



THE MINISTRY OF HEALTH OF TURKEY
General Directorate of Primary Health Care
Department of Nutrition and Physical Activity

HEALTHY NUTRITION BROCHURES



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ADEQUATE AND BALANCED NUTRITION



ADEQUATE AND BALANCED NUTRITION IS THE KEY TO A HEALTHY LIFE

Scientific researches identify almost 50 different nutrients that human beings need. The researches state how much daily intake is necessary of these nutrients for a person's healthy growth and development and also for that person to live a long, healthy, efficient life. If any one of these nutrients are not taken or taken more than necessary or less, is it scientifically proved that growth and development is hampered and health has deteriorated.



“ADEQUATE and BALANCED NUTRITION” is taking enough of the energy and nutrients necessary for the growth, renewal and proper functioning of the body and using them well.

For adequate and balanced nutrition, foods in the four main food groups should be consumed **adequately and in every meal**.

RECOMMENDATIONS FOR ADEQUATE AND BALANCED NUTRITION

- Consume adequately from each of the four food groups.
- Try to consume various foods.
- Do not skip meals. Especially do not start the day without breakfast.
- Try to keep your body weight balanced.
- Use less sugar and salt.
- Choose products made from unrefined grains.
- Prefer unsaturated oils to saturated animal fat.
- Drink at least 8-10 glasses of water every day.
- Refrain from alcohol consumption.
- Purchase safe foods and prepare them under hygienic conditions.
- Try to do regular physical activity along with adequate and balanced diet.

FRUIT AND VEGETABLES GROUP

All fruits and vegetables are in this group. These are rich in folic acid, carotenes (the precursor of vitamin A), vitamins E, C, B₂, calcium, potassium, iron, magnesium, fibers and other antioxidant components.

What is the daily required amount?

You need to consume at least 5 portions of fruits and vegetables a day. Moreover, at least two portions of this should be green-leaved vegetables or orange, tangerine etc. from the citrus family or tomatoes.

A medium sized orange, apple, pear, banana; 3-6 of apricots and plums, 10-15 strawberries, cherries and etc. is one portion of fruit. For green vegetables, 2-3 glasses when chopped; one medium sized potato or carrot; one small zucchini are a portion vegetable.

BREAD AND GRAINS GROUP

Grains like wheat, rice, corn, rye, oat, etc. and flour, bulgur (boiled and pounded wheat), and breakfast cereals etc. made from these are in this group. Unrefined foods of this group are especially rich in vitamin B group (mainly B₁), minerals, carbohydrates (starch), fiber, and other nutrients and are therefore important for your health.

What is the daily required amount?

You need to consume this group according to your energy expenditure. If you are overweight and have a sedentary lifestyle, you need to consume less of this group.

Depending on your weight, eating 1-2 slices of bread or 1-3 portions of the grains in every meal is enough. 3-4 spoons of rice or pasta, 1 bowl of soup, 1 medium sized potato, and 1 piece of pastry are a portion of the bread and grains group.

MILK GROUP

Milk, yogurt, cheese, curd, desserts and soups made with milk are in the milk group. They are the main source of calcium which is essential for bone growth and health. They are good sources for protein, vitamin B group, phosphorus, and zinc.

What is the daily required amount?

Two glasses for adults and for children, adolescents and pregnant, lactation period, post-menopause women 3-4 glasses worth of milk group nutrient consumption is necessary.

MEAT - EGG - LEGUMES GROUP

Meat, poultry, fish, eggs, lima beans, chick peas, lentil and seeds such as walnuts, nuts, and peanuts are in this group. This group is a good source for protein, iron, zinc, phosphorus, magnesium, vitamin B group. Legumes are also rich in fibers that activate the intestines.

What is the daily required amount?

You should consume two portions of this group daily. The portion amounts are as shown below.
Meat, poultry, fish, etc.: 50-60 grams
Legumes : 90 grams (half-a-cup)
Seeds : 30 grams
Eggs : 3-4, weekly
2 eggs are equal to 2-3 meatballs (60-90 grams).





PURCHASING FOOD



CHOOSING HEALTHY FOOD

For healthy nutrition;

- You need to choose natural and fresh foods.
- Avoid foods with a lot of additives.
- Prefer cereal that have been enriched or not refined (choosing brown bread with bran instead of white bread)
- Do not buy canned products with convex lids.
- Prefer low-salt foods.
- Choose fruits, milk or ayran instead of carbonated drinks.



CHECKING THE PACKAGES AND READING LABELS

Food packages should protect the product and avoid spoiling the best way possible.

Both the package and reading the labels are very important to protect the consumer.

While purchasing a product you need to check;

- The production and expiration date and the shelf life,
- The name and address of the producer,
- The permit given by the Ministry of Agriculture and Rural Affairs,
- The contents and the nutritive value,
- The net weight,
- The conditions for preparation, consumption, storage, and preservation,
- That the package is not damaged.

THINGS TO PAY ATTENTION TO WHILE PURCHASING FOOD

The quality and freshness of the food consumed is very important for people to be healthy.

For this reason;

- You should prepare a shopping list before going shopping.
- You should do a market research for the prices and chose food groups. There are cheap and expensive foods in each group. For example, apples are in the same group as bananas, but they are cheaper.
- You should pay attention to the quality and the hygiene of the foods you purchase.
- You should not buy things without packages apart from fruits and vegetables.
- You should buy things that may spoil quickly like meat, poultry and fish towards the end of shopping. These foods should not be in contact with foods in the shopping bag that are consumed without cooking and should be put into the refrigerator as soon as possible (within 2 hours and 1 hour in hot weather).
- Frozen foods should be taken at the end of shopping. You should make sure they have not defrosted.
- Frozen foods should be put into the freezer before they defrost and if defrosted, should be consumed immediately.
- You should not purchase broken, cracked or dirty eggs and eggs need to be placed into the fridge without washing.
- You need to prefer cheese produced from pasteurized milk, mature and cured for a long time instead of cheese from un-pasteurized milk.
- You should not use milk if you do not know the source and if it is sold in the street. Prefer pasteurized and UHT milk.





PRINCIPLES FOR FOOD PREPARATION, COOKING and PRESERVATION



FOOD PRESERVATION PRINCIPLES

- Meat, poultry, and fish that will not be consumed within 1-2 days should be separated into amounts sufficient for one meal, packaged in a flat shape and frozen. Defrosting should be done in the fridge.
- Grains, legumes, sugar and etc. should be stored in a dark, dry (moisture level 50-60%), and cool (20 °C at most) place.
- Defrosted foods should not be frosted again.
- Butter, margarine, and vegetable oils should be kept in the fridge.
- Leftovers with meat should not be kept in the fridge more than 1-2 days and 3-4 days for vegetable meals. You should reheat as much as you will eat and consume vegetable meals on the day of preparation if possible.



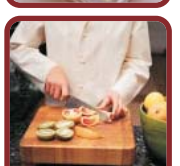
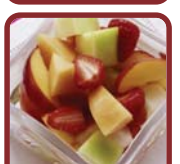
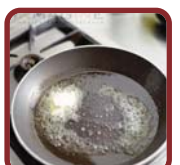
THINGS TO KEEP IN MIND WHILE USING CONTAINERS.

- Containers should not be exposed to extreme heat.
- Plastic containers should not be used in storing cooked meals.
- You should not scour the container while washing, if there are burnt or stuck remains in the container, the container should be reheated with water to enable washing without scouring.
- You need to rinse the container well after washing and use small amounts of dishwashing soap.

PRINCIPLES FOR FOOD PREPARATION, COOKING

Preparation and cooking processes of foods may increase or decrease their values. Below are some examples of these processes.

- Leavening the dough for bread, buns or cookies increases its nutritive value.
- Bran bread or brown bread is more nutritive than white bread. If thinly sliced and toasted, its nutritive value will decline.
- Eggs should not be consumed raw. Cooking the egg until the yolk turns green round the edges will decrease the protein value and the taste.
- Throwing away the water of the yoghurt causes vitamin loss.
- Tarhana is a nutritious food. Adding chick peas, lentil, carrots while cooking increases the nutritive value.
- When tarhana is sun dried, milk and yogurt are stored in a sunny environment, amount of **B2, B6** and **folic acid** will decline.
- It is easier to digest legumes if cooked well and their protein value will increase. You may throw away the presoaking water of these foods but throwing away the boiling water leads to vitamin loss.
- Nutritive values of desserts made with eggs, milk, tahin (sesame paste), pekmez (grape juice concentrate), cheese, and yoghurt are more than the ones made with flour, sugar, and fat.
- You should not leave the cooked food in room temperature more than 2 hours, but put them in the fridge. You need to consume the reheated food, not put it back in the fridge.
- Fats should be used without burning. Fat added to meals after burning becomes unhealthy.
- You should refrain from frying as a cooking method. The frying oil can be used 3 times at most and in a short period of time.
- If vegetables are not processed right after cutting, boiling-cooking water is thrown away, salads are not consumed right after adding lemon or vinegar; their vitamin A and C levels will decrease.
- Even though you keep freshly cut fruits and fresh fruit juice in the fridge, vitamins, mainly vitamin C and antioxidants will lessen.





