



INC SUBMISSION ON APPLICATION A1055 – SHORT CHAIN FRUCTO-OLIGOSACCHARIDES

11 February 2012

INTRODUCTION

This submission has been prepared by the Infant Nutrition Council (INC). The INC represents the majority of companies marketing infant formula and companies who manufacture infant formula in Australia and New Zealand.

INC aims to:

1. Improve infant nutrition by supporting the public health goals for the protection and promotion of breastfeeding and, when needed, infant formula as the only suitable alternative; and
2. Represent the infant formula industry in Australia and New Zealand.

INC is a responsible group that voluntarily restricts its marketing practices to support government policies for the protection and promotion of breastfeeding.

Members:

- Abbott Nutrition;
- Bayer Ltd;
- Fonterra Co-operative Group Ltd;
- H. J. Heinz Company Australia Ltd & H. J. Heinz Company NZ Ltd;
- Nestlé Australia Ltd & Nestlé New Zealand Limited;
- Nutricia Pty Ltd; and
- Pfizer Nutrition.

Associate Members:

- Biolife New Zealand Pty Ltd;
- Dairy Goat Co-operative (NZ) Ltd;
- New Zealand Goldmax Health Ltd;
- Murray Goulburn Co-operative Co Ltd (Aust);
- Sutton Group (NZ);
- Synlait Milk Ltd (NZ);
- Westland Milk Products (NZ).

INC believes that breastfeeding is the normal way to feed infants as it has numerous benefits for both mothers and babies. When an infant is not given breast milk the only suitable and safe alternative is a scientifically developed infant formula product. For these infants, infant formula is the sole source of nutrition for around the first 6 months. It is important that scientific advances in infant nutrition are captured and incorporated into these products to ensure the best possible outcome for infants who do not receive breast milk.

We welcome the opportunity to provide written comment to Food Standards Australia New Zealand (FSANZ) in response to the *Call for Submissions – Application A1055 – Short Chain Fructo-oligosaccharides*

SUBMISSION

The INC supports the continued development of food ingredients in infant formula products and therefore supports regulatory option 1 as set out in the Background and Risk Management Report – A1055. The introduction of new food ingredients that have been appropriately scientifically validated has the potential to have beneficial effects upon the health and wellbeing of formula fed infants.

We make particular note of the documents released by Food Standards Australia New Zealand (FSANZ) on this application. We support the Consolidated conclusion provided in the Risk and Technical Assessment report (p 46) – Application A1055, that:

“6.2 Consolidated conclusion

On the basis of these responses, it is concluded that scFOS produced by invertase-catalysed condensation of sucrose is technologically justified and is as safe as IDS already permitted to be added to foods generally, and to infant formula products, infant foods and FSFYC alone or in combination with IDS and/or GOS up to the currently permitted maximum concentrations. Additionally, scFOS has the potential to soften infant stools and may reduce the incidence of constipation, both of which are considered beneficial effects.”

Inulin derived substances (IDS) are already permitted in infant formula products, foods for infants and formulated supplementary foods and therefore scFOS_{inulin} is already permitted in these products.

The Application then establishes that scFOS_{sucrose} is nature identical to scFOS_{inulin} and is as safe to use in food products as scFOS_{inulin}. It is therefore appropriate for this form of scFOS to be permitted for use in infant formula products, at the same levels as that already permitted for inulin derived substances.

In providing permission for the use of scFOS_{sucrose}, both the definition and term ‘inulin-derived substances’, as listed in Standard 1.1.1, require amendment. FSANZ has proposed use of the term ‘inulin type fructan’ or ITF with the following definition:

“mixture of saccharide chains that have predominantly $\beta(2-1)$ fructosyl-fructose linkages with or without a terminal glucose”.

The term 'inulin derived substances' is technically incorrect to describe scFOS_{sucrose} since scFOS_{sucrose} is not derived from inulin.

Whilst INC has concerns with the introduction of a new definition using the term 'inulin type fructan', the inclusion in the definition of a direct reference to fructo-oligosaccharides, would largely address these concerns. We understand that the term 'inulin type fructans' has been used in some research papers (e.g. Boehm and Moro in *The Journal of Nutrition* 2008; 138: 1818S-1828S), however the use of the term 'fructo-oligosaccharides' is more widely in use in other regulatory agencies. The EU (EFSA Journal 2010; 8(3):1462 *Dietary Reference Values for carbohydrates and dietary fibre*) and the FAO/WHO (*Carbohydrates in human nutrition*; Report of a joint FAO/WHO Expert Consultation, Rome, 14-18 April 1997) both use the term 'fructo-oligosaccharides' for these substances. Furthermore, the IUPAC/IUB *Joint Commission on Nomenclature of Carbohydrates* (1996) refers extensively to 'oligosaccharides' in a large number of forms.

In our view, the term 'inulin type fructan' must incorporate reference to FOS. We therefore recommend that the definition be amended to read:

'Inulin type fructan'(ITF), also known as 'fructo-oligosaccharide' or 'FOS' refers to a mixture of saccharide chains that have predominantly $\beta(2-1)$ fructosyl-fructose linkages with or without a terminal glucose.

Using this definition will minimise confusion as to the nature of the ingredient both domestically and also in the international context for trade purposes when reference is made to Australian or New Zealand law.

INC strongly recommends wherever the term 'inulin type substances' is used in the Food Standards Code, it is replaced with " 'inulin type fructans' also known as 'fructo-oligosaccharides' or 'FOS' ". INC considers this substitution to be particularly important for Standard 1.1.1 clause 9A.

To improve ease of use in navigating the Food Standards Code, we suggest that FSANZ include a definition of 'fructo-oligosaccharides or FOS' that simply refers to the definition of 'inulin type fructan', in the proposed list of definitions, so those looking for FOS will be directed to the less common term.

As noted above, the term 'inulin type fructan' is an appropriate academic term but it is not recognised by other regulatory agencies or by consumers. It is not a term industry could use on labels that would have any recognition or resonance in the market place. A similar situation currently exists in relation to the term 'inulin derived substances' which is not used on labels. Other more widely accepted terms are used on labels instead such as FOS, oligofructose and polyfructose.

The remaining issue was the safety of the use the processing aid invertase, as derived from *Aspergillus niger*, when processing the sucrose to produce scFOS_{sucrose}. The evidence presented confirmed that the use of *A. niger* in the production of the invertase and the use of the invertase in the production of scFOS_{sucrose} raised no public health and safety issues.

Submission regarding Application A1055, Short Chain Fructo-oligosaccharides

The INC supports the approach to research and development that focuses upon the growth and development outcomes for infants and how these can be maintained and improved. This outcome-based approach has implications for the assessment of a wider range of food ingredients to be used in infant formula products, into the future.