

**Self-training questions to concluding summing-up control  
“Nutrition”  
for 3<sup>rd</sup> year students of MEDICAL FACULTY № 2  
for the spring-summer term of 2017-2018 academic year**

1. The main of functions of food.
2. Healthy nutrition. Basic principles of healthy nutrition.
3. Energy expenditure. Methods of energy expenditure calculation.
4. Physical activity coefficient. Daily activity category.
5. Body nutritional status and methods of its assessment.
6. Definition and assessment formula of Quetelet index, Brock-Bruhsh index.
7. Definition and assessment formula of body mass index (BMI).
8. Physiological standards of nutrients.
9. Caloric value of food products.
10. The main physiological and hygienic functions of proteins.
11. The main sources of proteins.
12. The main physiological and hygienic functions of fats, classification of fats.
13. The main sources of fats.
14. The main physiological and hygienic functions of carbohydrates, classification of carbohydrates.
15. The main sources of carbohydrates.
16. Dietary fiber, functions of fiber, primary sources.
17. Classification of vitamins and pseudovitamins.
18. Physiological and hygienic functions of vitamins.
19. Food which contains vitamins.
20. Basic symptoms of vitamin deficiency.
21. Causes of vitamin deficiency.
22. Antivitamins.
23. Classification of mineral substances.
24. Physiological and hygienic functions of basic mineral substances.
25. The main alimentary sources of minerals.
26. The main symptoms of mineral substances deficiency.
27. Causes of mineral deficiency.
28. Demineralizing substances.
29. Loss of nutrients in basic types of heat cooking.
30. Nutritional regimen. Principles of the healthy nutritional regimen.
31. Classification of the main diseases associated with nutritional factors.
32. Food poisoning. Classification of food poisoning.
33. Food poisoning of microbial origin. Kinds of microorganisms. Prevention of poisoning.
34. Food poisoning of non-microbial origin. Prevention of poisoning.
35. Bacterial food intoxication, definition, etiological factors.
36. Bacterial food toxic infection, definition, etiological factors.
37. Mycotoxicosis, skombroid food poisoning, definition, etiological factors.
38. Comparative characteristics of microbial food poisoning and acute intestinal infections.

39. The main principles of food poisoning prevention.
40. The main groups of food products (food stuffs).
41. Functions of milk and dairy products in nutrition Dietary functions of milk, dairy products, their sanitary quality, epidemic safety.
42. Functions of meat and meat products in nutrition. Dietary functions of meat. Sanitary quality and epidemiological safety of meat in nutrition.
43. Functions of fish and seafood products in nutrition. Hygienic characteristics. Dietary functions of fish and seafood.
44. Functions of eggs in nutrition. Hygienic characteristics.
45. Functions of vegetables, fruit and berries in nutrition. Dietary and preventive functions.
46. Parapharmacological properties of some vegetable products.
47. Functions of bread and cereal products. Dietary functions.
48. Functions of confectionery and sweets in nutrition. Hygienic characteristics.
49. Functions of beverages in nutrition. Hygienic characteristics.
50. Classification of mineral water beverages.
51. The most useful nutritional products.
52. Problems of overweight.
53. Anticancerogenic nutrition. The main nutritional principles.
54. Healthy nutrition pyramid.
55. Postulates of healthy nutrition.
56. Recent technologies in nutrition nowadays.

### **Practical skills to summing-up control**

1. Calculate the mean average energy expenditure (consumption) for a 35- year -old woman, a teacher, 70 kg in weigh, 168 cm in height.
2. Calculate the Quetelet index (body mass index) and evaluate the nutritional status of a 29-year-old man, 170 cm in height, weighing 75 kg. What are your recommendations concerning his nutrition?
3. Calculate the Brock index and evaluate the nutritional status of a 30-year-old woman, 165 cm in height, weighing 54kg. What are your recommendations concerning her nutrition?
4. Calculate the required amount of total protein, fat and carbohydrate for the person with energy consumption of 3500 kcal.
5. Calculate the required amount of carbohydrates (total, simple, food fibers), vitamins(C, B1, D and E) and mineral substances (Fe and I) for a woman with energy consumption of 2200 kcal.
6. Calculate the required amount of protein (total and animal protein), water-soluble vitamins and mineral substances (Ca, Mg, Zn and Se) for a sportsman with energy consumption of 4000 kcal.
7. A medical student daily obtains from his food ration the following amount of vitamins: C – 40 mg, B1– 0.8 mg, B2 – 0.9 mg. B6 – 0.7 mg, PP – 5.5 mg, A – 0.5 mg, E – 15 mg, D – 2.5 mcg, K – 0.2. Estimate whether his

