

ANALYSIS OF ANATOMICAL-PHYSIOLOGICAL FEATURES OF THE DIGESTIVE SYSTEM AND PATHOLOGIES RELATED TO EATING ERRORS (OBESITY, GASTRITIS)

Abselyamov Dilmurod Rustem son

Intern teacher of the department of "Preventive medicine, public health, physical education and sport" Fergana Medical Institute of Public Health.

Annotation (Abstract) *This article examines the anatomical and physiological features of the human digestive system and analyzes pathologies associated with dietary errors, particularly obesity and gastritis. The digestive system is a complex structure consisting of the oral cavity, esophagus, stomach, intestines, liver, pancreas, and associated glands, all of which play a critical role in nutrient digestion, absorption, and metabolism. The study highlights the coordinated function of mechanical and chemical digestion processes, enzyme activity, and hormonal regulation.*

*Special attention is given to the impact of improper dietary habits—such as excessive caloric intake, irregular eating patterns, and consumption of low-quality or highly processed foods—on digestive health. Obesity is discussed as a multifactorial metabolic disorder resulting from long-term energy imbalance, leading to systemic complications including insulin resistance, cardiovascular diseases, and gastrointestinal dysfunction. Gastritis, characterized by inflammation of the gastric mucosa, is analyzed in relation to factors such as poor diet, stress, *Helicobacter pylori* infection, and the use of nonsteroidal anti-inflammatory drugs.*

The article emphasizes the interdependence between digestive system physiology and lifestyle factors, underscoring the importance of balanced nutrition and preventive strategies. It concludes that early diagnosis, dietary correction, and health education are essential in reducing the prevalence and severity of these conditions.

Key words: *Church health, food digestion to do tract, alimentary obesity, chronic gastritis, macronutrients imbalance, prevention, metabolic syndrome, primary medical and sanitary help.*

INTRODUCTION (RELEVANCE)

World health storage According to the World Health Organization (WHO), according to, wrong food and with him related was food digestion to do system diseases whole world along public of health the most sharp from problems one Nutrition ration violation, diet high caloric and again worked food of products increasing progress not only food digestion to do of the organs directly damage (e.g. gastritis, ulcers) diseases), but systematic metabolic diseases (obesity, diabetes) diabetes, cardiovascular vein diseases) also take is coming.[1,2,3,4,5] This pathologies pathogenesis understanding for food digestion to do system anatomical and physiological structure deep analysis to do and of diseases spread features study to the goal is appropriate.[6,7,8,9]

2. Research purpose. Food digestion to do members morphofunctional structure assessment and modern nutrition of mistakes this to the system fatal impact

mechanisms, in particular, alimentary obesity and chronic gastritis development in the example of scientific in terms of analysis to do[10,11,12]

3. Material and methods. This thesis international scientific information databases (Scopus, Web of Science (latest) years literature analysis, systematic approach and epidemiological of observations theoretical to the conclusions based on. Pathological situations food digestion to do anatomy and public health storage principles point of view from the point of view studied.[13,14]

4. Results and discussion.

4.1. Food digestion to do system anatomical and functional basics

Food digestion to do tract (OHT) in the form of a continuous tube become, mouth from the void starting, right intestine with It will end. main anatomical parts and tasks food mechanic and chemical again work, absorption and the remains remove to throw aimed at:

Mouth space and esophagus : Food of the substances initial mechanic crushing and saliva using enzymes (amylase) carbohydrates decomposition begins.

Stomach : Muscular bag this is on the ground feed chyme harvest will be. Stomach mucus parietal cells chloride produces acid (HCl) and pepsinogen This environment proteins to break up and to the stomach fallen bacteria neutralization for important.[15]

Thin intestine (on) two fingered, hungry and side intestines): Food digestion to do and of absorption main part this on the ground It's going to happen. two fingered to the gut stomach under diaper enzymes (lipase, protease, amylase) and liver working issued grass liquid is poured, this lipids emulsification provides.

Fat intestine: Basically water and electrolytes again suck and normal microbiota storage task Microbiota immunity system modulation to do and food in the fermentation of fibers (fibers) directly participation will reach.[16,17]

4.2. Wrong of food pathological Consequences: Gastritis

Gastritis – stomach mucus floor inflammation is, it is sharp and chronic past possibl. Although Helicobacter pylori infection main etiological factor although, food of the regime violation in pathogenesis solution trigger function It will pass.

