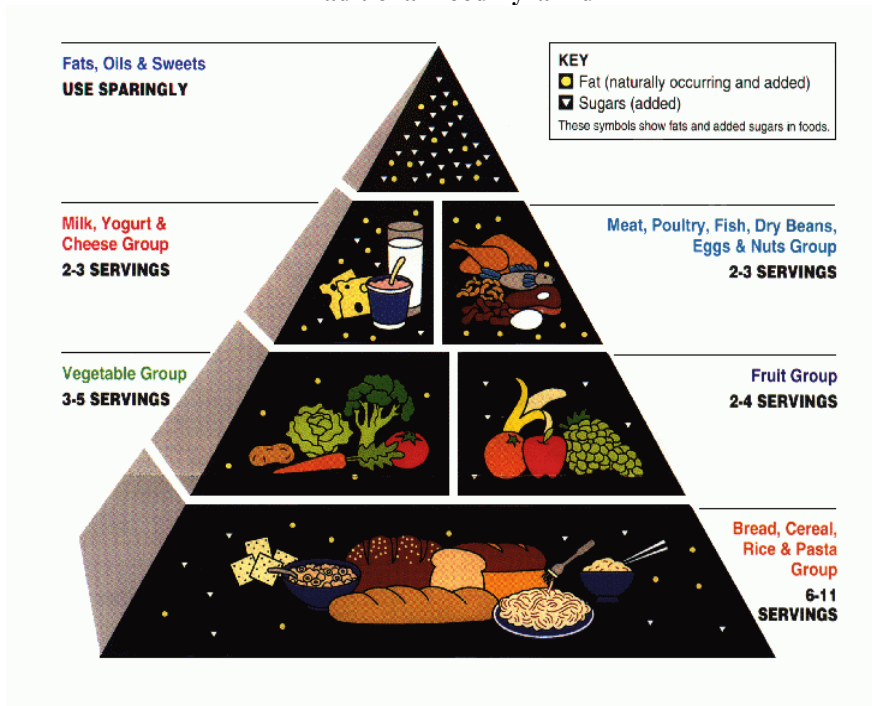


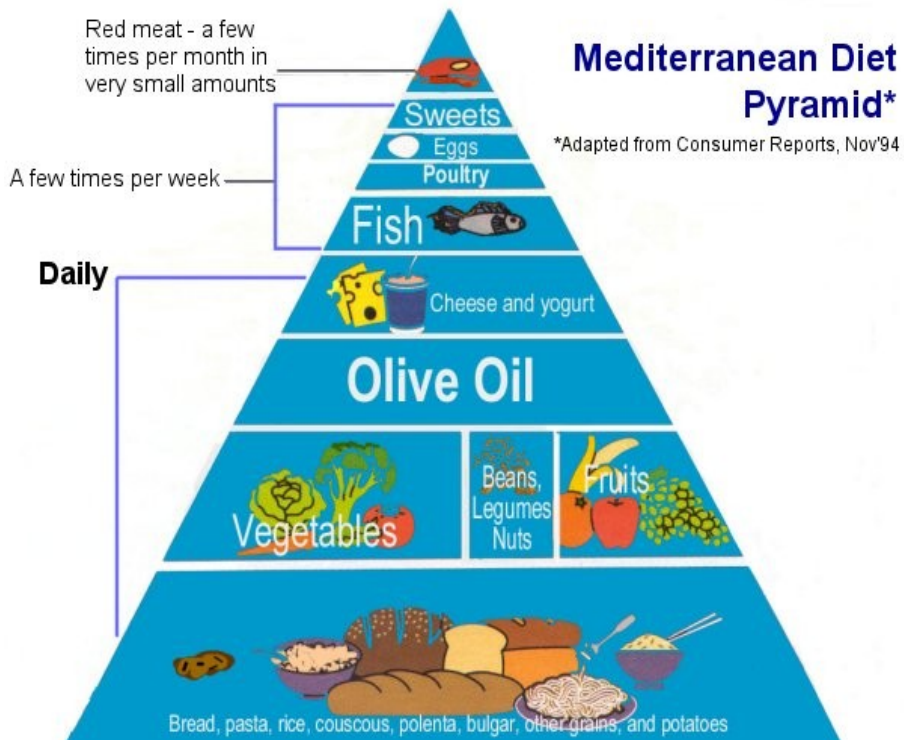
SEMINAR 8 SPORTS NUTRITION

*"Let your food be your medicine, and your medicine be your food."
 Hippocrates*

Traditional Food Pyramid



Mediterranean Food Pyramid



MEDITERRANEAN DIET

Task 1 Before you read Do you eat smart? think about your eating pattern and food decisions. Do you...

