

**8-04**  
**20 October 2004**

## **DRAFT ASSESSMENT REPORT**

### **PROPOSAL P274**

## **REVIEW OF MINIMUM AGE LABELLING OF FOODS FOR INFANTS**

**DEADLINE FOR PUBLIC SUBMISSIONS** to FSANZ in relation to this matter:  
**1 December 2004**  
*(See 'Invitation for Public Submissions' for details)*

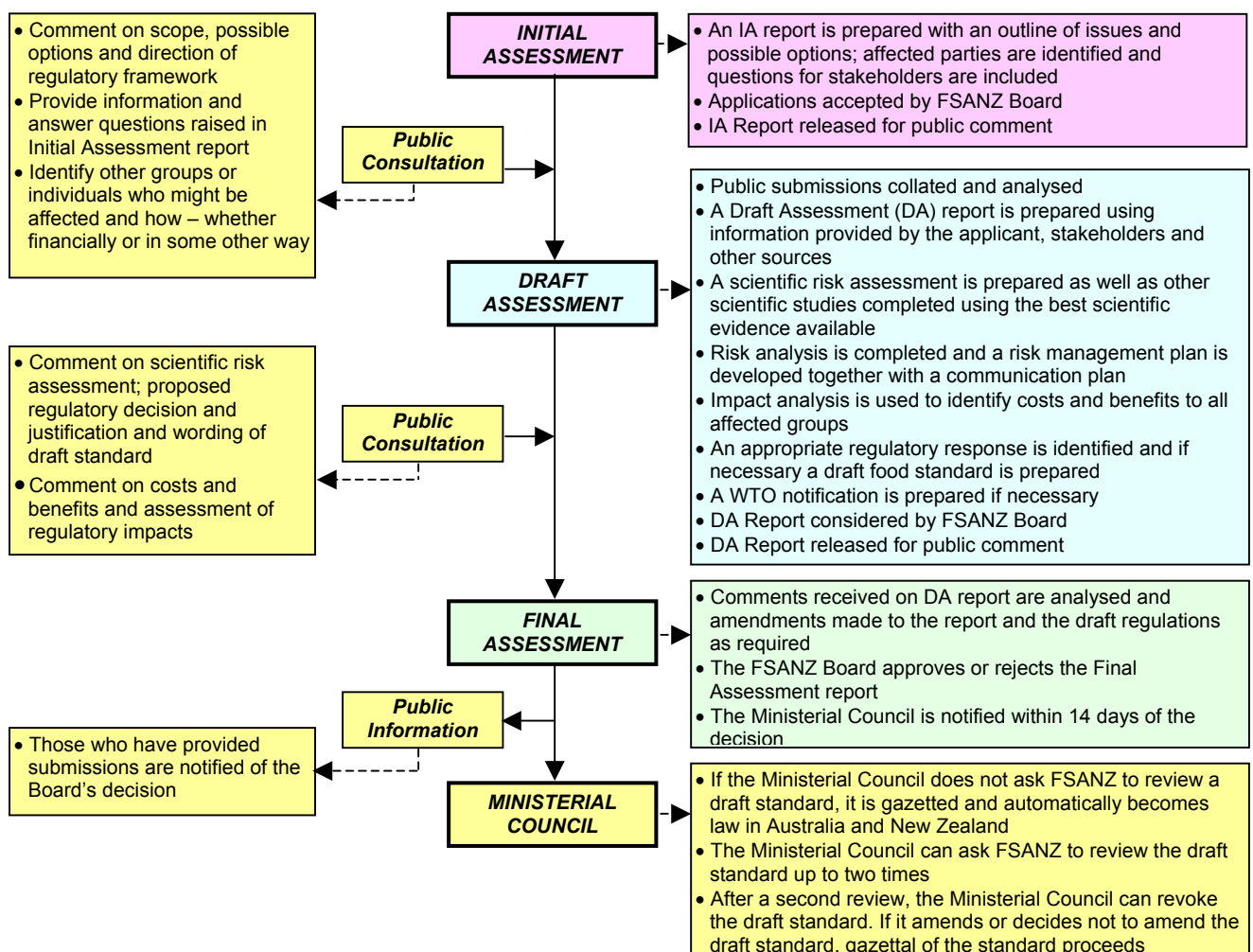
## FOOD STANDARDS AUSTRALIA NEW ZEALAND (FSANZ)

