

## **GENERAL COURSE TITLE. NUTRITION FOR SCHOOL-AGED CHILDREN (Module C. Nutrition in Specific group)**

### **Course overview**

#### **WELCOME TO COURSE NUTRITION FOR SCHOOL-AGED CHILDREN**

This course presents the scientific basis for school – aged children nutrition emphasizing the energy needs of activity and effect of dietary intake on performance. In the fast-developing world, where everything around us is developing at lightning speed, the problem of nutrition at school age is becoming more and more popular, because it directly affects the health of future generations. Increasing public access to information enables the growth of a generation well-versed in healthy lifestyles and healthy eating. The culture of a healthy lifestyle, and hence healthy eating, is becoming more and more popular. The focus of the current development is to present and evaluate school-age nutrition, healthy and alternative (non-traditional) nutrition and the main nutrients that play an essential role in the development of organisms.

**Semester:** 1,2

**Type:** Elective      **Semester load:** 1 unit = 45 min      **ECTS:** 2      **Groups:**

**Prerequisites:** Anatomy; Physiology, Nutrition Biochemistry.

### **Lecturers:**

<b>Name</b>	<b>Position</b>	<b>Contact information</b>	<b>Institute</b>
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<b>Isoeva Bahriniso</b>	candidate of medical sciences, head of infectious diseases department	+ 992 903 21 35 00 Telegram, What's App bahriniso@yahoo.co.uk	Khatlon state medical university, Dangara Tajikistan
<b>Khasanova Dilnoza</b>	Dean of international faculty, DSc, Associate professor of the	+998 91 781 09 35 akwamarin80@gmail.com	Bukhara State Medical Institute named after Abu Ali ibn Sino, Uzbekistan

	Department of Anatomy, clinical anatomy (OSTA)		
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**Goals of the course:**

The relevance of the problem is determined by the established need of organisms for substances that will be useful for them. Children and adolescents need a varied and healthy diet, which is necessary for their growth and development. Unbalanced nutrition at this age can be cause of eases at a later stage. During this time, many eating habits change, likes for one food and whims for another. Family, friends and the media (especially television) influence food choices and eating habits. School-aged children often tend to eat a greater variety of foods than, for example, their younger siblings.

The goal of the course is to present and examine the healthy nutrition of school-aged children, the main nutrients - proteins, fats, carbohydrates, water, minerals, vitamins, ballast substances that contribute to the proper development of children's bodies and are in accordance with the Central Asia introduced requirements for proper nutrition at this age.

**Key areas:**

- To present school-age nutrition accepted as the most beneficial for children;
- To consider healthy and non-traditional (alternative) nutrition, and the ways to implement them; make a comparative assessment between healthy and unbalanced nutrition;
- To present the main nutrients, their benefits, ways to combine them, as well as this point the main benefits of including them in the children's menu.

**At the completion of the course, students should be able to:**

1. Categorize the role of main nutrients - proteins, fats, carbohydrates, water, minerals, vitamins, ballast substances that contribute to the proper development of children's bodies
2. Examine the healthy and alternative (non-traditional) nutrition of school-aged children,
3. Make a comparative assessment between healthy and unbalanced nutrition
4. Categorize the efficacy of the main nutrients, their benefits, ways to combine them, as well as the main benefits of including them in the children's menu.

