**Annex**

**Request**

*I'd like to make a request for information relating to micro plastic contained within the supply of fish and shellfish in the UK.*

*1) Have the FSA taken any samples of fish and shellfish on sale in England and tested for the presence of micro plastics?*

*2) What test results are available for micro plastics in fish and shellfish available in England? Is the data available to be shared?*

*3) Is the food standards agency taking any action on micro plastics in the sale of fish and shellfish in the UK?*

**Response**

1) The FSA has not carried out any sampling or analysis for microplastics in fish or shellfish on sale in the UK.

2) The FSA does not have any analytical results for microplastics in fish or shellfish from England. However, independent research has provided some data concerning the occurrence of microplastics in whole fish and shellfish from seas surrounding the UK and this information is available in published scientific journal papers, as indicated below.

3) The FSA agrees with, and supports, the European Food Safety Authority (EFSA) statement - Presence of microplastics and nanoplastics in food, with particular focus on seafood (https://www.efsa.europa.eu/en/efsajournal/pub/4501), published in 2016. In the meantime, the FSA has continued to monitor emerging scientific information concerning microplastics in seafood.

**Additional informal information concerning the FSA's position on microplastics**

- The FSA has been monitoring the scientific evidence concerning the occurrence and effects of microplastic particles in seafood and other food products for several years.
- On the basis of available information, the FSA considers that it is unlikely that the presence of the reported low levels of microplastic particles in certain types of seafood, such as mussels, would cause harm to consumers.

- Micro- and nanoplastics can bind various environmental pollutants and could therefore contribute to the uptake of these chemicals by filter feeding shellfish. However, these chemicals also bind to naturally occurring sediment particles, which are ingested by filter feeders, and which are vastly more abundant than microplastics in the environment.
- The FSA agrees with European Food Safety Authority's (EFSA) recommendation that further information regarding the occurrence and the possible toxic effects of micro- and nanoplastics in seafood is required.
- Regulatory limits for certain environmental chemical contaminants, such as polycyclic aromatic hydrocarbons, in shellfish and fish, irrespective of the source of these contaminants, would prevent consumers from being exposed to shellfish containing elevated levels of these regulated contaminants.

**Published scientific papers containing data concerning the occurrence of microplastics in fish or shellfish**

The following references are scientific studies that have reported the occurrence of microplastics in whole fish and shellfish from the English Channel, the North Sea and the Atlantic. Gutting of fish, prior to consumption, would remove the microplastics reported in fish intestines.

Devriese, L I, van der Meulen, M D, Maes, T, Bekaert, K, Paul-Pont, I, Frère, L, Robbens, J, & Vethaak, A D. (2015) Microplastic contamination in brown shrimp (*Crangon crangon*, Linnaeus 1758) from coastal waters of the Southern North Sea and Channel area. Marine Pollution Bulletin 98: 179-187.

Foekema, E M, De Gruijter, C, Mergia, M T, van Franeker, J A, Murk, A J, & Koelmans, A A. (2013) Plastic in north sea fish. Environmental Science & Technology 47: 8818-8824.

Hermsen, E, Pompe, R, Besseling, E, & Koelmans, A A (2017) Detection of low numbers of microplastics in North Sea fish using strict quality assurance criteria. Marine Pollution Bulletin 122: 253–258.

Li, J, Green, C G, Reynolds, A, Shi, H, & Rotchell, J M. (2018) Microplastics in mussels sampled from coastal waters and supermarkets in the United Kingdom. Environ. Pollut. 241:35-44.

Lusher, A L, McHugh, M, & Thompson, R C. (2013) Occurrence of microplastics in the gastrointestinal tract of pelagic and demersal fish from the English Channel. Marine Pollution Bulletin 67: 94–99.

Murphy, F, Russell, M, Ewins, M, & Quinn, B. (2017) The uptake of macroplastic & microplastic by demersal & pelagic fish in the Northeast Atlantic around Scotland. Marine Pollution Bulletin 122: 353–359.

Rummel, C D, Löder, M G J, Fricke, N F, Lang, T, Griebeler, E-M, Janke, M, & Gerdts, G. (2016) Plastic ingestion by pelagic and demersal fish from the North Sea and Baltic Sea. Marine Pollution Bulletin 102: 134-141.