

Importance of Balanced diet and Well being



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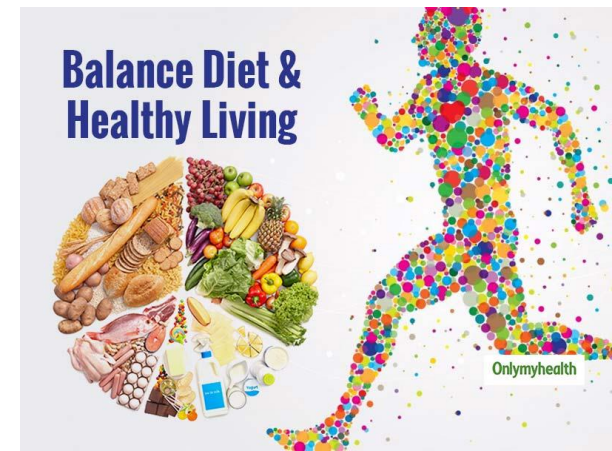
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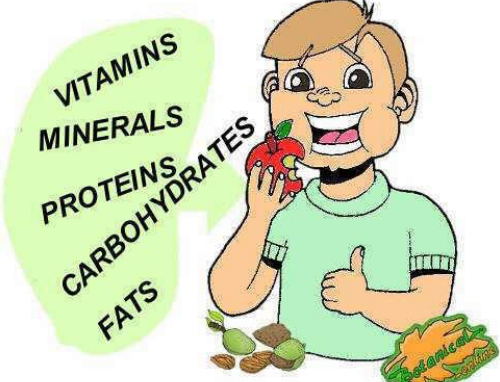
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Balanced Diet

- A balanced diet provides us with all the nutrients we need, but not too much of things such as sugars or fats which could lead to ill health.
- A balanced diet is one which includes a variety of foods in adequate amounts and correct proportions to meet the day's requirements of all essential nutrients such as proteins, carbohydrates, fats, vitamins, minerals, water, and fibre.



Major Nutrients need for well being



Carbohydrates



Fats



Minerals



Proteins



Vitamins



Water

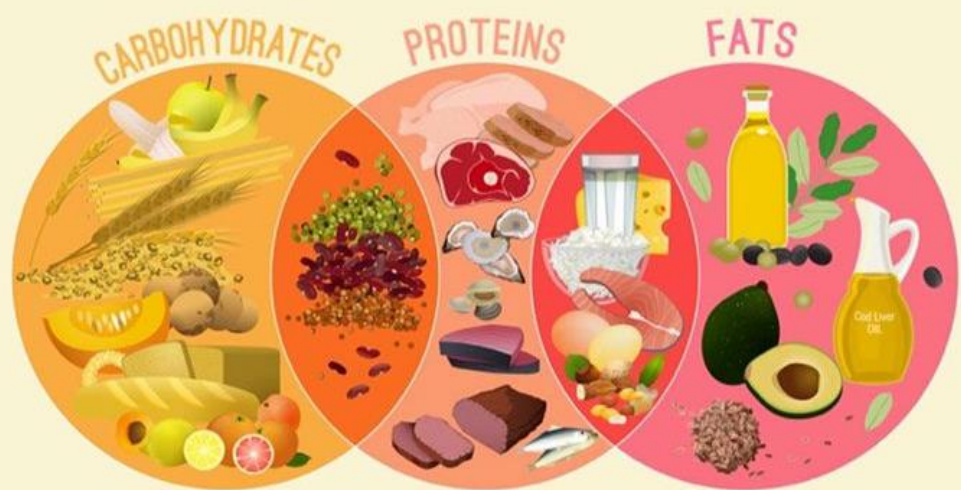
MACRO NUTREIENTS



Carbohydrates

Proteins

Fats



Carbohydrates

COMPLEX CARBOHYDRATES = HEALTHY CARBS



**Improves
glycemic
control**

**Aids in
weight
loss,
provides
satiety**

**Supports
Brain
health &
Digestive
health**

**Most
preferred
source of
energy**

**Protein
sparing
effect**

**CARBS:-
55-60% of
total calories
should come
from
carbohydrates**

**Source of
Phyto-
nutrients**

**DON'T FEAR CARBS;
EAT THE RIGHT ONES..**



Wheat



Bajra



Barley



Broken wheat



Rolled or steelcut oats



Maize



Wholewheat or multigrain bread



Whole wheat pasta



Millets



Legumes (beans, peas, lentils)