**Schedule:**

Unit number, date and time	Topic	Tasks, homework & deadlines
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<b>Week 1</b> Topic 1	Introduction to healthy nutrition. Learning Objectives: Define and describe the general concept of healthy eating, main knowledge about Healthy eating pyramid and Healthy plate.	Course Orientation-10 min Self-study of reading materials-45min Quiz in Moodle-10 min Writing task in Moodle- 20min Conclusion-5 min Homework: To prepare a presentation on topic “Functions of food and digestion”
Topic 2	Proteins. Carbohydrates. Fats Learning Objectives: Define and describe the general concept about carbohydrates, fats and proteins their functions in the school-aged children body and the required amount per day.	Orientation-10 min Self-study of reading materials-45min Quiz in Moodle-10 min Writing task in Moodle- 20min Conclusion-5 min Homework: To prepare a presentation on topic “The role of essential amino acids in the children body”
Topic 3	Vitamins. Water soluble vitamins. Fat soluble vitamins. Learning Objectives: Define and describe the general concept about water-soluble vitamins, main functions of each water-soluble vitamin in the school-aged children body, their sources and the required amount of vitamins per a day.	Orientation-10 min Self-study of reading materials-45min Quiz in Moodle-10 min Writing task in Moodle- 20min Conclusion-5 min Homework: To prepare a presentation on topic “The role of vitamin-like substances in children’s nutrition”
Topic 4	Minerals. Macro mineralы and microminerals. Learning Objectives: Define and describe the general concept about macro- and microminerals, main functions of each macro- and micro minerals in the school-aged children body, their sources and the required amount of macro- and micro minerals per a day.	Orientation-10 min Self-study of reading materials-45min Quiz in Moodle-10 min Writing task in Moodle- 20min Conclusion-5 min Homework: To prepare a presentation on topic “The importance of prevention of micronutrient deficiency in school-aged children”
Topic 5	Mid control	Orientation-40 min Mid control -40 min Conclusion-10 min

<p>Week 2 Topic 6</p>	<p>Promoting healthy eating habits: Promoting healthy eating habits with "food-based dietary guidelines" (e.g., food-based recommendations on fruits and vegetables, the importance of whole grains, limiting sugary drinks, how to deal with fast food).</p> <p>Learning Objectives: Define and describe the general concept of healthy eating habits and identify types of food habits.</p>	<p>Lecture-45 min Detect positive food habits - 20 min Explain negative food habits-25 min <a href="https://vc-training.fh-joanneum.at/moodle/mod/assign/">https://vc-training.fh-joanneum.at/moodle/mod/assign/</a> Homework: Case study</p>
<p>Topic 7</p>	<p>Nutrition education: how can parents, teachers, and caregivers educate and support children and youth in healthy eating? Learning Objectives: Describe how can parents, teachers, and caregivers educate and support children and youth in healthy eating</p>	<p>Lecture-45 min Students should To prepare presentation how can parents, teachers, and caregivers educate and support children and youth in healthy eating? -45 min <a href="https://vc-training.fh-joanneum.at/moodle/mod/assign/">https://vc-training.fh-joanneum.at/moodle/mod/assign/</a> Homework: Case study</p>
<p>Topic 8</p>	<p>Practical aspects: Tips and advice on preparing healthy meals, meal planning, and encouraging eating habits (e.g., input on the importance of regular meals or input regarding snacking).</p>	<p>Lecture-45 min Students should To prepare presentation how can encourage someone to develop healthy eating habits, planning to do to make food choices and food habits healthier -45 min <a href="https://vc-training.fh-joanneum.at/moodle/mod/assign/">https://vc-training.fh-joanneum.at/moodle/mod/assign/</a> Homework: Case study</p>
<p>Topic 9</p>	<p>Cultural and social influences: How do cultural and social factors influence nutrition in childhood and adolescence? This may include eating habits, access to food, and social norms. Learning Objectives:</p>	<p>Lecture-45 min Students to look for information on food groups of other countries from the internet, T.V books, journals etc.-45min <a href="https://vc-training.fh-joanneum.at/moodle/mod/assign/">https://vc-training.fh-joanneum.at/moodle/mod/assign/</a> Homework: Case study</p>

	Define and describe the general concept of healthy eating habits and identify types of food	
Final control	Final control	Orientation-50 min Final control-40 min Conclusion-10 min

### Previous knowledge required:

Basics of: physiology, biochemistry, pathology, nutritional physiology, basic knowledge of dietetics

### Learning methods:

Method: Please tick as appropriate and describe		
<input checked="" type="checkbox"/>	Lecture	Lectures and reading materials are given for students in Moodle.
<input checked="" type="checkbox"/>	Exercises	Every class student should do quiz and writing task in Moodle
<input type="checkbox"/>	Survey in institutions	
<input type="checkbox"/>	Street survey	
<input type="checkbox"/>	Excursion	
<input checked="" type="checkbox"/>	Presentation	Home tasks: to prepare presentations for different topics related to school aged children nutrition.
<input type="checkbox"/>	Seminar paper	
<input type="checkbox"/>	Project work	
<input type="checkbox"/>	Group work	
<input checked="" type="checkbox"/>	Other	Self-work, group work, PBL, TBL