1. Consider nutrition when you make food choices?

a) usually b) sometimes c) never

2. Try to eat regular meals rather than to skip some?

a) usually b) sometimes c) never

3. Try to eat a variety of foods?

a) usually b) sometimes c) never

4. Try to balance your energy intake with your physical activity?

a) usually b) sometimes c) never

Task 2 Getting ready to read

1. Which cultures enjoy the healthiest food, in your opinion? Explain.

2. Surprisingly, the richest countries may not have the best diets. What do you think?

Task 3 Reading

1 In recent years a large number of medical specialists and dieticians have devoted much effort to convincing us that just about everything we eat is bad for us. But now, if one accepts the findings of two recent international conferences held in San Francisco, there is some good news. Excellent health, increased *longevity*, and many simple pleasures of life are all available if you are prepared to follow “the Mediterranean Diet“, which is not so much a diet as a way of living.

2 Interest in the Mediterranean diet was first raised in the 1950’s, when researchers from Harvard University’s School of Nutrition became curious about why men and women on the islands of Crete and Sicily, many of whom lived well into their 80s, had one of the lowest rates of heart disease and cancer in the world.

3 They also noted a remarkably low rate of heart disease in other nations around the Mediterranean. Incidences of other diseases, such as breast and colon cancer, were also lower in the Mediterranean region, and in Greece and southern Italy *life expectancy* was about four years longer than in the U.S. or Northern Europe.

5 During more than 15 years of research, epidemiologists, who study large populations to identify “risk factors“ for diseases, were unable to identify the *crucial* factors, which affected the health of these Mediterranean populations. Finally, in 1964, the researchers began to focus on what they identified as the “traditional Mediterranean diet“.

6 They noted that the core of traditional Mediterranean cuisine of the 50’s and 60’s was an abundance of fruits and vegetables as well as large quantities of bread, pasta, *legumes*, nuts, couscous, rice and other grains. The overall diet included very little meat and only moderate amount of fish, poultry and dairy products. Sweets played a small role in the dining habits of the people and fruits were the main form of dessert. The two most *conspicuous* features of the Mediterranean diet were that olive oil accounted for as much as 40% of all of the fat consumed by most Mediterranean people and that they consumed wine with nearly every meal.

7 This and subsequent research resulted in the creation of the Optimal Traditional Mediterranean Diet Pyramid. The pyramid consists of nine levels, each representing the stress to be placed on various elements of the diet.

8 Red meat, at the pyramid’s *pinnacle*, is recommended only a few times per month. Sweets, poultry, eggs and fish are recommended a few times a week, and olives, olive oil, dairy products, beans, legumes, nuts, fruits and vegetables and whole grains including pasta and rice are recommended on a daily basis. The major focus at recent conferences has been on olive oil and wine.

9 According to prof. Walter Willet, olives and olive oil lowers levels of LDL, which is considered the harmful or “bad“ *cholesterol*. Olive oil also contains high quantities of antioxidants, today’s nutritional miracle, and these are also thought to ward off heart disease.

11 As to the consumption of wine, the pyramid suggests that a moderate level of alcohol consumption, especially of red wine, also lowers the risk of heart disease and reduces overall mortality.

12 There are a few potential problems in all of this. Some point out, for example, that *advocating* a diet in which nearly 40% of the calories we take in comes from olive oil is problematic. Olive oil is pure 100% fat, and fat, no matter what its positive effects may be, is public health enemy number one.

Task 4 Reading comprehension.

1. What is good news about diet, as found in two conferences?
2. What is the Mediterranean diet?
3. Where did doctors in the 1950’s find the lowest rates of heart disease?
4. What are two important parts of the Mediterranean diet?
5. How much red meat should be eaten, according to the article?
6. Why are olives and olive oil beneficial to one’s health?
7. Why might small amounts of wine be healthy?
8. What are some of the arguments against the Mediterranean diet?

