

# Physiological, Hygienic and Epidemiological Importance of Water

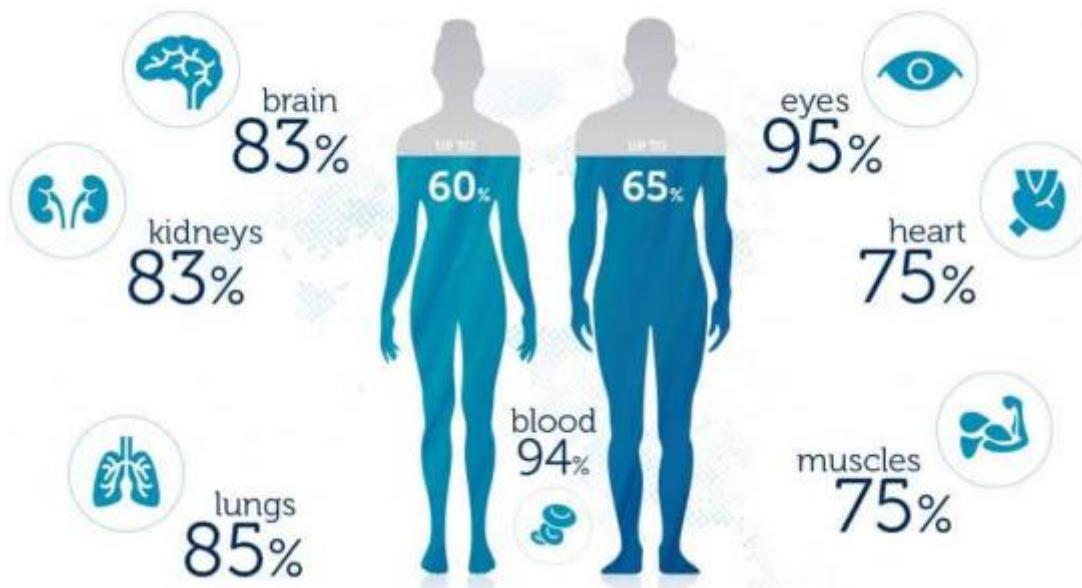
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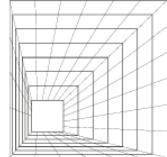
**Abstract:** On average, 65% (for adults) - 80% (children's body) of the human body consists of water. Water is considered a universal solvent of all substances in the body, and no biochemical process that occurs in the body without water is complete, it is an important component of the cell element, water actively participates in the process of heat management in the body.

**Key words:** microclimate, physiological, pathological, thirst, cholera, typhus, paratyphoid, cholera, hepatitis, brucellosis.

On average, about 1.5 l of water is needed during one day and night to perform physiological functions in the microclimate in comfortable conditions. This amount is the minimum physiological need of the body, and when consumed in smaller amounts, the body is dehydrated. When 5% of water is lost from the body, we may experience thirst, when 10% of water is lost, functional changes and various pathological conditions, when more than 20% of water is lost - death may occur due to dehydration of the body. Physiological need for water in a comfortable microclimate is 2.2 l per day. In our hot climate, during the hot seasons of the year, the body's sweating process is very high, and depending on it, the body's physiological need for water increases to 8-10 l per day (4-5 l on average).



It is natural for a person to spend a large amount of water in order to fully satisfy his hygienic needs, including maintaining the cleanliness of the body, keeping clothes - heads, residences, dishes - trays clean, and keeping the body clean. For the mentioned purposes, a person spends several tens of liters of water during one day and night. The day-by-day increase in water consumption by the population is related to the day-by-day improvement of sanitary and hygienic conditions in the life of the population.



Epidemiological importance of water. Water plays an important role as a factor that transmits and spreads many diseases, including cholera, typhoid, paratyphoid, cholera, hepatitis, brucellosis, etc. and is a spreader of some types of invasive diseases (rishta). This situation is not only due to the fact that many microorganisms can live in the water environment for a long time (from several days to several months), but they can also fully maintain their virulence in the water environment. This is especially important in hot climates, because in such conditions microorganisms, especially pathogenic microbes, can survive for very long periods of time. Therefore, the water environment is a very important factor in the spread of infectious diseases in our Republic. Identifying the rapid spread of infectious diseases through water (water epidemics) allows for quick and effective measures to prevent their further spread. It should be noted that epidemics spread through water have certain characteristics, such as: a large number of one type of disease is detected in a very short time (mass infection), the detected infectious disease has a specific place of residence (limitedness), and after the disease is detected, measures to neutralize the contaminated source are taken, and the incidence decreases sharply. In treatment-preventive institutions with a general profile, water consumption for 1 bed is 115 - 200 l per day, for an infectious disease hospital it is 240 l per day, in polyclinics and outpatient clinics it is 13 l for one patient in one shift. . Compared to the previous norms of water consumption, these norms of water consumption are given much less and are connected with the limitation of fresh water sources in the territory of our Republic. Implementation of the State Program on water supply of residential areas requires the correct selection of water sources for water supply. The role of medical personnel in this area is very high, because the main criterion for choosing a water source is its compliance with hygienic requirements.