FSANZ's role is to protect the health and safety of people in Australia and New Zealand through the maintenance of a safe food supply. FSANZ is a partnership between ten Governments: the Commonwealth; Australian States and Territories; and New Zealand. It is a statutory authority under Commonwealth law and is an independent, expert body.

FSANZ is responsible for developing, varying and reviewing standards and for developing codes of conduct with industry for food available in Australia and New Zealand covering labelling, composition and contaminants. In Australia, FSANZ also develops food standards for food safety, maximum residue limits, primary production and processing and a range of other functions including the coordination of national food surveillance and recall systems, conducting research and assessing policies about imported food.

The FSANZ Board approves new standards or variations to food standards in accordance with policy guidelines set by the Australia and New Zealand Food Regulation Ministerial Council (Ministerial Council) made up of Commonwealth, State and Territory and New Zealand Health Ministers as lead Ministers, with representation from other portfolios. Approved standards are then notified to the Ministerial Council. The Ministerial Council may then request that FSANZ review a proposed or existing standard. If the Ministerial Council does not request that FSANZ review the draft standard, or amends a draft standard, the standard is adopted by reference under the food laws of the Commonwealth, States, Territories and New Zealand. The Ministerial Council can, independently of a notification from FSANZ, request that FSANZ review a standard.

The process for amending the *Australia New Zealand Food Standards Code* is prescribed in the *Food Standards Australia New Zealand Act 1991* (FSANZ Act). The diagram below represents the different stages in the process including when periods of public consultation occur. This process varies for matters that are urgent or minor in significance or complexity.



## INVITATION FOR PUBLIC SUBMISSIONS

FSANZ has prepared a Draft Assessment Report of Proposal P274; and prepared a draft variation to the *Australia New Zealand Food Standards Code* (the Code).

FSANZ invites public comment on this Draft Assessment Report based on regulation impact principles and the draft variation to the Code for the purpose of preparing an amendment to the Code for approval by the FSANZ Board.

Written submissions are invited from interested individuals and organisations to assist FSANZ in preparing the Final Assessment for this Proposal. Submissions should, where possible, address the objectives of FSANZ as set out in section 10 of the FSANZ Act. Information providing details of potential costs and benefits of the proposed change to the Code from stakeholders is highly desirable. Claims made in submissions should be supported wherever possible by referencing or including relevant studies, research findings, trials, surveys etc. Technical information should be in sufficient detail to allow independent scientific assessment.

The processes of FSANZ are open to public scrutiny, and any submissions received will ordinarily be placed on the public register of FSANZ and made available for inspection. If you wish any information contained in a submission to remain confidential to FSANZ, you should clearly identify the sensitive information and provide justification for treating it as commercial-in-confidence. Section 39 of the FSANZ Act requires FSANZ to treat in-confidence, trade secrets relating to food and any other information relating to food, the commercial value of which would be, or could reasonably be expected to be, destroyed or diminished by disclosure.

Submissions must be made in writing and should clearly be marked with the word 'Submission' and quote the correct project number and name. Submissions may be sent to one of the following addresses:

**Food Standards Australia New Zealand**  
**PO Box 7186**  
**Canberra BC ACT 2610**  
**AUSTRALIA**  
**Tel (02) 6271 2222**  
**[www.foodstandards.gov.au](http://www.foodstandards.gov.au)**

**Food Standards Australia New Zealand**  
**PO Box 10559**  
**The Terrace WELLINGTON 6036**  
**NEW ZEALAND**  
**Tel (04) 473 9942**  
**[www.foodstandards.govt.nz](http://www.foodstandards.govt.nz)**

Submissions should be received by FSANZ **by 1 December 2004.**

Submissions received after this date may not be considered, unless the Project Coordinator has given prior agreement for an extension.