Task 5 Vocabulary building. The words are from the text above. Write the correct word in each blank.

cholesterol	pinnacle
advocate	crucial
life expectancy	longevity
legumes	conspicuous

- The top of something is called its _____ .
- Beans and lentils are types of _____ .
- We wish you good health and _____ .
- If you support an idea or behaviour publicly, you _____ it.
- She made herself _____ by her exhibitionistic behaviour.
- If something is extremely important because it will affect other things, it is _____ .
- Too much _____ in the blood can lead to heart disease.
- The number of years we are likely to live is our _____ .

SEMINAR 8 HEALTHY LIFESTYLE - LISTENING

Task 6 Listen to the conversation and answer the questions below.

1. What does the man want to do?
 - a) play basketball with friends from work
 - b) try out for the company baseball team
 - c) get in shape and compete in a cycling race

2. What is the woman's main concern?
 - a) She is worried her husband will spend too much time away from home.
 - b) She is afraid her husband will become a fitness freak.
 - c) She is concerned about her husband’s health.

3. What is the woman's first suggestion to her husband?
 - a) He should see a doctor.

- b) Her husband should start with a light workout.
c) Her husband needs to visit a fitness trainer.
4. What does the woman advise about the man's diet?
a) He should consume less salt.
b) He should eat less fatty foods.
c) He should add more protein products to his diet.

5. Why does the man's wife recommend cycling?
a) It is good for improving muscle tone.
b) It helps strengthen the heart.
c) It helps develop mental toughness.

Task 7 Listen again and complete the gaps.

1. ... they're organizing a company basketball team, and I'm thinking about _____.
2. ...I just don't want you having a _____ running up and down the court.
3. ...should I just abandon the idea? I'm not that _____.
4. ... and you need to watch your diet and _____ the fatty foods, like ice cream.
5. ... you should _____ a little weight training to strengthen your muscles or perhaps try cycling to _____ your cardiovascular system.
6. ...I just love you, and I want you to _____ for a long, long time.

<http://www.esl-lab.com/health/healrd1.htm>

Task 8 Home reading. Read and study the following paragraphs on sports nutrition.

Sports nutrition

Peak performance requires commitment to training and a number of other aspects. Our diet - what we eat and drink - is one of the areas which can influence sports performance. Sports nutrition is the what, when and how much of food and fluids we should consume.

Macronutrients and micronutrients

1. The keys to good nutrition are *balance, variety and moderation*. To stay healthy, your body needs the right balance of **carbohydrates, fats, and protein** -- the three main components of nutrition, or macronutrients.
2. You also need micronutrients **vitamins, minerals** and other substances from many different foods, and while some foods are better than others, no single food or food group has it all--so eating a variety of different foods is essential.

Moderation means eating neither too much nor too little of any food or nutrient. Too much food can result in excess weight and even too much of certain nutrients, while eating too little can lead to numerous nutrient deficiencies and low body mass.

Carbohydrates

Carbohydrates: the basic building block of a carbohydrate is a sugar molecule, a simple union of carbon, hydrogen, and oxygen. The human body uses carbohydrates in the form of glucose and it can convert both simple and complex carbohydrates into energy very quickly. The brain needs to use glucose as an energy source, since it cannot use fat for this purpose. This is why the level of glucose in the blood must be constantly maintained above the minimum level. The liver and muscles store some as glycogen, a complex carbohydrate that the body can easily and rapidly convert to energy. The amount of carbohydrates stored as glycogen is equivalent to about a day's worth of calories.

Carbohydrates can be classified as *simple* (monosaccharides and disaccharides) or *complex* (oligosaccharides and polysaccharides):

- **monosaccharides** (glucose, fructose, galactose, xylose and ribose) typically in fruits, berries, vegetables and honey.
- **disaccharides** formed by two monosaccharides (sucrose and lactose) in table sugar, i.e. sweets, cookies, cakes etc. and lactose comes primarily from milk
- **oligosaccharides** grains and vegetables
- **starch polysaccharides** found in cereals, whole grains, rice, pasta, potatoes, peas, corn and legumes.
- glycogen: found in the liver and muscles
- **non-starch polysaccharides**: dietary fiber such as cellulose, hemicelluloses, pectins

Simple sugars are absorbed directly by the small intestine into the bloodstream, where they are then transported to where they are required. Complex carbohydrates are broken down by enzymes into their constituent sugars which are then absorbed into the bloodstream while dietary fiber moves food through the digestive system.

