

FQAs

1. Write short notes on Benefits of fermented products?

The many benefits of fermented milk products include enhanced digestibility, new and unique flavors, added probiotics, vitamins and minerals, and preservation products for a food that normally has a very short shelf life. Fermented dairy products are products that can be produced via fermentation of lactose by microorganisms especially by lactic acid bacteria. A Probiotic food enhances health after consumption and contains microorganisms which are viable, specific and effective on main systems of nutritional physiology and those products are an important part of human diet. These benefits include supporting your immune system, fighting against the growth of toxic intestinal bacteria, decreasing discomfort from lactose intolerance, treating diarrhea and normalizing carcinogens in our food.

2: Explain in detail what are Health benefits of yogurt?

Yogurt is nutritionally rich in protein, calcium, vitamin D, riboflavin, vitamin B6. It has nutritional benefits beyond those of milk. Lactose-intolerant individuals may tolerate yogurt better than other dairy products due to the conversion of lactose to the sugars glucose and galactose, and due to the fermentation of lactose to lactic acid carried out by the bacteria present in the yogurt. The fat content of yogurt varies from 0-3.5%; most yogurt is low fat and contains 1–1.5% fat.

3: Name different Types of yoghurt?

These are some of the commonly available yoghurts;

1. Set Yogurt
2. Drinking Yogurt
3. Flavoured Yogurt
4. Stirred Yogurt
5. Frozen Yogurt
6. Concentrated Yogurt

4: Explain in detail what is cheese ripening?

A newborn cheese is usually salty, bland in flavor and, for harder varieties, rubbery in texture. Normally cheeses are left to rest under controlled conditions. This aging period (also called ripening, lasts from a few days to several years. This transformation is largely a result of the breakdown of casein proteins and milkfat into a complex mix of amino acids and fatty acids.

Cheese ripening or alternatively cheese maturation is a process It is responsible for the distinct flavour of cheese. The process is "characterized by a series of complex physical, chemical and microbiological changes" that incorporates the agents of: "bacteria and enzymes of the milk. Some cheeses have additional bacteria or molds intentionally introduced before or during aging. In traditional cheese making, these microbes might be already present in the aging room; they are simply allowed to settle and grow on the stored cheeses.

5:What is Bhanglassi and what chemical it contain?

Bhang lassi is a special lassi that contains Bhang, a liquid derivative of cannabis. *Cannabis* plants produce a group of chemicals called cannabinoids, which produce mental and physical effects when consumed..It is legal in many parts of India and mainly sold during Holi. Uttarpradesh is known to have licensed bhang shops, and in many places one can buy bhang products and drink bhang lassis.

7:Nutritional benefits of cheese?

The calcium, protein, and phosphorus in cheese may act to protect tooth enamel.Cheese increases saliva flow, washing away acids and sugars.

The nutritional value : The nutritional value of cheese varies widely. Cottage cheese may consist of 4% fat and 11% protein; some whey cheeses 15% fat and 11% protein, and some triple-crème cheeses 36% fat and 7% protein. In general, cheese supplies a great deal of calcium,protein,phosphorus and fat. Nutritionally, cheese is essentially concentrated milk: it takes about 200 grams (7.1 oz) of milk to provide that much protein, and 150 grams (5.3 oz) to equal the calcium

8:List out the microorganisms involved in the production of cheese?

9:Mention the Health benefits of probiotics?

Probiotics are live microbial food supplements or components of bacteria, which have been shown to have beneficial effects on human health. Probiotics can improve intestinal function and maintain the integrity of the lining of the intestines. These friendly organisms may also help fight bacteria that cause diarrhoea, may help prevent colon cancer and enhancing the host's immune response. Probiotics are mainly available in the form of dairy products or as supplements.

10:Write notes on Acidophilus milk and which microorganism used in this process?

Acidophilus milk is a type of fermented dairy product and *L. acidophilus* is used as culture. In the fermented Acidophilus milk production, milk is heat processed at 95°C and goes through homogenisation. Later, it is cooled to 37°C and inoculated with 2-5% commercial *L. acidophilus* pure culture and left for incubation for 18-24 hours. Following incubation, milk is cooled to 5°C and kept under cold conditions.. The purpose of using high temperatures is for better *L. acidophilus* growth.

Sweet acidophilus milk can be made from milk of any fat content but is usually made from lowfat (1 percent) milk. It looks and tastes like regular low fat milk and has the same nutritional value as low fat milk.

11:List out Different types of cheeses available?

Cheese is produced throughout the world; it is an ancient food and delicious and nutritious food that is very versatile. Hundreds of types of cheese from various countries are produced. Their styles, textures and flavors depend on the origin of the milk (including the animal's diet), whether they have been pasteurized, the butterfat content, the bacteria and mold, the processing, and aging. Herbs, spices, or wood smoke may be used as flavoring agents.eg,

1. Soft cheese
2. Semi Soft cheese
3. Semi hard cheese
4. hard cheese
5. Fresh cheese
6. Blue cheese

7. Processed cheese.

12:Write in detail about the health Benefits of curd ?

Curd is a dairy product made by curdling milk with rennet or LAB a. of beneficial bacteria.

1. Curd improves the digestive system as it contains a host of beneficial bacteria in it.
2. It helps to cope with stomach problems and consumption of curd provides relief from diarrhea
3. Consuming curd regularly increases the capacity to absorb the nutrients and minerals from other foods as well.
4. It proves health beneficial for those who are lactose intolerant.
5. Consuming curd proves beneficial for those suffering from vaginal infection.
6. It helps strengthen bones and teeth as it is high in calcium.

13:List out some important fermented dairy products and microorganisms involved/

Curd: *L. lactis subsp. lactis* ,

L. delbrueckii subsp. bulgaricus

L. plantarum

Streptococcus lactis

Cultured butter milk: *S. lactis subsp. Diacetylactis* and *S. cremoris*

Yoghurt: *L. acidophilus* ,*S. thermophilus*,*L. bulgaricus*

14:Explain in detail how to prepare Lassi:?

Lassi is a popular, traditional, yoghurt-based drink from Bangladesh, India and Pakistan. Lassi is a blend of yogurt, water, spices and some times, fruit. Traditional lassi sometimes flavored with ground and roasted cumin. Sweet lassi, however, contains sugar or fruits, instead of spices. yogurt sweetened with honey is used while performing religious rituals. With a little turmeric powder mixed in, it is also used as a folk medicine for stomach problem.

15:Explain what is Kefir and its health benefits.?

Kefir is a fermented yogurt-like drink. The word "kefir" is derived from the Turkish word "Keif," which means "good feeling"; a benefit this drink is said to provide for those who consume it. Kefir is produced with starter grains, known as kefir grains, which contain active microorganisms consisting of 83 to 90 percent lactic acid bacteria and 10 to 17 percent yeast. Traditionally, raw milk was mixed with kefir grains and placed in animal skin pouches to ferment. Kefir incorporates various essential vitamins, minerals, amino acids and enzymes, particularly phosphorus, magnesium, calcium and vitamins B2, B12, D, K and A. Kefir have some merit as kefir is rich in nutrients including folic acid.