While FSANZ accepts submissions in hard copy to our offices, it is more convenient and quicker to receive submissions electronically through the FSANZ website using the Standards Development tab and then through Documents for Public Comment. Questions relating to making submissions or the application process can be directed to the Standards Management Officer at the above address or by emailing [slo@foodstandards.gov.au](mailto:slo@foodstandards.gov.au).

Assessment reports are available for viewing and downloading from the FSANZ website. Alternatively, requests for paper copies of reports or other general inquiries can be directed to FSANZ's Information Officer at either of the above addresses or by emailing [info@foodstandards.gov.au](mailto:info@foodstandards.gov.au).

# CONTENTS

<b>EXECUTIVE SUMMARY AND STATEMENT OF REASONS</b> .....	<b>7</b>
REGULATORY PROBLEM .....	7
OBJECTIVES .....	7
RISK ASSESSMENT .....	7
RISK MANAGEMENT .....	8
REGULATORY OPTIONS AND IMPACT ANALYSIS .....	8
CONSULTATION .....	8
CONCLUSION AND STATEMENT OF REASONS .....	8
<b>1. INTRODUCTION</b> .....	<b>10</b>
<b>2. BACKGROUND</b> .....	<b>10</b>
2.1 INFANT FEEDING RECOMMENDATIONS .....	10
2.1.1 <i>International</i> .....	10
2.1.2 <i>Australia</i> .....	11
2.1.3 <i>New Zealand</i> .....	11
2.2 CURRENT STANDARD.....	11
2.3 INTERNATIONAL REGULATION OF MINIMUM AGE LABELLING .....	12
2.3.1 <i>Codex Alimentarius</i> .....	12
2.3.2 <i>Other international standards</i> .....	12
2.4 CURRENT LABELLING OF INFANT FOODS .....	12
2.5 PREVIOUS CONSIDERATION OF MINIMUM AGE LABELLING .....	13
<b>3. REGULATORY PROBLEM</b> .....	<b>13</b>
<b>4. OBJECTIVE</b> .....	<b>13</b>
<b>5 RELEVANT ISSUES</b> .....	<b>14</b>
5.1 RISK ASSESSMENT .....	14
5.1.1 <i>The timing and transition to solid foods</i> .....	14
5.1.2 <i>Introduction of solids before four months</i> .....	17
5.1.3 <i>Risk assessment conclusion</i> .....	17
5.2 RISK MANAGEMENT .....	17
5.2.1 <i>Research conducted</i> .....	18
5.2.2 <i>Consistency with Australia and New Zealand policy</i> .....	19
5.2.3 <i>Role of labelling in consumer education</i> .....	21
5.2.4 <i>Warning statement: ‘Not recommended for infants under the age of 4 months’.</i> .....	24
5.2.5 <i>Consistency that minimises the risk of choking</i> .....	25
5.2.6 <i>Additional compositional provisions for cereal-based foods</i> .....	26
5.2.7 <i>Other issues raised in submissions</i> .....	26
<b>6. REGULATORY OPTIONS</b> .....	<b>28</b>
6.1 OPTION 1 – MAINTAIN STATUS QUO .....	28
6.2 OPTION 2 – AMEND THE MINIMUM AGE LABELLING REQUIREMENTS IN STANDARD 2.9.2 BY VARYING THE MINIMUM REFERENCE AGE TO ‘AROUND SIX MONTHS’ .....	28
<b>7. IMPACT ANALYSIS</b> .....	<b>28</b>
7.1 AFFECTED PARTIES .....	28