- vitamin supply covers his requirement, while his energy expenditure makes up 3200 kcal. What are your recommendations concerning his nutrition?
8. A woman is daily supplied with the protein: total protein -55g, animal protein -22g; fat: total fat -70g, vegetable fat -30g; carbohydrates: 450g, mono and disaccharides (simple)-75g. Evaluate whether this amount of nutrients can cover her requirement, while her energy expenditure makes up 2600 kcal. What are your recommendations concerning her nutrition?
  9. Mineral substances deficiency is characterized by such symptoms: tiredness, vertigo, sleepiness, headache, decreased appetite, pale skin, disordered taste sensation. What are your recommendations concerning nutrition in this case?
  10. A 25-year-old woman has suddenly accepted vegan nutritional patterns. What nutrients will her body lack? What are your recommendations regarding the nutritional regimen?
  11. A 30-year-old man consumes 500g of meat and fish every day. What will the consequences of such regimen be? What are your recommendations regarding the nutritional regimen?
  12. What vitamin deficiency is characterized by the following symptoms: gingival bleeding during tooth brushing, pale and dry skin, keratinization of hair follicles with isolated petechiae, fatigue, increased susceptibility to colds?
  13. Decreased muscle tone, muscular weakness, infertility and spontaneous abortions, atherosclerosis, coronary heart disease. What vitamin deficiency may produce the above mentioned symptoms?
  14. What mineral substance deficiency may lead to such clinical signs: irritability, moody character, excitement, feeling of fear, convulsions?
  15. Retarded sexual development, personal growth retardation, prolonged wound healing, furuncles, acne. What mineral substance deficiency may lead to these symptoms?
  16. Regular consumption of strong tea in big quantities may cause decreased digestion of iron and calcium. What antialimentary factor (demineralizing substance) may this be related to?
  17. Regular consumption of raw eggs in big quantities may cause the biotin deficiency. What substance in eggs possesses antivitamin properties and why?
  18. Calculate the caloric value and amount of proteins, calcium and vitamin C obtained from the consumption of 150 g of cottage-cheese with moderate fat content, combined with 200 g of strawberries.
  19. Calculate the caloric value of the consumption of the following foodstuffs: 150g of coffee (10 g of dry substance) with 30 g of milk and 5 g of sugar, twice a day.
  20. A teenager has consumed 2.5 litres of Coca-Cola, 30 g of raisins and 30 g of dried apricots during the day. Calculate the caloric value of the consumed food and the amount of carbohydrates contained in these foodstuffs.
  21. Two students consumed sandwiches with cheese and sausage, cream cakes and tea. In 2 hours after last meal intake they started complaining of nausea,

vomiting, epigastric pain and body temperature of 37<sup>0</sup>C. What could cause these symptoms and why did they develop? What are the preventive measures?

22. What preventive measures should a person keep to while tinning (canning) the food at home, to prevent accumulation of botulism toxins?
23. Analyze the nutrient losses in basic types of heat cooking and recommend the food processing method, aimed to reduce vitamin C and B<sub>1</sub> loss.

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**INSTRUCTIONS FOR THE STUDENTS TO THE PRACTICAL CLASSES**  
**FOR 3<sup>RD</sup> YEAR STUDENTS OF MEDICAL FACULTY № 2**  
**FOR THE SPRING-SUMMER TERM OF 2017-2018 ACADEMIC YEAR**

**TOPIC 1**

**«Dietetic Characteristics Of Milk And Dairy Products»**

**1. Learning objective**

Extend the students' knowledge about dietetic characteristics of milk and dairy products.

**2. Basics**

2.1. You should know:

- 2.1.1. Physiological basics of metabolism in the human organism.
- 2.1.2. Energy metabolism and their regulations. Constituents of the daily energy expenditure.
- 2.1.3. Rational nutrition as a basis of the sufficient energy supply for the human organism.
- 2.1.4. Basic function of proteins, fat, carbohydrates, vitamins, minerals.
- 2.1.5. Dietary nutrition principles of people with different nosological forms of diseases and during the re-habilitation.
- 2.1.6. To carry out the prophylactic measures concerning the nutrition optimization.

2.2. You should have the following skills:

- 2.2.1. To monitor the daily activity of the individual or a group with similar daily routine and nutrition. Pay attention to hygienic characteristics and dietary functions of the dairy food.
- 2.2.2. To use directive, reference materials, formulas, tables, nomograms, perform the necessary calculations analyses.

