GLOSSARY

Anaerobic condition: An aerobic environment is characterized by the presence of free oxygen while an anaerobic environment lacks free oxygen.

Anaerobe: An *anaerobe* or *anaerobic* organism is any organism that does not require oxygen for growth. It may react negatively or even die if oxygen is present.

Autolytic spoilage: *Autolysis* means "self-digestion". The spoilage of fish is a complicated process brought about by actions of enzymes, bacteria and chemical constituents. The spoilage process starts immediately after the death of fish.

Dehydration: Dehydration, in food processing, means by which many types of food can be preserved for indefinite periods by extracting the moisture, thereby inhibiting the growth of microorganisms.

Freezer burn: Freezer burn is a condition that occurs when frozen food has been damaged by dehydration and oxidation, due to air reaching the food. Freezer burn appears as grayish-brown leathery spots on frozen food, and occurs when air reaches the food's surface and dries the product.

Latent heat of fusion: The heat absorbed as a substance changes phase from liquid to solid, a process called fusion or solidification.

Pelagic fish: *Pelagic fishes* are those that spend much of their lives swimming in open water away from the bottom.

Protein denaturation: *Denaturation* of *proteins* involves the disruption and possible destruction of both the secondary and tertiary structures. *Denatured proteins* are hydrolyzed, and the peptide bonds are broken down into easily digestible amino acids.

Rancidity: *Rancidity* is a term generally used to denote unpleasant odors and flavors in foods resulting from deterioration in the fat or oil portion of a food. Types of *rancidity* include hydrolytic and oxidative *rancidity*. Hydrolytic *rancidity* is a condition caused by fat hydrolysis. Oxidative *rancidity* is caused by a biochemical reaction between fats and oxygen.

Specific heat: The specific heat is the amount of heat per unit mass required to raise the temperature by 1 °C.

Temperate condition: The temperatures in these regions are generally relatively moderate, rather than extremely hot or cold, and the changes between summer and winter are also usually moderate.

Tropical condition: A *tropical climate* has warm temperatures throughout the year and a significant amount of precipitation.

Water holding capacity: Water-holding capacity is defined as the ability of meat to hold its own and added water.