7.2	IMPACT ANALYSIS .....	28
7.2.1	<i>Option 1 – Maintain the status quo</i> .....	29
7.2.2	<i>Option 2 – Amend the minimum age labelling requirements in Standard 2.9.2 by varying the minimum reference age to ‘around six months’</i> .....	29
<b>8.</b>	<b>CONSULTATION .....</b>	<b>30</b>
8.1	PUBLIC CONSULTATION.....	30
8.1.1	<i>Initial assessment</i> .....	30
8.1.2	<i>Draft assessment</i> .....	30
8.2	EXTERNAL ADVISORY GROUP .....	30
8.3	WORLD TRADE ORGANIZATION (WTO) .....	31
<b>9.</b>	<b>CONCLUSION AND RECOMMENDATION .....</b>	<b>31</b>
<b>10.</b>	<b>IMPLEMENTATION AND REVIEW .....</b>	<b>32</b>
	<b>ATTACHMENT 1 - DRAFT VARIATION TO THE AUSTRALIA NEW ZEALAND FOOD STANDARDS CODE.....</b>	<b>33</b>
	<b>ATTACHMENT 2 - SUMMARY OF SUBMISSIONS.....</b>	<b>35</b>
	<b>ATTACHMENT 3 – TNS CONSUMER REPORT – COPY OF TEXT .....</b>	<b>58</b>
	<b>ATTACHMENT 4 - SUMMARY OF RESEARCH WITH AUSTRALIAN HEALTH PROFESSIONALS .....</b>	<b>89</b>
	<b>ATTACHMENT 5 - EXTERNAL ADVISORY GROUP – TERMS OF REFERENCE.....</b>	<b>92</b>

## **Executive Summary and Statement of Reasons**

In April 2003, FSANZ was requested to review the minimum age labelling requirements for infant foods, to resolve an apparent inconsistency with the revised Australian National Health and Medical Research Council (NHMRC) *Dietary Guidelines for Children and Adolescents* (incorporating *Infant Feeding Guidelines for Health Workers*), subsequently released in June 2003. The review was to also consider and accommodate New Zealand infant feeding guidelines.

This inconsistency relates to the age of introduction of solids as currently, Standard 2.9.2 of the *Australia New Zealand Food Standards Code* (the Code) permits infant foods to be labelled as suitable 'from four months'. The revised NHMRC Infant feeding guidelines recommend the introduction of solids at around six months, whereas the New Zealand *Food and Nutrition Guidelines for Healthy Infants and Toddlers (Aged 0-2 years)* recommend solids be introduced to infants aged between four to six months.

This Draft Assessment Report discusses issues on the minimum age labelling of infant foods and proposes a preferred regulatory option. FSANZ seeks comments on this Draft Assessment, particularly in relation to the expected impact(s) of the proposed regulatory options from all interested parties. Comments received will assist in the preparation of a Final Assessment, including a recommended revised regulatory approach to the minimum age labelling of infant foods.

### **Regulatory problem**

While the minimum age labelling required by Standard 2.9.2 is consistent with current New Zealand infant feeding guidelines, it is however, no longer considered consistent with revised recommendations in Australia. Similarly, the labelling may be inconsistent with WHO recommendations on exclusive breast-feeding. This situation has the potential to create confusion for consumers (i.e. parents/carers), particularly in Australia, as the labelling of infant foods will conflict with the recommended timing of the introduction of solids to infants.

### **Objectives**

The specific objectives of this Proposal are to ensure that the regulatory requirements for the minimum age labelling of foods for infants:

- protect the health and safety of infants;
- provide adequate information for parents/carers to make appropriate choices for infant feeding;
- are consistent with infant feeding guidelines in Australia and New Zealand; and
- are based on the best available scientific evidence.

### **Risk Assessment**

There are a various risks associated with both the early and late introduction of solids to infants. Therefore the introduction of solids needs to be timed appropriately, based on developmental need and parents/carers need to ensure food choices are made with care.

## **Risk Management**

This Draft Assessment Report considers a number of issues relevant to the regulatory requirements for the minimum age labelling of infant foods. These include:

- the importance to an individual infant of appropriate timing of the introduction of solids;
- consistency of labelling with infant feeding policy of Australia and New Zealand;
- the role of labelling in parent/carer education; and
- managing risks associated with the early introduction of solids.