### Grading:

Assessment:	Weighting in %
1 Homework assignments	20
2 Collaboration	
3 Exercises	20
4 Seminar paper	
5 Midterm exam	30
6 Final written exam	30
7 Final oral exam	
8 Presentation	

9	Project work	
10	Other	

Grade		In points
1	Very good	92-100
2	Good	83-91
3	Satisfactory	74-82
4	Sufficient	66-73
5	Not sufficient	0-65

### **Participation in course:**

Students are obliged to attend all courses - as long as they are not prevented by illness or other compelling reasons. In such cases, a written excuse must be sent to the course director, the program director and the secretary's office. In the case of foreseeable valid reasons, the course director and the program director must be informed in advance.

The existing attendance requirement is at least 80% per course. Failure to meet the attendance requirement is equivalent to a negative assessment of the course.

In order to be able to complete the course positively in spite of this, substitute work can be done in consultation with the head of the study program and the head of the course.

If the substitute work is not completed or if the substitute work is evaluated negatively, the first examination is considered to be the second examination. Should the examination also be assessed negatively, a board examination will follow.

Participation in the course will be assessed according to the professional basis of the individual contributions or questions.

Students are expected to arrive on time for the course. If, for reasons beyond their control, students are nevertheless late, they should enter the course room without disrupting the course or fellow students. Cell phones are to be turned off prior to the start of the course. The consumption of food during the course is not permitted.

### **Required Textbook(s):**

Marotz, L., Cross, M., & Rush, J. (2012). *Health, safety, and nutrition for the young child*. (8<sup>th</sup> ed.) Clifton Park, NY: Thomson Delmar Learning

### **Additional Resources:**

1. AbilityPath.org. (2012) *Finding balance: Obesity and children with special needs*. Available from <http://www.abilitypath.org/health->

- daily-care/health/growth-and-nutrition/articles/ obesity/pdfs/obesity-report.pdf
2. Anti-Defamation League. (2004). *Assessing Children's Literature*. Available from [http:// www.adl .org/educati on/assessing.asp](http://www.adl.org/education/assessing.asp)
  3. American Childhood Cancer Organization. (2012). *Just for kids*. Available from [http:// www.acco.org/Information/ForKids/ForKids.aspx](http://www.acco.org/Information/ForKids/ForKids.aspx)
  4. American Childhood Cancer Organization. (2012). *Free books for families of children with cancer*. Available from <http://www.acco.org/Information/Resources/Books.aspx>
  5. AstraZeneca. (2004). *Bubbliboo*. Available from <http://www.bubbliboo.com/>
  6. Beyond Access & Center for Persons with Disabilities, Utah State University. (2003). *Inclusive outdoor learning environments: An introductory guide*. Available from [http:// www.beyondaccess.org/tutorials/introductory guide.pdf](http://www.beyondaccess.org/tutorials/introductory guide.pdf)
  7. Center for Disease Control. (2012). *Winnable Battles: Nutrition, physical activity and obesity*. Available from <http://www.cdc.gov/WinnableBattles/Obesity/index.html>
  8. Children's Disabilities Information. (n.d.). *Feeding Issues of Children*. Available from [http:// www.childrensdisabilities.info/feeding/index.html](http://www.childrensdisabilities.info/feeding/index.html)
  9. Division for Early Childhood. (2007). *Prevention of social, emotional, physical and cognitive disabilities and the promotion of health, safety and well-being*. Available from [http:// www.dec-sped.org/uploads/docs/about\\_dec/position\\_concept\\_papers/ PositionStatement\\_PreventPromote.pdf](http://www.dec-sped.org/uploads/docs/about_dec/position_concept_papers/PositionStatement_PreventPromote.pdf)
  10. Fleitas, J. (2009). *Bandaided and Blackboards*. Available from [http://www.lehman.cuny.edu/ faculty/j fl eitas/bandaides/](http://www.lehman.cuny.edu/faculty/j_fleitas/bandaides/)
  11. Head Start. (2012). *I am Moving, I am Learning: A proactive approach for addressing childhood obesity in Head Start children*. Available from <http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/health/Health/Nutrition/Nutrition%20Program%20Staff/IamMovingIam.htm>
  12. Hill, C. and Campos, M. (2012). *I am moving, I am learning: a proactive approach for*
  13. *addressing childhood obesity in Head Start Children* [slide show]. Available from [http:// caheadstart.org/2012HI/CHill.pdf](http://caheadstart.org/2012HI/CHill.pdf)
  14. Illinois Department of Children and Family Services. (2010, December 15). *Licensing standards for day care centers*. Available from <http://www.state.il.us/dcf/docs/407.pdf>
  15. Illinois State Board of Education: Division of Early Childhood Education. (2002, March).
  16. Illinois Early Learning Project. *Illinois early learning standards*. Available from [http:// illinoisearlylearning.org/standards/index.htm](http://illinoisearlylearning.org/standards/index.htm)
  17. Illinois State Board of Education, Nutrition Programs Division, Child and