THE IMPORTANCE OF BREAKFAST



BREAKFAST is the most important meal of the day, following an all-night hunger.

The time period between breakfast and dinner is approximately 12 hours and your body uses all nutrients in the blood during this period.

For your body to function properly, your blood glucose needs to be at a certain level. If breakfast is skipped, blood glucose decreases. This can lead to fatigue, headaches and deterioration in perception.

! When a student, skips breakfast his/her learning capacity and school success decline.

! When adults skip breakfast, work productivity and motivation decrease.



The Pattern of Breakfast

- Foods rich in protein such as milk, eggs, and cheese are effective for regulating the level of blood glucose in order to prevent fatigue and hunger. **Especially children should eat an egg every day.**



- Vitamin-rich fresh fruits and vegetables such as orange, tangerine, tomato, cucumber, parsley, green pepper, carrot etc. should be eaten in the breakfast. These fruits and vegetables increase bioavailability of other nutrients.



- Yogurt, lentil, and tarhana are nutritious soups and good options for breakfast. Also, whole grain breakfast cereals (cornflakes or oatmeal) can be consumed in breakfast. **It is important that you eat them with milk, fresh fruits and vegetables.**



The Pattern of Breakfast

- If you have a normal body weight, pekmez (concentrated grape juice), honey, jams and peanut butter are favorable choices for you.
- Eggs must be hard boiled, meaning eggs should be cooked in boiling water approximately for eight to ten minutes at low heat. Cooking eggs longer may lead to loss of their **nutrients**.
- Drinking tea at breakfast can reduce bioavailability of the other foods that are eaten concurrently. Therefore, weak or lemon tea should be preferred; if possible herbal teas like linden are even better. **However, the best option for breakfast is definitely MILK.**



SOME BREAKFAST SAMPLES

A glass of milk
Cheese (30-40 grams)
5-6 olives
Tomatoes
1-2 slices of bread.



Whole cereal product mixed with a glass of milk.

Fresh fruit juice (100-125 ml.)



A glass of milk.
One egg
One slice of bread with jam.
One tangerine.



A glass of milk
Tahin pekmez (sesame butter with concentrated grape juice)
4-5 walnuts
2 slices of bread
One carrot



- **The most important meal of the day is breakfast.**
- **For a sharp start to a new day and to continue it in the same way, the content and quality of the breakfast is crucial.**
- **Having a glass of milk or eating fresh fruits and vegetables such as an orange or a tomato is important for a dynamic and healthy start to a new day.**



DRINK HEALTHY MILK FOR YOUR HEALTH



Milk, is a vital food from infancy to old age which contains carbohydrates, proteins, fats, vitamins and minerals essential for body development, strength and maintaining health.

MILK;

In childhood and adolescence; creates strong bones and teeth, increases bone density and helps growth and development.

In pregnancy and lactation; helps intake the vitamins and minerals necessary for the baby to grow and the bone formation of the baby. Moreover, it is instrumental in protecting the dental and bone health of the mother. Milk decreases the risk of osteoporosis.

For adults and the elderly; along with protecting the bone health, it is an important source for many nutrients such as proteins, calcium, phosphorus and etc. which are necessary for the body.



For your health, drink milk in every period of your life.

Milk is highly rich in calcium which is essential for bone growth.

For healthy growth, healthy development and healthy aging, you should drink at least 2 glasses of milk every day.



Do not forget;

- Unsterilized milk can cause diseases since the source, content, milking and transportation conditions are not known.
- Unsterilized milk is not controlled, thus may contain strange and harmful substances such as dust, water, starch, mineral water that are not natural components of milk.
- Unless precautions are taken, unsterilized milk can cause many diseases such as brucellosis, tuberculosis, typhoid, and cholera.

WHY SHOULD WE CONSUME HEALTHY MILK?

As much as it can contain necessary nutrients, unless stored appropriately, milk is a suitable environment for the microbes to grow and cause various diseases. To kill these health-threatening microbes in milk, heating procedures must be applied to milk.



There are 3 different heating procedures:

1. Pasteurization

It is heating the milk up to 72-80°C for 15-16 seconds and cooling it rapidly in a factory environment. All disease causing microorganisms in the milk will be inactivated. This daily milk should be distributed in 4°C vehicles, should be kept in the fridge and consumed within 2-3 days.

2. UHT;

It is heating the milk up to 135-150°C for 1-6 seconds and cooling it rapidly in a factory environment. This milk can be stored for 4 months in room temperature, without opening the package. Upon opening the package, milk should be consumed within 2-3 days and kept in the fridge.

There is a common misconception that additives are added to milk in packages. While purchasing and using this milk, you need to make sure that the package is not damaged and the milk is licensed by the Ministry of Agricultural and Rural Affairs. You also should check the expiration date.

3. Boiling;

You need to boil and stir the milk for 10-15 minutes. If you boil it less, all the microbes are not killed. Boiling too much may lead to losing the vitamins. The boiled milk should be cooled rapidly.



EVERY DAY DRINK AT LEAST 2 GLASSES OF HEALTHY MILK





PREGNANCY and NUTRITION



ADEQUATE and BALANCED NUTRITION IS IMPORTANT FOR YOUR AND YOUR BABIES' HEALTH.



A SAMPLE MENU FOR PREGNANTS

BREAKFAST: 1 glass of milk,
1 egg or 30 gram cheese,
1 dessert spoon of pekmez
(concentrated grape juice) or honey or jam,
1 orange or carrot or tomato
1-2 thin slice of bread,

Snack: 1 portion of fresh fruit

LUNCH: 1 portion of vegetable
cooked with meat or 1 portion of legumes
1 portion of rice or pasta,
150 gram yogurt,
Salad,
1-2 slice of bread

Snack: 1 portion of fresh fruit
1 portion of cookie or cake or 1 slice of bread
and 30 gram cheese

DINNER: 1 portion of yogurt, tarhana or
tomato soup,
60-90 gram of meat, poultry or fish,
1 portion of vegetable cooked with olive oil,
Salad,
1-2 thin slice of bread

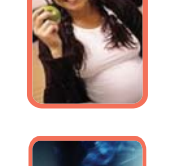
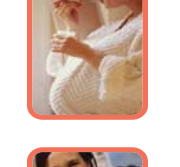
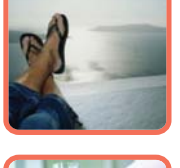
Snack: 1 glass of milk



Dear mothers-to-be;

Your children's physical and mental development starts in fetal life. For this reason, balanced and adequate nutrition is important for your and your babies' health. You should pay attention to the following recommendations.

- You should consume at least 60 grams of cheese a day, two glasses of UHT or pasteurized milk or yogurt. You can consume the same amount of yogurt as ayran (drink made with yogurt).
- You need to consume at least, one portion of vegetable cooked with meat and legumes such as lima beans, chick peas, and lentil everyday.
- Vegetables and fruits are rich sources of vitamins and should be consumed regularly in each meal.
- You should monitor your weight gain. You should gain 1-1,5 kg every month or 7-14 kg throughout your pregnancy period.
- You must consume iodized salt. You should conserve this salt in a dark and glass bottle. Iodized salt must be protected from light, sunlight and moisture. These situations cause loss of iodine. You should add iodized salt to your dishes after the meal is done cooking.
- Do not skip meals. You need to eat in small portions and frequently.
- Regular sunbathing in advisable hours of the day is good for your bone health.
- During your pregnancy, you should not consume foods ingredients of which are not known and that contain too much additives.
- You should prefer oils while cooking meals. You should consume olive oil every day but not margarine and animal fats. You should not add extra fat while cooking meats.
- Your body requires more fluids than before. You should drink at least 10 glasses of water a day. Also you need to drink milk, ayran, fresh fruit juices as extra fluid.
- You should consume foods rich in fiber such as legumes, fresh fruits; vegetables with a lot of liquid to prevent constipation.
- Anemia prevalence is frequent in pregnancy. You should consume egg, red meat, pekmez (concentrated grape juice), legumes along with fresh fruits and vegetables, to protect from anemia. You should not drink tea or coffee one hour before and after meals.
- You must not smoke and drink alcohol. Avoid places with smoke.
- Vegetables and fruits should be thoroughly washed because of pesticide residues.
- You must wash your hands before preparing meals.