## **Regulatory Options and Impact Analysis**

There are two options for addressing this Proposal:

1. Maintain the status quo i.e. the minimum reference age of four months remains unchanged; or
2. Amend Standard 2.9.2 by varying the minimum reference age to ‘around six months’(refer to Attachment 1).

For each regulatory option, an impact analysis has been undertaken to assess potential costs and benefits to various stakeholder groups associated with its implementation.

## **Consultation**

The Initial Assessment Report for this Proposal was released for public comment from 16 July to 9 September 2003 (six weeks). A total of 34 submissions were received. The majority (n= 30 submitters) supported an amendment to the current standard, two supported maintaining the status quo, one deferred a decision until the Draft Assessment had been completed and another did not indicate any preference (see Attachment 2). The issues raised in submissions are discussed in this report. FSANZ now seeks public comment on this Draft Assessment Report in order to proceed to Final Assessment.

## **Conclusion and Statement of Reasons**

By maintaining the *status quo* as per Option 1, consumers will continue to receive information on the suitability of infant food products. However, the current labelling may create confusion for parents/carers (both receiving and not receiving advice from health professionals) and as a result, infant health may be compromised by inappropriate and potentially harmful decisions being made on the introduction of solids.

When compared to Option 1 however, Option 2 provides greater benefits as it more likely to minimise any potential consumer confusion, and may actually encourage consumers to seek guidance from a health professional to determine the most appropriate time, i.e. age, to introduce solids to their infant based on developmental need.

In addition to continuing to provide parents/carers with information on the suitability of infant food products, Option 2 is more consistent with, and will therefore reinforce, infant feeding recommendations in both Australia and New Zealand.



Under Option 2, industry will incur costs to change labels to better reflect infant feeding recommendations; however there is likely to be benefits to industry from increased consumer confidence. In addition Option 2 continues to maintain harmonisation of food regulations between Australia and New Zealand.

For these reasons, Option 2 is considered the better option in fulfilling all of the regulatory objectives of this review.

This Draft Assessment therefore concludes that the proposed amendments to the Code, incorporating a variation to the minimum age labelling requirements to ‘around six months’, be approved for the following reasons:

- the protection of infant health and safety is maintained;
- there is consistency with infant feeding recommendations in both Australia and New Zealand, thereby reinforcing parent education and contributing to the promotion of infant health;
- permits greater flexibility and recognition of the natural variation of individual infants and their developmental needs;
- provides sufficient information to parents/carers in relation to the timing and consistency of infant foods to facilitate appropriate choices; and
- the harmonisation of regulations for Australia and New Zealand is maintained.

The proposed drafting for amendment to Standard 2.9.2 is at Attachment 1 of the Draft Assessment Report. If approved, the variation to the Code will come into effect on the date of gazettal.

## 1. Introduction

The purpose of this Proposal is to review the minimum age labelling of infant foods as required by Standard 2.9.2 – Foods for Infants of the Code.

In April 2003, the Ministerial Council requested FSANZ to review the minimum age labelling requirements for infant foods, to resolve an apparent inconsistency with the revised NHMRC *Dietary Guidelines for Children and Adolescents* (incorporating *Infant Feeding Guidelines for Health Workers*), subsequently released in June 2003. In addition, Ministers asked that a review of minimum age labelling also consider and accommodate New Zealand infant feeding guidelines.

This Draft Assessment Report discusses issues on the minimum age labelling of infant foods and proposes a preferred regulatory option. It also considers other consequential issues in relation to Standard 2.9.2 including an existing mandatory warning statement, and compositional requirements. FSANZ seeks comments on this Draft Assessment, particularly in relation to the expected impact(s) of the proposed regulatory options from all interested parties. Comments received will assist in the preparation of a Final Assessment, including a recommended revised regulatory approach to the minimum age labelling of infant foods.