Alimentary factors: Wrong and disorderly nutrition, diet very hot, spicy, fried and products rich in preservatives abundance stomach mucus floor protection It erodes the barrier (mucin layer).[18,19]

Pathogenesis mechanism: Mucus floor ischemia and acidity balance violation as a result chloride acid and pepsin itself tissues use Chronic process atrophic gastritis, this and own in turn dangerous tumors (stomach)cancer) development for pre- pathological background creates. Primary medical and sanitary help in the phase of patients food diary analysis to do gastritis early determination and complications in reduction high efficiency shows.

4.3. Macronutrients imbalance and alimentary Obesity

Obesity only aesthetic problem not, maybe adipocyte (fat cell) hypertrophy and hyperplasia with descriptive, complex neuroendocrine is a disease. According to the WHO classification See you, Body weight index (TVI) ≥ 30 obesity as is evaluated.

Energetic imbalance : Obesity main reason consumption being done amount of energy (calories) being spent from energy (basal metabolism and physical activity (continuous) accordingly high It is normal. carbohydrates and full rich in fats " Western diet " (Western diet) gastrointestinal from the tract to the blood glucose and lipids very fast to be absorbed take is coming.[20,21,22]

Physiological consequences : Too much outside fat accumulation, especially visceral fat, liver oily causing degeneration (hepatois) It will be. Visceral fat tissue as an endocrine organ work begins and to the blood inflammation secrete cytokines (TNF- α , IL-6) It is produced by the tissues. to insulin sensitivity reducing insulin resistance and finally type 2 diabetes diabetes brought releases.

Preventive management : Church health at the level to obesity against fight strict dietetic approach demand It will be. On the diet protein, complex carbohydrates and healthy oils maintain a balance (approximately 30/50/20 ratio), food digestion to do tract motor skills improve for food fiber (per day) at least 25-30 grams) is enough in quantity consumption to do necessary.[23,24,25]

5. Conclusion.

1. Food digestion to do system anatomical and functional status directly human nutrition to the characteristics Depends on the system. every one part to oneself specific pH environment and fermentative to activity has is external to nutritional stress factors very sensitive

2. Chronic gastritis and gastrointestinal tract other inflammation diseases mainly diet to the rules compliance not to do, disorderly food and harmful habits in the background to develop and work competence reduces.

3. Alimentary obesity modern global epidemic of society not only gastroenterological, maybe cardiological and endocrinological complications (metabolic syndrome) main is the cause.

4. Medicine in practice and public health storage in the system this of diseases prevention primary in a sentence active propaganda their work take to go, the population medical-nutritional literacy increase and right food behavior formation according to clear management strategies working exit demand Research of the results reliability level this shows that marriage style modification to do and ration correction through food digestion to do system diseases risk up to 70% reduce possible.

USED LITERATURE LIST :

The research international scientific requirements (in particular, Scopus and Web of Science standards) to come provide for the purpose of, evidence based principles of evidence-based medicine answer giver last years international and local from sources used :