LACTATION AND NUTRITION



Dear parents;

Breast milk is an indispensable food for babies.

Breast milk not only maintains growth and development of babies but also protects them from many diseases, mainly diarrhea, anemia and other diseases that will occur in the later life.

Breastfeeding is also important to form a psychological bond between the mother and her baby.

The best present a mother can give her baby is breast milk.

Breast milk:

- Is nutritious.
- Is economic.
- Is easy to digest.
- Creates the sentimental bond.
- Is always sterile and ready to drink.
- Is the most favorable food for babies.

You should give your baby only breast milk in the first six months and continue breastfeeding until the age of two.

In the lactation period, breast milk is equal to what mothers eat. Nutrients required for the secretion of milk, should be given to mothers additionally. Mothers should consume adequate and balanced meals both to maintain their own nutrient storages and to provide the energy, proteins, vitamins, and minerals the milk contains.

When mothers consume inadequate amounts of food they lose their own nutrient and energy storages. This situation causes health problems for the mother and inadequate production of breast milk.

Mothers can produce adequate amount of breast milk that will help develop their babies' health and growth. Also for an efficient lactation period, mothers should follow balanced and adequate diets.



For this;

- You need to have balanced and adequate diet. Consume adequately from each four basic food groups (milk group, meat-egg-legumes group, vegetables-fruits group, and bread-grains group)
- You should drink adequate amounts of liquids to produce adequate breast milk. You need to drink at least 10 glasses of water, ayran (drink made with yogurt), fruit juice prepared at home. Keep in mind that, the mother to get healthy nutrition and enough rest and to drink a lot of liquids are important factors for the production of adequate breast milk.
- You must not apply weight loss diets in this period. Low energy diets especially in the lactation period reduce production and nutritive value of the breast milk. You might start to lose weight after the lactation period.
- You must not smoke and drink alcohol.
- Onion, garlic, broccoli, cauliflower, hot spices, legumes, carbonated drinks, concentrated fruit juices could change the taste of breast milk. This may cause discomfort (gas in the gastrointestinal system or rejecting the breast milk) for some of the babies and some may not even notice it. If your baby has serious discomfort, either consume these foods less or totally avoid their consumption. Regular sunbathing in advisable hours is important to meet the vitamin D requirement of the body.
- You should consume iodized salt to meet your babies' iodine requirement. This mineral plays very important role for babies' development.



Daily food requirements for women in lactating period

Food groups	Amounts
Milk, yogurt	3-4 glass of milk (400-600 ml)
Cheese	60 gram
Meat, poultry, fish	3-4 portion
Egg, legumes	1 portion
Fresh fruits and vegetables	5-7 portion
Bread	4-6 slices
Rice, bulgur, pasta etc.	Maximum 2-3 portion

A Sample menu for women in the lactating period

Breakfast: 1 glass of milk, 1 egg, 30 gram cheese, 1 spoon of pekmez (concentrated grape juice), 1-2 thin slice of bread, 1 orange, 1 carrot or tomato

Snack: 1 portion of fresh fruit

Lunch: 1 portion of cooked vegetable with meat, 1 portion of rice or pasta, 150 gram yogurt, 1 portion of salad, 1 thin slice of bread

Snack: 1 glass of fresh fruit juice, 1 portion of cookie, cake or 1 slice of bread and cheese

Dinner: 1 portion of yogurt, tarhana or tomato soup, 60-90 gram of meat, poultry or fish, 1 portion of legumes with olive oil, salad, 1 portion of fresh fruit, 1 thin slice of bread

Snack: 1 glass of milk





INFANT NUTRITION



Dear Parents;

Babies' nutrition in the first year is essential for their life-long health and efficiency. In the first six months only breast milk must be given to the baby and later other complementary foods should be started in adequate types and quantities. Breast feeding should continue in the first two years.

- Breast milk is the irreplaceable food for all new-born babies.
- Breast feeding must begin in the first half hour, as soon as the mother regains her consciousness after giving birth.
- Colostrum is the milk secreted in the first three or five days after giving birth. It is crucial that babies drink this milk.
- Breast feeding meets all nutrient needs of babies except for vitamin D. The babies do not need extra liquids, complementary foods, and vitamins.
- Solely breastfeeding for the first six months maintains healthy growth and development of the babies. Breast milk reduces the risk of mainly diarrhea and other diseases and this continues in later life as well.
- Any healthy mother can produce enough milk for her baby.

Breast milk does not meet babies' nutritional needs after the first six months. Therefore, complementary foods should be given to babies following this period. Every new kind of food should be given to the baby only one teaspoon a day and also only one new kind of food should be given every one or two days.

0 - 6 MONTHS	BREAST MILK		
7. MONTH	BREAST MILK	milk, yogurt, fresh fruit juice and pureed vegetables and fruits, concentrated grape juice (pekmez), eggs, soups such as tarhana, yogurt, lentil and vegetable.	
8-12 MONTHS	BREAST MILK	milk, yogurt, fresh fruit juice and pureed vegetables and fruits, concentrated grape juice (pekmez) egg, soups such as tarhana, yogurt, lentil, and vegetable.	pureed legumes , meatballs, chicken, fish
UP TO 1 YEAR	BREAST MILK	All foods cooked at home	

RECOMMENDATIONS

- Do not add salt, tomato paste, sugar, and spices to babies' foods.
- Do not only give the juice of the meal, but also the pieces in it after mashing.
- Against common knowledge, boiling water of meat and poultries is not nutritious. Instead, meat and poultry should be given to the babies in the recommended months.
- Babies should be held in an upright position while feeding.
- The complementary foods should start to be given to the babies in small amounts when they are hungry and the amount of foods should be increased gradually.
- You should give only one new kind of food to your baby a day.



- Babies' foods should be boiled or cooked in the oven, not fried.
- All foods should be washed before preparing meals.
- Babies should drink boiled and warmish water after the sixth month.
- You should wash your hands with soap before preparing babies' foods and meals.
- All foods should be freshly made for babies before each meal. Babies should not eat offal such as brain, kidney, etc.



MONITORING GROWTH

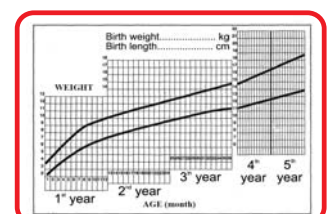
The best signs of the nutritional status of the babies are how well they grow and develop in line with the growth charts. For this;

All babies should be monitored by parameters such as height, body weight, and head circumference. The parameters should be compared with the standards.

Until the age of one, babies' parameters should be checked in the first 48 hours, on the 15th day, 2nd, 3rd, 4th, 6th, and 9th months. Children, one to three years old should be monitored every six months and the four to six year-olds should be monitored once a year.

ATTENTION!

If there is no weight gain between two monitoring periods, it means that growth has stopped. These babies should be taken to a physician their nutritional status should be closely followed.





PRESCHOOL CHILDREN and NUTRITION



Preschool children are between the ages of 1-5. Children form emotional bonds between the people who feed them in this period of life. For this reason parents especially mothers play an important role in creating new nutritional habits.

Giving good nutritional habits to the child is very important in this period of life.



Knowing the energy and food requirements of the child and letting the child choose his/her food makes it easy for the child to eat without complaining.



Inadequate and unbalanced nutrition delays physical and mental development, learning skills of children.

Table: Recommended daily food amounts for preschool children

Food Groups	1-3 Years Old	4-6 Years Old
1- Milk and Dairy products Milk – Yogurt Cheese – Curd	500 ml 20-30 gram	400 – 600 ml 30-40 gram
2- Meat – Egg – Legumes Red Meat – Poultry – Fish Egg Legumes	30 gram 1 2/3 portion	30 gram 1 2/3 portion
3- Vegetables and Fruits Green and Yellow Ones Others	½ portion 1-2 portions	½ portion 2-3 portions
4- Cereals Bread Rice – Bulgur	50-100 gram 2/3 portion	100 gram 1 portion

RECOMMENDATIONS

- Since every child has different metabolic rate and anatomical characteristics, parents should **not compare** their children with the others.
- Children should not be forced to eat and conflicts should not be created. Children should be fed according to their requirements.
- Children should be **relaxed** before meals.
- Spoons and forks should be **appropriate for the child to use**.
- Parents should allow their children to **eat meals by themselves**.
- Children's **portion sizes should be small**.



