

# Topic 1: Introduction to Healthy Nutrition

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**Relevance of the topic:** Good nutrition is an important part of leading a healthy lifestyle. Combined with physical activity, your diet can help you to reach and maintain a healthy weight, reduce your risk of chronic diseases (like heart disease and cancer), and promote your overall health.

**Aim of the topic:** Give information to you about principles of healthy nutrition on examples of Healthy Nutrition Pyramid and Healthy Nutrition Plate.

## Questions for prepare:

1. What is healthy nutrition?
2. What are the main principles of healthy nutrition?
3. What are the main differences between Healthy Nutrition Pyramid and Healthy Nutrition Plate?
4. Pyramid and Healthy Nutrition Plate?

## 1.1 Principles of healthy nutrition

**Healthy nutrition** means eating a variety of foods that give you the nutrients you need to maintain your health, feel good, and have energy. These nutrients include protein, carbohydrates, fat, water, vitamins, and minerals.

Consuming a healthy nutrition throughout the life-course helps to prevent malnutrition in all its forms as well as a range of noncommunicable diseases (NCDs) and conditions. However, increased production of processed foods, rapid urbanization and changing lifestyles have led to a shift in dietary patterns. People are now consuming more foods high in energy, fats, free sugars and salt/sodium, and many people do not eat enough fruit, vegetables and other dietary fiber such as whole grains.

The exact make-up of a diversified, balanced and healthy diet will vary depending on individual characteristics (e.g. age, gender, lifestyle and degree of physical activity), cultural context, locally available foods and dietary customs. However, the basic principles of what constitutes a healthy diet remain the same.

A healthy nutrition for school-aged children 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 2 serves 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, which is equivalent to 50 g (or about 12 level teaspoons) for a person of healthy body weight consuming about 2000 calories per day, but ideally is less than 5% of total energy intake for additional health benefits. 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) and *trans*-fats of all kinds, including both industrially-produced *trans*-fats (found in baked and fried foods, and pre-packaged snacks and foods, such as frozen pizza, pies, cookies, biscuits, wafers, and cooking oils and spreads) and ruminant *trans*-fats (found in meat and dairy foods from ruminant animals, such as cows, sheep, goats and camels). 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.

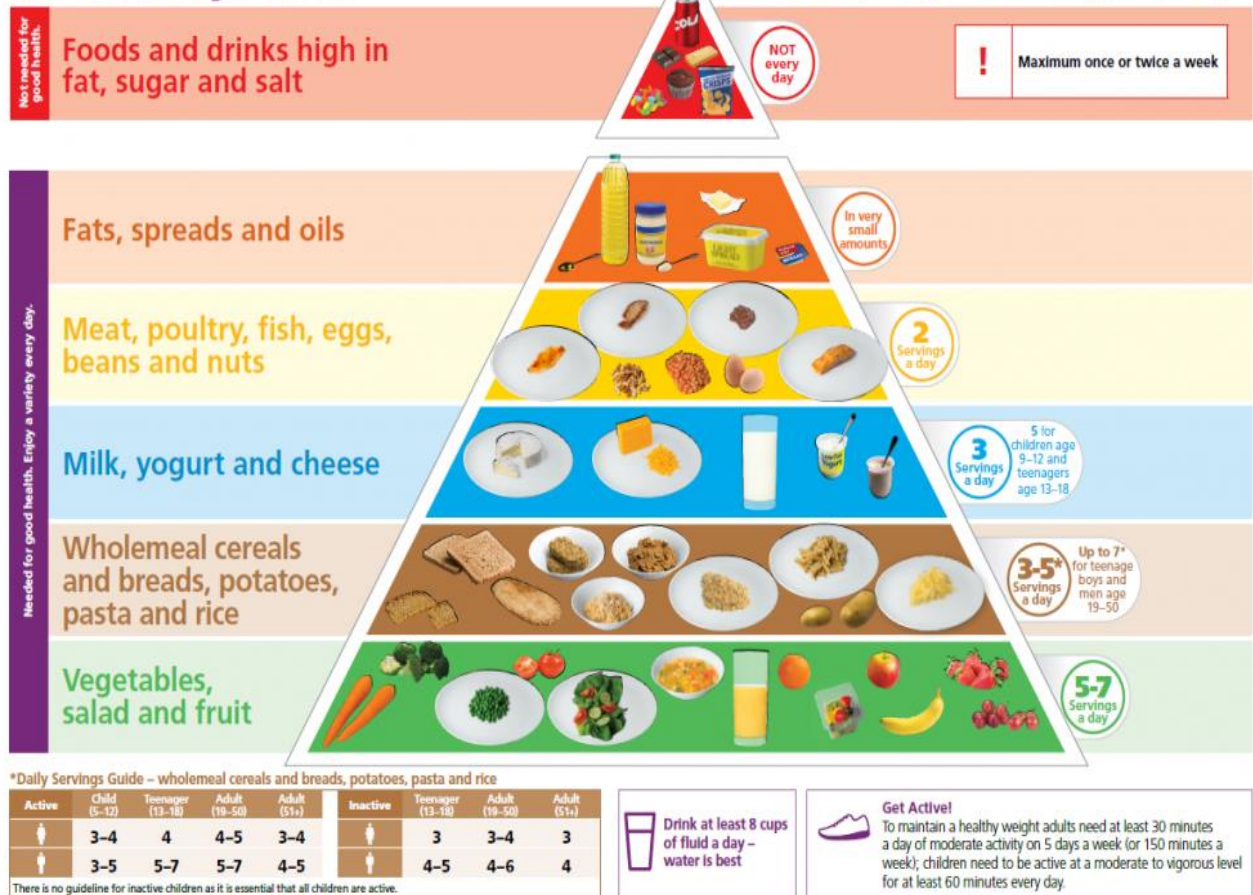
- Less than 5 g of salt (equivalent to about one teaspoon) per day. Salt should be iodized.