**3. Self-training questions**

- 3.1. Physiological basics of energy and the plasticity of metabolism in organism.
- 3.2. Physiological significance and main functions of the nutrition.
- 3.3. Daily energy expenditure of human organism and its main constituents.
- 3.4. Classification of nutrients and their functions in the organism.
- 3.5. Method of calculation of the human requirements in nutrients.
- 3.5. Basic of characteristics of milk and dairy products.

**4. Self-training assignments**

4.1. Compare of chemical composition of cow and breast milk (kind of proteins; fat, carbohydrates, vitamins, minerals).

4.2. Calculate the caloric value and amount of proteins, calcium and vitamin A obtained from the consumption of:

- 150 g of cottage-cheese;
- 250 ml of milk;
- 20 g of butter;
- 50 g of cheese;
- 200 g of yogurt;

4.3. A 60-year-old man consumes 200g of cheese and 50 g of butter every day. What will the consequences of such day regimen be? What are your recommendations regarding the nutritional regimen?

#### **Literature**

1. General Science of Nutrition. Study Guide for the 4th accreditation level Medical School Students /Edited by S.T. Omelchuk, O.V. Kuzminska., K., 2016. P. 145.

2. Rybak O. The Role of Milk Proteins in the Structure Formation of Dairy Products / Olga Rybak. // Ukrainian Food Journal. – 2014. – №3.– С. 360.

3. Clinical Nutrition Basics for Medical Students Paperback / Amanda Velazquez– 2014 , 304 p.

4. Fundamentals of Human Nutrition: for Students and Practitioners in the Health Sciences, 12-th Edition/Catherine Geissler, Hilary Powers, 2011, p. 291-365.

5. Nutrition at a Glance 1st Edition / Mary Barasi 2014, p. 80-102.

6. Nutrition Counseling and Education Skills: A Guide for Professionals 7th Edition/Judith Beto, Betsy Holli , - 2018, p. 220-245.

7. Nutrition in Public Health 4th Edition /Sari Edelstein,- 2018.-p.183-225.

8. Alimentary Obesity as Hygienic Problem / L. I.Byrjak, E. N. Belitskaya, S. A. Shchudro, L. V. Grygorenko. – Dnipropetrovsk: "Thresholds", 2012. – 273 с.

9. Hygiene and Ecology / [V. G. Bardov, V. F. Moskalenko, S. T. Omelchuk and authors]. – Kiev: NovaKnyha, 2009. – 685 с.

10. Greenfield H. Food Composition Data Production, Management and Use / H. Greenfield, D. Southgate. – Rome: FAO, 2003. – 288 с. – (second edition). – (Food and agriculture organization of the United Nations).

11. CINDI. Принципи здорового харчування / CINDI. – Україна, 2001. – 28с.– (Посібник для поліпшення якості роботи).

12. Гігієна харчування з основами нутриціології / [В. І. Ципріян, Т. І. Аністратенко, Т. М. Білко та ін.]. – Київ: Медицина, 2007. – 528 с. – (у двох томах).

13. «Про затвердження Норм фізіологічних потреб населення України в основних харчових речовинах і енергії». (Наказ МОЗ України № 107 від 03.09.2017).

14. <http://www.fao.org/docrep/018/i3396e/i3396e.pdf>.

15. [http://www4.ncsu.edu/~adpierce/u03\\_characteristics\\_milk.pdf](http://www4.ncsu.edu/~adpierce/u03_characteristics_milk.pdf).

16. <http://advances.nutrition.org/content/5/2/131.full>.

17. <https://authority.nutrition.com/foods/milk/>

#### **Equipment required for the lesson**

1. Tables:

Physiological norms of nutrition for different age and professional population groups.

2. Tables of food products chemical composition and energy value (caloric content).

3. Calculators.

4. Self-training tasks, tests for student.

## **TOPIC 2**

### **«Dietetic Characteristics Of Meat And Meat Products»**

#### **1. Learning objective**

Extend the students' knowledge about dietetic characteristics of meat and meat products.

#### **2. Basics**

##### **2.1. You should know:**

2.1.1. Physiological standards of nutrients.

2.1.2. The main physiological and hygienic functions of proteins, fats, vitamins.

2.1.3. Basic functions of proteins, fats, vitamins, minerals. Its of classification.

2.1.4. Basic symptoms of proteins, vitamins, mineral substances deficiency.

2.1.5. Causes of vitamins and minerals deficiency.

2.1.6. Functions of meat and meat products in nutritions.

2.1.7. Dietary functions of meat and meat products.

##### **2.2. You should have the following skills:**

2.2.1. To monitor the daily activity of the individual or a group with similar daily routine and nutrition. Pay attention to hygienic characteristics and dietary functions of the meat and meat products.

