Summary

Canning is a method of preservation in which spoilage can be averted by killing micro-organisms through heat. It is generally well known that food carries micro-organisms which cause spoilage if left unchecked. These micro-organisms are to be eliminated and the entry of other is restricted. In addition canning allows storing or transporting highly perishable foods in environments where no other preservation method is successful. Canning is defined as the preservation of foods in the sealed containers and usually implies heat treatment as the principal factor in prevention of spoilage. Mostly canning is done in "tin cans" which are made of tin coated steel or in glass containers, but canning is also done in containers that are partially or wholly of aluminum, of plastics such as pouches or solid containers of a composite materials. In conventional canning, the food is placed inside the container, the air is removed by vacuum and the cans are hermetically sealed. The cans are placed in the retort, sterilized within steam and cooled. Canning is basically a heat processing operation where heat flows from a hot body (heating medium) to a cold body (food inside the can). The aim of canning is to destroy microbial populations (vegetative cells and spores) and/or enzymes responsible for food deterioration. Canning has a number of advantages when compared to other methods such as smoking, curing, drying and refrigeration. These are simpler storage conditions, considerably longer shelf life and nutritional characteristics closest to those of the unprocessed material. Canning is especially appropriate for perishable food materials marketed to tropical and subtropical conditions, where temperature and humidity are high.