## **1.2 Healthy Nutrition Pyramid and Healthy Nutrition Plate**

The Harvard Healthy Eating Pyramid represents the latest nutritional science. The widest part at the bottom is for things that are most important. The foods at the narrow top are those that should be eaten sparingly, if at all. The Food Pyramid is designed to make healthy eating easier. Foods that contain the same type of nutrients are grouped together on each of the shelves of the Food Pyramid. This gives you a choice of different foods from which to choose a healthy diet. Following the Food Pyramid as a guide will help you get the right balance of nutritious foods within your calorie range. Studies show that we take in too many calories from foods and drinks high in fat, sugar and salt, on the top shelf of the Food Pyramid. They provide very little of the essential vitamins and minerals your body needs. Limiting these is essential for healthy eating (Figure 1).

# The Food Pyramid

For adults, teenagers and children aged five and over



Source: Department of Health, December 2016.

Figure 1. Healthy Nutrition Pyramid

In 2011, it switched to a new graphic of a plate filled with the proper amounts of foods. Known as MyPlate, it focuses on variety, amount, and nutrition for each meal. Healthy eating is important in managing or preventing chronic disease and enjoying a better quality of life.

**The Healthy Nutrition Plate** (Figure 2) is based on the most up-to-date nutrition research, and it is not influenced by the food industry or agriculture policy. The Healthy Eating Plate does not define a certain number of calories or servings per day from each food group. The relative section sizes suggest approximate relative proportions of each of the food groups to include on a healthy plate. They are not based on specific calorie amounts, and they are not meant to prescribe a certain number of calories or servings per day, since individuals' calorie and nutrient needs vary based on age, gender, body size, and level of activity.

