MINISTRY OF HEALTH OF UKRAINE O.O. BOGOMOLETS NATIONAL MEDICAL UNIVERSITY

"Approved"

at the methodological conference of hygiene and ecology department **Head of the department** correspondent member of NAMS of Ukraine, M.D. Bardov V.G._____

GUIDELINES FOR STUDENTS

Subject	Hygiene and ecology					
Module № 1	Assessment of the environment and its impact on the					
	population health					
Submodule № 3	Nutrition hygiene					
Topic of the lesson	Sanitary and hygienic control on public nutrition.					
Course	6					
Faculty	medical					
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1. Learning objective

1. Master method of clinical nutrition organization health control in patient care institutions.

2. Basics

2.1. You should know:

2.1.1. Pathogenetic principles of dietary treatment.

2.1.2. Dietary products classification.

2.1.3. List of the main diets in patient care institutions.

2.2. You should have the following skills:

2.2.1. Interpret (expound) principles of dietary treatment in patient care institutions.

2.2.2. Accomplish clinical nutrition organization health control in patient care institutions.

3 Self-training questions

3.1. Peculiarities of invalid food (diet) in health centres and preventoriums.

3.2. Description of individual diets.

3.3. Risk factors of nosocomial infections and food poisoninga appearence.

3.4. Structure and personnel of PCI relative to clinical nutrition organization.

3.5. Functional duties of PCI personnel about patients nutrition organization.

3.6. List of the main clinical nutrition organization documents in PCI.

3.7. Procedure of preventive medical examinations passing by personnel of PCI. Absolute and relative contra-indications for work at nutrition unit.

3.8. List of food product and meals which are forbidden for cooking and realization at nutrition unit.

3.9. List of food product and meals which are forbidden for receiving by patients from relatives.

3.10. . List of food product and meals which can be left at scullery to the next day.

3.11. Prevention of acute enteric infections and food poisonings preventive measures.

4. Self-training assignments

4.1. Laboratory received milk for examination. They have next data -

color-whitish; odor-without peculiarities; taste- milky; density-1,038; acidity-35° of Terner; richness (fattiness)-3,2%. Determine level of milk quality.

5. Structure and content of the lesson (duration of the lesson 160 min + 10 min break)

5.1. Preamble – 5-10 min.

5.2. Test control for assessment of students' knowledge datum level -10-15 min

5.3. Theoretical training – 30-40 min.

5.4. Typical situational tasks "Krok-2" solution – 30-40 min.

5.5. State exams situational tasks solution – 30-40 min.

5.6. Test control for assessment of students' knowledge final level -10-15 min.

Peculiarities of invalid food (diet) in health centres and preventoriums

Difference in clinical nutrition organization caused by next factors:

1. Patients with chronic diseases in remission or slight worsening (exacerbation) and reconvalescents receive treatment in sanatoriums. This factor cause diminution of restrictions in sanatorim nutrition, strict diet (1a, 5a, 10a) are used seldom.

2. Sanatorium's patients lead an active life. That's why their power inputs are higher then hospitals' patients. As a result – diets in sanatoriums have higher food value (15-20%) then hostitals one.

3. Treatment procedures force to change nutrition regimen. The best variant is patients eat 2-3 hours before procedures.

4. Government give more monney for nutrition in sanatoriums, that's why it is more various balanced and delicious.

Peculiarities of invalid food (diet) preventoriums.

1. Patients in preventorium work or study in the same they receivetreatment. So it is needed not just organize invalid food (diet) but supply with appropriate level of calories which depends on physical activity.

2. Almost for all patients in preventoriums diet #15 (rational nutrition) is prescribed. But we have take into account needs of pregnant women, workers which work in harmful conditions.

3. Preventoriums in factories with 2 or 3-shifts working day supply with hot food workers of all shifts.

4. In preventoriums in factories with wery harmful conditions of work workers receive invalid food (diet) and preventive nutrition.

Nutrition unit cannot receive

1. Food products without documents.

2. Products with changed organoleptic properties, poluted, defective.

3. Products without special markers (stamp on meat, signet on eggs).

4. Products shelf life of which ended or will be end soon.

5. Products which are not corresponding to category or grade (by-products, not dietary eggs).

Nutrition unit cannot cook

- 1. Confectioneries with cream.
- 2. Meals from by-products.
- 3. Meat-jelly, paste, aspic fish and meat.
- 4. Macaroni "for sailors" (with canned meat).
- 5. Meals from not boiled milk.

6. Sour milk, cottage cheese.

Nutrition unit cannot keep

- 1. Ready meals more than 2 days.
- 2. To left products or ready meals for the next day except bread, salt, sugar.

