

~~Proposed G15~~

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UG/FSC-T. DSE/17601;

FOOD SCIENCE & TECHNOLOGY: PROCESSING OF FOODS OF ANIMAL ORIGIN

CREDITS: THEORY: 4, PRACTICAL: 2

UNIT I

- Sources and composition of milk, nutritive value.
- Chemistry of milk - milk, proteins, lactose, vitamins, minerals & salts.
- Processing of market milk - standardization, toning of milk, homogenization, pasteurisation, sterilization.

UNIT II

- Storage, transportation and distribution of milk.
- Milk products - processing of cream, whole and skimmed milk, fermented milk, butter and its manufacture.
- Cheese and its types.
- Production of ice creams.

UNIT III

- Introduction of Indian meat industry.
- Structure of muscle; slaughtering of meat animals. Post-mortem changes in meat.
- Tenderization and aging of meat.
- Different cuts of lamb and their uses.

UNIT IV

- Preservation of meat by freezing, curing, pickling and smoking
- Traditional meat products in J&K.
- Structure, composition and nutritive value of eggs.
- Preservation of fish by freezing, canning, smoking and dehydration.
- Packaging requirements of meat and meat products.

PRACTICALS

1. Market survey of meat and milk products.
2. Preparation of meat pickle.
3. Slaughtering of poultry and determination of meat to bone ratio.

4. Dressing of fish and calculation of dressing percentage.
5. Quality evaluation of eggs.
6. Evaluation of milk-total solids, fat.
7. Determination of acidity and specific gravity of milk.
8. Preparation of common milk products like yoghurt, evaporated milk.
9. Visit to local milk processing plant and slaughterhouse.

References

1. Outlines of Dairy Technology by S. K. De.
2. Dairy Chemistry by H.H. Sommer.
3. Lawre. R.A. & Ledward, D.A. (2006). Lowres meat science 7th edition. Woodhead publishing company, Cambridge, England.
4. Principles of meat Science by Forest.
5. Processed Meats by Pearson.