

THE USE OF UNFERMENTED NAN FORMULA IN THE COMPLEX TREATMENT OF INFANTS WITH DYSBIOSIS

Uralov Sh.M

Samarkand State Medical University, Samarkand, Uzbekistan

Annotation: *The beneficial properties of fermented foods are primarily due to the fact that in an acidic environment, the absorption of protein and fat improves, the absorption of iron and zinc increases, and digestive processes improve [1, 3, 5-9]. However, fermented milk products prepared on the basis of whole milk should not be used as breast milk substitutes in the diet of infants due to their high protein content, their high osmolarity, and insufficient amounts of vitamins and trace elements [2, 10-18]. The use of the NAN fermented milk mixture containing an adequate amount of high-quality protein (OptiPro) enriched with alpha-lactalbumin and all necessary vitamins, trace elements in children with dyspepsia and dysbiosis is very effective [4, 19-25]. The mixture also contains probiotics (*B.lactis*), which provide high functionality of this product.*

Keywords: *young children, fermented milk mixtures, dysbiosis.*

The relevance of the problem. Dysbacteriosis is one of the reasons for the increased incidence of infants at various stages of its development [1, 3]. The role of minor changes in the state of intestinal biocenosis in the genesis of abdominal syndrome and various intestinal dysfunctions is high [4-6]. The study of the clinical picture and the state of intestinal microbiocenosis and assessment of the effectiveness of the NAN-fermented milk mixture in children with dysbiosis was the aim of this work [2, 25].

Materials and research methods. The intestinal microflora and case histories of 46 infants with functional disorders of the gastrointestinal tract, who were admitted to the gastroenterology department of the Samarkand Regional Children's Multidisciplinary Medical Center, were studied.

Discussion of the results. Patients were admitted to the hospital with complaints from the mother about diarrhea (95.6%), undigested or fetid stools (86.7%), vomiting or regurgitation (76%), anxiety and anorexia (69.5%) and flatulence (50 %). All children became ill after a meal that was not appropriate for the child's age in terms of quality or quantity.

The cause of dyspepsia in children was often the excessive use of fruit by the mother (84.7%), the irrational use of drugs (65.2%) and food prepared by the mother the day before (43.4%), and acute intestinal upset in the mother - 17.4%. A study of the intestinal microbiocenosis of patients upon admission to the hospital revealed a bifidoflora deficiency in all children. Bifidobacteria were seeded in 65.2% in the VI th, in 21.7% of the children in the VII th and in 6 children in the VIII th breeding.

To normalize the activity of the gastrointestinal tract and eliminate intestinal imbalance in the complex treatment of dysbiosis, we recommended diet therapy, in particular, a NAN-fermented milk mixture. The reason for its appointment was that the NAN-fermented milk mixture, reducing the pH of the gastrointestinal tract, is more rapidly absorbed, does not affect the absorption of food ingredients, contributes to the suppression of fermentation-putrefactive processes, conditionally pathogenic microorganisms and the growth of bifidoflora, thereby improving and normalizing microbial landscape and eliminates dysbiosis.

30 children (I-group) received a NAN-fermented milk mixture, and the remaining 16 patients (II-group) received fresh mixtures. All children were mixed-fed. In children of the 1st group, flatulence disappeared on the 2nd day, and by the end of the 3rd day, abdominal pains, dyspeptic disorders decreased and the general condition improved in 86.9% of patients. The level of bifidobacteria in all patients increased by 1-2 orders of magnitude.

Bifidoflora in 22 children of the I-group was determined in the VIIIth dilution, in 8 patients - in the IXth, and in patients of the 2nd group in the VIIth in 6 children and in 10 cases in the VIIIth dilution. In group I patients, stool normalization was recorded on day 3. In group II, flatulence, dyspepsia symptoms, upset stool and bifidoflora deficiency lasted twice as long. Studies have shown that a NAN-fermented milk mixture with good probiotic properties helps normalize digestion in infants.

Conclusions. The results of the study showed that the inclusion of the NAN-fermented milk mixture in the complex treatment of sick children with intestinal microflora disorders accompanying functional disorders of the gastrointestinal tract helps to restore the function of the gastrointestinal tract and improves bifidoflora, which indicates the high biological value of the NAN fermented milk and its widespread use in the complex treatment of intestinal dysbiosis is recommended.

REFERENCES:

1. Абдуллаева, З. Х., Азимова, Г. А., Уралов, Ш. М., & Нажмиддинова, Н. К. (2014). Об эффективности проведения экспресс-диагностики возбудителей внебольничной пневмонии у детей. In Молодежь и медицинская наука в XXI веке (с. 29-30).
2. Волкова М. П. Дисбактериоз кишечника у детей. Диагностика и возможности коррекции // Журнал ГрГМУ. 2011. №2 (34).
3. Гарифулина, Л., Рустамов, М., Кудратова, Г., & Уралов, Ш. (2014). Урсодексихолевая кислота в терапии вирусных хронических гепатитов у детей. Журнал проблемы биологии и медицины, (3 (79)), 95-96.