Risk factors of food poisonings and enteric infections

- 1. Poor quality of received products.
- 2. Conditions and time of foodstuff keeping.
- 3. Coocking technology.
- 4. Pollution of ready meals.
- 5. Term of ready meals issue (distribution).
- 6. Conditions and methods of package and crockery handling.

Preventive measures

- 1. Spatial and temporal division of technological processes.
- 2. Holding of goods neighborhood principle.
- 3. Heat treatment.
- 4. Holding of ready meals issue (distribution) term.
- 5. Prevention of microorganizms contamination.
- 6. Prevention of microorganizms circulation.
- 7. Holding of package and crockery handlin methods.

Means (instruments) for control of ready meals qulity

- fork for determination of readiness of meat and fish meals;
- 2 table-spoons;
- thermometer for determination of ready meals temperature;
- glass with cold not sweet tea for oral cavity rinsing;
- plate with hot water for spoons rinsing.

Control of meals quality accomplished by

Doctor on duty (obligatory with head diet-nurse) Head physician of PCI Dietitian

Taking a sample includes

- 1. assessment of ready meals compliance to menu-schedule.
- 2. determination of ready meals temperature at the time of distribution.
- 3. organoleptic examination
- readiness;
- taste;
- quality;
- accordance to the diet.
- 4. determination of ready meals yield (output)

- meals in copper mass according to quantity of helpings;
- separate helpings mass;
- mass of cutlets, meat balls.
- 5. assessment of nutrition unit and sculleries sanitary state.
- 6. inquiry of patients.
- 7. stock-taking of disuse food mass.

Criteria of ready meals quality

"Excellently" – dish is tasty, accorded to the diet, beautifully serveing.

- "Good" dish accorded to the diet and receipt, but it has some defects, which can be eliminated.
- "Satisfactory" dish has considerable deviations from cookery demands, but it is eatable.
- "Not satisfactory" poor taste and odor, half-done, burn slightly, not accorded to the diet.

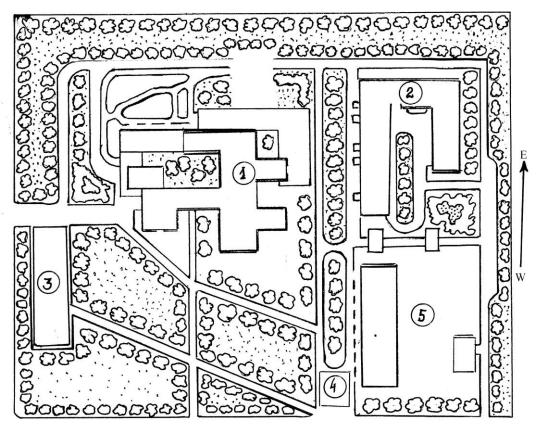


Fig. 44.1 A scheme (the general layout)

The notation conventions:

- 1. 9-storey central building with the diagnostic and treatment department and the in-patient department for 450 beds.
- 2. 1-storey infectious diseases unit for 60 beds.
- 3. 2-storey polyclinic.
- 4. the morbid anatomical building.
- 5. the household zone with nutrition unit

Name of hospital

Register of patients who need diet

_" _____20____y

Department	Number of patients	Including with by diets								
Total										

Branch manager_____ Head nurse_____ Controled by: head nurse of pigeon hole

6. Literature

<u>6.1. Principal:</u>

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6.2. Additional:

6.2.1. Воробьев В.И. Организация диетотерапии в лечебнопрофилактических учреждениях. М., «Медицина», 1983.

6.2.2. Справочник по диетологии / под ред. А.А. Покровского, М.А. Самсонова. – М., 1981

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2. Hygiene and ecology / V.A. Korobchanskiy, M.P. Vorontsov, A.A. Musulbas. – Kharkov, 2006. – 207 p.

3. Medicine of emergency situations: textbook for students of higher medical institutions / V.V. Chaplyk, P.V. Oliynyk, S.T. Omelchuk, V.V. Humenyuk. – Vinnytsia: Nova Knyha, 2012. – 344 p.

4. General nutrition: Study guide for the 4th accreditation level Medical School Students / edited by S.T. Omelchuk, O.V. Kuzminska. – Kyiv, 2016. – 146 p.

5. Гигиена и экология: учебник для студентов высших медицинских учебных заведений. – Винница: НОВА КНИГА, 2008ю – 720 с.

7. Equipment required for the lesson

- criteria of ready meals quality
- means (instruments) for control of ready meals qulity
- the general layout of hospital with nutrition unit
- nutrition unit documents