Fruits & vegetables



Protein



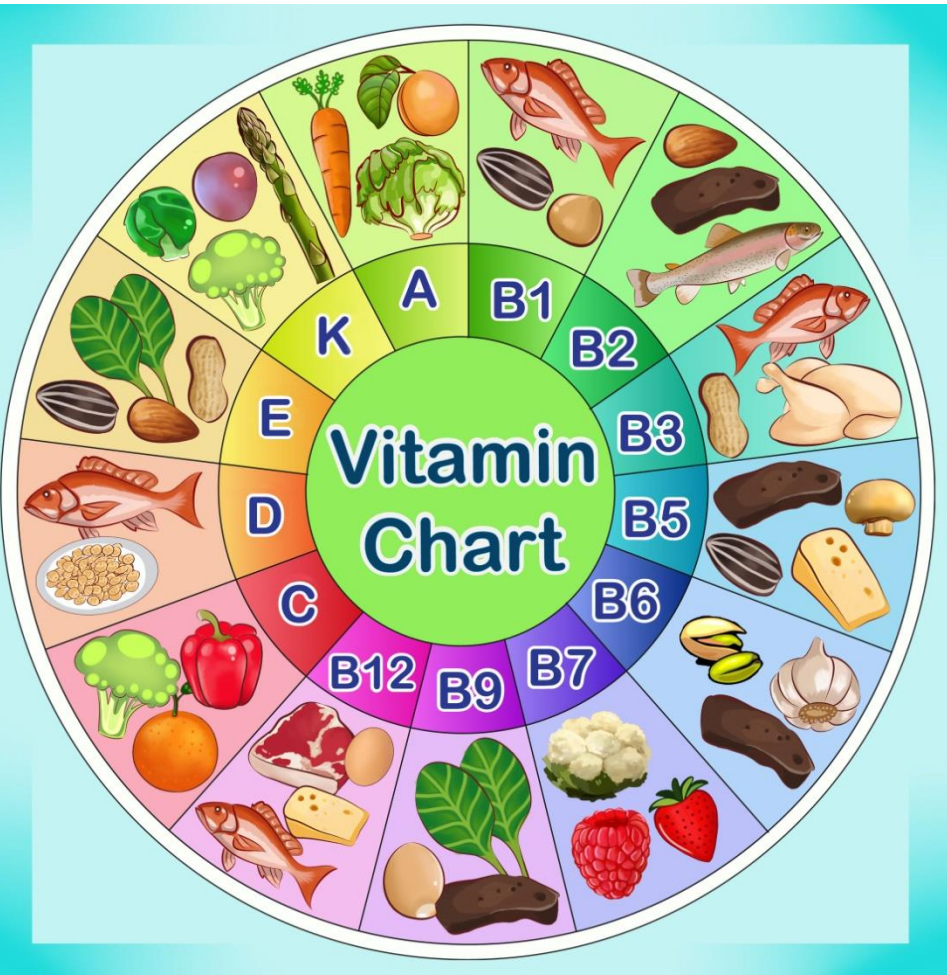
Fats and Oils



Fiber



Vitamins



Minerals

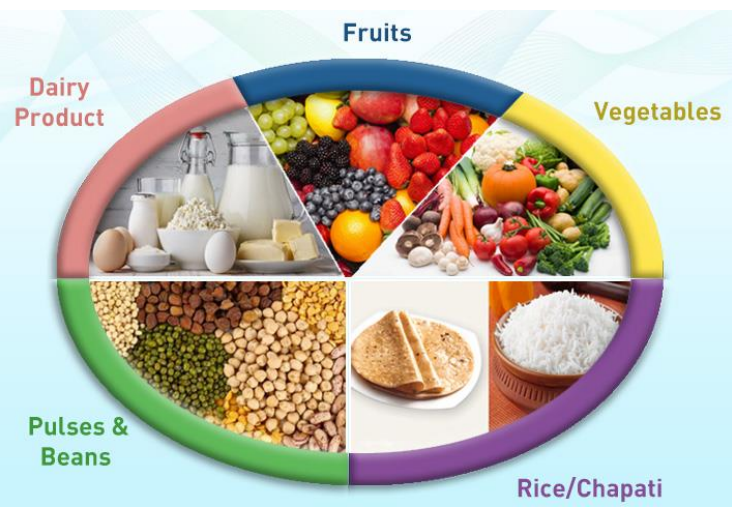


RDA for Indians

Age Group	Category of work	Body Wt	Protein	CHO	Calcium	Magnesium	Iron	Zinc	Iodine	Thiamine	Riboflavin	Niacin	Vit B6	Folate	Vit B12	Vit C	Vit A	Vit D
		(kg)	(g/d)	(g/d)	(mg/d)	(mg/d)	(mg/d)	(mg/d)	(µg/day)	(mg/d)	(mg/d)	(mg/d)	(mg/d)	(µg/d)	(µg/d)	(mg/d)	(µg/d)	(IU/d)
Men	Sedentary	65	54.0	130	1000	385	19	17	150	1.4	2.0	14	1.9	300	2.5	80	1000	600
	Moderate									1.8	2.5	18	2.4					
	Heavy									2.3	3.2	23	3.1					
Women	Sedentary	55	45.7	130	1000	325	29	13.2	150	1.4	1.9	11	1.9	220	2.5	65	840	600
	Moderate									1.7	2.4	14	1.9					
	Heavy									2.2	3.1	18	2.4					
	Pregnant woman	55 + 10	+9.5 (2 nd trimester) +22.0 (3 rd trimester)	175	1000	385	40	14.5	250	2.0	2.7	+2.5	2.3	570	+0.25	+15	900	600
	Lactation 0-6m		+16.9	200	1200	325	23	14	280	2.1	3.0	+5	+0.26	330	+1.0	+50	950	600
7-12m		+13.2	200						2.1	2.9	+5	+0.17	330					
Infants	0-6 m*	5.8	8.1	55	300	30	-	-	100	0.2	0.4	2	0.1	25	1.2	20	350	400
	6-12m	8.5	10.5	95	300	75	3	2.5	130	0.4	0.6	5	0.6	85	1.2	27	350	400
Children	1-3y	11.7	11.3	130	500	135	8	3.0	90	0.7	0.9	7	0.9	110	1.2	27	390	
	4-6y	18.3	15.9	130	550	155	11	4.5	120	0.9	1.3	9	1.2	135	1.2	32	510	600
	7-9 y	25.3	23.3	130	650	215	15	5.9	120	1.1	1.6	11	1.5	170	2.5	43	630	
Boys	10-12y	34.9	31.8	130	850	270	16	8.5	150	1.5	2.1	15	2.0	220	2.5	54	770	600
Girls	10-12y	36.4	32.8	130	850	255	28	8.5	150	1.4	1.9	14	1.9	225	2.5	52	790	600
Boys	13-15y	50.5	44.9	130	1000	355	22	14.3	150	1.9	2.7	19	2.6	285	2.5	72	930	600
Girls	13-15y	49.6	43.2	130	1000	325	30	12.8	150	1.6	2.2	16	2.2	245	2.5	66	890	600
Boys	16-18y	64.4	55.4	130	1050	405	26	17.6	150	2.2	3.1	22	3.0	340	2.5	82	1000	600
Girls	16-18y	55.7	46.2	130	1050	335	32	14.2	150	1.7	2.3	17	2.3	270	2.5	68	860	600

* AI

- A healthy diet helps to protect against malnutrition in all its forms, as well as noncommunicable diseases (NCDs), including diabetes, heart disease, stroke and cancer.
- Unhealthy diet and lack of physical activity are leading global risks to health.
- Healthy dietary practices start early in life – breastfeeding fosters healthy growth and improves cognitive development, and may have longer term health benefits such as reducing the risk of becoming overweight or obese and developing NCDs later in life.



- Energy intake (calories) should be in balance with energy expenditure.
- To avoid unhealthy weight gain, total fat should not exceed 30% of total energy intake.
- Intake of saturated fats should be less than 10% of total energy intake, and intake of trans-fats less than 1% of total energy intake, with a shift in fat consumption away from saturated fats and trans-fats to unsaturated fats, and towards the goal of eliminating industrially-produced trans-fats.

- Limiting intake of free sugars to less than 10% of total energy intake is part of a healthy diet. A further reduction to less than 5% of total energy intake is suggested for additional health benefits.
- Keeping salt intake to less than 5 g per day (equivalent to sodium intake of less than 2 g per day) helps to prevent hypertension, and reduces the risk of heart disease and stroke in the adult population.
- WHO Member States have agreed to reduce the global population's intake of salt by 30% by 2025; they have also agreed to halt the rise in diabetes and obesity in adults and adolescents as well as in childhood overweight by 2025.

For adults

- A healthy diet includes the following:
 - Fruit, vegetables, legumes (e.g. lentils and beans), nuts and whole grains (e.g. unprocessed maize, millet, oats, wheat and brown rice).
 - At least 400 g (i.e. five portions) of fruit and vegetables per day, excluding potatoes, sweet potatoes, cassava and other starchy roots.
- Less than 10% of total energy intake from free sugars.
 - Free sugars are all sugars added to foods or drinks by the manufacturer, cook or consumer, as well as sugars naturally present in honey, syrups, fruit juices and fruit juice concentrates.

- Less than 30% of total energy intake from fats.
 - Unsaturated fats (found in fish, avocado and nuts, and in sunflower, soybean, canola and olive oils) are preferable to saturated fats (found in fatty meat, butter, palm and coconut oil, cream, cheese, ghee and lard).
 - It is suggested that the intake of saturated fats be reduced to less than 10% of total energy intake and *trans*-fats to less than 1% of total energy intake. In particular, industrially-produced *trans*-fats are not part of a healthy diet and should be avoided.
- Less than 5 g of salt (equivalent to about one teaspoon) per day. Salt should be iodized.

For infants and young children

- In the first 2 years of a child's life, optimal nutrition fosters healthy growth and improves cognitive development. It also reduces the risk of becoming overweight or obese and developing NCDs later in life.
- Advice on a healthy diet for infants and children is similar to that for adults, but the following elements are also important:
 - Infants should be breastfed exclusively during the first 6 months of life.
 - Infants should be breastfed continuously until 2 years of age and beyond.
 - From 6 months of age, breast milk should be complemented with a variety of adequate, safe and nutrient-dense foods. Salt and sugars should not be added to complementary foods.

Practical advice on maintaining a healthy diet

- **Fruit and vegetables**

- Eating at least 400 g, or five portions, of fruit and vegetables per day reduces the risk of NCDs and helps to ensure an adequate daily intake of dietary fibre.
- Fruit and vegetable intake can be improved by:
 - always including vegetables in meals;
 - eating fresh fruit and raw vegetables as snacks;
 - eating fresh fruit and vegetables that are in season; and
 - eating a variety of fruit and vegetables.

