stages of life. The food pyramid and food plate provides information on variety of foods that can be included at right proportions to meet the daily requirements.

In 2011, USDA introduced “my plate” along with dietary guidelines for AMERICANS. It visualize familiar meal planning symbol in consumers mind as well as serves a reminder in healthy eating but not intended to provide diet plan



(Source: Dietary guidelines for Indians, ICMR 2011)

- Consumption of proportions of food groups indicated in the plate helps prevent macronutrient & micronutrient malnutrition (**Hidden Hunger**)
- The proportion indicated in the plate ensures adequate intake of all micronutrients (vitamins & minerals), bioactive compounds, functional foods, antioxidants etc.
- No vitamin or mineral (micronutrients) supplements will provide the adequacy of all nutrients that can be met from this model plate
- Routine consumption of certain nutrients as supplements will interfere with absorption of other nutrients
- Micronutrients from food are better absorbed and more bioavailable than vitamin and mineral supplements/tablets/capsules/fortification
- A complete diet as indicated in the model plate provides many unknown substances/nutrients that cannot be met from supplements or fortified foods

Regular consumption of foods in proportions as per the model plate

- improves immunity and resistance to infections
- maintains good microbial flora (beneficial bacteria in the intestine)
- prevents Diabetes Mellitus, Cardiovascular Diseases (CVDs) such as heart attack, stroke and many other diseases
- maintains appropriate alkalinity and thereby reduces inflammation and decreases chances of kidney stone formation
- prevents insulin resistance and maintains appropriate insulin sensitivity and glycaemic index
- ensures adequate intake of fibre and therefore prevents constipation
- prevents adverse effects of environmental pollution and toxins such as heavy metals and pesticides by working as a detoxifying diet

(Source: **Dietary guidelines for Indians, ICMR 2011**)

Weblinks:

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4. World Health Organization. Regional Office for Europe. Benefits of a balanced diet. Available from: <http://www.euro.who.int/en/health-topics/disease-prevention/nutrition/a-healthy-lifestyle/benefits-of-a-balanced-diet>.
5. National Health Portal India. Healthy Diet. Available from : <https://www.nhp.gov.in/healthyliving/healthy-diet>. [30 December, 2017].

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