News story: GC and IFST publish Information Statement on dietary fibre

Diets low in dietary fibre may contribute to the development of diseases such as bowel cancer and heart disease. But what is dietary fibre, how is it measured and how much should we eat? Michael Walker from the Government Chemist team has collaborated with Julian Cooper of the Institute of Food Science & Technology, IFST, to produce an Information Statement to address these and other questions.

Developed and peer-reviewed through the IFST Scientific Committee, Information Statements provide up-to-date and conclusive scientific opinions on matters of topical importance within food science and technology in one single document. The Dietary Fibre Information Statement is available on the IFST website.

Understanding dietary fibre and using it has an important part to play in reformulating foods to address public health issues. Measuring dietary fibre for product quality control and to ensure accurate labelling as part of nutrition information is also necessary for a wide range of food. The Information Statement aims to assist the food industry to innovate to provide attractive foods contributing to healthy eating. It also aims to help regulators and enforcement personnel understand the issues and protect consumers and responsible businesses.

What is dietary fibre?

Chemically, dietary fibre consists of carbohydrate polymers or oligomers that are neither digested nor absorbed in the human small intestine. More detailed definitions are given in the Information Statement. Fibre must be declared on pre-packed labelling if a claim is made (e.g. ‘high in fibre’) and is part of voluntary European nutrition labelling.

How is dietary fibre measured?

There are three basic approaches:

- analytical methods from AOAC
- methods pioneered by Hans and Klaus Englyst and colleagues
- hybrids of both methods.

Each starts with dispersion and enzymatic hydrolysis of starch, but they differ in the analytical ‘finish’. For foods not containing resistant starch any of the methods can be employed with broadly similar results. The main

exceptions are raw flours and foods that contain non-digestible oligosaccharides.

How much is enough fibre?

How much dietary fibre should I eat? The value for the average population intake of dietary fibre for adults should be 30g per day, measured using the AOAC methods.

For more information about the Government Chemist role, what we do, or if you have a food analysis related enquiry contact: