

Balanced Diet: Importance and Necessity

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Abstract:

A balanced diet is a diet that contains differing kinds of foods in certain quantities and proportions so that the requirement for calories, proteins, minerals, vitamins and alternative nutrients is adequate and a small provision is reserved for additional nutrients to endure the short length of leanness. In addition, a balanced diet ought to offer bioactive phytochemicals like dietary fiber, antioxidants and nutraceuticals that have positive health advantages. A balanced diet should offer around 60-70% of total calories from carbohydrates, 10-12% from proteins and 20-25% of total calories from fat.

- Healthy eating increases energy, improves the way your body functions, strengthens your immune system and prevents weight gain. The other major benefits are:
- Meets your nutritional need. A varied, balanced diet provides the nutrients you need to avoid nutritional deficiencies.
- Prevent and treat certain diseases. Healthful eating can prevent the risk of developing certain diseases such as diabetes, cancer and heart disease. It is also helpful in treating diabetes and high blood pressure.
- Following a special diet can reduce symptoms, and may help you better manage an illness or condition.
- Feel energetic and manage your weight. A healthy diet will assist you to feel higher, provide you with more energy, and help you fight stress.
- Food is the mainstay of many social and cultural events. Apart from nutrition properties, it helps facilitate connections between individuals.

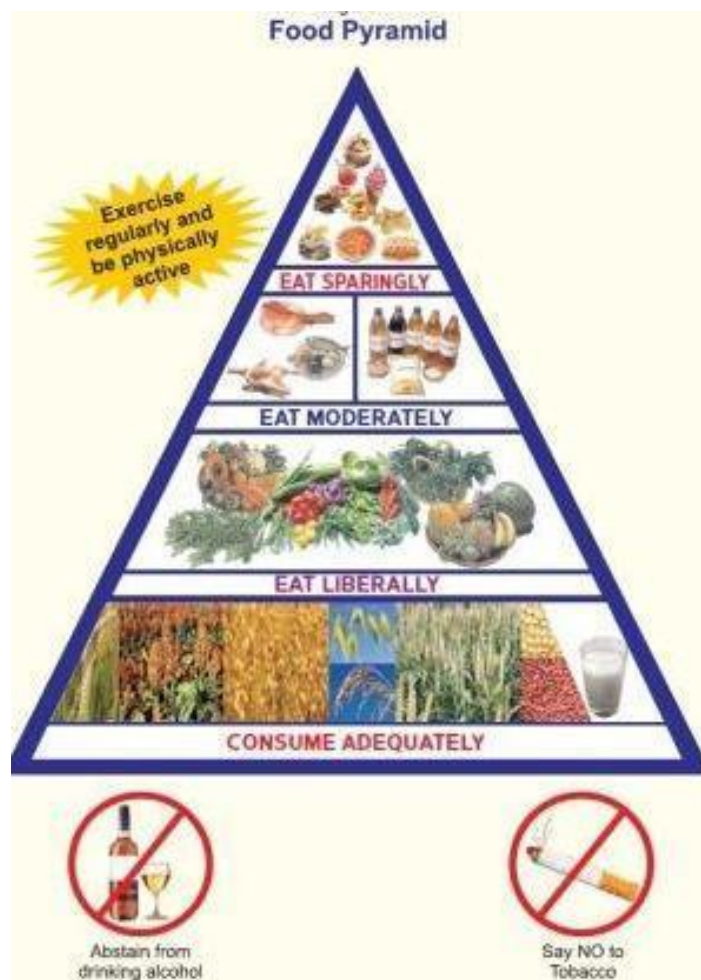
Keywords: balanced diet, phytochemicals, nutraceuticals, weight, diseases, healthy, nutrition.

Introduction

- The most important rule of healthy eating is not skipping any meal. Skipping meals lowers your metabolic rate. Normal eating includes 3 major meals and 2 snacks between meals. Also, Never skip breakfast. It is the foremost vital meal of the day.
- Learn simple ways to prepare food. Healthy eating doesn't have to mean complicated eating. Keep meal preparation easy, eat more raw foods such as salads, fruits and vegetable juices, and focus on the pleasure of eating healthy food rather than the calories.
- It is important to stop when you feel full. This will help you maintain your weight to an extent. This also will help you remain alert and feeling your best.[1,2]
- Drink lots of water. Keep a bottle of water near you while working, watching TV, etc.
- Variety of foods should be used in the menu. No single food has all the nutrients.

- To improve the cereal and pulse protein quality, a minimum ratio of cereal protein to pulse protein should be 4:1. In terms of the grains, it will be eight parts of cereals and one part of pulses.
- Eat five portions of fruit and vegetables every day.
- Keep a supply of healthy snacks to hand. This will stop you from eating an unhealthy snack when hungry.
- Remove all visible fat from food before you cook it – take the skin off chicken and trim the white fat off any meat.
- Limit stimulants such as caffeine, alcohol and refined sugar.[3,4]
- Limit the number of times you eat out to once a week. Take your own packed lunch to work.
- Only eat things you like the taste of – find what works for you and don't force yourself to eat things just because they're good for you.

With today's fast life, cooking a meal in the traditional style is extinct. People mostly opt for eating less healthy fast foods, ready to eat meal packets, etc. To make a healthy meal, the most important thing is to cook it at your home, rather than opting for outside cooked food. Explore healthy ways to add variety to your meals as repetition can cause boredom. Infuse your diet with the excitement and good taste you crave for. Here are a few suggestions for cooking healthily.[5,6]



Having to choose healthy food does not mean you need to give up on your favorites. Think of how you can turn your favorites into a healthy option. For instance:

- Decrease the meat and add more vegetables to your dishes.
- Use whole wheat flour instead of refined flour when you bake.
- Blot your fried foods to take off the extra oil.
- Use low-fat yogurt instead of mayonnaise
- Add cut fruits to your curd, rather than having flavored yogurt
- Try to skim milk instead of a normal one.
- Use non-stick cookware to reduce the need for oil to cook.
- Microwave or steam your vegetables rather than boiling to avoid loss of nutrients.
- Fats in your foods should be maintained a minimum.[7,8]
- Choose lean meats and skim dairy products. Fats are good in the form of nuts, seeds, fish, olives when they are accompanied by other nutrients. Some amount of fats while cooking is good as to help the body to absorb fat-soluble vitamins.
- If you wish to use oil, try cooking sprays or apply oil with a pastry brush. Cook in liquids (such as vegetable stock, lemon juice, fruit juice, vinegar or water) instead of oil. Use low-fat yogurt, low-fat soymilk evaporated skim milk or cornstarch as a thickener instead of cream.
- Choose to scrub the vegetables than peel as there are many nutrients in the skin. When you have to boil the vegetables, retain the vitamin-rich water and use it as a stock in another preparation.
- Switch to a reduced salt wholemeal or wholegrain bread.
- For sandwiches, limit your use of spreads high in saturated fat like butter and cream cheese; replace with scrapings of spread or alternative nut spreads or low-fat cheese spreads or avocado. Choose reduced-fat ingredients like low-fat cheese or salad dressing.
- Add a lot of vegetables to your sandwich to make it healthier.[9,10]

Discussion

Requirements are the quantities of nutrients that healthy individuals must obtain from food to meet their physiological needs. The recommended dietary allowances (RDAs) are estimates of nutrients to be consumed daily to ensure the requirements of all individuals in a given population. The recommended level depends upon the bioavailability of nutrients from a given diet. The term bioavailability indicates what is absorbed and utilized by the body. In addition, RDA includes a margin of safety, to cover variation between individuals, dietary traditions and practices. The RDAs are suggested for physiological groups such as infants, pre-schoolers, children, adolescents, pregnant women, lactating mothers, and adult men and women, taking into account their physical activity. In fact, RDAs are suggested averages/day. However, in practice, fluctuations in intake may occur depending on the food availability and demands of the body. But, the average requirements need to be satisfied over a period of time.[11,12]

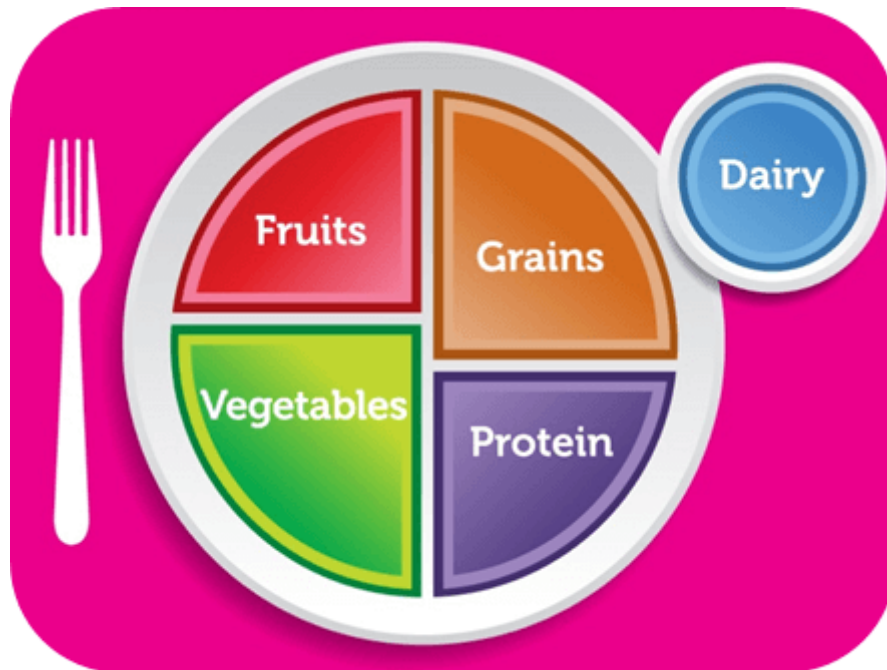


Plate tool as accessed on choosemyplate.gov, as on October 7 2016

Question	Answer
What is a balanced diet?	A variety of food in the right amounts.
What happens when people do not have a balanced diet?	The body becomes weak and they catch diseases easily. They become malnourished.
What three food groups do we need to have a balanced diet?	GO, GROW, and GLOW.
What does a child with a balanced diet look like and feel like?	Healthy, active and growing well.
Give two examples of food from each of the three food groups.	GO: rice and maize; GROW: meat and beans; GLOW: avocados and bananas.
Give three reasons why children do not get a balanced diet?	People do not know what a balanced diet is, people do not grow or harvest or buy enough good food, people spend their money on food that is not good (junk/fast food), people do not have money to buy good food.
Do boys and girls need equal amounts of food?	Yes, boys and girls have similar needs for food. Larger children or children who are very active might need more GO food.
Do some foods belong in only one food group? Give examples!	No, most foods belong in more than one food group but it is MOSTLY IN one e.g. maize and potatoes are mostly GO foods although they can help us GLOW and GROW just a little. There are few foods that are WHOLE foods some examples are avocados, coconuts, nuts and seeds.

Our diet must provide adequate calories, proteins and micronutrients to achieve maximum growth potential. Therefore, it is important to have appropriate diet during different stages of one's life . There may be situations where adequate amounts of nutrients may not be available through diet alone. In such high risk situations where specific nutrients are lacking, foods fortified with the limiting

Nutrients become necessary. A good example of such fortified foods is the salt fortified with iron and iodine.[13,14]

Senior Citizens: For being physically active and healthy require nutrient dense low fat foods.

Pregnancy: For maintaining health, productivity and prevention of diet-related diseases and to support pregnancy/lactation require nutritionally adequate diet with extra food for child bearing/rearing.

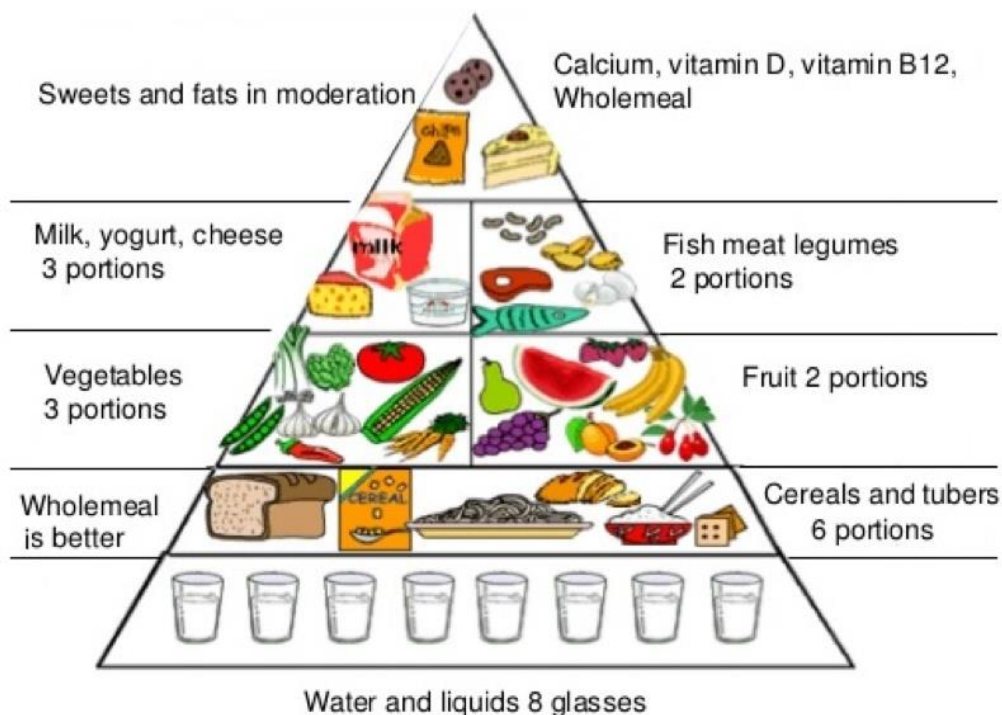
Adolescent: For growth spurt, maturation and bone development require body building and protective foods.

Child Age: For growth, development and to fight infections require Energy, body building and protective food.

Infant: For growth and appropriate milestones require Breast milk, energy rich foods.

Calories in foods represent the energy stored in that food. The human body uses calories to perform daily activities such as breathing, moving, thinking, walking, and other vital functions. The average amount of calories needed for a person is about 2000 calories per day to maintain their current weight. However, the daily calorie requirement varies according to the person’s sex, age, and level of physical activity. For example, men usually need more calories than women. Empty calories are found in food providing large amounts of calories without having a good nutritional value. Examples of empty calories foods are soda and energy drinks, cookies and cakes, fries and chips, pizza, ice cream, and processed meat. Therefore, the consumption of foods with empty calories should be limited in order to maintain a healthy life.[15,16]

A food pyramid for the elderly



Results

A healthy balanced diet should contain different vegetables and fruits every day, **starchy food** with higher fiber like bread, dairy products or their alternatives, **proteins** such as meat, fish, beans, or eggs, small amounts of **unsaturated fats**, and about 6 to 8 glasses of fluids.

To get different nutrients, you should eat the healthiest foods while avoiding foods with added sugars, foods with high salt content, saturated fats, and processed food.

Why is it important to eat healthily? A well-balanced diet provides the human body with essential nutrients needed to allow the body to effectively perform different activities. Without balanced nutrition, the body is more susceptible to fatigue, infections, diseases, and reduced activity. On the other hand, children should have a balanced diet containing different nutrients in order to avoid impaired development and growth, different infections, and low academic performance. Children who do not consume enough healthy foods are most likely to develop persistent unhealthy eating habits into adulthood. Moreover, overweight children have a higher risk of developing heart disease, type 2 diabetes, and cancer in their adulthood.[17,18]

Eating well ensures proper nutrition that keeps the body active and healthy. A healthy proper diet protects the body against *noncommunicable diseases*, such as heart disease, stroke, cancer, and diabetes that are the most common leading causes of death in the United States. It also protects the body against malnutrition.

Lack of physical activities and an unbalanced diet are global health risks. In order to avoid weight gain, calorie intake should be balanced, the intake of saturated fats should be minimized, and decrease salt intake. Increased intake of saturated fats elevates blood cholesterol levels and eventually increases the risk of heart disease development.

Eating and drinking large amounts of sugars increase the risk of tooth decay and obesity. Too much salt may increase blood pressure, which consequently increases the risk of developing a stroke or heart disease.

Conclusions

What are the food groups? A balanced diet plan should include all daily nutritional requirements from five groups of food; they are vegetables, fruits, grains, protein, and dairy. Different groups of food provide us with the needed calories to do our daily activities. However, consuming calories more than the body needs will eventually lead to unhealthy weight gain because extra calories are not consumed but stored in the body as fats. The total calorie intake should include less than 10% of it from free sugars added to foods or drinks. But how much fat per day? fats should represent less than 30% of the total intake of energy as you should have a low-fat diet.[19]

Fats are found as unsaturated recommended fats in nuts, sunflower, fish, olive oils, avocado, and soybean, whereas saturated fats are not recommended and can be found in coconut oil, butter, fatty meat, and cheese. The intake of saturated fat per day should be limited to about 5% of total calories. *Trans-fats* are found in all pre-packed snacks such as biscuits, fried foods, cookies, pies, and pizza. Trans-fats are industrially produced; therefore, their intake should be avoided.

Each food group provides the body with different nutrients; therefore, we should include foods from all five groups in our daily food intake to make sure we get the full range of nutrients needed for our bodies to effectively function and stay healthy. Consequently, excluding one or more food groups will negatively affect the body. For example, cutting starchy carbohydrates may decrease the intake of B vitamins and dietary fiber.[20,21]

	Breakfast	Snack	Lunch	Snack	Dinner
Day 1	Cucumber detox drink Oatmeal in low-fat milk	100 Gram Paneer Mix Vegetable Salad	1 cup lentils 1 cup sabzi 1 chapati	1 glass of buttermilk 1 cup of chopped fruits 1 cup of tea with milk and less sugar	1 cup lentils 1 cup sabzi 1 chapati
Day 2	rebootwithnature.in Cucumber detox drink 1.5 cup curd, 2 chapatis, and 1 cup mixed vegetable	100 Gram Paneer Mix Vegetable Salad	1 cup lentils half cup of methi rice	1 glass of buttermilk 1 apple half cup of coffee with milk and less sugar	1 cup of sautéed vegetables 1 chapati 1 cup paneer rebootwithnature.in
Day 3	Cucumber detox drink Oatmeal in low-fat milk	100 Gram Paneer Mix Vegetable Salad	1 cup lentils 1 cup sabzi 1 chapati	1 glass of buttermilk 1 cup of chopped fruits 1 cup of tea with milk and less sugar	1 cup lentils 1 cup sabzi 1 chapati
Day 4	Cucumber detox drink 1 cup low-fat yogurt 2 multigrain toast	100 Gram Paneer Mix Vegetable Salad	rebootwithnature.in 1 cup of sautéed vegetables 1 chapati, 1 cup paneer	a half small-sized banana 1 glass of buttermilk vegetable salad	3/4 cup lentils half cup of methi rice
Day 5	Cucumber detox drink 3/4 Cup Yogurt Smoothie	100 Gram Paneer Mix Vegetable Salad	1 cup lentils 1 cup sabzi 1 chapati	1 glass of buttermilk 1 glass orange juice 1 cup of tea with milk and less sugar	1 Cup Palak 1 cup of rice
Day 6	Cucumber detox drink 1 glass low-fat milk 1.5 cup Peas Poha	100 Gram Paneer Mix Vegetable Salad	1.5 cup skimmed Paneer Curry 1 Missi Roti	1 Cup Papaya 1 Cup Buttermilk 1 cup of tea with milk and less sugar	Half cup curd 1 cup sabzi 1 chapati
Day 7	Cucumber detox drink 1 Cup Sambhar 2 Idli	100 Gram Paneer Mix Vegetable Salad	Half cup curd 1 cup sabzi 1 chapati	1 glass of buttermilk 1 cup of chopped fruits 1 cup of tea with milk and less sugar	1 cup green lentils 1 cup sabzi 1 chapati

