

- effective dosage form when used as applications.

Conclusions. The literature was examined and interviewed by dental associates on the usage of a dosage form of gel in dental practice. Advantages of gel as a dosage form for treatment and prevention of diseases of oral cavity are given.

YOGURT: BENEFITS AND HARMS OF PROBIOTIC FERMENTATION DRINK

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Introduction. Milk yogurt can be made from goat's or sheep's milk, but traditional cow's milk is still the most popular. In addition, yogurt is the most consumed fermented dairy product in developed countries today.

Aim. Analyze milk yogurt as a probiotic drink and characterize the positive and negative aspects of its consumption. Consider the technological features of yogurt production.

Materials and methods descriptive research method, literature and internet sources that are publicly available were used.

Results and discussion. Yogurt has long been prized for its creamy texture and many uses. In those days, fresh milk was often stored in the dried stomachs of animals, where beneficial bacteria, along with the climate, contributed to fermentation. However, today this process is very different. Milk is heated to the point where existing bacteria are destroyed - a process known as pasteurization. A culture of live bacteria is introduced, and the milk is allowed to ferment for several hours until it becomes thick, rich and sour.

Main equipment for yogurt production:

- containers of different volumes, consisting of two layers, are made of stainless steel;
- cream separation machine;
- device for normalization by fat content;
- homogenizing device;
- pasteurization and cooling unit;
- cooler with running liquid;
- closed fermentation tanks with mixing elements;
- refrigeration unit.

The industry has recently often used innovative equipment. Yogurt machines allow you to ferment and ferment milk in a safe way. The fermentation process is extremely sensitive to external factors and requires strict compliance of specialists with each parameter. Therefore, it is necessary to carefully approach the choice of devices. All types of fermentation equipment are somewhat similar to each other. In them, the container is made only of stainless steel. The structure is equipped with a milk supply module, a heat exchanger, a sterile air filter and elements for mixing the mixture. Sensors and meters monitor the filling level, temperature regime, if necessary – acidity, etc.all this information is sent to the central unit and recorded. The technologist sees all the data on the display.

The properties of yoghurts were analyzed in a study published in the journal Nutrition Research, Involving 6,526 people. The researchers concluded that yogurt consumption was directly associated with better overall dietary quality, a healthier metabolic profile, blood pressure, and triglyceride levels. In addition, real yogurt has been found to be an excellent source of calcium,

potassium, magnesium, zinc, and vitamins B2 and B12. yogurt is great for maintaining health and wellness, and probiotic-rich foods play a central role in the GAPS diet.

Live probiotics in yogurt, including *Lactobacillus acidophilus*, lower cholesterol levels. It is known that only 200 ml of yogurt every day has this effect. In a controlled clinical trial, researchers observed a 2.4% reduction in serum cholesterol. They believe that regular consumption of probiotic yogurt can reduce the risk of developing coronary heart disease by 6-10%.

The benefits of yogurt far outweigh any potential side effects. Yogurt provides nutritional value in the form of protein and calcium, and the probiotics in its composition help to maintain a healthy digestive tract and support the immune system. Probiotic yogurt can cause minor side effects, such as flatulence or upset stomach. You should not take it only if you are allergic to lactose. And in acute gastritis, pancreatitis or cholecystitis, preference should be given only to low-fat varieties.

The probiotics present in yogurt can cause infections in people who are seriously ill or in people with weakened immune systems. A condition called short bowel syndrome (when some part of the small intestine is missing or surgically removed) can also increase the risk of infection from probiotics. According to the University of Maryland Medical Center, bacteria of the genus *Lactobacillus acidophilus* can cause infection in people with an artificial heart valve. Probiotics can affect the metabolism of certain medications, such as sulfasalazine (a medicine for ulcerative colitis).

Conclusions. The benefits and harms of yogurt depend on how fresh and natural the product is. Real yogurt with live bacteria is safe for almost everyone who is not lactose intolerant, and has a great effect on the body. Therefore, expanding the range of yoghurts by releasing new types of yoghurts, with useful additives to improve their functional properties, is an urgent task of the dairy industry.

FRACTAL PROPERTIES OF VESSELS

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Introduction. Fractals are shapes that have properties of self-similarity. It can be assumed that vascular systems have fractal properties. Just like the branches of trees, the vessels naturally branch out, forming a network. Most vessels branch dichotomically, so, two branches are formed from one branch and each of these branches then divides again into two (vessels of the kidneys, eyes). In the process of separation, the vessels decrease in diameter and caliber. But there are also options when smaller branches consistently depart from the main vessel, while this main vessel almost does not change in diameter (main coronary vessels). A fractal dimension greater than 1.0 indicates that the system is self-similar (it has fractal properties). But if this value is 1.5, then the process can be considered random. In the case of a normal state, the fractal geometry of the vessel will have a simple, repetitive branching character. If the vessel is affected or with age, it acquires a more complex structure. This will also affect the fractal dimension.

Aim. The aim of the study is to combine properties into parametric L-systems to obtain open tree structures that are both fractal in nature and also physiological in their branching properties.

Materials and methods. The Lindenmayer parametric system (L-system) allows to create branched structures similar to an arterial network. However, there is a feature of vascular branching – this is the variability of branching parameters in the arterial tree. These parameters include the asymmetry coefficient, plane coefficient, branch diameter and branch angle. There is also a