2.2.2. To use directive, reference materials, formulas, tables, nomograms, perform the necessary analyses.

#### **3. Self-training questions**

3.1. Classification of nutrients and their functions in the organism.

3.2. Physiological standards of nutrients.

3.3. Symptoms of proteins, vitamin, mineral substances deficiency.

3.4. Causes of vitamin and mineral deficiency.

3.5. Basic of characteristics of meat and meat products.

3.6. Dietary functions of meat and meat products

#### **4. Self-training assignments**

4.1. Calculate the amount of total fats for the 67-year-old person if he eats 250 g of pork's liver and 150 g of pork's kidneys a long time. What will the consequences of such day regimen be? What are your recommendations regarding the nutritional diet?

4.2. Mineral substances deficiency is characterized by such symptoms: tiredness, vertigo, sleepiness, headache, decreased appetite, pale skin, disordered taste sensation. What are your recommendations concerning nutrition in this case?

4.3. A 22-year-old woman has suddenly accepted vegan nutritional patterns. What nutrients will her body lack? What are your recommendations regarding the nutritional regimen?

4.4. Calculate the caloric value and amount of proteins, iron, fats, vitamin B<sub>12</sub> obtained from the consumption of:

- 200 g of beef;

- 200 ml of fatty pork;

- 200 g of poultry;
- 200 g of chicken (breast cut);
- 200 g of sausage;

4.5. When and why are limited meat products (disease, physiological condition)?

Write down.

### **Literature**

1. General Science of Nutrition. Study Guide for the 4th accreditation level Medical School Students /Edited by S.T. Omelchuk, O.V. Kuzminska., K., 2016. P. 145.
2. Clinical Nutrition Basics for Medical Students Paperback / Amanda Velazquez– 2014 , 304 p.
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4. Nutrition at a Glance 1st Edition / Mary Barasi 2014, p. 80-102.
5. Nutrition Counseling and Education Skills: A Guide for Professionals 7th Edition/Judith Beto, Betsy Holli , - 2018, p. 220-245.
6. Nutrition in Public Health 4th Edition /Sari Edelstein,- 2018.-p.183-225.
7. Alimentary Obesity as Hygienic Problem / L. I.Byrjak, E. N. Belitskaya, S. A. Shchudro, L. V. Grygorenko. – Dnipropetrovsk: "Thresholds", 2012. – 273 с.
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11. Гігієна харчування з основами нутриціології / [В. І. Ципріян, Т. І. Аністратенко, Т. М. Білко та ін.]. – Київ: Медицина, 2007. – 528 с. – (у двох томах).
12. «Про затвердження Норм фізіологічних потреб населення України в основних харчових речовинах і енергії». (Наказ МОЗ України № 107 від 03.09.2017).
13. <http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1053&context=hbspapers>.

### **Equipment required for the lesson**

1. Tables:
  - Physiological norms of nutrition for different age and professional population groups.
2. Tables of food products chemical composition and energy value (caloric content).
3. Calculators.
4. Self-training tasks, tests for student.



## TOPIC 3

### «Dietetic characteristics of fish and seafood products»

#### 1. Learning objective

Extend the students' knowledge about dietetic characteristics of fish and seafood products.

#### 2. Basics

2.1. You should know:

2.1.1. Physiological standards of nutrients.

2.1.2. The main physiological and hygienic functions of proteins, fats, vitamins, minerals.

2.1.3. Basic symptoms of proteins, vitamins, mineral substances deficiency.

2.1.4. Deficiency of UNFA.

2.1.5. Causes of vitamins and minerals deficiency, deficiency of UNFA.

2.1.6. Functions of fish and seafood products in nutritions.

2.1.7. Dietary functions of fish and seafood products.

2.2. You should have the following skills:

2.2.1. To monitor the daily activity of the individual or a group with similar daily routine and nutrition. Pay attention to hygienic characteristics and dietary functions of the fish and seafood products.

2.2.2. To use directive, reference materials, formulas, tables, nomograms, perform the necessary analyses.

#### 3. Self-training questions

3.1. Classification of nutrients and their functions in the organism.

3.2. Physiological standards of nutrients.

3.3. Symptoms of proteins, fats, vitamins, mineral substances deficiency.

3.4. Causes of vitamins, UNFA and minerals deficiency.

3.5. Basic of characteristics of fish and seafood products.

3.6. Dietary functions of fish and seafood products.

3.7. The basic role of the sea products.

#### 4. Self-training assignments

4.1. Retarded sexual development, personal growth retardation, prolonged wound healing, furuncles, acne. What mineral substance deficiency may lead to these symptoms?

