

# **FDE 408**

# **FOOD QUALITY CONTROL**

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# Course Catalogue Contents

- ✓ Quality concept and quality criteria in foods, basic concepts of quality assurance and related definitions (ISO, GMP, HACCP, GAP), quality assurance organization and its function, quality control cards and their interpretation, color, textural and rheological properties of foods, sensorial properties of foods and evaluation techniques, national and international standards and legislation concerning food quality, quality changes in foods, defect types and their determination in foods

# Learning Objectives

- ✓ An ability to understand food quality components, measurement methods and food quality control systems
- ✓ An ability to understand the role of a quality assurance process
- ✓ An ability to evolve appropriate quality assurance plan
- ✓ An ability to understand the principles of quality assurance as a function of total quality management and the methodology necessary to establish and implement a quality assurance program for a food manufacturing plant

# Course Outline

- ✓ WEEK 1- Quality Concept and Quality Criteria in Foods
- ✓ WEEK 2- Basic concepts of quality assurance and related definitions (ISO, GMP, HACCP, GAP)
- ✓ WEEK 3- Quality assurance organization and its function
- ✓ WEEK 4- Quality control cards and their interpretation
- ✓ WEEK 5- Color and color measurement system
- ✓ WEEK 6- Kinesthetic ve textural characteristics
- ✓ WEEK 7- Viscosity and consistency

# Course Outline

- ✓ WEEK 8- Food quality defects and measurement methods
- ✓ WEEK 9- Sensory properties of foods
- ✓ WEEK 10- Sensory evaluation techniques for foods
- ✓ WEEK 11- National standards related to food quality
- ✓ WEEK 12- International standards and legislation concerning food quality (EU and CAC standards)
- ✓ WEEK 13- Food safety, risk analysis and risk assessment
- ✓ WEEK 14- Quality changes in foods, food shelf-life

# Reference Books

- ✓ Early, R. 1995. Guide to Quality Management Systems for the Food Industry. 308p. Springer.
- ✓ Topal, Ş. 1996. Gıda Güvenliği ve Kalite Yönetim Sistemleri. TÜBİTAK-MAM Matbaası. Gebze/Kocaeli 225s.
- ✓ Vasconcellos, J. A. 2003. Quality Assurance for the Food Industry: A Practical Approach. 448p. CRC Press.
- ✓ Goetsch, D.L., Davis, S. 2003. Quality Management: Introduction to Total Quality Management for production, Processing and Services. 858 p. Prentice Hall.

**QUALITY**

# Why is quality important?





# Definitions of the Quality in the Food Industry

**Product-based**

**User-based**

**Manufacturing-based**

**Value-based**

# Why is quality important?

## ✓ *What is a good quality product?*

- ❖ conformance to specifications (production)
- ❖ fitness for use (consumption)
- ❖ customer satisfaction
- ❖ exceeding consumer expectations

# Quality in the Food Industry

- ✓ A requirement for consumer acceptance
- ✓ Total quality or integral quality
  - ✓ all industrial operations, manufacturing and the final product should be subjected to ***acceptable processing*** and ***conformance with requirements***



# Standards of Quality

- ✓ **Legal Standards**
- ✓ **Company or Voluntary Label Standards**
- ✓ **Industry Standards**
- ✓ **Consumer or Grade Standards**