Meat Inspection and Grading

Purpose of inspection of meat is to protect the consumer by ensuring wholesomeness of carcass, meat and meat products.

Elements of meat inspection

Following are the elements of meat inspection:

1. Sanitation inspection
2. Ante mortem (pre-slaughtering) inspection
3. Post mortem inspection
4. Control and restriction of condemned material
5. Product inspection
6. Laboratory inspection
7. Marketing and labeling

Meat Grading

Meat grading refers to the segregation of meat or meat products, depending upon two attributes as:

- Quality (palatability)
- Yield (Compositional quality)

Different grades of meat and their characteristics

1. **Prime Grade**: It contains abundant marbling. It is meat of young animal.
2. **Choice Grade**: It contains more marbling but less than prime grade. It is meat of young animal.

Above grades are preferred for dry cooking methods.

3. **Select Grade**: In this, marbling is present but less than prime and choice grade. It is meat of young animal.
4. **Standard Grade**: In this, marbling is not present. It is meat of young animal.
5. **Commercial Grade**: It contains marbling but it is meat of mature animal.

Above three categories are usually preferred for wet/moist cooking methods.

6. **Utility Grade**: It contains no marbling and it is meat of mature animal.

Utility grade is usually used in the form of minced meat.

Factors used to establish meat quality grades

- **Kind and class of animal**: Kind is specie of specific animal and class is based on gender.
- **Maturity**: It is age of animal.
- **Marbling**: Its intramuscular fat. Presence of marbling improves palatability of meat.
- **Firmness**: It depends on internal, external and total amount of fat. It doesn't affect eating quality. It affects appearance of meat.
- **Confirmation and fleshing**: Confirmation is muscle to bone ratio. If muscle to bone ratio is more than it is good quality and vice versa, while flesh is total amount of meat.

Factors used to establish meat yield

- **Amount of fat**: More amount of fat, less yield of meat.
- **Muscle development**: More muscles will yield more meat
- **Carcass weight**: More weight, more meat.