4.2. Calculate the caloric value and amount of fats, iodine obtained from the consumption of:

- 200 g of any fish;

- 50 g of caviar;

- 100 g of laminaria (seaweed);

- 200 g of salmon.

#### Literature

1. General Science of Nutrition. Study Guide for the 4th accreditation level Medical School Students /Edited by S.T. Omelchuk, O.V. Kuzminska., K., 2016. P. 145.
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15. <http://www.fao.org/wairdocs/tan/x5916e/x5916e01.htm>.

### **Equipment required for the lesson**

1. Tables:  
Physiological norms of nutrition for different age and professional population groups.
2. Tables of food products chemical composition and energy value (caloric content).
3. Calculators.
4. Self-training tasks, tests for student.

## TOPIC 4

### «Dietetic characteristics of bread and cereal products. Sweets.»

#### 1. Learning objective

Extend the students knowledge about dietetic characteristics of bread and cereal products.

#### 2. Basics

##### 2.1. You should know:

- 2.1.1. Physiological standards of nutrients.
- 2.1.2. The main physiological and hygienic functions of vitamins, minerals.
- 2.1.3. Basic function of vitamins, minerals. The main of their classifications.
- 2.1.4. Basic symptoms of vitamins, mineral substances deficiency.
- 2.1.5. The main sources of carbohydrates.
- 2.1.6. Dietary fiber, functions of fiber, primary sources.
- 2.1.7. Classification of vitamins and pseudovitamins.
- 2.1.8. Functions bread and cereal products nutrition.
- 2.1.9. Dietary functions of fish and seafood products.

##### 2.2. You should have the following skills:

2.2.1. To monitor the daily activity of the individual or a group with similar daily routine and nutrition. Pay attention to hygienic characteristics and dietary functions of the bread and cereal products.

2.2.2. To use directive, reference materials, formulas, tables, nomograms, perform the necessary calculations (analyses).

#### 3. Self-training questions

- 3.1. Classification of nutrients and their functions in the organism.
- 3.2. Physiological standards of nutrients.
- 3.3. Symptoms of vitamins, mineral substances deficiency.
- 3.4. Causes of vitamins and minerals deficiency.
- 3.5. Basic of characteristics of bread and cereal products.
- 3.6. Dietary functions of bread and cereal products.
- 3.7. The basic role of the cereal products.
- 3.8. Problems of overweight.
- 3.9. Glycaemic index. Determination, importance for the body.
- 3.10. Dietary and preventive functions of bread and cereal products.

#### 4. Self-training assignments

4.1. Calculate the required amount of total carbohydrate and energy if the person intakes 250g of white bread per day.

4.2. Calculate the caloric value and amount of vitamins B<sub>1</sub>, B<sub>2</sub>, B<sub>6</sub>, PP obtained from the consumption of:

- 100 g of any cereal products;
- 200 g of any bread;
- 50 g of any candy;

4.3. A teenager has consumed 2.5 litres of Coca-Cola, 30 g of raisins and 30 g of dried apricots during the day. Calculate the caloric value of the consumed food and the amount of carbohydrates contained in these foodstuffs.

## Literature

1. General Science of Nutrition. Study Guide for the 4th accreditation level Medical School Students /Edited by S.T. Omelchuk, O.V. Kuzminska., K., 2016. P. 145.
2. Clinical Nutrition Basics for Medical Students Paperback / Amanda Velazquez– 2014 , 304 p.
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14. <https://www.organicfacts.net/health-benefits/cereal>.
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## Equipment required for the lesson

1. Tables:  
Physiologicalnormsofnutritionfordifferentageandprofessionalpopulation groups.
2. Tables of food products chemical composition and energy value (caloric content).
3. Calculators.
4. Self-training tasks, tests for student.

## **TOPIC 5.**

### **«Dietetic characteristics of vegetables, fruit and berries, nuts.»**

#### **1. Learning objective**

Extend the students' knowledge about dietetic characteristics of vegetables, fruit and berries, nuts.

#### **3. Basics**

##### **3.1. You should know:**

- 3.1.1. Physiological standards of nutrients.
- 3.1.2. The main physiological and hygienic functions of carbohydrate, vitamins, minerals.
- 3.1.3. Basic functions of vitamins, minerals, carbohydrate. The main of their classifications.
- 3.1.4. Antivitamins.
- 3.1.5. Demineralizing substances.
- 3.1.6. Causes of vitamins and minerals deficiency.
- 3.1.7. Functions of vegetables, fruit and berries, nuts nutrition.
- 3.1.8. Dietary functions of vegetables, fruit and berries, nuts.