Fats

- Reducing the amount of total fat intake to less than 30% of total energy intake helps to prevent unhealthy weight gain in the adult population. Also, the risk of developing NCDs is lowered by:
 - reducing saturated fats to less than 10% of total energy intake;
 - reducing *trans*-fats to less than 1% of total energy intake; and
 - replacing both saturated fats and *trans*-fats with unsaturated fats (2, 3) – in particular, with polyunsaturated fats.
- Fat intake, especially saturated fat and industrially-produced *trans*-fat intake, can be reduced by:
 - steaming or boiling instead of frying when cooking;
 - replacing butter, lard and ghee with oils rich in polyunsaturated fats, such as soybean, canola (rapeseed), corn, safflower and sunflower oils;
 - eating reduced-fat dairy foods and lean meats, or trimming visible fat from meat; and
 - limiting the consumption of baked and fried foods, and pre-packaged snacks and foods (e.g. doughnuts, cakes, pies, cookies, biscuits and wafers) that contain industrially-produced *trans*-fats.

Salt, sodium and potassium

- Most people consume too much sodium through salt (corresponding to consuming an average of 9–12 g of salt per day) and not enough potassium (less than 3.5 g).
- **High sodium intake and insufficient potassium intake contribute to high blood pressure, which in turn increases the risk of heart disease and stroke.**
- Reducing salt intake to the recommended level of less than 5 g per day could prevent 1.7 million deaths each year.
- People are often unaware of the amount of salt they consume. In many countries, most salt comes from processed foods or from foods consumed frequently in large amounts (e.g. bread). Salt is also added to foods during cooking or at the point of consumption (e.g. table salt).
- Salt intake can be reduced by:
 - limiting the amount of salt and high-sodium condiments (e.g. soy sauce, fish sauce and bouillon) when cooking and preparing foods;
 - not having salt or high-sodium sauces on the table;
 - limiting the consumption of salty snacks; and
 - choosing products with lower sodium content.
- Some food manufacturers are reformulating recipes to reduce the sodium content of their products, and people should be encouraged to check nutrition labels to see how much sodium is in a product before purchasing or consuming it.
- Potassium can mitigate the negative effects of elevated sodium consumption on blood pressure. Intake of potassium can be increased by consuming fresh fruit and vegetables.

Sugars

- In both adults and children, the intake of free sugars should be reduced to less than 10% of total energy intake. A reduction to less than 5% of total energy intake would provide additional health benefits.
- Consuming free sugars increases the risk of dental caries (tooth decay). Excess calories from foods and drinks high in free sugars also contribute to unhealthy weight gain, which can lead to overweight and obesity. Recent evidence also shows that free sugars influence blood pressure and serum lipids, and suggests that a reduction in free sugars intake reduces risk factors for cardiovascular diseases.
- Sugars intake can be reduced by:
 - limiting the consumption of foods and drinks containing high amounts of sugars, such as sugary snacks, candies and sugar-sweetened beverages (i.e. all types of beverages containing free sugars – these include carbonated or non-carbonated soft drinks, fruit or vegetable juices and drinks, liquid and powder concentrates, flavoured water, energy and sports drinks, ready-to-drink tea, ready-to-drink coffee and flavoured milk drinks); and
 - eating fresh fruit and raw vegetables as snacks instead of sugary snacks.

How to promote healthy diets

- Diet evolves over time, being influenced by many social and economic factors that interact in a complex manner to shape individual dietary patterns.
- These factors include income, food prices (which will affect the availability and affordability of healthy foods), individual preferences and beliefs, cultural traditions, and geographical and environmental aspects (including climate change).
- Therefore, promoting a healthy food environment – including food systems that promote a diversified, balanced and healthy diet – requires the involvement of multiple sectors and stakeholders, including government, and the public and private sectors.
- Governments have a central role in creating a healthy food environment that enables people to adopt and maintain healthy dietary practices. Effective actions by policy-makers to create a healthy food environment include the following:
 - Creating coherence in national policies and investment plans – including trade, food and agricultural policies – to promote a healthy diet and protect public health
 - Encouraging consumer demand for healthy foods and meals
 - Promoting appropriate infant and young child feeding practices