- You should form a **joyful and happy** atmosphere in the mealtime.
- Children should **not skip meals**.
- Children should consume **fresh fruits, milk, fresh fruit juices** for snacks.
- Children should not consume **bonbons, cakes, cookies, carbonated beverages** etc. for snacks.
- If a family has balanced and adequate nutritional habits there is no need to **cook a different meal for children**.
- Parents should monitor their child's growth. If children get obese they must be taken to a health institution.



SAMPLE MENU FOR PRESCHOOL CHILDREN

BREAKFAST: 1 glass of milk
1-2 slices bread
1 egg
1 spoon of pekmez (concentrated grape juice)
1 tomato or orange

LUNCH: 1/2 portion of meat or 2/3 portion of legumes
Rice or pasta: 1/3 portion for 1-3 year-olds; 1/2 portion for 4-6 year-olds
Yogurt or ayran
Salad
1 slice of bread

SNACK: Fresh fruit

DINNER: Vegetable cooked with meat: 1/2 portion of 1-3 year-olds; 2/3 portion for 4-6 year-olds
Rice or pasta with yogurt:
1/3 portion for 1-3 year-olds;
1/2 portion for 4-6 year-olds
1 portion of fruit
1 slice of bread

SNACK: 1 glass of milk





NUTRITION FOR SCHOOL CHILDREN



School period is when children grow and develop quickly and acquire life-long nutritional habits.

Unbalanced and inadequate or excess nutrition of school children could lead to some health problems such as;

- Growth and development will be delayed. If this delay is not cured until the end of the growing period, it will be reflected upon the adult, they will have short stature, be too thin and weak.
- Infectious diseases are frequent and severe.
- Iron deficiency anemia is frequent in girls because of menstruation period.
- In adolescence, bone density reaches maximum level. In this period of life inadequate consumption of calcium is a risk for osteoporosis in older ages.
- As a result of imbalanced nutrition, obesity emerges as an important problem. Childhood obesity will be reflected on the older ages and creates basis for high blood pressure, increased blood lipids, chronic diseases such as coronary heart diseases and diabetes.

BREAKFAST

Breakfast is the most important meal of the day, following an all-night hunger. When a child comes to school without having breakfast, since she/he has been hungry, she/he will be weak, her/his learning capacity, motivation and school success will decrease. **For these reason students should have breakfast every morning.**

Samples for Breakfast

- A glass of milk, one egg, five olives, bread, fresh fruit or tomato.
- A glass of fresh fruit juice, cheese omelette, bread.
- A glass of milk, breakfast cereals, fruits.
- A glass of milk, tahin (sesame paste), pekmez (concentrated grape juice), sugar added sesame paste, bread, fruits.
- A glass of milk, bread, 3–4 walnuts, peanut butter, fruits.
- Lentil or tarhana soups, bread, fruits.



RECOMMENDATION

You should;

1. Take food from four basic food groups in each meal.
2. Drink at least 2 glasses of milk a day.
3. Eat at least 5 portions of vegetables and fruits a day.
4. Drink at least 8-10 glasses of water a day.
5. Eat your meals slowly and chew them well.
6. Not apply any diet.
7. Do regular exercises.
8. Get regular and enough sleep.
9. Spend less time in front of the TV and computer.
10. Consume clean and hygienic foods. Fruits and vegetables should be washed well before eating, and unpacked foods should be avoided.
11. Prefer fresh fruit juices, milk, ayran instead of tea and carbonated beverages.
12. Not eat sweets for snacks. When you eat these foods you should brush your teeth or wash your mouth with a lot of water.
13. Wash your hands before and after meals.
14. Use your own spoon, knife, fork, dish, and glasses in meals; not share them
15. Monitor height and body weight of your children
16. Make sure they get regular sunlight and vitamin D.

LUNCH BOX

Students should not eat unhealthy, unpackaged foods with low nutritive value and sold in the street.

You can put in your sandwiches, foods given in the first group below. Eating vegetables and fruits stated in the second group will meet students' vitamin requirements along with the sandwich. Milk or ayran are good options for beverages.

1 st group	boiled egg, cheese, grilled meatball, boiled chicken, boiled meat.
2 nd group	you can choose thoroughly washed fresh fruits and vegetables in season (tomato, cucumber, lettuce, carrot, tangerine, apple, grape, cherries, plum, and etc.).

If it is possible consuming peanut, wolnuts etc. should be an additional support to energy, protein and mineral intake.



Lunch boxes must be cleaned thoroughly everyday.



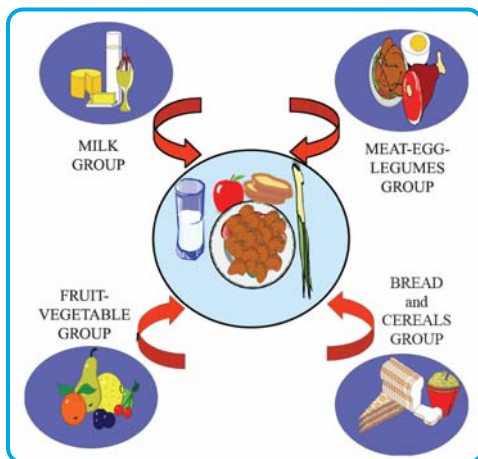
ADOLESCENTS and NUTRITION



Dear Young Ones;

Now you are no longer children, but are becoming adults. These years, when you are turning into adults, are fundamental years for you to have a healthy life in the future.

For example; as much as consuming adequate amounts of milk and dairy products at these ages may affect your height, it will also protect your bone health when you become an adult and in your old ages. Again, acquiring the habit of healthy nutrition will help you avoid diseases you may encounter in the future such as obesity, coronary diseases, diabetes, and hypertension. It is essential that you make the most of this important period through adequate and balanced diet, and make it a habit throughout your life.



Your need for energy and nutrition is at its peak in this period when growth is fast and your body gains shape. To meet this need, you should consume suggested amounts of the all four food groups in every meal.

KEEP IN MIND!

We know that right now your appearance is very important. However, each individual has a unique body structure; your weight should be stated according to your height, physical development, age, and activity levels. To do this you may take help from a health professional.

- You should start the day with a balanced breakfast to be more energetic, to have better perception, memory, and to be better at problem solving.
- Do you want to look beautiful/handsome? Get adequate and balanced nutrition.
- For safety, do not eat things sold in the street.



- Instead of foods with low nutritious value and high energy, foods with too much oil and salt, you should prefer foods prepared at home like vegetables, salads, yogurt, desserts made with milk. If you are to go to fast food restaurants, you should prefer healthy options like hamburger along with ayran (drink made with yogurt) or fruit juice and salad.
- Drink at least 2 glasses of milk every day.
- Eat at least 5 portions of fruits and vegetables every day.
- Do not apply random diets. Consult a dietician.



- Try to do regular exercises.

For this;

- Have talks with your friends while walking instead of talking on the phone.
- Join a gym.
- Try to join the school team.
- If possible, walk to school. Do not take the school bus.
- Spend less time in front of the TV or the computer.





ELDERLY NUTRITION

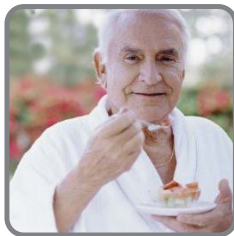


Hello Second Spring!

Aging is a process that begins before you were born and lasts until you die. To experience this process in a more healthy way, healthy nutrition is very important.

Adequate and balanced nutrition in the old age:

- Protects and improves health.
- Decreases the risk of illnesses based on nutrition, plays a significant role in treating the illnesses that occur.
- Enables an energetic and independent lifestyle.



Nutrition Recommendations for the Old Age

- Design your meals as 3 main and 3 snacks. This way the amount of food per meal will decrease and digestion problems will be avoided.
- Have food from each of the main four food groups (milk group, meat-egg-legumes group, fruits-vegetables group, bread-grains group) in every meal. Pay attention to having food varieties.
- Try to consume at least 2 glasses of low-fat milk, yogurt, cheese, and ayran (a drink made with yogurt); at least 5 portions of vegetables, fruits or fresh fruit juice.



Nutrition Recommendations for the Old Age

- Prefer poultry and fish; consume less red meat in your meals.
- Choose vegetable oils while cooking. If you cook with meat, do not add additional oil to your meals.
- Consume rather limited amounts of sugar, foods with sugar, and desserts with syrup.
- If you do not have gastrointestinal problems, favor bran bread to white bread and bulgur (boiled and pounded wheat) to rice.
- Eat legumes (lima beans, chick peas, lentil, etc.) 2-3 times a week.
- Prefer boiling or baking instead of frying.
- The decline in the feeling of thirst with the old age, may cause dehydration. You need to drink at least 8-10 glasses (1,5 liter) of water without waiting for the feeling of thirst.
- Consume less salt. Using too much salt can cause problems like hypertension, coronary diseases, osteoporosis, and etc. Do not add extra salt to your meals.
- Pay attention to your mouth and dental hygiene.
- Increase your physical activity and make time for daily regular exercise.
- Benefit regularly from sunlight for your bone health.
- Watch your body weight, refrain from obesity.





