

AMFT26 BIOLOGY AND CHEMISTRY OF FOOD FLAVOURS

UNIT-1 INTRODUCTION

- 1.1 Problems in flavour research
- 1.2 Classification of food flavors;
- 1.3 Chemical compounds responsible for flavour.

UNIT-2 FLAVOUR COMPOUNDS

- 2.1 Chemical compound classes and their flavour responses;
- 2.2 Flavour development during biogenesis,
- 2.3 Flavour development during food processing;
- 2.4 Use of biotechnology to develop flavors.

UNIT-3 THE CHEMICAL SENSES

- 3.1 Anatomy of the chemical senses;
- 3.2 Neural development of the chemical senses;
- 3.3 Receptor mechanisms, neural coding; the control of eating.

UNIT-4 FLAVOUR ANALYSIS

- 4.1 Subjective versus Objective methods of analysis;
- 4.2 Psychophysics and sensory evaluation and its types, ENOSE, ETONGUE; Instrumental analysis;
- 4.3 Sample handling and artifacts; data handling

UNIT-5 TEACHING FLAVOUR CONCEPTS

- 5.1 Problem based learning;
- 5.2 tongue and nose;
- 5.3 Onion-Beverage-Maillard reaction-Thio-stench

References Books

- 1 Hofmann, Thomas. "Challenges in Taste Chemistry and Biology". American Chemical Society Publications, 2004.
- 2 Charalambous, G. "Food Flavors: Generation, Analysis and Process Influence". Elsevier, 1995.