References

1. ^ "Told to Eat Its Vegetables, America Orders Fries" article by Kim Severson in *The New York Times* September 24, 2010, accessed September 25, 2010
2. ^ "Policy and Action for Cancer Prevention Food, Nutrition, and Physical Activity" (PDF). *World Cancer Research Fund & American Institute for Cancer Research*. 2010. Archived from the original (PDF) on 2015-09-11. Retrieved 2016-04-28.
3. ^ The embodied energy of food: the role of diet DA Coley, E Goodliffe, J Macdiarmid (1998) *Energy Policy* 26 (6), 455-460
4. ^ "Vegetarian diet: How to get the best nutrition". *Mayo Clinic*. Retrieved 2021-04-06.
5. ^ Melina, Vesanto; Craig, Winston; Levin, Susan (December 2016). "Position of the Academy of Nutrition and Dietetics: Vegetarian Diets". *Journal of the Academy of Nutrition and Dietetics*. **116** (12):1970–1980. doi:10.1016/j.jand.2016.09.025. ISSN 2212-2672. PMID 27886704.
6. ^ "Healthy Eating: How do you get started on healthy eating?". *Webmd.com*. 2009-10-12. Retrieved 2011-12-11.
7. ^ Aphramor, Lucy (2010-07-20). "Validity of claims made in weight management research: a narrative review of dietetic articles". *Nutrition Journal*. **9** (1): 30. doi:10.1186/1475-2891-9-30. ISSN 1475-2891. PMC 2916886. PMID 20646282.
8. ^ "Diets". *medlineplus.gov*. Retrieved 2021-05-28.
9. ^ "Body Weight". *MedlinePlus*. Retrieved June 26, 2020.

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10. ^ "Eating Disorders". *medlineplus.gov*. Retrieved 2020-04-10.
11. ^ "NIMH » Eating Disorders". *www.nimh.nih.gov*. Retrieved 2020-04-10.
12. ^ Keown, Damien (26 August 2004). *A Dictionary of Buddhism*. Oxford University Press. p. 77. ISBN 9780191579172.
13. ^ Marcos 7:14-23
14. ^ Mateo 15:10-20
15. ^ "Code of Canon Law". *vatican.va*. Retrieved July 28, 2013.
16. ^ James Tabor, *The Jesus Dynasty* p. 134 and footnotes p. 335, p. 134 – "The Greek New Testament gospels says John's diet consisted of "locusts and wild honey" but an ancient Hebrew version of Matthew insists that "locusts" is a mistake in Greek for a related Hebrew word that means a cake of some type, made from a desert plant, similar to the "manna" that the ancient Israelites ate in the desert on the days of Moses.(ref 9) Jesus describes John as "neither eating nor drinking," or "neither eating bread nor drinking wine." Such phrases indicate the lifestyle of one who is strictly vegetarian, avoids even bread since it has to be processed from grain, and shuns all alcohol.(ref 10) The idea is that one would eat only what grows naturally.(ref 11) It was a way of avoiding all refinements of civilization."
17. ^ Bart D. Ehrman (2003). *Lost Christianities: The Battles for Scripture and the Faiths We Never Knew*. Oxford University Press. pp. 102, 103. ISBN 978-0-19-514183-2. p. 102 – "Probably the most interesting of the changes from the familiar New Testament accounts of Jesus comes in the Gospel of the Ebionites description of John the Baptist, who, evidently, like his successor Jesus, maintained a strictly vegetarian cuisine."
18. ^ James A. Kelhoffer, *The Diet of John the Baptist*, ISBN 978-3-16-148460-5, pp. 19–21
19. ^ G.R.S. Mead (2007). *Gnostic John the Baptizer: Selections from the Mandæan John-Book. Forgotten Books*. p. 104. ISBN 978-1-60506-210-5. p. 104 – "And when he had been brought to Archelaus and the doctors of the Law had assembled, they asked him who he is and where he has been until then. And to this he made answer and spake: *I am pure; [for] the Spirit of God hath led me on, and [I live on] cane and roots and tree-food.*"
20. ^ https://journals.lww.com/co-endocrinology/Abstract/2020/10000/Can_a_carnivore_diet_provide_all_essential.11.aspx?context=LatestArticles "Can a carnivore diet provide all essential nutrients?"
21. ^ PATNAIK, BISWARAJ. "Study shows ancient Hindus ate meat-heavy food". *The Pioneer (India)*.