PHYSICAL ACTIVITY and HEALTH

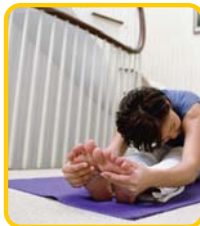


INCREASE YOUR PHYSICAL ACTIVITY, BE HEALTHY!

Regular physical activity along with an adequate and balanced diet is very important to improve and protect your health.

Physical activity helps your body work properly, thus using nutrients in the best way.

Lack of physical activity and a sedentary lifestyle lead to weight gain and consequently causing chronic diseases like coronary heart diseases, hypertension, and diabetes.



BENEFITS OF REGULAR PHYSICAL ACTIVITY

It is enjoyable, increases the life span and quality of life.

Improves mental health and gives you a more positive attitude towards life.

With increased energy consumption, physical activity helps control body weight. Decreases body fat, increases fat free mass.

Increases bone density (helps prevent osteoporosis).



BENEFITS OF REGULAR PHYSICAL ACTIVITY

- Reduces the risk of coronary artery diseases.
- Induces growth and development factors for children, promoting growth and development.
- The ability to continue the daily activities for the elderly.



RECOMMENDATIONS

- If you lack the habit of regular physical activity you should consult your physician before starting exercising.
- Activity level should increase gradually and intensive exercising in a short period of time should be avoided.
- Do moderately intense exercises, 30-45 minutes a day, at least 3 days a week. Take advice from health professionals about it.
- All exercises should be done regularly.



**FOR A HEALTHY LIFE,
PHYSICAL ACTIVITY IS
AS IMPORTANT AS
NUTRITION AND SLEEPING.**

**REGULAR EXERCISE AND
ADEQUATE-BALANCED
DIET ARE INDISPENSABLE ELEMENTS
FOR A HEALTHY LIFE.**



OBESITY



Obesity means excess storage of body fat so much that it could damage your health.

Body fat percentages should be:

% 12-15 for men

% 20-27 for women

Increasing of these percentages indicates obesity. Obesity should be prevented because it increases risks of chronic diseases.

Causes of Obesity

1. Overeating
2. Low level of physical activity
3. Psychological disorders
4. Metabolic and hormonal disorders



The balance between body weight and height is a key component of healthy and long life.

OBESITY increases the risk of;

- High blood pressure
- High blood cholesterol
- Coronary heart diseases
- Stroke
- Diabetes mellitus
- Cancer
- Respiratory complications
- Diseases related to joints etc.



Life style with an adequate and balanced diet and regular physical activity is crucial to control body weight.

How is the body weight evaluated

Body Mass Index

$$\text{BMI} = \frac{\text{Body Weight (kg)}}{\text{Height (m)}^2}$$

Sample;

$$\text{BMI} = \frac{75}{1,65 \times 1,65} = 27,6 \text{ (over weight)}$$

if BMI value
= 18,5 – 24,9 kg/m² ideal body weight
= 25 – 29,9 kg/m² overweight
= over 30 kg/m² obese



Waist circumference

The waist circumference should not exceed 94 cm for men and 80 cm for women. The waist circumference exceeding 102 cm for men and 88 cm for women threatens your health.

RECOMMENDATIONS TO PREVENT OBESITY

1. Your aim should be "ideal weight for your height". If you have an ideal body weight, avoid gaining weight.
2. Acquire adequate and balanced nutritional habits.
3. Create a balance between the energy intake and the energy expenditure.
4. Eat your meals regularly. Do not skip meals.
5. Do not practice every diet. When it is necessary, get support from a dietician.
6. Consume relatively less amount of foods that are high in sugar and fats.
7. In cooking methods boiling, baking, steaming should be preferred to frying, which increases the fat content of foods.
8. Drink a lot of water.
9. Do regular physical activity.





CANCER and NUTRITION



Cancer is a disease that is caused by uncontrolled production of cancer cells, damaging the body cells with specific functions.

Cancer is an important cause of mortality. The way to prevent cancer is primarily by identifying all the factors that cause cancer and eliminating them.

General causes of cancer

- Toxic chemical substances
 - Air pollution
 - Unhealthy drinking water
 - Bad food choices and nutritional habits
- Genetic susceptibility
- Radiation
- Hormones
- Others

Cancer is no longer a horrifying disease; it can be prevented and be cured with early diagnosis.

Nutrition is one of the most important factors creating cancer.

Nutrition is important for the phenomenon of cancer and at the same time cancer affects individuals' nutritional status.

Role of nutrition the occurrence of cancer

- Inadequate dietary fibers
- Harmful and excessively used additives
- Smoking and alcohol consumption
- Overeating and inadequate nutrition
- Inappropriate cooking techniques
- Mold and toxins



RECOMMENDATIONS TO PREVENT CANCER

- You need to get adequate and balanced nutrition.
- You should keep your ideal body weight.
- You should consume less sugar and fat.
- Meat with fat and offal should be eaten as rarely as possible.
- Cooking methods like baking, steaming or boiling should be preferred.



- You should refrain from excessive salt consumption and food with a lot of salt like pickles and canned food.
- As foods preventing cancer, fruits and vegetables help decrease the risk of cancer. They should be eaten at least five portions a day, at least two of these portions should be green leafy vegetables or tomatoes or citrus fruits such as orange, tangerine.



- Do not peel fruits which could be eaten with their skin.
- Do not consume foods cooked in high temperature, smoked or in direct contact with fire.



- You should consume at least two portions of legumes such as lima beans, lentil etc. every week. You also should not throw away the boiling water of legumes.
- You should pay attention to the storing conditions of your food.



- You should not drink alcohol or smoke and avoid from places with smoke.
- You should do exercises such as jogging cycling, swimming for 30 to 45 minutes at least three days a week and these exercises should turn into a lifestyle.



- Foods rich in selenium and vitamin E (bran bread, rye bread, oat bread etc.) should be consumed as they contain dietary fibers that protect you from cancer.





MENOPAUSE, OSTEOPOROSIS and NUTRITION



Menopause is the period when women lose fertility. In this period women often experience osteoporosis (bone loss).

Osteoporosis or commonly known as bone loss, is bones becoming fragile due to the increased loss of calcium.



Formation of bones in the growing period is more.

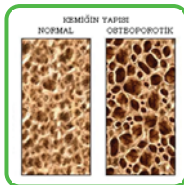
Between the ages 25-30, bone density reaches the highest level.

Around 40s, bone density starts to decline.

During menopause – with decline in the level of estrogen – loss of bone density reaches the highest level.

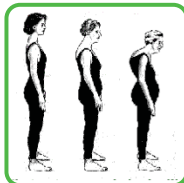
WHICH BONES ARE AFFECTED FROM OSTEOPOROSIS?

Osteoporosis affects mostly the spine that carries the weight of the body. Following this, the pelvis, ankles, and other bones are affected. In older ages, this may lead to decline in height, breaking of bones even after minor falls.



What are the symptoms of osteoporosis?

You may not have any symptoms in the beginning. However, when the illness advances, you will experience back pains and you may become hunchbacked. The most important consequence of osteoporosis is the bones breaking with the slightest hit.



To understand if you suffer from osteoporosis or not, you need to have “**bone densitometer**” test upon doctor’s advice.

WHO IS MORE LIKELY TO EXPERIENCE OSTEOPOROSIS?

1. Women who in menopause period.
2. People who do not consume calcium rich foods like milk, yogurt and cheese.
3. The ones who have a sedentary lifestyle.
4. Smokers, people who drink alcohol, carbonated and caffeinated drinks.
5. The ones with genetic susceptibility.
6. People who have for a long time used salt and medicine which increase calcium excretion or decrease calcium absorption.
7. People with diabetes, endocrinal diseases like the excessive functioning of the thyroid glands, absorption disorders, renal failure and who had gastrointestinal operations or who experienced strokes.

