



## Research subjects

- 1- Quality of table eggs**
  - a- Definition of egg quality
  - b- Microbiological quality
  - c- Chemical quality
  - d- Detection of egg quality
  - e- Sources of contamination and prevention methods
  - f- Egg defenses
  
- 2- Good Manufacturing Practices and cheese quality**
  - a- What GMP means
  - b- Objectives of GMP
  - c- GMP starter cultures ·
  - d- GMP rennet: production, storage, use ·
  - e- GMP additions of rennet to the milk and curd ·
  - f- GMP salting of curd ·
  - g- GMP product storage and transport ·
  - h- GMP direct sale
  - i- Personnel hygiene
  - j- Equipment hygiene
  
- 3- How to implement HACCP system in dairy factories.**
  - a- Definition of HACCP system
  - b- Principles of HACCP system
  - c- Write a model of implementation of the system in a dairy factory.
  - d- Importance of the system
  
- 4- Salmonella food poisoning in Egypt: Statistics, Problems and Solutions.**
  - a- Definition of food poisoning
  - b- Characteristics of the organism and its symptoms
  - c- Optimum conditions for growth of the organism in food
  - d- Statistics about the incidence of Salmonella food poisoning in different dairy products in Egypt
  - e- High risk foods associated with Salmonella food poisoning.
  - f- Rapid methods for detection
  - g- Prevention and control
  
- 5- Innovative technologies for a sustainable dairy industry**
  - a- Definition, aim and importance of sustainable dairy technology
  - b- Overview of recent innovations in dairy technology.



c- Give an Example in detail

**6- Impacts of subclinical mastitis on dairy industry**

- a- Definition and causes of subclinical mastitis
- b- Effects of subclinical mastitis on public health, milk composition and dairy products
- c- Detection and control of subclinical mastitis

**7- Probiotic dairy products as functional foods**

- a- Definition, types and characters of probiotics
- b- Health effects of probiotics
- b- Definition, types and sensory properties of functional dairy products

**8- Role of food technologies to obtain safe food**

- a- Using temperature for food preservation
- b- Aim of different milk heat treatment processes
- c- Influence of heat treatment on milk
- d- Alternative processes for heat treatment

**9- Defects of butter fat rich products**

- a- Types and nature of butter fat rich products
- b- Major control points during manufacture of butter fat rich products
- c- Physico-chemical changes associated with processing
- d- Technological, microbiological hazards and spoilage

**10- Butter is comparatively stable product microbiologically**

- a- Nature of butter
- b- Sources of microorganisms in butter
- c- Microbial load of butter
- d- Microbiological hazard

*With best wishes Staff members of food control department*

*Head of department*

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