#### **Literature:**

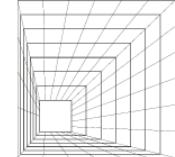
1. Аблақулов И. Д., Тухтаров Б. Э., Валиева М. У. СИЛ КАСАЛЛИГИНИНГ ОЛДИНИ ОЛИШДА ПРОФИЛАКТИК ЧОРА-ТАДБИРЛАРНИНГ АҲАМИЯТИ //PROSPECTS OF DEVELOPMENT OF SCIENCE AND EDUCATION. – 2022. – Т. 1. – №. 5. – С. 46-49.
2. Ахмадалиев Н. Н., Тўлаганов Б. Б., Тухтаров Б. Э. Ортопед-Стоматологлар Организмининг Функционалҳолатини Иш Ҳафтаси Динамикасида Ўзгариши //AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI. – 2022. – С. 303-306.



3. Аскарова Н. К., Рахимова Д. Ж. ЭФФЕКТИВНОСТЬ СПЕЦИФИЧЕСКОГО ЛЕЧЕНИЯ МЕТАБОЛИЧЕСКИХ НАРУШЕНИЙ ОБУСЛОВЛЯЮЩИХ СУДОРОГИ В ПЕРИОД НОВОРОЖДЕННОСТИ //НАУЧНЫЕ ИССЛЕДОВАНИЯ. – С. 68.
4. Аскарова Н. К. и др. Клиническая характеристика хронических расстройств питания различного генеза у детей первых двух лет жизни //Научный аспект. – 2020. – Т. 2. – №. 1. – С. 259-264.
5. 5Аминов З. З. и др. Социальные аспекты и роль питания в стоматологическом здоровье детей и подростков //Academy. – 2019. – №. 10 (49). – С. 50-56.
6. 6.Ахмеджанова Н. И. и др. Оценка функционального состояния почек при ренальных осложнениях у детей в период пандемии COVID-19: обсервационное когортное ретроспективное клиническое исследование //Кубанский научный медицинский вестник. – 2023. – Т. 30. – №. 3. – С. 25-33.
7. Буляев З. К. Распространенность Гепатита А Среди Детей В Центральной Азии //Research Journal of Trauma and Disability Studies. – 2023. – Т. 2. – №. 5. – С. 7-12.
8. Валиева М. У., Тухтаров Б. Э. TO THE EXPERIENCE OF USING A BIOLOGICALLY ACTIVE FOOD ADDITIVE NOGLUKIN IN THE NUTRITION OF ATHLETES //Galaxy International Interdisciplinary Research Journal. – 2023. – Т. 11. – №. 4. – С. 425-432.
9. Гаппарова Г. Н., Ахмеджанова Н. И. COVID-19 PANDEMIYASI DAVRIDA BOLALARDA PIELONEFRITNING KLINIK-LABORATOR XUSUSIYATI, DIAGNOSTIKASI VA DAVOLASH //ЖУРНАЛ РЕПРОДУКТИВНОГО ЗДОРОВЬЯ И УРО-НЕФРОЛОГИЧЕСКИХ ИССЛЕДОВАНИЙ. – 2022. – Т. 3. – №. 4.
10. MATLUBA E. Improvement Of Ecological Status Of Soil In Organic Agriculture //JournalNX. – Т. 6. – №. 08. – С. 66-69.
11. Маллаева М. Б. ЭКОЛОГИЯ ҲИСОБИНИ ШАКЛАНТИРИШ МАСАЛАЛАРИ //SO ‘NGI ILMUY TADQIQOTLAR NAZARIYASI. – 2023. – Т. 6. – №. 4. – С. 269-280.
12. Маллаева М. М. СОГЛОМ ТУРМУШ ТАРЗИНИ РИВОЖЛАНТИРИШ //O’ZBEKISTONDA FANLARARO INNOVATSİYALAR VA ILMUY TADQIQOTLAR JURNALI. – 2023. – Т. 2. – №. 16. – С. 753-760.
13. Наимова З. С. ВЛИЯНИЕ ЭКОЛОГИИ СЕМЬИ И ОБРАЗА ЖИЗНИ НА СОСТОЯНИЕ ЗДОРОВЬЯ ДЕТЕЙ ШКОЛЬНОГО ВОЗРАСТА //Journal of new century innovations. – 2023. – Т. 31. – №. 3. – С. 107-113.
14. Наимова З. С. и др. Влияние Выбросов Химического Производства На Состояние Здоровья Детей И Подростков //AMALIY VA TIBBIYOT FANLARI ILMUY JURNALI. – 2022. – С. 288-292.
15. Намозбоева М. А., Тухтаров Б. Э., Абдумуминова Р. Н. ЎЗБЕКИСТОН РЕСПУБЛИКАСИДА ГИМЕНОЛЕПИДОЗ БИЛАН КАСАЛЛАНГАНЛАРНИНГ ЭПИДЕМИОЛОГИК ТАҲЛИЛИ //PROSPECTS OF DEVELOPMENT OF SCIENCE AND EDUCATION. – 2022. – Т. 1. – №. 5. – С. 58-60.
16. Рахимова Д. Д., Шайхова Г. И. 7-17 YOSHLI MAKTAB OQUVCHILARINING JISMONIY RIVOJLANISHINI BAHOLASH //журнал репродуктивного здоровья и уро-нефрологических исследований. – 2022. – Т. 3. – №. 4.
17. Рахимова Д., Аскарова Н. Гиповитамины у военнослужащих //Общество и инновации. – 2021. – Т. 2. – №. 3/S. – С. 90-99.
18. Рахимова Д. Ж. и др. ОБОСНОВАНИЕ ЛЕЧЕНИЯ ПНЕВМОНИИ КОРОНАВИРУСНОЙ ЭТИОЛОГИИ (COVID-19) КОМБИНАЦИЕЙ ПУЛЬС



