



**Paper for discussion: Issue raised by the Advisory
Committee on Novel Foods and Processes**

Issues raised by the Advisory Committee on Novel Foods and Processes

Novel carbohydrates and “fibre”

1. This paper summarises issues raised by the Advisory Committee on Novel Foods and Processes (ACNFP), regarding three novel carbohydrates: isomaltulose, tagatose and phosphated distarch phosphate.
2. To help inform discussions, members are provided with the following papers:
 - Annex 1 – Opinion on an application under the novel foods regulation for D-tagatose.
 - Annex 2 – Opinion on an application under the novel foods regulation for the approval of isomaltulose as a food ingredient.
 - Annex 3 – Background information on phosphated distarch phosphate from the Agency website.

Background

3. The role of ACNFP is primarily to assess product safety. Benefits are not systematically assessed. However, the ACNFP may comment on the risk of consumers being misled by a particular type of claim and consideration of the biological mechanisms of a proposed beneficial effect may lead to further testing requirements, to address any safety implications.
4. Within the last six months three novel carbohydrates have been discussed at ACNFP: isomaltulose, tagatose and phosphated distarch phosphate.

The issue

5. The claims associated with the three products have been very different:
 - lower glycaemic index (isomaltulose);
 - sweetness with lower digestibility and “prebiotic” effect (tagatose);
 - presence of “fibre” (phosphated distarch phosphate or “RS4-fibre”).
6. The issue, which arises, is whether differences in digestibility indeed translate into health benefits (which the consumer may particularly expect of terms like “fibre” and “prebiotic”)? Use of the term fibre is particularly contentious. Although the AOAC definition of fibre includes resistant starches, the literature suggests that the health benefits are specific to plant cell wall components as defined by the Englyst definition of fibre. Englyst (2005) *"inclusion of material other than plant cell walls as dietary fibre has the potential to mislead the consumer, who has the expectation that dietary fibre labelling provides guidance towards the largely unrefined plant foods shown to be associated with health"*.
7. There are other questions, including attribution of a metabolisable energy value to these products, which are envisaged as substitutes for simple carbohydrates in a variety of manufactured foods, baked goods and confectionery. Young children would tend to be relatively high consumers of these products.

8. At a previous meeting, SACN discussed the position with fructose- and galactose-oligosaccharides in infant formulas, including potential risks and limited evidence of benefit.
9. Members are asked to consider if the Committee should review the evidence supporting postulated health benefits associated with various types of carbohydrate, so that:
 - The consumer has a clear understanding about the scientific basis of claims on which to base choice?
 - There is a basis for accurate labelling. Current application of the AOAC definition and increasing commercial interest in these products appear likely to cause confusion.
 - Current dietary recommendations take account of the incorporation of a widening range of carbohydrates in manufactured foods?

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