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DEPARTMENT OF FOOD TECHNOLOGY

19FTE402-MEAT, FISH AND POULTRY PROCESS TECHNOLOGY

UNIT III- POULTRY PROCESSING

TOPIC 1 & 2

Classification

The term poultry is applied to all domesticated birds which are used as food and includes chickens, ducks, geese, turkeys and pigeons. Of these, chicken and turkey are most commonly used for their meat.

1. Classification: Poultry is classified on the basis of age. Age influences tenderness and fat content and this determines the cooking method. The classification according to Indian standards is as follows.

- Broiler or Fryer: chicken of 8 to 10 weeks of age either sex, having tender meat with soft, pliable smooth textured skin and breastbone cartilage that may be somewhat less flexible than that of the broiler or fryer.
- Stag: A male chicken, usually under 10 months of age with coarse skin, somewhat toughened and darkened flesh and a considerable hardening of the breastbone cartilage.
- Stewing chicken or fowl: A mature chicken, usually more than 10 months of age. Has less tender meat than that of a roaster and flexible breastbone tip.
- Cock: A mature male chicken, usually over 10 months of age, with coarse skin, toughened and darkened meat and hardened breastbone tip.

Turkeys

1. Fryer–roaster turkey: a young immature turkey (usually, under 16 weeks of age), of either sex, that is tender-meated with soft, pliable, smooth-textured skin, and flexible breastbone cartilage.

2. Young turkey: a turkey (usually, under 8 months of age) that is tender- meated with soft, pliable smooth-textured skin and breastbone cartilage that is somewhat less flexible than in a fryer–roaster turkey. Sex designation is optional.

3. Yearling turkey: a fully matured turkey (usually, under 15 months of age) that is reasonably tender-meated and with reasonably smooth-textured skin. Sex designation is optional.

4. Mature turkey or old turkey (hen or tom): an old turkey of either sex (usu- ally in excess of 15 months of age), with coarse skin and toughened flesh.For labeling purposes, the designation of sex within the class name is optional,and the two classes of young turkeys may be grouped and designated as "young turkeys."

Ducks

1. Broiler duckling or fryer duckling: a young duck (usually, under 8 weeks of age), of either sex, that is tender-meated and has a soft bill and a soft windpipe.

2. Roaster duckling: a young duck (usually, under 16 weeks of age), of either sex, that is tender-meated and has a bill that is not completely hardened and a windpipe that is easily dented.

3. Mature duck or old duck: a duck (usually, over 6 months of age), of either sex, with toughened flesh, a hardened bill, and a hardened windpipe.

Geese

Young goose: may be of either sex, is tender-meated, and has a windpipe that is easily dented.

2. Composition and nutritive value: Poultry meat has a high protein content about 25 percent and is comparable in quality and nutritive value to other meats. It contains all the essential amino acids required for building body tissues. There is little fat on the meat of young birds, but the fat content is influenced by age and species of poultry. Chicken fat is more unsaturated than the fat of red meat and this has nutritional advantage. Like other animal tissues, poultry flesh is a good source of B vitamins and minerals. The dark meat of chicken is richer in riboflavin than the light, but the light meat is richer in niacin. White meat is lower in fat and calories than dark meat but skinless dark meat is still lower in fat than some cuts of red meat. Dark meat supplies more iron than while meat. Skin colour of chicken does not affect nutritional value, flavour tenderness or fat content. Because of its high protein to fat ratio, poultry meat is advantageous to persons who must restrict the intake of fats.