##### **3.2. You should have the following skills:**

2.2.1. To monitor the daily activity of the individual or a group with similar daily routine and nutrition. Pay attention to hygienic characteristics and dietary functions of the vegetables, fruit and berries, nuts.

2.2.2. To use directive, reference materials, formulas, tables, nomograms, perform the necessary analyses.

#### **3. Self-training questions**

- 3.1. Classification of carbohydrate.
- 3.2. Classification of vitamins.
- 3.3. Classification of minerals substances.
- 3.4. Physiological standards of carbohydrate, vitamins, minerals.
- 3.5. Symptoms of vitamins, minerals substances deficiency.
- 3.6. Glycaemic index. Determination, importance for the body.
- 3.7. Antivitamins and demineralizing substances. Definition and meaning.
- 3.8. Causes of vitamin and mineral deficiency.
- 3.9. Basic of characteristics of vegetables, fruit and berries, nuts.
- 3.10. Dietary functions of vegetables, fruit and berries, nuts.

#### **4. Self-training assignments**

24.A 25-year-old woman has suddenly accepted vegan nutritional patterns. What nutrients will her body lack? What are your recommendations regarding the nutritional regimen?

25. What vitamin deficiency is characterized by the following symptoms: gingival bleeding during tooth brushing, pale and dry skin, keratinization of hair follicles with isolated petechiae, fatigue, increased susceptibility to colds?

26. Calculate the caloric value and amount of vitamin C obtained from the consumption of 150 g of any berries.
27. Analyze the nutrient losses in basic types of heat cooking and recommend the food processing method, aimed to reduce vitamin C, vitamins of group B loss.
28. Calculate the required amount of carbohydrate and energy if the person intakes:
  - 200 g of banana;
  - 300 g of potato;
29. Calculate the required amount of  $\beta$ -carotene:
  - 200 g of pumpkin;
  - 100 g of carrots;
  - 150 g of parsley;
30. Calculate the required amount of vitamin C:
  - 200 g of cherries;
  - 100 g of apricots;
  - 150 g of peaches;

### **Literature**

1. General Science of Nutrition. Study Guide for the 4th accreditation level Medical School Students /Edited by S.T. Omelchuk, O.V. Kuzminska., K., 2016. P. 145.
2. Clinical Nutrition Basics for Medical Students Paperback / Amanda Velazquez– 2014 , 304 p.
3. Fundamentals of Human Nutrition: for Students and Practitioners in the Health Sciences, 12-th Edition/Catherine Geissler, Hilary Powers, 2011, p. 291-365.
4. Nutrition at a Glance 1st Edition / Mary Barasi 2014, p. 80-102.
5. Nutrition Counseling and Education Skills: A Guide for Professionals 7th Edition/Judith Beto, Betsy Holli , - 2018, p. 220-245.
6. Nutrition in Public Health 4th Edition /Sari Edelstein,- 2018.-p.183-225.
7. Alimentary Obesityas Hygienic Problem / L. I.Byrjak, E. N. Belitskaya, S. A. Shchudro, L. V. Grygorenko. – Dnipropetrovsk: "Thresholds", 2012. – 273 с.
8. Hygieneand Ecology / [V. G. Bardov, V. F. Moskalenko, S. T. Omelchuk and authors]. – Kiev: NovaKnyha, 2009. – 685 с.
9. Greenfield H. Food Composition Data Production, Managementand Use / H. Greenfield, D. Southgate. – Rome: FAO, 2003. – 288 с. – (second edition). – (Food and agriculture organization of the United Nations).
10. CINDI. Принципи здорового харчування / CINDI. – Україна, 2001. – 28с.– (Посібник для поліпшення якості роботи).
11. Гігієна харчування з основами нутриціології / [В. І. Ципріян, Т. І. Аністратенко, Т. М. Білко та ін.]. – Київ: Медицина, 2007. – 528 с. – (у двох томах).

12. «Про затвердження Норм фізіологічних потреб населення України в основних харчових речовинах і енергії». (Наказ МОЗ України № 107 від 03.09.2017).

13. <http://livewell.jillianmichaels.com/diet-fruits-vegetables-nuts-5355>.

### **Equipment required for the lesson**

1. Tables:  
Physiological norms of nutrition for different age and professional population groups.
2. Tables of food products chemical composition and energy value (caloric content).
3. Calculators.
4. Self-training tasks, tests for student.