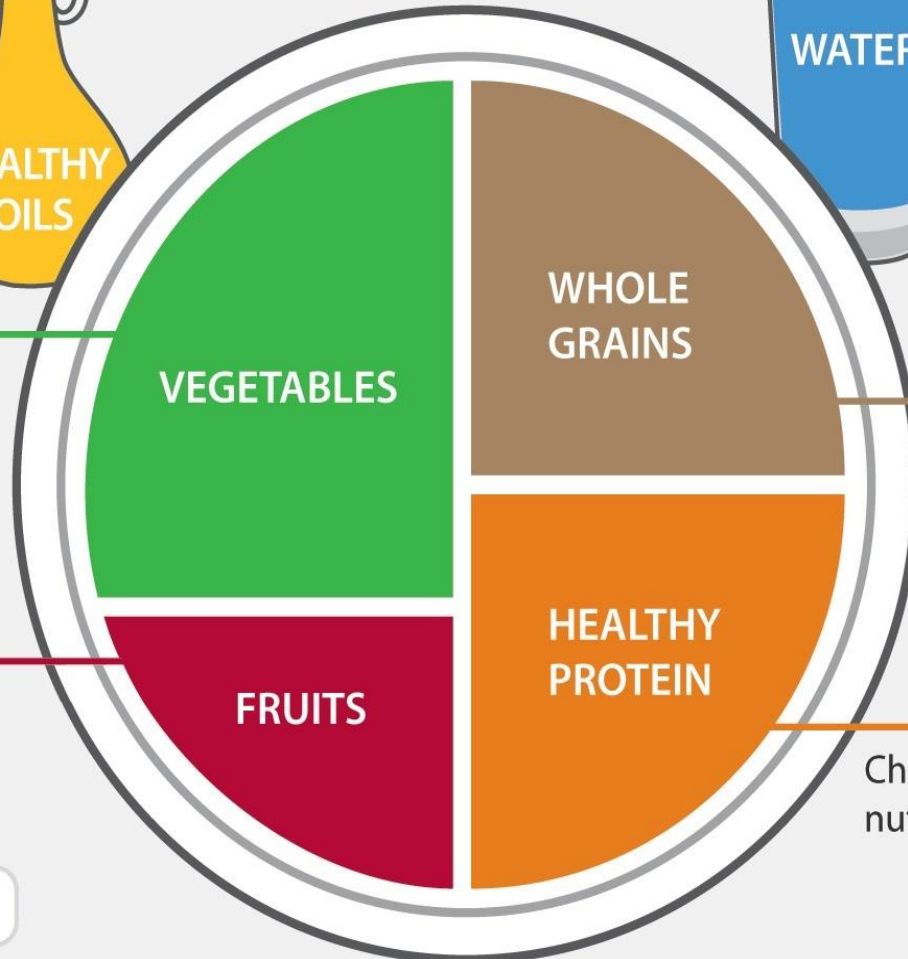
HEALTHY EATING PLATE



Use healthy oils (like olive and canola oil) for cooking, on salad, and at the table. Limit butter. Avoid trans fat.



Drink water, tea, or coffee (with little or no sugar). Limit milk/dairy (1-2 servings/day) and juice (1 small glass/day). Avoid sugary drinks.



The more veggies – and the greater the variety – the better. Potatoes and French fries don't count.

Eat a variety of whole grains (like whole-wheat bread, whole-grain pasta, and brown rice). Limit refined grains (like white rice and white bread).

Eat plenty of fruits of all colors.

Choose fish, poultry, beans, and nuts; limit red meat and cheese; avoid bacon, cold cuts, and other processed meats.



STAY ACTIVE!

