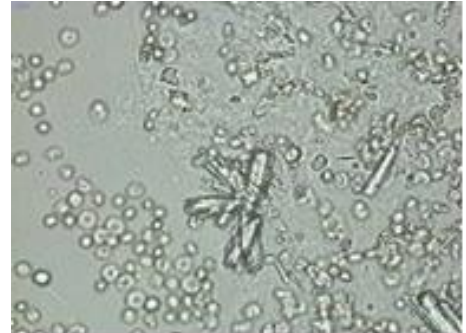




# Food safety advice

## STRUVITE CRYSTALS IN CANNED SEAFOOD

There are certain natural constituents of some canned fish/seafood (notably salmon, tuna, mackerel, shrimps, etc.) which, during the canning process can result in the formation of magnesium ammonium phosphate. Very occasionally, this chemical can form crystals, which even more rarely, can grow large enough to attract attention.



The crystals at first appearance resemble glass. Naturally, consumers who are unfamiliar with this may be alarmed and assume that careless factory procedures or sabotage is to blame. However, Struvite (as the crystals are called) can be readily identified in the laboratory, but may be differentiated from glass by simple tests, even in the home.

- Struvite crystals bear a superficial resemblance to particles of broken glass, but on close examination, especially if a magnifying glass is used, the difference is apparent. Struvite occurs usually in the form of regularly shaped prisms, with the edges tending to form straight lines. Glass particles on the other hand are more likely to be irregular in shape. However, the type of product concerned, and the location of the crystals in the can may produce less regular crystals of Struvite.
- Struvite crystals are softer. They can be scratched, and when compressed between hard surfaces, will usually break down into smaller crystal fragments or powder.
- In case any doubt should remain after examining them in this way, their identity can be demonstrated by their solubility in warm vinegar, or lemon juice. Heating them in such liquids for a few minutes will completely dissolve Struvite, whereas glass would remain un-dissolved.

**Struvite is completely harmless and would be broken down easily by acid in the stomach.**