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**THE PRACTICAL LESSON COURSE SCHEDULE ON  
“NUTRITION”  
FOR THE STUDENTS OF 3 COURSE (MEDICAL FACULTY № 2)**

<b>№ of group</b>	<b>Teacher of group</b>	<b>Topic № 1 date/ time</b>	<b>Topic № 2 date/ time</b>	<b>Topic № 3 date/ time</b>	<b>Topic № 4 date/ time</b>	<b>Topic №5 date/ time</b>
5639M2a	O.V. Kuzminska	06.02.2018 (13.40-15.20)	13.02.2018 (13.40-15.20)	20.02.2018 (13.40-15.20)	27.02.2018 (13.40-15.20)	06.03.2018 (13.40-15.20)
5638M2a	N.V. Velyka	07.02.2018 (13.40-15.20)	14.02.2018 (13.40-15.20)	21.02.2018 (13.40-15.20)	28.02.2018 (13.40-15.20)	07.03.2018 (13.40-15.20)
5637M2a	O.V. Kuzminska	08.02.2018 (8.20-10.00)	15.02.2018 (8.20-10.00)	22.02.2018 (8.20-10.00)	01.03.2018 (8.20-10.00)	15.03.2018 (8.20-10.00)
5640M2a	N.V. Velyka	08.02.2018 (8.20-10.00)	15.02.2018 (8.20-10.00)	22.02.2018 (8.20-10.00)	01.03.2018 (8.20-10.00)	15.03.2018 (8.20-10.00)
5636M2a	O.V. Kuzminska	22.03.2018 (8.20-10.00)	29.03.2018 (8.20-10.00)	05.04.2018 (8.20-10.00)	12.04.2018 (8.20-10.00)	19.04.2018 (8.20-10.00)
5630Ca	N.V. Velyka	12.04.2018 (8.20-10.00)	19.04.2018 (8.20-10.00)	26.04.2018 (8.20-10.00)	03.05.2018 (8.20-10.00)	10.05.2018 (8.20-10.00)
5628M2a	O.V. Kuzminska	18.04.2018 (8.20-10.00)	25.04.2018 (8.20-10.00)	16.05.2018 (8.20-10.00)	23.05.2018 (8.20-10.00)	30.05.2018 (8.20-10.00)
5633M2a	O.V. Kuzminska	18.04.2018 (13.40-15.20)	25.04.2018 (13.40-15.20)	16.05.2018 (13.40-15.20)	23.05.2018 (13.40-15.20)	30.05.2018 (13.40-15.20)
5632M2a	N.V. Velyka	20.04.2018 (8.20-10.00)	27.04.2018 (8.20-10.00)	04.05.2018 (8.20-10.00)	11.05.2018 (8.20-10.00)	18.05.2018 (8.20-10.00)
5631M2a	O.V. Kuzminska	20.04.2018 (11.00-12.40)	27.04.2018 (11.00-12.40)	04.05.2018 (11.00-12.40)	11.05.2018 (11.00-12.40)	18.05.2018 (11.00-12.40)
5634M2a	O.V. Kuzminska	20.04.2018 (13.40-15.20)	27.04.2018 (13.40-15.20)	04.05.2018 (13.40-15.20)	11.05.2018 (13.40-15.20)	18.05.2018 (13.40-15.20)
5635M2a	N.V. Velyka	20.04.2018 (13.40-15.20)	27.04.2018 (13.40-15.20)	04.05.2018 (13.40-15.20)	11.05.2018 (13.40-15.20)	18.05.2018 (13.40-15.20)
5629M2a	O.V. Kuzminska	26.04.2018 (11.00-12.40)	03.05.2018 (11.00-12.40)	10.05.2018 (11.00-12.40)	17.05.2018 (11.00-12.40)	24.05.2018 (11.00-12.40)

**№№ Topic of practical lesson**

1. Dietetic characteristics of milk and dairy products.
2. Dietetic characteristics of meat and meat products.
3. Dietetic characteristics of fish and seafood products, eggs and eggs products.
4. Dietetic characteristics of bread and cereal products, confectionery products.  
Sweets.
5. Dietetic characteristics of vegetables, fruit and berries, nuts.