## 2. Background

### 2.1 Infant Feeding Recommendations

#### 2.1.1 International

In March 2001, the World Health Organization (WHO) conducted an expert consultation on the optimal duration of exclusive breastfeeding<sup>1</sup>. The outcome of this consultation was a recommendation, applying to populations, of *exclusive breastfeeding for 6 months, with introduction of complementary foods and continued breastfeeding thereafter*. This revised WHO's previous recommendation of exclusive breastfeeding for the first four to six months of life<sup>2</sup>. Subsequently, the Fifty-fourth World Health Assembly (WHA) in May 2001 adopted a comprehensive resolution<sup>3</sup> on infant and young child feeding, which called on WHO Member States (including Australia and New Zealand):

*to strengthen activities and develop new approaches to protect, promote and support exclusive breastfeeding for six months as a global public health recommendation, taking into account the findings of the WHO expert consultation on the optimal duration of exclusive breastfeeding, and to provide safe and appropriate complementary foods, with continued breastfeeding, for up to two years of age or beyond, emphasizing channels of social dissemination of these concepts in order to lead communities to adhere to these practices.*

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<sup>1</sup> World Health Organization (2002) The Optimal Duration of Exclusive Breastfeeding - Report of an Expert Consultation, Geneva, Switzerland, 28-30 March 2001

<sup>2</sup> WHO Infant Feeding Recommendation. Wkly Epidemiol Rec. 1995; 70:119-120

<sup>3</sup> WHA 54.2 Infant and Young Child Nutrition

### 2.1.2 Australia

The recently revised NHMRC *Dietary Guidelines for Children and Adolescents* (incorporating *Infant Feeding Guidelines for Health Workers*)<sup>4</sup> reflect the WHO recommendations. The Guidelines recommend exclusive breastfeeding for the first six months of life and introduction of solid foods at around six months, to meet the infant's increasing nutritional and developmental needs. In recognising the requirements of individual infants, the revised guidelines also state *infants' needs differ, and a small number may benefit from the introduction of solids before the age of six months, but not before four months*. Previously, NHMRC recommendations<sup>5</sup> encouraged breastfeeding for the first four to six months of life and introduction of solids thereafter.

### 2.1.3 New Zealand

Currently, the New Zealand *Food and Nutrition Guidelines for Healthy Infants and Toddlers (Aged 0-2 years)*<sup>6</sup> recognise that breast milk is the ideal food for infants. The guidelines recommend infants be fed exclusively on breast milk from birth to four-six months of age and preferably until at least 12 months, with appropriate complementary solid foods being introduced at around four to six months. The guidelines state that weaning<sup>7</sup> should occur when an infant is at the appropriate stage of development and nutritional need, which will vary between individuals, although it is also noted that infants should not have solid food before four months. FSANZ has been advised that New Zealand Food and Nutrition Guidelines series are updated via a rolling program of regular review, but at this time there are no specific plans to review New Zealand's infant feeding guidelines in the immediate future.

## 2.2 Current Standard

Standard 2.9.2 – Foods for Infants, provides the compositional and labelling requirements of foods intended and/or represented for use as foods for infants, excluding infant formula products, which are regulated by Standard 2.9.1 – Infant Formula Products. An infant is defined as a person up to the age of 12 months. In relation to minimum age labelling, Subclause 5(3) of Standard 2.9.2 requires the label of an infant food to contain:

- a statement indicating the consistency of the food and the minimum age, expressed in numbers, of the infants for whom the food is recommended, and
- where the food is recommended for infants between the age of 4-6 months, in association with the statement required above the words – *'Not recommended for infants under the age of 4 months'*.

In addition the label of an infant food must not include a recommendation, express or implied, that the food is suitable for infants less than four months old (subclause 5(2)).