TO PREVENT OSTEOPOROSIS;

1. Pay attention to your nutrition.

- Consume foods rich in calcium. The best source for calcium is milk and dairy products.
- Try to have pekmez (grape juices concentrate), legumes, and green leaved vegetables every day.
- Use less salt.
- Benefit more from sunlight. This will activate the vitamin D in your body.
- Do not eat too much of foods with protein like meat and meat products. It is observed that people with protein-rich diets suffer from calcium loss.
- Do not consume too much of coffee, carbonated drinks and chocolate since they have caffeine in them.
- Avoid being too thin.



2. Acquire the habit of exercising regularly.

- For short distances, prefer walking instead of driving.
- Use the stairs, not the elevator.
- Park a bit far from where you are going and walk.
- Do gardening and housework.
- Do regular exercises (walking, swimming, cycling, etc.) at least 3 days a week.





CORONARY HEART DISEASES AND NUTRITION



Today, with the effects of technological developments and changes in life conditions, people lead a different lifestyle compared to previous generations. Nutritional behavior also changed along with the changes in the life style. These changes play an important role in the occurrence of many diseases. Among these, coronary heart diseases are one of the most common ones around the world, as well as in our country. However, it is a disease that can be avoided with healthy nutrition and adjustments in the life style.

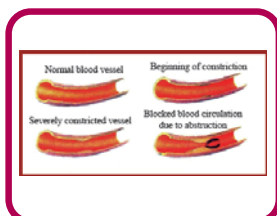
RISK FACTORS

- Age (over 45 for men, 55 for women)
- Early menopause
- High LDL, triglyceride and low HDL levels.
- Low consumption of fruits and vegetables.
- Sedentary lifestyle
- Stress
- Alcohol consumption and smoking
- Genetic susceptibility
- Obesity, hypertension, diabetes and etc.

Atherosclerosis is one of the main reasons for coronary diseases.

This leads to the loss of flexibility, constriction and obstruction of the veins. Fatty substances like cholesterol accumulate in the walls of the veins, constrict the veins and causes loss of flexibility.

This constriction process may start in early ages and gradually continue. This process may accelerate with unfavorable lifestyle and nutritional behavior.



To prevent coronary heart diseases:

1. Have adequate and balanced nutrition.

Recommended amounts from the four food groups should be taken for consuming and using adequately the energy and nutritive substances necessary for the body to regenerate and function.



2. Pay attention to the types of fats you consume and how much you consume.

Prefer vegetable oils and olive oil to animal fat in your meals.

Do not use margarine, animal fat, etc.

Prefer low fat or fat free milk and dairy products.



Eat more fish and poultry, without the skin. Eat less red meat, even if it is low fat or fat free.

Choose appropriate cooking methods to use less fat. Prefer to boil, grill or bake your food; do not add oil to food with meat.



3- Consume fiber rich foods.

You should eat legumes, whole bread, bulgur, vegetables and fruits that decrease blood cholesterol level.

4- Do not consume excess amount of sugar.

You need to eat fresh fruits and drink fresh fruit juices instead of concentrated fruit juices. You should not consume cookies, cakes, bonbons and carbonated beverages.



5- Pay attention to your salt consumption.

There is an important relationship between salt consumption and hypertension. Canned foods, pickled foods, salty nuts, sauces and etc. should be avoided in the diet.

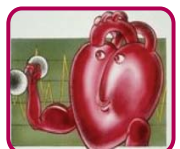


6- Maintain your ideal body weight.

High level of body fat increases the risk of heart diseases. You should be careful to maintain your ideal body weight.

7- Avoid smoking and consumption of alcohol.

Smoking and alcohol consumption are important risk factors for coronary artery diseases as they increase blood pressure and heart beat.



8- Increase your physical activity.

You should do regular physical activity such as cycling, slow-paced running, and jogging for your heart's health.



DIABETES and NUTRITION



WHAT IS DIABETES?

Diabetes is a disease characterized by the elevated level of blood glucose due to deficiency of insulin hormone excreted from the pancreas or the decreased insulin action.

Foods are broken down into glucose after digestion so that they can be absorbed in the blood stream and increase the level of glucose in the blood. In healthy individuals, the insulin released from the pancreas transports glucose to the cells.

Diabetics cannot transfer glucose to the cells, either because they suffer from insulin deficiency or the insulin is inefficient. This leads to a high blood glucose level.

When the blood glucose level increases and is above the normal range, glucose is excreted with the urine. Thus, resulting in polyurea and polydypsia, and drinking too much water.

Diabetics should learn about balanced and adequate nutrition for their health.

TYPES OF DIABETES

Type 1 Diabetes is the deficient production of insulin in the body or total lack production.

Type 2 Diabetes is when the body produces insulin, but fails to use the insulin efficiently.

RECOMMENDATIONS

- Do not skip meals. Meals should be eaten at certain times and amounts.
- Prefer poultry and fish.
- Do not add extra oil or butter while cooking meat.
- Prefer oil to butter or margarine while cooking.
- Choose cooking methods such as boiling, grilling, and baking instead of frying.
- Your body weight should be monitored.



DIABETICS SHOULD KNOW;

Which foods contain sugar?

Sugar from sweets such as table sugar, bonbons, jams, honey, chocolate, traditional desserts, and concentrated fruit juice with additional sugar, cakes, and sweetened carbonated drinks are converted into glucose and quickly absorbed; causing sudden increases in the blood glucose levels. Avoiding these foods help to prevent fluctuations of blood glucose levels.

Which foods contain starch?

Bread, rice, pasta, potatoes, flour, corn, and legumes contain starch that is broken down as glucose. The starch molecules are converted into glucose slowly, therefore blood glucose increases gradually. Starchy foods that contain dietary fibers such as whole grain bread, bulgur, and legumes increase glucose levels slower in comparison to refined foods such as white bread, potatoes, rice etc.

Avoid these in your diet;

- Table sugar and other sweets such as honey, jam, syrup, and chocolate
- Cookies, cakes, white bread, sugar added carbonated beverages and fruit juices
- Margarine, butter and foods rich in fat
- Salami, sausage, bacon, and dried meat
- Offal such as liver, brain, etc.
- All fried foods
- Foods rich in salt such as olives, pickles and canned foods



The diet should be planned by a dietician, taking into consideration body weight, height, physical activity, and socio-economical level and nutritional habits of the individuals and should be customized.

How do we increase the fiber content of the diet?

Diabetics should consume whole grain bread, bulgur, and fresh fruits instead of respectively, white bread, rice, concentrated and sugar added fruit juices.

They should eat fruits, if possible without peeling the skin.

They should eat fresh vegetables and salad with each meal.

Legumes should be eaten frequently.

How many times a day do we need to eat?

Diabetics should eat each meal at the recommended time and amount to prevent fluctuations of blood glucose levels. Skipping meals and not eating for a long time is dangerous for patients' health. Diabetics' diets and meal times should be planned by health professionals.

Diabetics should increase their physical activity through regular exercises such as jogging, cycling, swimming, gardening, and etc.



CHRONIC RENAL DISEASES and NUTRITION

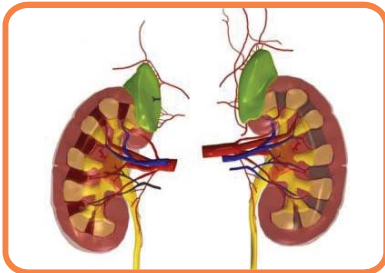


Chronic Kidney Diseases

The most important function of the kidney is to remove the residues of nutrients that metabolize in the organism.

Chronic renal disease is the failure of kidney functions in a way that it can not continue balancing body fluids.

In the renal diseases caused by renal dysfunction, concentrations of **urea**, **creatinine** and especially **potassium** in the blood increase remarkably. Balance of electrolytes in the blood is deteriorated.



Diet is very important

Nutrition (diet) is one of the most important parameters for the therapy of chronic renal failure. A diet therapy planned and applied by a dietician can delay progression of the disease.

Important components of diet therapy are;

- Taking adequate amount of energy and proteins,
- Gaining and/or keeping ideal body weight,
- Taking adequate amounts of;
 - ⇒ Sodium,
 - ⇒ Phosphorus,
 - ⇒ Potassium,
 - ⇒ Liquids,
 - ⇒ Vitamins and minerals.

Nutrients

The most important energy sources for chronic renal failure patients, as well as healthy individuals, are carbohydrates and fats.



The diet must contain enough foods rich in carbohydrates such as bread and other cereals (rice, flour, pasta etc.), table sugar, honey, and jam.

As high blood cholesterol level accelerates the damage on the kidneys for chronic renal failure patients, types and amounts of dietary fats should be carefully planned. Oil groups like olive oil-nut oil and sunflower/corn/soy oil should be preferred.



In the chronic renal failure disease, amount of proteins could be restricted based on the renal functions. If dietary protein is restricted, the proteins consumed should be mostly animal proteins with high bioavailability.