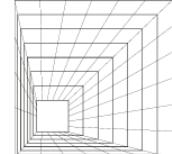
- ТЕРАПИИ С ИММУНОДЕПРЕССАНТАМИ //Re-health journal. – 2020. – №. 4 (8). – С. 59-64.
19. 19. Рахимова Д. Ж. и др. Изменение состава микроэлементов у детей с хроническим расстройством питания первых двух лет жизни на фоне ОКИ //Научный аспект. – 2020. – Т. 2. – №. 1. – С. 252-258.
20. 20. Соатов М. М., Тухтаров Б. Э., Валиева М. У. ЎҚУВЧИЛАР МАКТАБ ЖИҲОЗЛАРНИНГ БОЛАЛАР САЛОМАТЛИК ҲОЛАТИГА ТАЪСИРИ //PROSPECTS OF DEVELOPMENT OF SCIENCE AND EDUCATION. – 2022. – Т. 1. – №. 5. – С. 54-57.
21. Тухтаров Б. Эколого-гигиеническая забота о состоянии атмосферного воздуха.(На примере Алмазарского района города Ташкента) //Каталог монографий. – 2023. – Т. 1. – №. 1. – С. 1-131.
22. Тухтаров Б. и др. Эколого-гигиеническая оценка загрязнения почв тяжелыми металлами и разработка мероприятий по его улучшению //Каталог монографий. – 2023. – №. 1. – С. 2-110.
23. Тухтаров Б. Э. и др. Оценка значимости биологической ценности рационов питания спортсменов тяжелой атлетики в условиях жаркого климата //Журнал "Медицина и инновации". – 2021. – №. 1. – С. 127-130.
24. Уралов У., Баратова Р., Раджабов З. УЛУЧШЕНИЕ САНИТАРИИ ПИТЬЕВОЙ ВОДЫ //Евразийский журнал академических исследований. – 2023. – Т. 3. – №. 2 Part 2. – С. 176-179.
25. Уралов Ш. М., Буляев З. К. О ВЛИЯНИИ ФАКТОРОВ ОКРУЖАЮЩЕЙ СРЕДЫ НА КАЧЕСТВО ЖИЗНИ И ЗДОРОВЬЕ СТУДЕНЧЕСКОЙ МОЛОДЕЖИ (КРАТКИЙ ОБЗОР) //Новости образования: исследование в XXI веке. – 2023. – Т. 1. – №. 11. – С. 518-525.
26. Уралов Ш. М., Буляев З. К. ИЗУЧЕНИЕ ВОПРОСОВ ВЛИЯНИЯ ЗАНЯТИЙ ФИЗИЧЕСКОЙ КУЛЬТУРЫ НА ЗДОРОВЬЕ И УРОВЕНЬ ФИЗИЧЕСКОГО СОСТОЯНИЯ СТУДЕНТОВ //Новости образования: исследование в XXI веке. – 2023. – Т. 1. – №. 11. – С. 511-517.
27. Файзибаев П. Н., Буляев З. К., Уралов Ш. М. САМАРҚАНД ВИЛОЯТИ АҲОЛИСИ ЎРТАСИДА РАЦИОНАЛ ОВҚАТЛАНИШ ТАМОЙИЛЛАРИГА РИОЯ ҚИЛИШ ҲОЛАТИ //Новости образования: исследование в XXI веке. – 2023. – Т. 1. – №. 11. – С. 501-510.
28. Халманов Н., Элмурадова М. EFFECT OF GREEN MANURE APPLICATION ON SOIL FERTILITY, GROWTH, DEVELOPMENT AND YIELD OF COTTON IN TYPICAL SANDY LOAM SIEROZEM SOIL CONDITIONS OF ZARAFSHAN VALLEY //Наука и мир. – 2019. – Т. 1. – №. 2. – С. 75-77.
29. Халманов Н. Т., Элмурадова М. А. Влияние сидерации на плодородие сероземов, рост, развитие и урожайность хлопчатника Зерафшанской долины //Плодородие. – 2019. – №. 2 (107). – С. 33-37.
30. Элмурадова Л. Х., Тухтаров Б. Э., Мустанов Ж. А. ЎЗБЕКИСТОНДА ТЕРИ ЛЕЙШМАНИОЗИ КАСАЛЛИГИНИНГ ЭПИДЕМИОЛОГИК ТАҲЛИЛИ //PROSPECTS OF DEVELOPMENT OF SCIENCE AND EDUCATION. – 2022. – Т. 1. – №. 5. – С. 61-64.
31. Andarmonovich K. A. et al. IFLOSLANGAN ATMOSFERA HAVOSINING O 'SIMLIKLAR VA HAYVONLAR ORGANIZMIGA TA'SIRI //Journal of new century innovations. – 2023. – Т. 42. – №. 1. – С. 176-181.