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<sup>4</sup> NHMRC Dietary Guidelines for Children and Adolescents (incorporating Infant Feeding Guidelines for Health Workers) (2003)

<sup>5</sup> NHMRC Dietary Guidelines for Children and Adolescents (1995)

<sup>6</sup> New Zealand Ministry of Health, Food and Nutrition Guidelines for Healthy Infants and Toddlers (Aged 0-2): A Background Paper. (1999)

<sup>7</sup> In this case 'weaning' means the phase during which the infant changes from a purely liquid diet of breast milk or infant formula (or both) to one which contains all the varied foods typical of that family.

## **2.3 International Regulation of Minimum Age Labelling**

### *2.3.1 Codex Alimentarius*

Codex standards exist for Processed Cereal-Based Foods for Infants and Children (CODEX STAN 74-1981) and Canned Baby Foods (CODEX STAN 73-1981). Neither standard provides guidance on the minimum age labelling of infant foods, although the Codex standard for cereal-based foods is under revision (at Step 6) and the current draft<sup>8</sup> includes the requirement for *the label to indicate clearly from which age the product is recommended. This age shall not be less than six months for any product.*

### *2.3.2 Other international standards*

#### 2.3.2.1 European Commission (EC)

The EC Directive on processed cereal-based foods and baby foods for infants and young children (96/5/EC) requires the mandatory labelling of infant food with:

*a statement as to the appropriate age from which the product may be used, regard being had to its composition, texture or other particular properties. The stated age shall not be less than four months for any product.*

#### 2.3.2.2 United States of America (US)

The *Code Of Federal Regulations* from the US Food and Drug Administration (FDA) on food labelling prescribes no specific regulation for the labelling of infant foods other than different nutrition information labelling (21CFR101.9(J)(5)) and ingredient labelling (21CFR105.65).

#### 2.3.2.3 Canada

Division 25 of the Canadian *Food and Drug Regulations 1954* sets out the requirements for infant foods and allows the naming of foods to reflect their consistency. In addition, the Regulations do not allow labelling of an infant food that implies that the food is suitable for consumption by infants less than six months of age (B25.061 (1)).

## **2.4 Current labelling of Infant Foods**

There are three major manufacturers of infant foods in Australia and New Zealand. Currently manufacturers label their products with the minimum age for whom the food is recommended in accordance with Standard 2.9.2 of the Code. The ages chosen by manufacturers are four months, six months and either eight or nine months depending on the manufacturer. In addition, all these manufacturers uniformly use a colour code of blue, red and green respectively, to differentiate products corresponding to these reference ages. Historically, parents have relied on this colour-coding in addition to the minimum age reference in making appropriate infant food choices.

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<sup>8</sup> Report of the 25<sup>th</sup> Session of the Codex Committee on Nutrition and Foods for Special Dietary Uses (ALINORM 04/27/26 APPENDIX VI)

The 'age' reference assists to distinguish between different textures of infant foods, which change to meet the developmental requirements of infants as they grow. Infant foods labelled as suitable 'from 4 months' are a smooth pureed texture with no lumps. The texture of infant food changes when labelled 'from 6 months' to being a smooth puree with soft pieces included encouraging the acts of biting and chewing. From about nine months molar teeth have started to erupt and infants are able to grind their teeth and can chew soft lumpy textures. As they are also able to sit unsupported and their fine motor co-ordination is developing, self-feeding is encouraged. Infant foods labelled suitable for over nine month olds are of a soft texture but include chunks to meet changing developmental requirements.

Internationally there are other approaches used to label for the consistency of infant foods, namely 'stage' and 'phase'. A leading infant food company in the US use a 'stages' approach to labelling according to developmental signs of eating readiness with no mention of age<sup>9</sup> e.g. 1<sup>st</sup> Foods, 2<sup>nd</sup> Foods etc. The use of 'phases' or 'steps' appears to combine developmental timing (beginner/starter) with age references (from six months, from 8-9 months). Recently a major manufacturer of infant food in New Zealand has, in addition to age, commenced labelling with reference to 'stages'.

