和英対訳船内の食事管理

(2006年の海上の労働に関する条約準拠)

Food and Catering on Board Ships

(Conform to Maritime Labour Convention, 2006)





国土交通省海事局運航労務課監修

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The Association for Promoting Safety and Sanitation for Seafarers

3. 食品に対する衛生

(1) 洗浄・消毒・殺菌

食品の洗浄には通常上水道流水で行い、必要に応じ食品用中性洗剤を低濃度で使い、その後は十分な水で流しを行います。船内では清水での洗浄は必須です。必要であれば食品衛生法に指定されている殺菌剤(次亜塩素酸ナトリウム)や、除菌法(アルコール製剤)を使用します。

(2) 食品の保管管理

保管管理は衛生的に行い、常温保管・冷蔵保管・冷凍保管となります。

常温保管 一定期間腐敗しないようにした食品は、微生物の繁殖を防ぎ、変色・でん粉 の老化を防ぐよう細心の注意が必要です。

冷蔵保管 食品鮮度を保つため0~5℃で保存時間を延ばす。酵素活性を抑え、化学的変化、微生物の繁殖を抑え遅らせ変質を防止することになります。

植物は低温で呼吸作用が少なくなり保存性が増し、ビタミン類の減少を防ぐ作用があります。

冷蔵庫内では、乾燥による水分減少があります、プラスティクフィルム(食品ラップ)で包装が必要です。

低温障害 低温で保存するときに食品に低温障害 (変色・腐敗) を起こすことがあります。 (バナナ・ナス・さつま芋・ポテト・玉葱等) 温度管理が必要です。

パーシャル 食品の水分凍結温度より少し低温で凍結させない温度帯で冷蔵する方法です。(氷温貯蔵)通常-3℃です。



○冷蔵庫の温度帯

冷蔵庫 飲食物を低温貯蔵し腐敗を遅らせ、冷却させる機器。

+5~15℃ 保冷部 野菜・牛乳・玉子類 +5℃ 冷蔵部 主に魚・肉類 -3℃ パーシャル (氷温) 主に魚・肉類

-15℃以下 冷凍部 主に冷凍食品・その他

現在の冷蔵庫は電気冷蔵庫が主に使われ、庫内温度は温度制御装置により、一定に温度を保つ事が出来ます。

3. Food Sanitation

(1) Washing, disinfection, sterilization

Running tap water is commonly used to wash food and a low-concentration neutral detergent for food is used as necessary; then the food is rinsed again with sufficient water. On board ships, the use of fresh water is a must. If necessary, a disinfectant (such as sodium hypochlorite) designated by the Food Sanitation Act or a bacteria elimination method (using an alcohol-based preparation) may be used.

(2) Food storage

It is essential that food storage be carried out in a sanitary manner. There are three methods of food storage: normal-temperature storage, refrigerated storage and frozen storage.

Normal-temperature storage: To keep food from spoiling for a reasonable period of time, the greatest possible care must be taken to prevent the proliferation of microorganisms, food discoloration and the aging of starch.

Refrigerated storage: To keep freshness and prolong the storage period, food is refrigerated in the temperature range of $0 \sim 5$ °C. Refrigeration prevents food from deteriorating by inhibiting or retarding enzyme activity, chemical changes and the proliferation of microorganisms.

For plants, refrigeration increases their preservability by reducing oxygenation, thereby minimizing the loss of vitamins.

Refrigeration causes moisture loss, so it is advisable to wrap food with plastic film.

Low-temperature damage: When food is stored at very low temperatures, low-temperature damage (discoloring, decomposition) may occur. So temperature control is necessary especially when storing items such as bananas, eggplants, sweet potatoes, potatoes and onions.

Partial refrigeration: In this method, food is kept unfrozen when it is stored in a temperature range slightly lower than the temperature at which point water contained in the food freezes. This method is known as controlled freezing-point storage. The temperature is usually -3° C.

Temperature ranges inside refrigerators

Refrigerator: Equipment used to cool food and beverages and retard their decomposing by storing them at low temperatures.

+5 ~ 15℃ Cooling area Vegetables, milk and eggs

+5°C Refrigerating area Mainly fish and meat

-3°C Partial (freezing-point) area Mainly fish and meat

-15°C or below Freezing area Mainly frozen food

Electric refrigerators are the mainstream today. Temperatures inside the modern refrigerator can be kept at a constant level by means of a temperature control device.