32. Abdujabbarova Z., qizi Ziyodabegim M., Karimov A. A. WAYS OF HUMAN BODY DAMAGE BY HEAVY METALS //GOLDEN BRAIN. – 2023. – T. 1. – №. 6. – C. 63-65.
33. Amangildievna S. M. Informational Educational Programs on Adolescent Health //Eurasian Research Bulletin. – 2023. – T. 17. – C. 210-214.
34. Baratova R. S. The Importance Of A Healthy Lifestyle In Maintaining The Health Of The Population //Eurasian Research Bulletin. – 2023. – T. 17. – C. 236-240.
35. Bakhriyevich U. U., Amankeldievna S. M. IMPACT OF ECOLOGICAL PROBLEMS ON SOCIETY AND ECOLOGICAL PROBLEMS OF THE PRESENT TIME //Новости образования: исследование в XXI веке. – 2023. – T. 1. – №. 9. – C. 1000-1008.
36. Boysin K. et al. Influence of Xenobiotics on Organisms and Methods of their Detoxification //Web of Scholars: Multidimensional Research Journal. – 2022. – T. 1. – №. 7. – C. 81-84. [31.01.2024 12:14]
37. Gapparova G., Akhmedjanova N. CLINICAL AND LABORATORY FEATURES, DIAGNOSIS AND TREATMENT OF PYELONEPHRITIS IN CHILDREN DURING THE COVID-19 PANDEMIC //Академические исследования в современной науке. – 2022. – T. 1. – №. 17. – C. 186-187.
38. Guli S. et al. PRINCIPLES OF FOOD ORGANIZATION FOR PRIMARY SCHOOL STUDENTS IN GENERAL EDUCATIONAL ORGANIZATIONS.
39. Erugina M. V. et al. The population health in The Russian Federation and the Republic of Uzbekistan: a comparative analysis //Problemy Sotsial'noi Gigienny, Zdravookhraneniia i Istorii Meditsiny. – 2023. – T. 31. – №. 2. – C. 206-209.
40. Eshnazarovich T. B., Usmonovna V. M., Chorshanbievich K. N. Some Indicators of Protein Security of Professional Athletes-Young Men Engaged in Kurash Wrestling //Eurasian Research Bulletin. – 2023. – T. 17. – C. 241-245.
41. Jurakulovna R. D. Analysis Of Distribution Of Vitamins, Macro And Micro Elements Deficiency Among Children And Adolescents In Samarkand Region, According To Clinical Symptoms //Eurasian Research Bulletin. – 2023. – T. 17. – C. 229-235.
42. Jurakulovna R. D., Utamurodova N. A. RISK FACTORS AFFECTING THE MENTAL HEALTH OF FREQUENTLY ILLNESSES PRESCHOOL CHILDREN //Western European Journal of Linguistics and Education. – 2024. – T. 2. – №. 2. – C. 29-33.
43. Jurakulovna R. D. et al. Effectiveness Of Streptokinase And Propofol Drugs In Patients With Coronavirus Delta Straw (Examples From Practice) //European Scholar Journal. – 2021. – T. 2. – №. 9. – C. 21-25.
44. Islamovna S. G., Jurakulovna R. D., Gulistan K. Current state of the problem of rationalization of schoolchildren's nutrition. – 2022.
45. Karimov A. A. ATROF-MUHIT IFLOSLANISHI NATIJASIDA OG ‘IR METALLARNING INSON ORGANIZMIGA TA’SIRINI EKOLOGIK BAHOLASH //Results of National Scientific Research International Journal. – 2023. – T. 2. – №. 4. – C. 205-215.
46. Karimovich B. Z. Prevalence of Hepatitis a in Central Asian Regions //INTERNATIONAL JOURNAL OF HEALTH SYSTEMS AND MEDICAL SCIENCES. – 2023. – T. 2. – №. 5. – C. 28-
47. Karimov A. A. ACCUMULATION OF HEAVY METALS IN PLANTS //GOLDEN BRAIN. – 2023. – T. 1. – №. 5. – C. 148-157.