Non-starch carbohydrates are the main components of dietary fiber. These are the indigestible portion of plant foods, such as cellulose, the major component of plant cell walls that consists of several thousand glucose units.

Fats

Besides being a source of energy, fat stores protect the internal organs of the body. Some essential fats are also required for the formation of hormones. Fats are the slowest source of energy but the most energy-efficient form of food. Because fats are such an efficient form of energy, they are stored by the body either in the *abdomen* (omental fat) or *under the skin* (subcutaneous fat) for use when the body needs more energy.

Fats that are in foods are combinations of four main types:

- **Saturated fats**: They are called saturated because they are fully saturated with hydrogen atoms and cannot incorporate more. They are solid at room temperature and are most often of animal origin. Examples are *butter, cheese, lard*. An excess of these fats in the diet however, is believed to raise the LDL cholesterol – low density lipids or bad cholesterol – level in the bloodstream.
(E.g. *Butter, cheese, meat, meat products (sausages, hamburgers), whole milk and yoghurt, pies, pastries, lard, dripping, hard margarines and baking fats, coconut and palm oil.*)
- **Monounsaturated fats**: These are composed mostly of monounsaturated fatty acids. They are liquid at room temperature. Examples are *olive, peanut, canola oil*. They appear to protect against heart disease, in that they reduce LDL cholesterol levels.
(E.g. *Olives, rapeseed, nuts (pistachio, almonds, hazelnuts, macadamia, cashew, pecan), peanuts, avocados, and their oils.*)

- **Polyunsaturated fats:** These fats are composed mostly of fatty acids such as linoleic or linolenic acids, as for example *corn oil*, *sunflower oil*. They are also liquid at room temperature. Polyunsaturated fats are thought to reduce the risk of coronary heart disease. The omega-3 forms are believed to play an important role in brain and eye function. Oily fish such as *salmon*, *herring* and *mackerel* are examples of omega-3s, and they are also found in *walnuts* and some oils like *soybean*.
- **Trans fatty acids.** They are produced by the partial hydrogenation of vegetable oils and present in *hardened vegetable oils*, most *margarines*, *commercial baked foods*, and many *fried foods*. An excess of these fats in the diet is thought to increase the risk of heart disease.

Proteins

Proteins are important biological molecules (biomolecules) that consist of strings of smaller units called amino acids, the “building blocks” of proteins.

They are present in every living cell. In the skin, hair, callus, cartilage, muscles, tendons and ligaments, proteins hold together, protect, and provide structure to the body. As enzymes, hormones, antibodies, and globulins, they catalyze, regulate, and protect the body chemistry. Important biomolecules like hemoglobin, myoglobin and various lipoproteins, that carry oxygen and other substances within the body are also proteins.

Besides providing energy to the body, dietary protein is also required for growth—especially by children, teenagers, and pregnant women, tissue repair, immune system function, hormone and enzyme production, and for lean muscle mass and tone maintenance.

There are 20 amino acids and the body can make some of them from components within the body, but it cannot synthesize nine of them, accordingly called the “essential amino acids” since they must be provided in the diet. They include: histidine, isoleucine, leucine, methionine, phenylalanine, threonine, tryptophan, and valine. Protein that comes from animal sources are called “*complete proteins*” because they contains all of the essential amino acids while protein from plants, legumes, grains, nuts, seeds and vegetables are called “*incomplete proteins*” because they are lacking one or more essential amino acid(s).

Proteins are complex molecules and the body needs time to break them down. This is why they are a slower and longer-lasting source of energy than carbohydrates. If more protein is consumed than is needed, the body stores its components as fat. Proteins are broken down during digestion, which exposes them to acid in the stomach and to degradation by the action of enzymes called proteases.

Foods that are a source of protein include:

- **Animal protein:** Meat, poultry, fish, eggs, milk, cheese and yogurt provide high biological value proteins, because they contains all the essential amino acids.
- **Plant proteins:** Plants, legumes, grains, nuts, seeds and vegetables provide low biological value proteins. However, combining proteins from different plant sources in the same meal often results in a mixture of higher biological value. Examples of such combinations are: beans with rice, pasta or manioc, chickpeas with bread, lentils with potatoes, vegetables with cereals.

<http://www.diet.com/g/macronutrients>