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PROBIOTICS AND THEIR STANDARDIZATION

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Abstract.

Probiotics are living microorganisms that have a fairly positive effect on the human body. Probiotics increase the number of beneficial bacteria in the intestines in a short time, which is especially important after treatment with antibiotics. Probiotics increase the number of beneficial bacteria in the intestines in a short time, which is especially important after treatment with antibiotics. However, this effect is not long-lasting and foreign microorganisms in our body quickly die.

Keywords

Probiotic, microflora, antibiotic, fermentation.

ПРОБИОТИКИ И ИХ СТАНДАРТИЗАЦИЯ

Аннотация.

Пробиотики — это живые микроорганизмы, которые оказывают достаточно положительное воздействие на организм человека. Пробиотики увеличивают количество полезных бактерий в кишечнике за короткое время, что особенно важно после лечения антибиотиками. Пробиотики увеличивают количество полезных бактерий в кишечнике за короткое время, что особенно важно после лечения антибиотиками. Однако этот эффект не является долгосрочным и чужеродные микроорганизмы в нашем организме быстро погибают.

Ключевые слова

Пробиотик, микрофлора, антибиотик, ферментация.

Studies show that bacteria introduced into the body change the composition of the intestinal microflora for a short time, but the initial state is quickly restored. It is also worth noting that some probiotics have a negative effect on health. The immune response against any foreign microorganisms that are part of probiotics

can have both positive and negative effects. Therefore, it is important to remember that probiotics have both beneficial and harmful aspects. It is important to consult a specialist before taking them.

As living microorganisms, probiotics cannot always survive in the intestines, they are killed by antibiotics. They live in the body for a short time (up to 5-7 days) and are suppressed by human microflora. They can impart antibiotic resistance to strains of human microflora. Probiotics are food components that are not digested and do not decompose in the upper layers of the gastrointestinal tract, are fermented by the colonic microflora, and stimulate their viability and development. Probiotics can have a greater effect on the microflora than probiotics. Because they are not broken down in the gastrointestinal tract and are resistant to antibiotics and the harsh acidic environment of the stomach. They stimulate the growth and development of a number of strains of beneficial human bacteria. Since they do not contain foreign genes, they do not cause a secondary immune response of the body and do not contain genes that promote resistance to antibiotics.

Standardization of probiotics is the process of establishing clear standards and procedures to ensure the quality and safety of probiotics. Probiotics are microorganisms that have a beneficial effect on the human body, mainly improving the intestinal microflora. Their effectiveness and safety are guaranteed only in products that comply with standards.

Standardization of probiotics may include the following factors:

1. Composition: The type and number of microorganisms (colony-forming) present in probiotic preparations. This is important for determining the effectiveness of the drug.

2. Safety: Probiotic microorganisms must be safe, meaning they must not cause harm to the human body, cause infections or other adverse effects.

3. Storage conditions: Optimal temperature and humidity conditions for storing probiotics, as well as proper storage methods to ensure that they remain active for a long time.

4. Research: Clinical and laboratory studies must be conducted to confirm the effectiveness and safety of probiotics.

5. Certification and regulations: Different countries have their own standards and regulations for probiotics, and products must comply with these rules in order to be registered or approved.

International organizations (e.g. FAO/WHO) also develop general recommendations and standards for probiotics. Taking these into account, the production and consumption of probiotic products can be safe and effective.

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