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**“Nutrition” course schedule of self-educational extramural work  
for 3<sup>rd</sup> year students of *MEDICAL FACULTY № 2*  
for the spring-summer term of 2017-2018 academic year**

№	Topic	Duration, hours	Type of control
1.	<b>Preparing to practical lessons</b> – theoretical preparing and acquisition of practical skills	10	Regular control on practical lessons
2.	<b>Self-training preparation of a topic which is not included in the lectures and practical lessons course schedule</b>		
	<b>1. Modern approach to food safety</b>	4	Regular control on practical lessons
	<b>2. Problems of overweight</b>	4	
	<b>3. Anticancer nutrition</b>	4	
	<b>4. Healthy nutrition pyramid and its principles</b>	6	
	<b>5. Nutrition of various age and profession groups</b>	4	
	<b>6. Bases of clinical-preventive nutrition</b>	4	
	<b>7. Recent technologies in nutrition now a days</b>	4	
3.	<b>Individual research self-training work*</b>	10	--/--
<b>TOTAL</b>		50	

\*Individual research self-training work - Calculating individual requirement for basic nutrients

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**THE FINAL CONTROL**  
**“NUTRITION”**  
**FOR THE STUDENTS OF 3 COURSE**  
**MEDICAL FACULTY № 2**

<b>№ of group</b>	<b>The teachers</b>	<b>Date/ time</b>
5639M2a	O.V. Kuzminska	06.03.2018 (13.40-15.20)
5638M2a	N.V. Velyka	07.03.2018 (13.40-15.20)
5637M2a	O.V. Kuzminska	15.03.2018 (8.20-10.00)
5640M2a	N.V. Velyka	15.03.2018 (8.20-10.00)
5636M2a	O.V. Kuzminska	19.04.2018 (8.20-10.00)
5630Ca	N.V. Velyka	10.05.2018 (8.20-10.00)
5628M2a	O.V. Kuzminska	30.05.2018 (8.20-10.00)
5633M2a	O.V. Kuzminska	30.05.2018 (13.40-15.20)
5632M2a	N.V. Velyka	18.05.2018 (8.20-10.00)
5631M2a	O.V. Kuzminska	18.05.2018 (11.00-12.40)
5634M2a	O.V. Kuzminska	18.05.2018 (13.40-15.20)
5635M2a	N.V. Velyka	18.05.2018 (13.40-15.20)
5629M2a	O.V. Kuzminska	24.05.2018 (11.00-12.40)

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PRACTICAL LESSONS DEBT CLEARANCE  
AND CONSULTATIONS SCHEDULE  
FOR 3<sup>RD</sup> YEAR STUDENTS OF MEDICAL FACULTY № 2  
FOR THE SPRING-SUMMER TERM OF 2017-2018 ACADEMIC YEAR  
«Nutrition»

Date of debt clearance	Day of debt clearance	Teacher (Tutor)
07.02.18	Wednesday	Assistant professor Kuzminska O.V.
08.02.18	Thursday	Assistant professor Velyka N.V.
14.02.18	Wednesday	Assistant professor Kuzminska O.V.
15.02.18	Thursday	Assistant professor Velyka N.V.
21.02.18	Wednesday	Assistant professor Kuzminska O.V.
22.02.18	Thursday	Assistant professor Velyka N.V.
28.02.18	Wednesday	Assistant professor Kuzminska O.V.
01.03.18	Thursday	Assistant professor Velyka N.V.
07.03.18	Wednesday	Assistant professor Kuzminska O.V.
08.03.18	Thursday	Assistant professor Velyka N.V.
14.03.18	Wednesday	Assistant professor Kuzminska O.V.
15.03.18	Thursday	Assistant professor Velyka N.V.
21.03.18	Wednesday	Assistant professor Kuzminska O.V.
22.03.18	Thursday	Assistant professor Velyka N.V.
28.03.18	Wednesday	Assistant professor Kuzminska O.V.
29.03.18	Thursday	Assistant professor Velyka N.V.
04.04.18	Wednesday	Assistant professor Kuzminska O.V.
05.04.18	Thursday	Assistant professor Velyka N.V.
11.04.18	Wednesday	Assistant professor Kuzminska O.V.
12.04.18	Thursday	Assistant professor Velyka N.V.
18.04.18	Wednesday	Assistant professor Kuzminska O.V.
19.04.18	Thursday	Assistant professor Velyka N.V.
25.04.18	Wednesday	Assistant professor Kuzminska O.V.
26.04.18	Thursday	Assistant professor Velyka N.V.
02.05.18	Wednesday	Assistant professor Kuzminska O.V.
03.05.18	Thursday	Assistant professor Velyka N.V.
09.05.18	Wednesday	Assistant professor Kuzminska O.V.
10.05.18	Thursday	Assistant professor Velyka N.V.
16.05.18	Wednesday	Assistant professor Kuzminska O.V.
17.05.18	Thursday	Assistant professor Velyka N.V.
23.05.18	Wednesday	Assistant professor Kuzminska O.V.
24.05.18	Thursday	Assistant professor Velyka N.V.
30.05.18	Wednesday	Assistant professor Kuzminska O.V.
31.05.18	Thursday	Assistant professor Velyka N.V.

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