4. Лукушкина Е.Ф., Кутилова Н.В., Нетребенко О.К.. Кисломолочные смеси в питании грудных детей. Вопросы современной педиатрии /2010/ ТОМ 9/ № 1: 136-141.
5. Рустамов, М. Р., Ибатова, Ш. М., Уралов, Ш. М., Атаева, М. С., & Юсупова, М. М. (2008). О составе высших жирных кислот при витамин Д-дефицитном рахите. Вестник врача общей практики, (3), 54-56.
6. Улугов, Х. Х., Уралов, Ш. М., Шакаров, Ф. Р., & Гафурова, М. Э. (2014). Об эффективности противовирусного препарата Генферон лайт при лечении острых бронхитов у детей раннего возраста. In Молодежь и медицинская наука в XXI веке (pp. 92-92).
7. Умарова, С., Уралов, Ш., Гарифулина, Л., & Шамсуддинова, Д. (2014). Изучение степени бронхиальной обструкции у детей, страдающих острым бронхитом. Журнал проблемы биологии и медицины, (3 (79)), 159-160.
8. Uralov Sh.M., Rustamov M.R., Zakirova B.I., Abdusalyamov A.A. The state of gluconeogenic liver function in children with gastroduodenal pathology depending on the duration of the disease // Vyatka Medical Bulletin, 2006, No. 2, - 61-62 p.
9. Ibatova, S. M., Uralov, S. M., & Mamatkulova, F. K. (2022). Bronchobstructive syndrome in children. Web of Scientist: International Scientific Research Journal, 3(5), 518-522.
10. Kh, J. A., & Achilova, F. A. (2022). The state of the erythron system in acute pneumonia in children. Web of Scientist: International Scientific Research Journal, 3(5), 798-808.
11. Sh. Uralov (2024). Surunkali gastritli bolalarda jigar funktsional holatining buzilishi va uni korrektsiyalash. Журнал гепатогастроэнтерологических исследований, 1(5), 53-59.
12. Sh. Uralov, I. Shamatov, Z. Shopulotova, & M. Kodirova (2024). Immunological indicators in stenosing laringotracheitis in children. Science and innovation, 3 (D1), 81-86. doi: 10.5281/zenodo.10578214
13. Uralov Shukhrat Mukhtarovich, & Kholikova Gulnoz Asatovna. (2023). Occurrence of functional constipation in children of different age. British Journal of Global Ecology and Sustainable Development, 17, 32–38. Retrieved from <https://journalzone.org/index.php/bjgesd/article/view/351>
14. Uralov Shukhrat, E. E. Kobilov, H. F. Batirov, M. K. Tukhtaev and V. B. Agzamov. Clinical and anamnestic characteristics of children with chronic gastroduodenal pathology. BIO Web Conf., 76 (2023) 01014. DOI: <https://doi.org/10.1051/bioconf/20237601014>
15. Уралов Шухрат, Аралов Мирзо, & Нажимов Шахбоз. (2024). Использование электронной программы оценки степени тяжести

обезвоживания при диареях у детей и выбора оптимальной тактики лечения. Uz-Conferences, 690–694. Retrieved from <https://uz-conference.com/index.php/p/article/view/601>

16. Уралов Шухрат, Ачилова Феруза, & Абдукадирова Наргиза. (2024, май 2). Результаты комплексной оценки функционального состояния печени у детей с хронической гастродуоденальной патологией. <https://doi.org/10.5281/zenodo.11103035>

17. Уралов, Ш. (2020). COVID-19 pandemiyasi davrida chaqaloqlarni ko'krak suti bilan oziqlantirish bo'yicha tavsiyalar sharhi. Журнал гепато-гастроэнтерологических исследований, 1(1), 98-103.

18. Уралов, Ш. М., Аралов, М. Ж., & Холикова, Г. А. (2022). О современных методах лечения острого стенозирующего ларинготрахеита у детей. Международный журнал научной педиатрии, (5), 25-31.

19. Уралов, Ш. М., Жалилов, А. Х., Аралов, М. Ж., & Холикова, Г. А. (2022). Методы лечения острого стенозирующего ларинготрахеита у детей на современном этапе. Scientific impulse, 1(2), 19-28.

20. Уралов, Ш. М., Жураев, Ш. А., & Исраилова, С. Б. (2022). О влиянии факторов окружающей среды на качество жизни и здоровье молодежи. So 'ngi ilmiy tadqiqotlar nazariyasi, 1(3), 6-13.

21. Уралов, Ш. М., Жураев, Ш. А., & Рахмонов, Ю. А. (2022). Управляемые предикторы бронхиальной астмы у детей, перенесших бронхообструктивный синдром в анамнезе. O'zbekistonda fanlararo innovatsiyalar va ilmiy tadqiqotlar jurnali, 1(9), 376-381.

22. Уралов, Ш. М., Облокулов, Х. М., & Мамутова, Э. С. (2020). О неспецифической профилактике коронавирусной инфекции. In Актуальные вопросы современной науки (pp. 132-134).

23. Уралов, Ш. М., Рустамов, М. Р., Закирова, Б. И., & Абдусалямов, А. А. (2006). Состояние глюконеогенной функции печени у детей с патологией гастродуоденальной зоны в зависимости от давности заболевания. Вятский медицинский вестник, (2), 61-62.

24. Уралов, Ш., Рустамов, М., & Халиков, К. (2022). Изучение глюконеогенной и мочевинообразовательной функции печени у детей. Журнал гепато-гастроэнтерологических исследований, 2(3.2), 18–20.

25. Уралов, Ш., Абдусалямов, А., Ибатова, Ш., & Умарова, С. (2014). Результаты проведенного анкетирования матерей, дети которых страдают острой респираторно-вирусной инфекцией. Журнал Проблемы биологии и медицины, (3 (79)), 164-165.