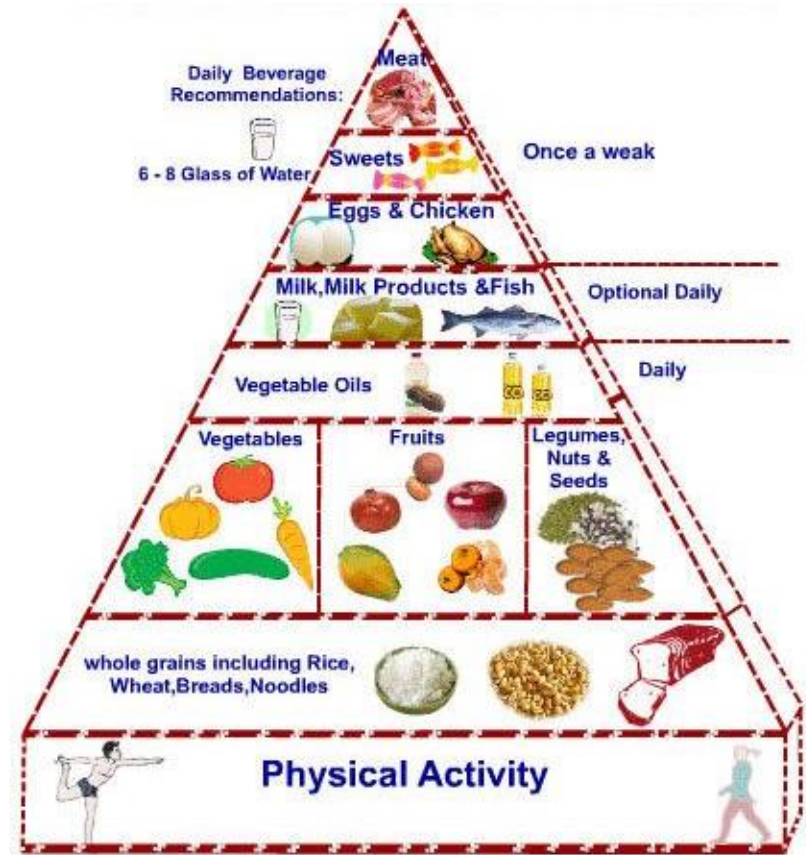
Food pyramid

- A representation of the optimal number of servings to be eaten each day from each of the basic food groups.
- The first pyramid was published in Sweden in 1974.
- The 1992 pyramid introduced by the United States Department of Agriculture (USDA) was called the "Food Guide Pyramid" or "Eating Right Pyramid".
- It was updated in 2005 to "My Pyramid", and then it was replaced by "My Plate" in 2011.



Indian Food Pyramid

- The pyramid is divided into four levels of foods according to recommended consumption: cereals and legumes/beans at the base should be eaten in sufficient quantity, vegetables and fruits on the second level should be eaten liberally, animal source foods and oils on the third level are to be eaten moderately, and at the apex, highly processed foods high in sugar and fat to be eaten sparingly.
- Accompanying the pyramid there is a recommendation to do regular physical activity and warnings against smoking and drinking alcohol.



Importance of the Nutrition values, food safety and well being



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Food

Eating food is a risky process



Innate Immunity and traditional culinary practices are major protective factors



Food Safety

- A suitable product which when consumed orally either by a human or an animal does not cause health risk to consumer.

OR

- Assurance that food will not cause harm to the consumer when it is prepared and/ or eaten according to its intended use.

Food Safety: Why?????

- Changing food habits
- Increased processing and handling
- Changing processes, products
- Globalization of food trade



Summary & Conclusion

- Good Nutrition Improves Well-Being
- Eating a poor diet reduces physical and mental health because eating healthy allows people to be more active.
- Two-thirds of people who eat fresh fruit and vegetables daily report no physical / mental health issues.
- Its Expensive To Be Unhealthy.
- A Healthy Weight Eating a nutritious diet filled with fruits, vegetables, whole grains, dairy and protein will help maintain a healthy body weight.

QUESTIONS...???....???



Nutritious & Balanced Diet

THANK YOU



Well being....