## FAQ'S

## 1. What are microbial enzymes?

**A.** Microbial enzymes are the biological substance or biological macromolecules that are produced by a micro-organism which acts as a catalyst to bring about a specific biochemical reaction.

## 2. What are the sources of commercial enzymes? What advantage does this source have?

**A.** Microorganisms; rapid growth, easily find robust strain, lower production costs, and easy of genetic manipulation.

# 3.Current enzymes used in food processing are not ideal catalysts. What techniques can one use to improve enzyme properties and production?

A. Recombinant DNA technique and protein engineering.

#### 4. What do you mean by lactose intolerance?

**A. Lactose intolerance** is a condition in which people have symptoms due to the decreased ability to digest lactose, a sugar found in milk products.Symptoms may include abdominal pain, bloating, diarrhea, gas, and nausea.

#### 5.What is Rennet?

**A.** Rennet is an enzyme derived from the stomachs of calves, lambs or goats before they consume anything butmilk.

#### 6. What is Protease?

**A.Protease** (also called a **peptidase** or **proteinase**) is any enzyme that performs proteolysis by hydrolysis of peptide bonds.

#### 7. What are some industrial processes that use bacteria?

**A.** Bacteria are used by industry in various ways. There are vaccines made of attenuated pathogenic bacteria or of antigens present in bacteria. One of the most ancient uses of bacteria is the fermentation of milk to produce yogurt, cheese, and so on. Some methods of antibiotic production involve bacteria. The recombinant DNA technology (genetic engineering) allows the industrial production and commercialization of human proteins, such as insulin for diabetics by mutant bacteria.

# 8. What do bread and beer have in common?

**A**. Yeasts break glucose down and produce alcohol and carbon dioxide as their by-products.

# 9. What is the importance of yeast in the food process?

**A.**Yeast is a living organism used in bread (to make it rise), beer, wine, and spirits (to make ethanol). In bread dough the yeast will consume the natural sugars in the flour as soon as water is added. As it consumes the sugars ferments producing pockets of CO2 and alcohol. When baking, the heating process gets rid of the ethanol to leave the pockets, making the bread light and fluffy.

# 10. What is the role of Lactic Acid Bacteria (LAB) in fermented milk products?

**A.**Fermented milk by LAB was first made in order to increase the shelf life of dairy products, as well as to make milk easier to digest and enhance the flavor and texture of dairy foods; the specific chemical reaction and product that results from fermentation depend upon the type of bacteria used and the process by which it is combined with the milk. It is commonly used to create dairy products such as yogurt, kefir, cheese, and sour cream, and so on.