48. Kholmonov N., Matluba E. Siderations Improve the Chemical Properties of Gray-Earth Soils in Uzbekistan //Eurasian Journal of Research, Development and Innovation. – 2022. – T. 7. – C. 70-73.
49. Muhammadjon M., Mavjudaxon M. EKSPERIMENTAL TOKSIK GEPATITDA AYRIM POLIFENOLLARNING TA'SIRI //International Journal of Contemporary Scientific and Technical Research. – 2023. – C. 283-286.
50. Maxramovna M. M. et al. PEDAGOGICAL ESSENCE OF DEVELOPING A CULTURE OF HEALTHY LIFESTYLE FOR YOUNG PEOPLE //Web of Scientist: International Scientific Research Journal. – 2022. – T. 3. – №. 10. – C. 1234-1238.
51. Naimova Z. S., Shayqulov H. S. KIMYO ZAVODIGA YAQIN HUDUDLARIDA YASHOVCHI BOLALAR VA O 'SMIRLARDAGI ANTROPOMETRIK KO 'RSATGICHLAR //GOLDEN BRAIN. – 2023. – T. 1. – №. 5. – C. 59-64.
52. Nurmamatovich F. P., Jurakulovna R. D. The importance of the international hassp system in the production of quality and safe confectionery products //ACADEMICIA: An International Multidisciplinary Research Journal. – 2021. – T. 11. – №. 10. – C. 1184-1186.
53. Naimova Z. S. Xenobiotics as a Risk Factor for Kidney and Urinary Diseases in Children and Adolescents in Modern Conditions //Eurasian Research Bulletin. – 2023. – T. 17. – C. 215-219.
54. Nurmuminovna G. G., Abdurakhmanovna U. N. CLINICAL AND LABORATORY FEATURES OF NEPHROPATHY IN CHILDREN WITH DIABETES MELLITUS //Open Access Repository. – 2023. – T. 9. – №. 2. – C. 116-122.
55. Nurmuminovna G. G. CLINICAL AND LABORATORY FEATURES, DIAGNOSIS AND TREATMENT OF PYELONEPHRITIS IN CHILDREN DURING THE COVID-19 PANDEMIC //JOURNAL OF BIOMEDICINE AND PRACTICE. – 2023. – T. 8. – №. 2.
56. Nurmuminovna G. G. Assessment of Partial Renal Function in Children with Pyelonephritis During the Covid-19 Pandemic //Eurasian Research Bulletin. – 2023. – T. 17. – C. 220-228.
57. Narbuwayevna A. R., Murodulloyevna Q. L., Abduraxmanovna U. N. Environmentally friendly product is a Pledge of our health!. – 2022.
58. qizi Zulfiqorova M. Y. et al. HOMILADORLARDA VITAMIN D TANQISLIGI, OQIBATLARI, OLDINI OLISH YO 'LLARI //Educational Research in Universal Sciences. – 2024. – T. 3. – №. 3. – C. 46-49.
59. Raximova D. J., Naimova Z. S., Halimova S. A. 7 YOSHDAN 14 YOSHGACHA BO 'LGAN BOLALARDA OZIQLANISH MUAMMOLARI VA ULARNI OLDINI OLISHDA VITAMIN VA MINERALLARNING O 'RNI //Oriental renaissance: Innovative, educational, natural and social sciences. – 2022. – T. 2. – №. 4. – C. 380-385.
60. Sattorovna N. Z. Family Ecology and Way of Life as a Factor Shaping the State of Health of School Children //Global Scientific Review. – 2023. – T. 14. – C. 60-67.
61. Sanayeva S. B. et al. ABOUT PESTS OF GOURDS IN THE SAMARKAND REGION //GOLDEN BRAIN. – 2023. – T. 1. – №. 6. – C. 66-68.
62. Sh B. R. et al. THE SIGNIFICANCE OF GIAMBLIASIS IN THE ETIOPATOGENESIS OF DISEASES IN CHILDREN //EPRA International Journal of Multidisciplinary Research (IJMR). – 2022. – T. 8. – №. 6. – C. 62-65.
63. Sh B. R. et al. Environmentally Friendly Product is a Pledge of Our Health //Texas Journal of Multidisciplinary Studies. – 2022. – T. 9. – C. 48-50.



