



## Number: 19 Foreign bodies

Your own reference source on food safety



Food contamination is a global safety concern. 1 in 10 people fall ill each year due to eating food that has been contaminated, and as a result, businesses are obligated to ensure they uphold the highest standards of food safety.

A contaminant is any substance that has been added to food that should not be there. The four main types of food contamination are chemical, microbial, physical, and allergen. We are going to concentrate on physical contamination.

## What is a foreign body?

Physical contamination refers to food that has been contaminated by a foreign object. Foreign bodies in food need to be quickly and accurately identified in order to find the source of contamination and be able to implement control measures and prevent reoccurrence.

## Types of foreign bodies

Animal tissue: this may include skin, bone and cartilage which should have been excluded from the food, but can also include animal faeces.

**Insects:** this is a recurring problem with the food industry, and are hard to detect and difficult to remove.

Micro-organisms: yeasts and moulds.

**Metals**: there are three types of metal contaminants; ferrous, non-ferrous and stainless steel. Ferrous is the easiest type of metal to find because it is both magnetic and conductive. Although non-ferrous is not magnetic, non-ferrous metal is a good conductor, which makes it relatively easy to find. Stainless steel has very low conductivity, which means it is the most difficult to detect.

**Glass:** most modern food factories operate a 'no glass' policy in food production areas. However, glass fragments may come from a wide variety of sources.

Rocks: these can range from grains of sand to larger stones.

Plastics: widely used in the food supply chain from packaging to machinery and instrumentation.

Fibres and hairs: these can include animal fibres, insect fibres, plant fibres, artificial fibres, mineral fibres and metals.