Guidelines on Proper Storage of Food in Refrigerators and Maintenance of Refrigerators

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Singapore Food Agency

INTRODUCTION

Refrigeration slows bacterial growth and prolongs the freshness of food. Bacteria grow most rapidly between 5 ºC and 60 ºC, a temperature range known as the 'Temperature Danger Zone'. Hence, it is important to maintain the correct temperature of refrigerators and to keep them clean so that frozen and chilled food remain safe. Food handlers should adopt the following guidelines when using the refrigerator.

GUIDELINES

1) Maintaining Safe Refrigerator Temperatures

a) Keep the temperature of chillers between 0ºC and 4ºC and the temperature of freezers at -18ºC and below.

b) Use a refrigerator thermometer (one that can read temperatures below 0ºC) to ensure that the refrigerator temperature is correct*. The temperature inside the refrigerator can be determined by following the steps below:

i. Place the thermometer near the centre of the refrigerator in a convenient, easy-to-read location and close the refrigerator door.

ii. Leave the thermometer in the refrigerator for 10 to 15 minutes to allow the thermometer to obtain an accurate temperature reading.

iii. Read the thermometer without taking it out of the refrigerator. If the thermometer reading is not within the range of 0ºC to 4ºC (for chiller) or

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18⁰C and below (for freezer), adjust the thermostat dial to the required temperature. Read the thermometer reading again after 15 minutes.

c) Use a non-mercury thermometer in the refrigerator as mercury thermometers may break and contaminate the food.

d) Ensure that both thermometer and refrigerator are in good working condition*.

e) Allow proper circulation of cool air by not overloading the refrigerator with too much food. Cool air should circulate freely to keep food properly chilled.

f) Avoid leaving the refrigerator door open for too long as this will raise the refrigerator's temperature.

2) Storing Food Safely in the Refrigerator

a) Store food at the correct temperature as soon as it has been delivered or prepared. This prevents growth of harmful bacteria and minimises the risk of food spoilage.

b) Store cooked and ready-to-eat food above raw food*. This is to prevent cross-contamination of the cooked or ready-to-eat food with the drippings from the raw food.

c) Store food in separate, properly-covered containers in the refrigerator to prevent cross-contamination*.

d) Do not store marinated food at room temperature as bacteria can multiply rapidly in food at room temperature. Place marinated food in covered containers and store it in the refrigerator.

e) Label food and include the date of purchase or preparation and the respective "use-by" date. Adopt a First Expire First Out (FEFO) principle. Older food items that are stored in the refrigerator should be used first.

f) Place hot food into shallow dishes or distribute them into smaller portions for rapid, even cooling before refrigeration. Alternatively, use a blast chiller to cool food down before storing it in the refrigerator.

g) Do not store perishable food in the refrigerator door. Put them on the shelves in the main part of the refrigerator. The temperature of food stored in the door can increase when the refrigerator is opened.

3) Keeping the Refrigerator Clean*

a) Wipe spills immediately with a damp cloth and dry with a clean cloth.

b) Clean the inside of the refrigerator using a clean sponge or cloth and warm, soapy water regularly. Rinse with a damp cloth and dry with a clean cloth.

c) Wash removable shelves and drawers with warm, soapy water and rinse with clean water. Dry with a clean cloth.

d) Clean the rubber lining of the refrigerator regularly.

e) Clean the condenser coil regularly with a brush to remove dirt and dust so that the refrigerator can work efficiently.

f) Conduct a stock-check every week to discard perishable food that has turned bad or has passed the "use-by" date.

*Environmental Public Health (Food Hygiene) Regulations

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