Sodium

Kidneys are among the organs with important roles in regulating sodium levels in the blood stream. In renal failure, sodium is accumulated in the body. That is why dietary sodium intake could be restricted. The most important sodium source in the diet is **table salt**. Other sodium rich foods are as follows:



- ⇒ Olives, pickles, pickled foods, and canned foods,
- ⇒ Processed meat products such as salami, sausage, dry meat,
- ⇒ Salty crackers.



To reduce salt in the diet;

- ⇒ You should add little salt while cooking.
- ⇒ You need to give up the habit of adding salt to meals before eating.
- ⇒ You should try to avoid foods with high sodium content.

! All renal disease patients do not have to restrict salt in the diet. The amount of salt necessary in your diet should be decided by your doctor and dietician.

Liquids

Liquid intake includes all liquids such as water, linden, carbonated beverages, soups, milk etc. Liquid restriction is not always necessary in the first stage of renal failure.



However, for the patients with low urine amount restricting liquids could be required. When excess fluid taken is retained in the body, edema, heart failure, hypertension, and respiration problems can occur. In these situations, liquid intake should be regulated according the urine amount of the previous day.



Due to the restricted diet applied to patients of chronic renal failure, deficiencies in vitamin and mineral intakes can be observed. In this situation;

Only vitamin and mineral supplements recommended by medical doctor should be used.

Diet therapy of chronic renal failure patient should be planned by a dietician.



FOOD ALLERGIES



FOOD ALLERGIES

Human body is willingly or unwillingly exposed to many different substances throughout the day. These substances, some of which are defined as edible or drinkable foods, enter into the body system through various ways (mouth, nose, eyes, and lungs).

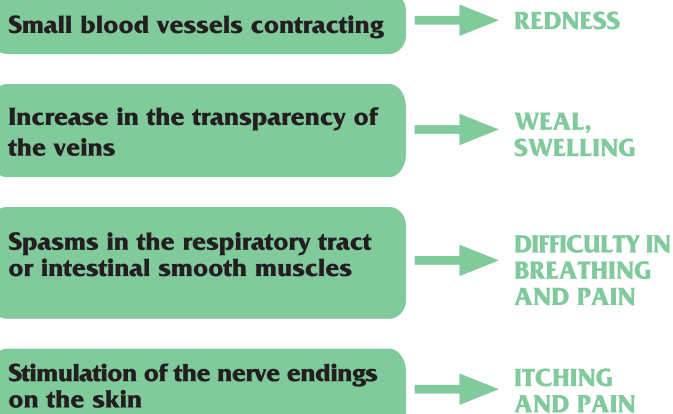


Food allergies affect human life as of infancy and childhood, even before you are born. Food allergies may occur not only by consuming the food, but also with touching or even smelling the food.

Since food is mostly composed of more than one substance, it is hard to understand which ones cause the allergy.



Some chemical and physical traits of foods turn them into allergens and cause changes in the body. These are;



To say that you have allergies to a food, you need to have one or more of these allergic reactions each time you consume that food.

WHICH FOODS MAY CAUSE ALLERGIES?

These are the foods that may frequently cause allergies:

- Cow's milk
- Egg (egg white, especially for children)
- Fish and other sea foods (sardines, mackerel, tuna fish, lobster, shrimps, crab, shellfish, oyster, calamari, etc.)
- Fruits (strawberries, melon, watermelon, orange, cherry, apricot, peach)
- Vegetables (zucchini, tomatoes, celery root, asparagus, etc.)
- Legumes
- Spices and flavorings
- Chocolate
- Honey
- Some beverages (drinks with food coloring additives, tea, coffee, cacao, cola drinks)
- Shelled nuts (nuts, peanuts, etc.)



RECOMMENDATIONS

- As of small ages, you should be careful about the nutrition of people with allergies and when these symptoms occur they should be taken to a doctor.
- Family history plays an important role in some food allergies. Keeping this in mind, you need to be cautious when you consume foods that may be allergens.
- The food which causes allergies should be excluded from the diet and tried again after some time. If same reactions occur, these foods should not be consumed.
- The foods excluded from the diets due to allergies should not lead to inadequate and unbalanced nutrition. You should consume more from the other foods in the same group.



**IF YOU EXPERIENCE
ITCHING, REDNESS,
SWELLING OR BREATHING DIFFICULTIES
AFTER CONSUMING A FOOD,
YOU MUST GO TO
A HEALTH INSTITUTION.**

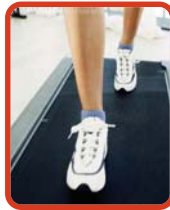


SPORTS NUTRITION



Genetic factors, training and nutrition are 3 basic factors for athletic performance. When athletes have adequate knowledge on nutrition, it can easily control and increase their performance.

Athletes should increase their carbohydrate consumption which is a basic source of energy. While consuming carbohydrates the ones that are complex, with high fiber content and food rich in vitamins and minerals [brown bread, bulgur (boiled and pounded wheat), rice, pasta, other grain products, legumes, fruits and vegetables] should be preferred.



Contrary to common belief, athletes do not need too much protein consumption and fat restriction. Muscle mass will not increase if you intake more proteins than necessary.



Dehydration decreases your exercise performance. Therefore, for optimum performance and to be healthy, you should increase fluid consumption before, during and after exercise.



- Do not wait for thirst to drink water.
- Increase fluid consumption before, during and after exercise.
- Fluid consumption has to be increased especially in hot weather.
- To make up for dehydration during exercise, you should consume approximately a glass of water in every 15-20 minutes.

- Before starting to exercise, being hungry or too full will negatively affect your performance. Pre-exercise meal has to be consumed 2-4 hours before the exercise. These foods should be chosen from foods that will not upset your stomach, with adequate fluids, low fat and fiber, high carbohydrate and moderate amount of protein levels. Foods the athletes are accustomed to should be preferred.
- Adequate and balanced diet provides all vitamins and minerals. For this reason, athletes do not need to take vitamin and mineral supplements.
- Do not use any random products. Before the using them, consult a health professional.



Sport Performance Products

Products which affect sports performance (ergogenic supplements; athletes products, vitamins, creatinine, ginseng, and etc.) are sometimes evaluated regardless of their effect on health and performance. By using these products, not only athletes waste their money but also risk their health.



Age, sex, types of exercise, health condition, whether the athlete is professional or not is important in choosing these products.



These products can really affect the performance positively, but right product and accurate timing and amount should be decided. Professionals will help you on this.



Before using any product, athletes should consult to a physician and a dietician.

RECOMMENDATIONS

Adequate and balanced diet, from all food groups, has to be consumed.



A diet with adequate energy to keep the desired body weight and composition should be followed.

Carbohydrate is an essential source of energy during exercising. You should pay attention to choose foods which contain high levels carbohydrates.



Eat various foods.



Fluid consumption should increase before, during and after exercise.





FREQUENTLY ASKED QUESTIONS ON NUTRITION (I)



Do eggs increase cholesterol?

Egg is an important food for our nutrition and has the highest quality of protein. Egg proteins are assessed as reference proteins. Egg yolk is rich in iron, vitamins A and B.



One third (1/3) of the fatty acids from an egg is saturated, 10% is polyunsaturated and the rest is monounsaturated.

Although it has a high level of cholesterol, the raising effect of egg yolk on cholesterol is less than meat or dairy, because it contains high level of unsaturated fatty acids and lecithin. Consumption of egg is limited (once-twice a week) for people with high cholesterol. Where as, for people with normal cholesterol levels, especially children, egg is a rather nutritious food that needs to be eaten often.

When eaten with vegetables and cereals, egg does not have any negative effect on blood cholesterol. People who do not eat meat can choose egg as an alternative.

Since the protein of egg is high quality and the lecithin it contains helps organize brain functions, one egg per day is essential for babies and children.

What needs to be done to avoid the loss of iodine in salt?

In our country, extra iodine is added to table salt to avoid iodine deficiency. It should be kept in mind that salt with iodine prevents goitre but does not cure once the illness occurs. **IODIZED SALT** should be used in meals to prevent iodine deficiency related conditions, mainly goitre. This salt should be;

- Put into a dark colored glass container upon purchase,
- Protected from sunlight,
- Kept in a dark place,
- Kept dry,
- Added just before the food is done cooking,
- Used until the "best before" date on the package.

Are sour apples better for diabetes patients?

Diabetes is a syndrome characterized by elevated level of blood glucose due to deficiency of insulin hormone excreted from the pancreas or the decreased insulin action. Customized diet therapies are a must for diabetics. Their diets differ according to sex, age, physical activity, and treatment types. Therefore, daily energy and nutrient requirements of the patient is organized by the dieticians.

