

Targeted Food Surveillance – Malachite green in aquatic products

Centre for Food Safety

Food and Environmental Hygiene Department

January 2008

Introduction

■ Background

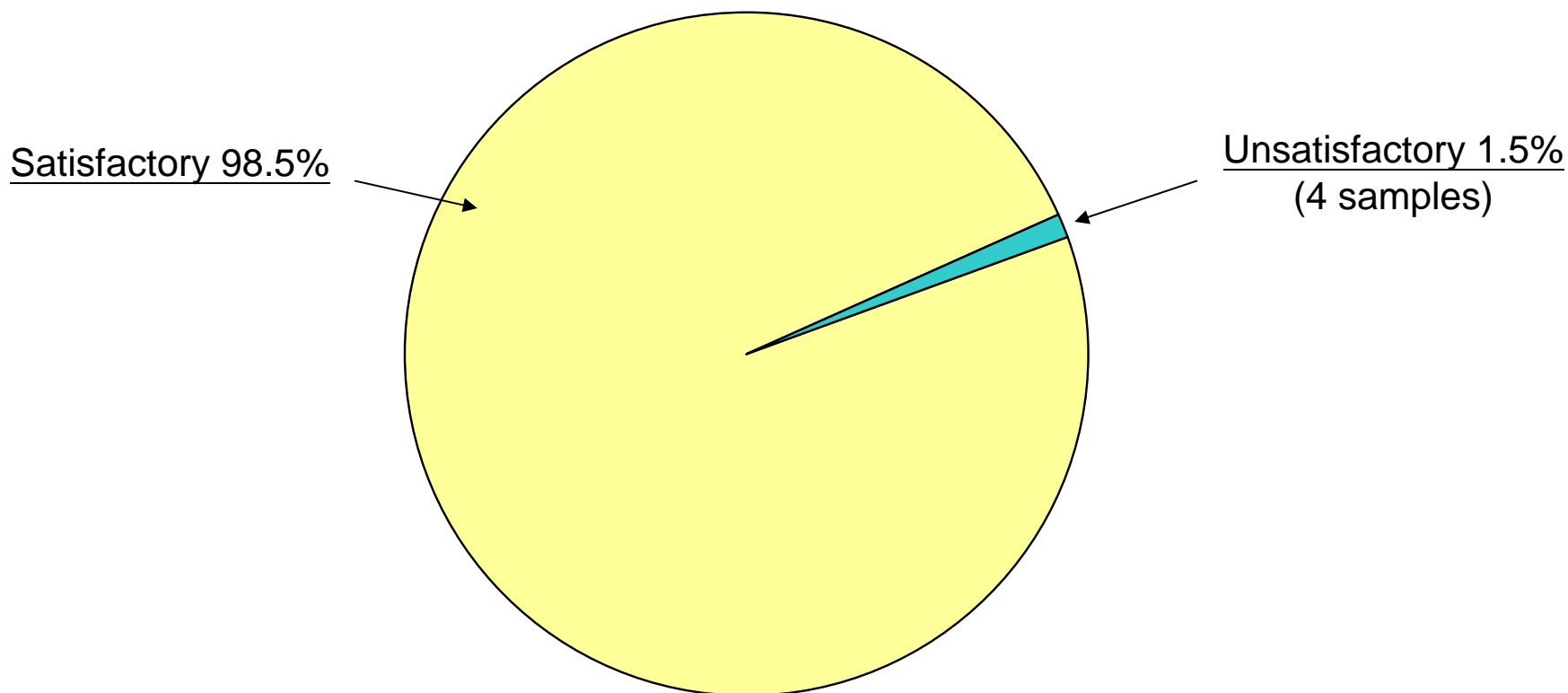
- ❑ Malachite green is a synthetic dye which was used for treating parasitic, fungal and protozoan diseases in fish. However, due to its carcinogenic potential in experimental animals as shown in some studies, it should not be used in fish for human consumption. Under the law of Hong Kong, malachite green is not allowed in any food. Selling food for human consumption that contains malachite green is an offence.
- ❑ The Centre for Food Safety (CFS) had detected malachite green in some aquatic product samples in the past which drew the public's concern. The CFS has recently conducted a targeted food surveillance project to assess the situation of malachite green in aquatic products.

Types of samples

- About 260 samples were collected. They included a variety of sea and fresh water fishes, fish products (minced fish & fish ball), shrimps and shellfish.

Overall results

- Four samples were detected to have trace amounts of malachite green. The overall satisfactory rate was 98.5% .



Unsatisfactory samples

- The unsatisfactory samples were 2 frozen bream fillet (among them, one was a follow up sample), a clam and a minced fish. The levels of malachite green detected ranged from 0.0031 to 0.0057 ppm respectively.
- The levels of malachite green detected in the sample were low. Upon normal consumption, adverse health effect on consumers is unlikely.

Follow up actions

- Issue warning letters.
- Request vendors to stop sale and dispose of incriminated food items.
- Carry out investigation and take follow up samples.
- Take prosecution actions if there is sufficient evidence.

Advice for trade

- Adopt “good agricultural practices” (GAP). Do not use malachite green on aquatic products from culture to retail levels.
- Source aquatic products from reliable suppliers. In case of doubt, ask for and check documents and certificates accompanying the consignment to ensure the supply is malachite green free.
- Under the Harmful Substances in Food Regulations (Chapter 132AF), no one shall sell, for human consumption, any food which contains malachite green. Contravention of the law could lead to a maximum fine of \$50,000 and six months’ imprisonment.

Advice for consumers

- Purchase aquatic products from reliable food premises.
- Maintain a balanced diet to minimize risk.