## Adult Care Food

18. Program. (2012). *Crediting Foods Guide*. Available from [http://www.isbe.net/nutrition/pdf/crediting\\_foods.pdf](http://www.isbe.net/nutrition/pdf/crediting_foods.pdf)
19. National Association for the Education of Young Children. (2012). NAEYC for Families.
20. Quality Child Care Matters NAEYC Accredited Programs The Right Choice for Kids. Available from <http://www.rightchoiceforkids.org/>
21. National Food Service Management Institute. (2006). *Handbook for Children with Special Food and Nutrition Needs*. University of Mississippi: Author. Available from <http://nfsmi-web01.nfsmi.olemiss.edu/documentlibraryfiles/PDF/20111103084132.pdf>
22. National Resource Center for Health and Safety in Child Care and Early Education. (2012).
23. Caring for our children: National health and safety performance standards; Guidelines for early care and education programs. 3rd edition. Available from <http://nrckids.org/CFOC3/PDFVersion/list.html>
24. National Resource Center for Health and Safety in Child Care and Early Education. (2012).
25. Caring for our children: National health and safety performance standards; Guidelines for early care and education programs. 3rd edition. *Appendix EE: America's Playgrounds Safety Report Card*. Available from [http://nrckids.org/CFOC3/PDFVersion/PDF\\_Color/CFOC3\\_EE.pdf](http://nrckids.org/CFOC3/PDFVersion/PDF_Color/CFOC3_EE.pdf)
26. Nemours Foundation. (2012). KidsHealth Health Problems. Available from [http://kidshealth.org/kid/health\\_problems/index.html](http://kidshealth.org/kid/health_problems/index.html)
27. TED: Ideas Worth Sharing. (Feb. 2010). *Jamie Oliver's TED prize wish: Teach every child about food* [video]. Available from [http://www.ted.com/talks/jamie\\_oliver.html](http://www.ted.com/talks/jamie_oliver.html)
28. United States Department of Agriculture, Food and Nutrition Services. (2012). *Breastfeeding Promotion and Support in WIC*. Available from <http://www.fns.usda.gov/wic/Breastfeeding/mainpage.HTM>
29. United States Department of Agriculture. (n.d.). *Choose My Plate.gov*. Available from <http://www.choosemyplate.gov/index.html>
30. United States Department of Agriculture. (n.d.). *Choose My Plate, Picky Eating, Kitchen Activities*. Available from <http://www.choosemyplate.gov/preschoolers/picky-eaters/kitchen-activities.html>
31. United States Department of Agriculture. (n.d.). *Choose My Plate, Health and Nutrition Information for Preschoolers, Picky Eating*. Available from <http://www.choosemyplate.gov/preschoolers/picky-eaters.html>
32. United States Department of Agriculture. (2011). *Let's Eat for the health of it: Choose My Plate Brochure*. Available from <http://www.choosemyplate.gov/food-groups/downloads/MyPlate/DG2010Brochure.pdf>
33. United States Department of Agriculture. (n.d.). *SuperTracker: My foods, My fitness, My health*. Available from <https://www.choosemyplate.gov/SuperTracker/default.aspx>