# HEALTHY EATING PLATE

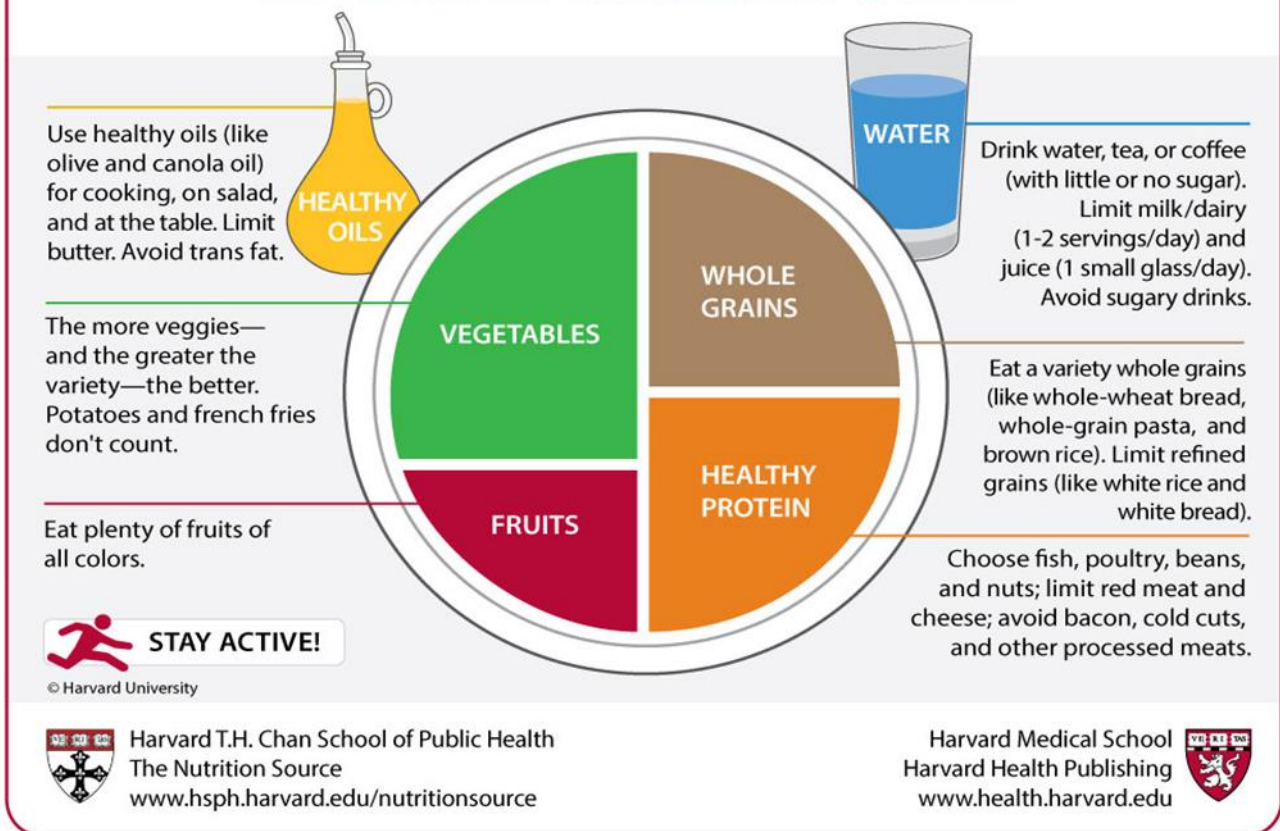


Figure 2. Healthy Nutrition Plate

**Vegetables** should form at least a quarter of the food we eat. The more varied the vegetables and preparation methods, the better. Chips don't count as vegetables, and potatoes belong to the polysaccharide group, because of their content.

**Fruit** is the second quarter of the plate. The healthiest and most nutritious is to eat a range of different types and colours that are in season. You can substitute fruit by eating vegetables instead.

**Drinks:** The best drinks are pure water and unsweetened tea. Human is better off leaving sweetened drinks out altogether.

**Polysaccharides** are best in their natural form. For example, millet grains, oats, rye sourdough bread, and wild rice. It is important to limit the amount of processed white flour products that you eat.

**Protein:** Good protein is from fish, beans and legumes, nuts, seeds, soured milk products, eggs, and meat. A better ration of vegetable protein would benefit almost all of us.

**Oils and Fats** are the most valuable in healthy super foods, such as nuts, avocado, and fish. Good quality butter and cold pressed vegetable oils are also suitable. Don't eat margarine, and limit other industrially modified fats and oils.

## References

1. Harvard Health Publishing, Harvard Medical school - Healthy Eating Plate, Updated: June 5, 2017Published: September, 2011.
2. Kaitlin Vogel “The Food Pyramid Just Got Updated With Harvard’s “Healthy Eating Plate” – Here Are the Pros and Cons”.
3. 2011, Harvard University. For more information about The Healthy Eating Plate, please see The Nutrition Source, Department of Nutrition, Harvard School of Public Health, [www.thenutritionsource.org](http://www.thenutritionsource.org), and Harvard Health Publications, [www.health.harvard.edu](http://www.health.harvard.edu).
4. WHO - Healthy diet, 23 October 2018.