All fruits contain fructose and are used in certain amounts in diets. Whether the fruit is sour or sweet does not indicate that it can be consumed more or will not increase the blood glucose. They should not be consumed more than the recommended amount.



Is it bad to dry "tarhana" (Tarhana is a kind of dried food made of yogurt and wheat flour, later to be used for making soup.) in the sun?

Tarhana is a very nutritious, traditional food. Sun-dried tarhana made from yogurt will lose most of its vitamins, mainly B2. Thus drying it in a dark place, with a light cotton cloth over it is the best choice.



I exercise, yet I still cannot lose weight, why?

As soon as people start exercising, they expect to lose weight and complain about not losing weight rapidly. Body weight may not change at the beginning of the exercise program; however body composition may change.

Fat mass will decrease with exercise, but the increase in other mass, especially muscle mass hampers weight loss. Upon continuing the exercise program weight loss will begin.

Even though weight loss seems modest or none at all, this change in body composition is a much desired situation. The fat mass has declined.

Changes occurring after getting used to exercising may take a month. Later on due to the loss of energy with exercise, body weight will decline as well.



Is the consumption of tea and coffee harmful?

Even if there are various types and amounts of nutrients in tea leaves, since the quantity consumed daily is very little and only the elements that pass into the water are taken in, tea does not have any remarkable effect on nutrition.

Unless milk is added, coffee does not have much nutritive value either. However, the tannins in tea and coffee taken along meals, bind with iron and reduce its absorption. For this reason, tea or coffee should not be drunk one hour before or after meals. While consuming tea or coffee, daily amounts need to be considered. Lemon tea or weak tea should be preferred instead of well-steeped tea.

What needs to be done to prevent anemia?

To protect from anemia;

You need to have an adequate and balanced diet.

You need to prefer foods rich in iron more.

Having vegetables, fruits and fruit juices rich in vitamin C in every meal strengthens the absorption of iron. Especially eating food rich in iron such as chick peas, lentil, lima beans with salad or fruits will increase their nutritive values.

Since tea and coffee inhibits iron absorption, they should not be consumed during or right after meals.



FREQUENTLY ASKED QUESTIONS ON NUTRITION (2)



What is kephir? Does it prevent diseases?

Kephir is a dairy product obtained by fermenting milk. Quality kephir is liquid, homogenous, and looks clear and bright. Kephir should be kept in the refrigerator, if left in room temperature, it spoils.

The nutritive value of kephir is similar to yogurt. The useful bacteria and ferments that increase in the fermentation process may decrease the harmful effects of microbes that enter the body. It is especially useful in bowel infections such as diarrhea and dysentery.

Kephir is easier to digest than milk. People who complain from stomachaches or diarrhea when they drink milk can prefer kephir.



What are the benefits of rye bread?

Rye is grown in mountainous regions. Since the grains are not separated from the bran, rye is rich in vitamin B groups and minerals. It is particularly good for people suffering from constipation. It is also recommended to diabetes patients since it does not increase the blood glucose level quickly. Again, rye bread is good for people with high cholesterol.



Does lemon have a slimming effect?

The excess weight of the obese is mostly fat. When you eat low calorie foods, the body uses this fat storage to cover for the energy gap. Lemon does not melt this fat. Meanwhile, if we consume lemon instead of high calorie foods when we are hungry, it will suppress the feeling of hunger with little amount of calorie intake.

This is not valid only for lemon but also for other low calorie vegetables such as cucumber, tomato, lettuce, and etc.



Is carrot juice good for your health?

Carrots contain carotene, the precursor of vitamin A. When carotenes are taken, they mostly turn into vitamin A in the small intestine or the liver. Vitamin A and carotenes that do not transform into vitamin A are stored in the liver. When the vitamin A levels in the blood decline, they are excreted from the liver to function as vitamins.

When you eat 100 grams of carrot, you create more carotenes than the daily required amount. If one glass of carrot juice is made from 500 grams of carrot, and drunk every day or every other day, you take 5-10 times more carotenes than you need. Since carotenes need fat to penetrate into the blood stream from the small intestines, eating 1-2 carrots with your meal will enable the absorption of the carotene with the fat from the meal.

If you want to drink carrot juice, drinking half-a-glass with meals is much better.



How can you tell poisonous mushrooms from the safe ones?

Mushrooms are foods from the vegetables group, but they have more proteins and vitamin B groups compared to other vegetables. Mushroom is especially rich in vitamin B₂, which is so rare in cereals.

Mushrooms are much favored, tasty vegetables. However, the ones that grow in the wild can be poisonous.

It is hard to identify if the mushroom that grows by itself in nature is poisonous or not. For this reason, mushroom other than the cultivated ones should not be eaten. It can be fatal.

You must make sure that the mushrooms you purchase have a package, with the production address and date and the best-before date.



Do you get goiter from black cabbage ?

Black cabbage, mostly grown in the Black Sea region is an important winter vegetable. To meet the daily vitamin C requirement, 3-4 edible leaves of black cabbage are enough.

It is known that vegetables like black cabbage, radish, and turnip have substances in them that cause goitre (goitrogens). However, they are mostly in the seeds of the plants. The leaves and other edible parts of the plants contain very little amounts of these substances.

Researchers indicate that the small amount of goitrogens that might be taken in with black cabbage, radish, and turnip consumed daily, at normal levels do not have a remarkable effect on causing goiter.

The main reason for the growth of thyroid gland, also known as simple goiter, is the lack of iodine. The best way to prevent this is using iodized salt.



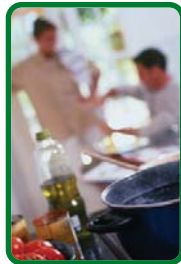


FREQUENTLY ASKED QUESTIONS ON NUTRITION (3)



Is it OK to re-use the frying oil?

Oil is important in preparing meals. However, since their chemical structure can easily deteriorate and render them harmful for your health, you need to directly add it to the meals, not burn them before. Oven baking and boiling should be preferred to frying. If you are to fry, deep frying is better.



Deep frying is much better as the crumbs are less, the food is evenly fried and less oil is absorbed. Re-using the frying oil over and over is not right. That is why after each time you fry something, you need to filter the oil, keep it in a dark and cool place, in a tightly closed container. The frying oil can be used 3 times at most and in a short period of time. Once again, frying should be the least favored option in cooking.

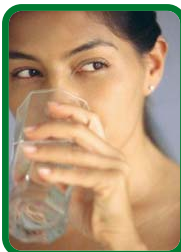
Is it right not to give children fish and eggs until the age of one?

Only breast milk should be given to babies in the first six months. Fish and eggs are rather nutritious foods. Thus, after the first six months, fish and eggs need to be given to babies during infancy when their growth and development rates are the highest. However, you must use correct cooking methods.



What is healthy and safe water?

Water that chemically, microbiologically and radioactively fits into the parameters listed in the Regulation for Water for Human Consumption is defined as healthy water. Safe water does not have harmful bacteria, chemicals and poisonous elements in it.



Which water is safe to drink?

Tap water, natural spring water licensed by the Ministry of Health and sold commercially, drinking water and natural mineral water production of which are controlled by the Ministry of Health are healthy types of water.



How do we know if the water is clean or not?

Impure, stinking, dirty water should not be consumed. Even if the stream looks clear, this does not mean you can drink it. Spring water emerging to the surface cleanly can be contaminated later with leakages and microbes carried through air. Whether the water is clean or not is decided following an inspection by health authorities. That is why only water that is approved by them should be used.



Which one is more efficient in weight control? Dieting or exercise?

Dieting or exercising can be efficient by themselves in weight loss; but they both have advantages and disadvantages. When applied together, they affect each other positively and create balance.



Negative energy balance created with dieting may induce quick weight loss at the beginning of the weight loss program. However, in this circumstance, fat-free body mass and resting metabolic rate will decline. Exercising results in less weight loss but keeps and even increases the fat-free mass, prevents the resting metabolic rate from declining.

When you lose weight by dieting you lose 75% of the fat mass, 25% of the proteins. If exercising is applied along with dieting, the loss of proteins is just 5%. The benefits of exercising still continue if you apply weight loss diets along with it.

Are the foods prepared in microwave ovens unhealthy?

With the short electromagnetic waves from the microwave ovens, the food in the oven absorbs the microwave energy and turns it into heat.

Microwave ovens help to defrost frozen food quickly and without deformation.

You should put your food in glass, ceramic, porcelain or microwave safe containers while using the microwave.