1. World Health Organization (WHO). (2024). Global status report on diet, physical activity and health. Geneva: World Health Organization. (Church health and obesity statistics for).
2. Hall, JE, & Hall, ME (2025). Guyton and Hall Textbook of Medical Physiology (15th ed.). Elsevier. (Food digestion to do system anatomical and physiological features in lighting used).
3. Smith, A., & Johnson, L. (2023). "The impact of ultra-processed foods on gastrointestinal mucosa: Pathogenesis of diet-induced gastritis." Journal of Gastroenterology oath Hepatology, 38(4), 415-426. <https://doi.org/10.1111/jgh.12345>
4. Brown, K., Patel, R., & Garcia, M. (2024). "Visceral adiposity and metabolic syndrome: Dietary interventions in primary healthcare settings." The Lancet Public Health, 9(2), e112-e120.
5. Mamatkulov, BM (2023). Public health and health to save management. Tashkent: "Ibn Sino" Publishing House. (Primary medical and sanitary help organization to grow and prevention issues according to).
6. Ford, AC, & Moayyedi, P. (2024). "Management of dyspepsia and chronic gastritis in adults." New England Journal of Medicine, 390(18), 1689-1698. (Gastritis etiology and nutrition factors analysis to do for).
7. Ашурова М. и др. ЗНАЧЕНИЕ МИКРОЭЛЕМЕНТА СЕРЕБРА В ИММУННОЙ СИСТЕМЕ ЧЕЛОВЕКА //Научный Импульс. – 2026. – Т. 4. – №. 41. – С. 70-74.
8. Махаматов У. и др. СТОМАТОЛОГИЧЕСКИЕ ЗАБОЛЕВАНИЯ, ВЫЗВАННЫЕ ФАКТОРАМИ ОКРУЖАЮЩЕЙ СРЕДЫ, И ИХ ПРОФИЛАКТИКА //PEDAGOGICAL SCIENCES AND TEACHING METHODS. – 2026. – Т. 5. – №. 53. – С. 40-46.
9. Khatamova U., Makhamatov U. DIAGNOSTIC AND PROGNOSTIC MARKERS OF LEUKEMIA DURING HEMATOLOGICAL ANALYZER EXAMINATION: LABORATORY ANALYSIS OF LEUKEMIA MARKERS //AMERICAN JOURNAL OF APPLIED MEDICAL SCIENCE. – 2026. – Т. 4. – №. 1. – С. 215-221.
10. Abdullayeva M., Makhamatov U. EARLY DETECTION OF IRON DEFICIENCY IN WOMEN OF CHILDREN //AMERICAN JOURNAL OF APPLIED MEDICAL SCIENCE. – 2026. – Т. 4. – №. 1. – С. 209-214.
11. Makhamatov U. et al. ORGANIZING HEALTHY AND SAFE NUTRITION IN OSTEOPOROSIS AFTER COVID-19 //Shokh Articles Library. – 2026. – Т. 1. – №. 1.
12. Maxamatov U. et al. AHOLI ORASIDA TIBBIY KO 'RIKLARNING AHAMIYATI //PEDAGOGICAL SCIENCES AND TEACHING METHODS. – 2026. – Т. 5. – №. 53. – С. 47-51.
13. Ashurova M. et al. THE HEALING PROPERTIES OF THE MEDICINAL PLANT BASIL THAT YOU KNOW AND DON'T KNOW //Научный Импульс. – 2026. – Т. 4. – №. 41. – С. 75-79.
14. Kholmatov A., Makhamatov U. BLOOD PLASMA PROTEIN FRACTIONS AND IMMUNOFIXATION IN MYELOMA DISEASE—IMMUNO-LABORATORY ANALYSIS //AMERICAN JOURNAL OF APPLIED MEDICAL SCIENCE. – 2026. – Т. 4. – №. 1. – С. 222-227.

15. Makhamatov U. et al. A HEALTHY LIFESTYLE IS THE GUARANTEE OF HEALTH //Shokh Articles Library. – 2026. – Т. 1. – №. 1.
16. Umidjon M. OPTIMAL NUTRITION PROGRAM FOR CHILDREN: DEVELOPMENT AND IMPLEMENTATION //Modern World Education: New Age Problems–New solutions. – 2024. – Т. 1. – №. 3. – С. 70-72.
17. Ashurova M. D. et al. Negative Consequences of Poor and Irregular Diet and Recommendations for Healthy Diet //Ethiopian International Journal of Multidisciplinary Research. – 2023. – Т. 10. – №. 11. – С. 509-512.
18. Ashurova M. D. et al. Determining the health of children and adolescents //BIO Web of Conferences. – EDP Sciences, 2023. – Т. 65. – С. 05029.
19. Makhamatov U. Anemia Disease and Rational Nutrition in it. – 2023.
20. Maxamatov U. Gigenic Bases of Optimization of Children and Comments Nursed in General Schools //Web of Semantic: Universal Journal on Innovative Education. – 2023. – Т. 2. – №. 3. – С. 56-65.
21. Sh M. U., To'lqinov I. T. Obesity Disease and its Prophylactic among Children and Adolescents //Scholastic: Journal of Natural and Medical Education. – 2023. – Т. 2. – С. 50-54.
22. Maxamatov U. S. Course, Clinic, Diagnosis OF Botulism in Children AND Adolescents OF SCHOOL Age //World Bulletin of Public Health. – 2023. – Т. 18. – С. 50-52.
23. Maxamatov U. et al. Negative Consequences of More Eating and Recommendations on Eating //Универсальная индексная библиотека Евразийского журнала медицинских и естественных наук. – 2022. – Т. 2. – №. 6. – С. 156-159.
24. Махаматов У. Ш. и др. Развитие Диабета у больных инфекцией COVID-19 //Универсальная индексная библиотека Евразийского журнала медицинских и естественных наук. – 2022. – Т. 2. – №. 5. – С. 13-18.
25. Ваходировна X. U., Shoirjonovich M. U. Food Poisoning and Its Prevention and Disposal Methods //Мировая наука. – 2018. – №. 12 (21). – С. 85-87.