

# Targeted Food Surveillance on Nitrate and nitrite in meat, meat products and cheese

Centre for Food Safety

Food and Environmental Hygiene Department

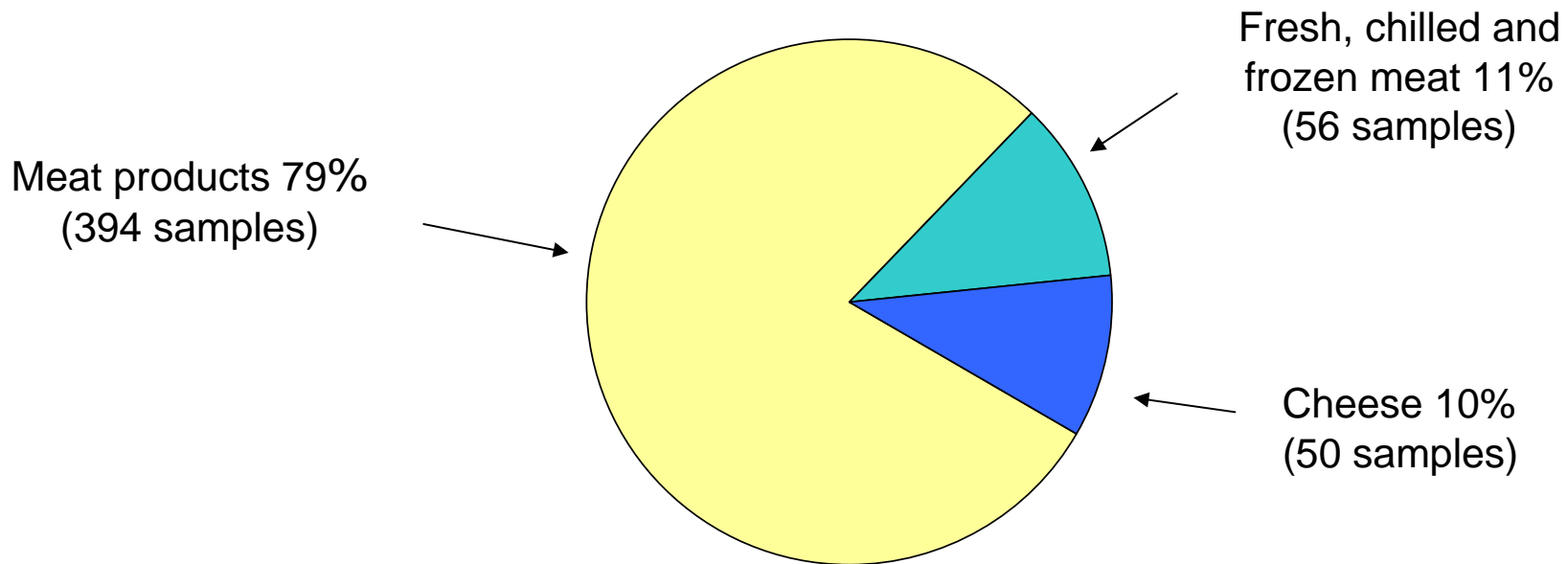
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# Background

- Nitrate and nitrite are preservatives commonly used in meat curing and cheese making as they can inhibit the growth of bacteria. 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 methaemoglobinaemia. Infants are more susceptible to it because of the immaturity of the digestive and methaemoglobin reductase systems.
- Therefore, a targeted food surveillance project conducted by the Centre for Food Safety (CFS) is continued this year to assess the occurrence of nitrate and nitrite in meat, meat products and cheese.

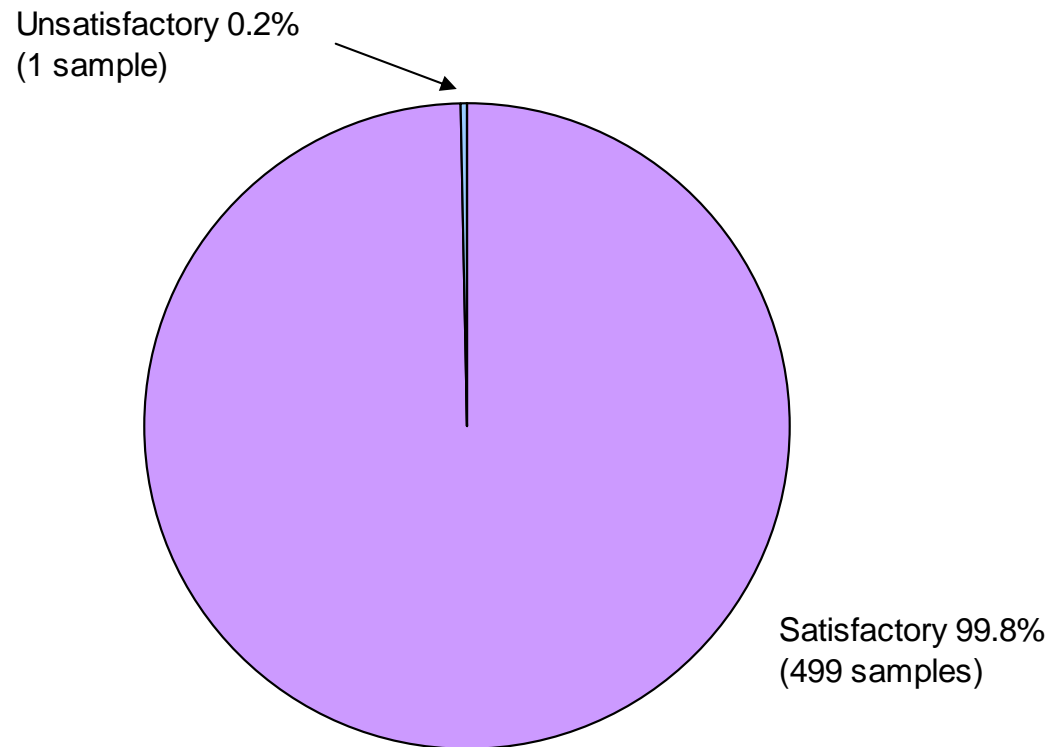
# Types of samples

- The CFS collected 500 samples at different retail outlets including 56 fresh, chilled and frozen meat, 394 meat product (such as bacon, ham, hamburger, preserved meat, Chinese preserved sausage, dim sum, meat ball, canned meat, Siu Mei and Lo Mei) and 50 cheese samples for testing.



# Overall result

- Overall satisfactory rate was 99.8%.



# Unsatisfactory sample

- 1 sample was found unsatisfactory.

Sample	Unsatisfactory testing item	Result
Preserved pork	Nitrate	932ppm <sup>(1)</sup>

<sup>(1)</sup> The level exceeded the legal limit (500ppm). It is of low toxicity and will not cause adverse health effects upon normal consumption.

# Follow up actions

- Trace source of the food item in question.
- Request vendors to stop sale and dispose of incriminated food items.
- Issue warning letters to concerned vendors.
- Take follow-up samples for analysis which showed satisfactory results.

# Advice for the 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 6 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.