# Glossary

1. **Hermetic package -** .Extended maintenance of quality can be achieved in an hermetic package through exclusion of contamination, delaying of microbial spoilage, maintenance of desirable color and by the minimization of water loss.
2. **Brochothrix thermospacta –** It is a type of spoilage bacteria associated with meat spoilage. The minimum water activity at which Brochothrix thermospacta can grow in the presence of oxygen at 00 c is 0.94 whereas in the absence of oxygen it is 0.97.
3. **Lactic acid bacteria** – These belong to the Lactobacillus species. The presence of such flora dominated by the lactic acid genera can normally be expected to signify a maximum shelf life for packaged fresh meat.
4. **Vacuum-packaged primal cuts –** Method to store and distribute chilled beef as primal cuts (2 to 9 kg) vacuum packaged in bags made of plastic materials having low permeability to gases. Beef which is packed in this manner is easy to handle.
5. **Vacuum pack** – In this type of pack, the residual oxygen is consumed, presumably by the tissues and microbial consumption of the oxygen. In turn, carbon dioxide is produced. If the process of vacuum packaging has been correctly followed, there is little head space left in a vacuum package.
6. **Low permeability films -** Beef stored vacuum packaged in low permeability films should be purple in colour since the myoglobin content is in the reduced form.
7. **Bloom -** When vacuum packs of beef are opened, the purple colour should turn into red colour which is termed as return of the “bloom”.
8. **Leaker -** If a brown color has developed during storage it is indicative of excess oxygen penetration into the pack. This can be caused either by the use of a film which is excessively permeable or due to the pack being a “leaker”
9. **Visual deterioration –** Changes which are seen to the naked eye such as change of colour, texture etc is termed as visual deterioration.
10. **Greening -** Growth of Alteromonas putrefaciens, Aeromonas, or some types of Enterobacteriaceae may cause spoilage due to a colour defect termed as greening.
11. **Sulphmyoglobin –** Certain organisms produce hydrogen sulphide which reacts with myoglobin to form sulphmyoglobin which is responsible for the formation of green colour.
12. **Telescoping -** A method known as telescoping is used to pack lamb carcasses in which the size is reduced. In this process, the hind legs are folded up into the thoracic cavity and by this a considerable reduction in volume is achieved.
13. **Gas – flushing -** Gas flushing with 100 per cent carbon dioxide results only in a marginal improvement of storage life and quality of vacuum packaged primal cuts. This is because there is little head space and only a very low concentration of oxygen is remaining.

14. **Acid treatment -** The acid treatment reduces the number of bacteria present, but also has a residual effect. It delays the onset of the growth of putrefactive bacteria i.e. it has a bacteriostatic effect.
15. **Modified atmosphere package -** Modified atmosphere packages house pork products in an environment other than air. Modified atmosphere packages typically are rigid plastic trays, which hold the meat product and an absorbent pad, which has been sealed with a clear high-barrier plastic film.