
Targeted Food Surveillance — Nitrate and nitrite in meat, meat products and cheese

Centre for Food Safety

Food and Environmental Hygiene Department

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Introduction

■ Background

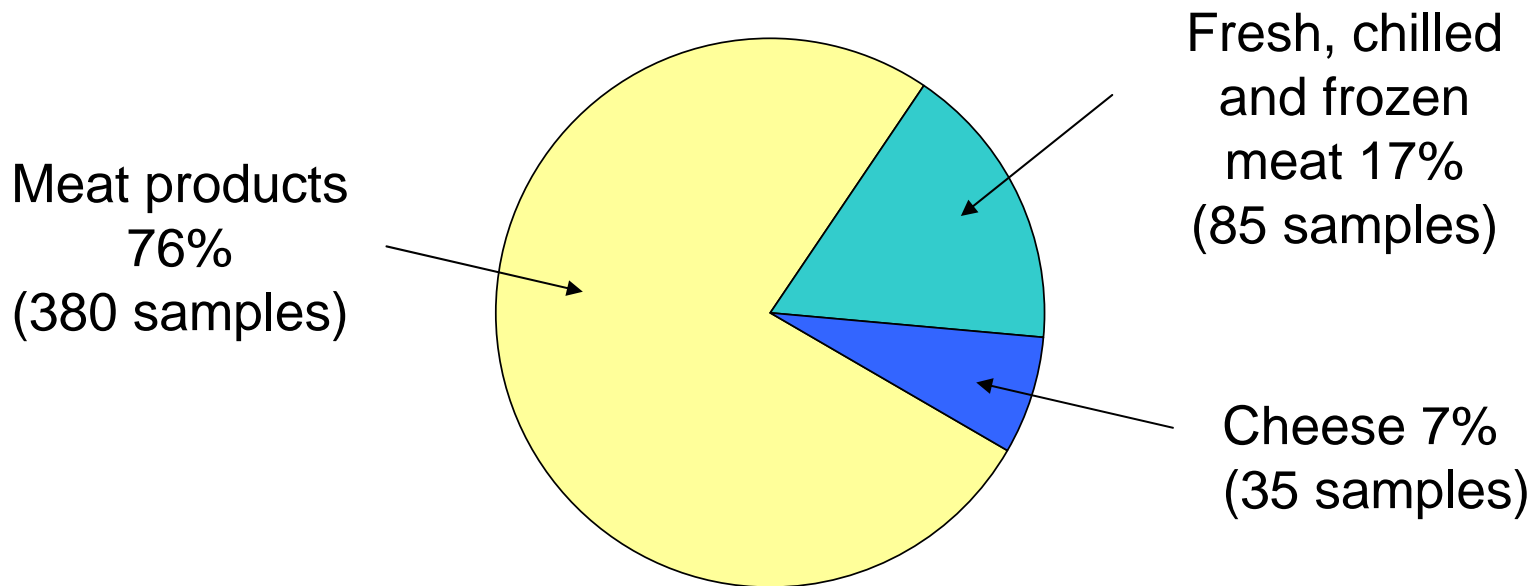
- Nitrate and nitrite are preservatives commonly used in meat curing and cheese making as they can inhibit the growth of bacteria, especially the life-threatening bacterium *Clostridium botulinum*. However, their use must be within legal limits. Under the law, they are not allowed to be added into fresh, chilled and frozen meat.
- Excessive intake of nitrite may affect the oxygen-carrying capacity of red blood cells to cause a blood disease, methaemoglobinaemia, characterized by breathlessness and bluish discolouration of skin.

■ Objective

- The Centre for Food Safety conducted a targeted food surveillance project to assess the occurrence of nitrate and nitrite in meat, meat products and cheese.

Types of samples

- 85 fresh, chilled and frozen meat, 380 meat products (such as bacon, ham, hamburger, preserved meat, Chinese preserved sausage, dim sum, meat ball, Siu Mei and Lo Mei) and 35 cheese samples were collected for testing.



Overall result

- Overall satisfactory rate was 100%.

Advice for trade

- Food manufacturers should adhere to the "good manufacturing practice" (GMP) for manufacturing food products. They should not abuse the use of food additives.
- Use of preservatives is regulated under the Preservatives in Food Regulations, Cap. 132BD. Non-permitted or excessive use of nitrate and nitrite is not allowed. Contravention of the law could lead to a maximum fine of \$50,000 and six months' imprisonment.
- The trade should take note of the regulatory requirements regarding the use and labelling of food additives and comply with the related legislation.

Advice for consumers

- Take a balanced diet so as to avoid excessive exposure to food additives from a small range of food items.
- Purchase meat, meat products and cheese from reliable shops.
- Do not buy meat with abnormal colour.