

The Six Elements of Nutrition

Tutor's Handbook



Six Elements of Nutrition

What are the Six Elements?

We know that in order to be healthy, we need to maintain a 'balanced diet'; but what elements should we be balancing in our diet to look after our overall health and also to maintain a healthy weight? The aim of this resource is to present you with an overview of the six elements that we need to consume in order to adhere to our body's nutritional needs. So, what are the six elements? They include:

1. Water
2. Carbohydrates
3. Minerals
4. Vitamins
5. Proteins
6. Fats

Through this handbook, we will briefly introduce these six elements and then we will suggest a meal planning activity that you can prepare for members of your local health network.

Water

Water should mean more to use than just a means of quenching our thirst. Water is, in fact, a major nutritional element that helps regulate body temperature, lubricate your joints and protect your major organs and tissues. Water also helps transport important substances, like oxygen, throughout your body. Aim to drink at least eight 8 glasses of water every day.

Carbohydrates

Carbohydrates are your body's major source of energy. The fibre found in whole grains, fruits and vegetables also helps reduce your risk of obesity, cardiovascular diseases and type 2 diabetes. Experts recommend getting 45 to 65 percent of your daily calories from carbohydrates.

Minerals

Minerals are substances that allow your body to grow and develop properly. Minerals are divided into two classes based on how much of each nutrient your body needs. Your body needs the major minerals – sodium, potassium, calcium, phosphorus, magnesium, sulfur and chloride – in large amounts, while the trace minerals – copper, fluoride, zinc, iron, chromium, selenium, iodine, molybdenum and manganese – are needed in small amounts. The exact amount needed varies by mineral.

Proteins

We find proteins throughout the body, in muscle, in bone and in body fluids. They are needed throughout life to form and repair tissues but especially in certain determining moments, such as pregnancy, lactation, childhood, adolescence, etc., in which the requirements are greater due to the increase in tissue formation. They are found in eggs, meat, fish, milk and its

derivatives, and in legumes, cereals and nuts.

Vitamins

Vitamins are essential nutrients, since they cannot be synthesized in the body and have to be ingested with the diet. Their main function is to regulate metabolic reactions that take place in the body. They are necessary in very small quantities, but their deficit can produce many deficiency diseases.

Fats

Fat has developed a bad reputation over the years, but it is actually a major nutritional element and a vital aspect of a healthy diet. Fat helps insulate your body, allowing you to maintain your body temperature. Fat also cushions your organs, which can help protect them from trauma. Although fat is important, too much can be bad for your health. Limit your total fat intake to 20 to 35 percent of your daily calories. Aim to meet your fat requirements from unsaturated fats, such as nuts, nut butters, seeds, avocado and olive oil.

How to use this Resource with your Local Health Group?

This handbook presents some introductory information on different elements that we need to incorporate into our diets in order to have good nutrition. It contains the same information that your local health network

members will be able to access through the digital resource.

To accompany this handbook, you will also find a short PowerPoint presentation that can be used with your local health network to introduce these different nutritional elements. This presentation gives some of the basic information that is included in this handbook. To use this resource with your local group, we recommend that you first play the short video lecture, talk through the PowerPoint slides given and the lead a group discussion on the topic of nutrition.

The aim of this resource is to show local communities and families the types of foods they need to incorporate into their diets and the additional supplements, minerals and vitamins they need to be able to maintain good nutrition. All group members may not be aware of the different elements that make up good nutrition, so we have designed a short activity that you can complete with your group to enhance their understanding

Group Activity

Once you have shared the digital resource and the PowerPoint presentation with your group members, you can start a group discussion about their understanding of nutrition. For this, ask people to discuss the different nutritional elements presented, by asking:

- Where you aware of all these different nutritional elements?

- Do you regularly incorporate vitamins and minerals into your diet?
- Do you monitor how much water you and your family members drink?

Next you can show group members the two examples included in this handbook of meal planning for children and adolescents. This example was taken from healthline.com, to show the needs of two young people and how different they are. When planning meals for a family, we often make smaller portions of adult meals for children and adolescents, whereas they have different nutritional needs altogether. For this activity, you can show group members the two sample menus, and ask them to work in pairs to identify the different elements of nutrition in each meal that is featured on the meal plan. Once they have completed this, they can share their findings with the group. As a follow-up activity, or a homework assignment, ask group members to consider the nutritional needs of people in their household and to draft a weekly meal plan to incorporate all six elements of nutrition, as shown in this resource. Group members can bring their meal plans along to the next group session to discuss and get feedback from group members.

Meal Planning Activity

Adapted from Healthline.com

A Day in the Life of a 6-Year-Old

Breakfast:

- 1 oz. grains (e.g., 1 slice whole grain toast)
- 1 oz. protein (e.g., 1 tbsp. nut/seed butter)
- 1 cup dairy or dairy equivalent (e.g., 1 cup milk of choice)

Snack:

- 1 cup fruit (e.g., a banana)
- 1/2 oz. grains (e.g., 1/2 cup oat-based cereal)

Lunch:

- 2 oz. protein + 1 tsp. oil (e.g., 2 oz. protein of choice, cooked in 1 tsp. olive oil)
- 1/2 cup vegetables + 1 tsp. oil (e.g., 1/2 cup carrots roasted in 1 tsp oil)
- 1 oz. grains (e.g., 1/2 cup cooked rice)

Water

Snack:

- 1/2 cup vegetables (e.g., 1/2 cup celery sticks)
- 1 oz. protein (e.g., 2 tbsp. hummus)

Water

Dinner:

- 2 oz. grains (1 cup cooked pasta)
- 1 oz. protein of choice
- 1/2 cup vegetables

Water

Dessert:

- 1 cup dairy/dairy equivalent (e.g., 1 cup yogurt of choice)
- 1/2 cup fruit (e.g., 4 strawberries)

A Day in the Life of a 14-Year-Old

Breakfast:

- 1oz. grains + 1 cup dairy/dairy equivalent (e.g., oatmeal: 1/3 cup dry oats + 1 cup milk)
- 1oz. protein (e.g., 12 almonds)
- 1/2 cup fruit (e.g., 1/2 Granny Smith apple)
- 1 cup dairy/dairy equivalent (e.g., 1 cup milk of choice)

Snack:

- 1 oz. grains (1 oz. whole grain crackers)
- 1 oz. protein (1 tbsp. nut/seed butter)

Water

Lunch – Sandwich + Water:

- 2 oz. grains (e.g., 2 slices of 100 percent whole-grain bread)
- 2 oz. protein of choice
- 1 cup vegetables (e.g. tomato, lettuce, cucumbers, etc.)
- 1/4 cup avocado
- 1 cup fruit (e.g., a banana)

Snack:

- 1 cup dairy/dairy equivalent (1 cup yogurt of choice)

Dinner:

- Chili, cooked in 1 tbsp. of olive oil:
- 2 oz. protein (e.g., 1/2 cup beans of choice)
- 1/2 cup vegetables (e.g., 1/2 cup red and green peppers)
- 1 1/2 cups vegetables (e.g., 1/2 cup corn, 1/2 cup red and green peppers, 1/2 cup tomato puree)
- 2 oz. grains (e.g., 1 large slice cornbread)

Water



ON CALL

Lay Community Health Advisors



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