FDE551 Shelf-life of Food

Department of Food Engineering – Elective course

Credit: 3 ECTS: 7.5

Course Description: This graduate-level course explores the factors influencing food quality deterioration, emphasising how environmental elements affect packaged foods. Students will study the permeability properties of various packaging materials, including barriers against gas, vapour, aroma, liquid, and light, and understand their importance in food preservation. The course covers the interactions between food and packaging, recent advancements in packaging technology, and practical methods for determining and extending the shelf life of food products.

Course Outcomes:

- Identify and explain the environmental factors that impact foods' quality and shelf life.
- Analyze the permeability properties of different packaging materials and their role in food preservation.
- Evaluate the barriers for optimal food shelf life based on food type and storage conditions.
- Describe the interactions between food and packaging materials and their implications for food quality.
- Assess recent technological advancements in food packaging and their effectiveness in extending shelf life.
- Apply methods for determining food shelf life and recommend improvements to packaging and storage practices.

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