64. Tukhtarov B. E., Abdumuminova R. N. DO YOU KNOW THE NORM OF NITRATES //Archive of Conferences. – 2021. – T. 15. – №. 1. – C. 7-9.
65. Tukhtarov B. E. et al. Assessment of the significance of the biological value of the diets of weightlifting athletes in a hot climate //Journal" Medicine and Innovations. – 2021. – №. 1. – C. 127-130.
66. Tukhtarov B. E., Valiyeva M. U., Ch K. N. ESTIMATION OF THE IMPORTANCE OF BIOLOGICAL VALUE OF NUTRITION ALLOWANCES OF SPORTSMEN OF WEIGHTLIFTING IN THE CONDITIONS OF THE HOT CLIMATE //World Bulletin of Public Health. – 2023. – T. 19. – C. 149-152.
67. Zhurakulovna R. D., Abdurakhmanova U. N. Current State of the Problem of Rationalization of Schoolchildren's Nutrition //Eurasian Medical Research Periodical. – 2023. – T. 19. – C. 81-89.
68. Zhurakulovna R. D. ASSESSMENT OF THE ACTUAL NUTRITION OF CHILDREN AND ADOLESCENTS TAKING INTO ACCOUNT REGIONAL PECULIARITIES //E Conference Zone. – 2022. – C. 41-44.
69. Zhurakulovna R. D. NUTRITION OF CHILDREN AS A FACTOR DETERMINING THE HEALTH OF FUTURE GENERATIONS //Conferencea. – 2022. – C. 41-42.
70. Zhurakulovna R. D. et al. Green Economy And Its Role In Preventing Air Pollution In Major Cities //Pedagogical Cluster-Journal of Pedagogical Developments. – 2024. – T. 2. – №. 2. – C. 478-484.
70. Zhurakulovna R. D. et al. ESTABLISHING THE RELATIONSHIP BETWEEN VARIOUS METASTATIC LUNG LESIONS WITH GENDER AND AGE //Web of Medicine: Journal of Medicine, Practice and Nursing. – 2024. – T. 2. – №. 2. – C. 104-107.
71. Zhurakulovna R. D., Shomuratovna B. R., Narmuminovna G. G. HYGIENIC RECOMMENDATIONS FOR THE PREVENTION OF SCHOOL MYOPIA AND OTHER VISUAL IMPAIRMENTS IN CHILDREN OF PRIMARY SCHOOL AGE //American Journal of Interdisciplinary Research and Development. – 2022. – T. 6. – C. 29-38.