## **2.5 Previous Consideration of Minimum Age Labelling**

The age suitability of infant foods was considered in Proposal P215 – Foods for Infants and Young Children as part of the development of joint Australian and New Zealand food standards. The Draft Assessment Report (October 1999) notes the current Australian and New Zealand recommendations to introduce solids from four to six months of age and states that this 'age' will be used as a reference age for label statements about the suitability of the food. In addition to assist carers with low literacy skills, the reference age was proposed to be in a numerical form. This approach was maintained at Final Assessment (April 2000).

In addition, to address concerns raised on the health risks associated with early feeding of solids i.e. before four months of age, it was agreed to include, in association with the age suitability reference, the labelling statement, 'not recommended for infants under four months of age' for those infant foods targeted at four to six month old infants.

## **3. Regulatory Problem**

While the minimum age labelling required by Standard 2.9.2 is consistent with current New Zealand infant feeding guidelines, it is however, no longer considered consistent with revised recommendations in Australia. Similarly, the labelling may be inconsistent with WHO recommendations on exclusive breast-feeding. This situation has the potential to create confusion for consumers (i.e. parents/carers), particularly in Australia, as the labelling of infant foods will conflict with the recommended timing of the introduction of solids to infants.

## **4. Objective**

In developing or varying a food standard, FSANZ is required by its legislation to meet three primary objectives which are set out in section 10 of the FSANZ Act. These are:

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<sup>9</sup> The Gerber Feeding Plan, [www.gerber.com](http://www.gerber.com)

- the protection of public health and safety;
- the provision of adequate information relating to food to enable consumers to make informed choices; and
- the prevention of misleading or deceptive conduct.

In developing and varying standards, FSANZ must also have regard to:

- the need for standards to be based on risk analysis using the best available scientific evidence;
- the promotion of consistency between domestic and international food standards;
- the desirability of an efficient and internationally competitive food industry;
- the promotion of fair trading in food; and
- any written policy guidelines formulated by the Ministerial Council.

The specific objectives of this Proposal are to ensure that the regulatory requirements for the minimum age labelling of foods for infants:

- protect the health and safety of infants;
- provide adequate information for parents/carers to make appropriate choices for infant feeding;
- are consistent with infant feeding guidelines in Australia and New Zealand; and
- are based on the best available scientific evidence.

## **5 Relevant Issues**

### **5.1 Risk assessment**

#### *5.1.1 The timing and transition to solid foods*

The timing of transition from a purely liquid (breast milk or infant formula) diet to one that includes a range of other (solid) foods varies between infants and is dependent on achievement of developmental milestones which indicate that an infant is 'ready' for solid foods. The co-ordination of swallowing movements that are required to deal with semi-solid foods are not achieved until between four and six months of age. At around six months of age there are increased nutritional needs when breast milk or infant formula alone can no longer meet the nutritional requirements of infants.

There are risks associated with both the early and late introduction of solid foods to an infant's diet. Therefore the appropriate timing of the introduction of solids is an important factor affecting the health and development of an infant.

The risks surrounding the timing of the introduction of solids are:

- the early introduction of solid foods i.e. before four months may displace the intake of breast and/or formula milk, thereby potentially reducing the intake of nutrients and changing the proportion of energy provided by macronutrients;
- the gastrointestinal tract and the mouth and facial muscle control of the infant are not sufficiently developed for solid foods consumption before four to six months of age;

- the kidneys of infants have insufficient functional capacity to cope with the potential higher solute load of solid foods before four months of age;
- introduction of solid foods before four months may contribute to the risk of food allergy and atopic dermatitis; and
- iron fortified foods become crucial for the prevention of iron deficiency anaemia at about six months of age.

#### 5.1.1.1 Displacement of breast /formula milk

Studies have shown that infants up to six months of age are able to self-regulate their intake of milk, and that when complementary food is introduced a reduction in breast/formula milk consumption occurs<sup>10,11</sup>. Breast and formula milk are concentrated sources of a variety of vitamins and minerals unlikely to be matched by ‘first’ solid foods that, unless fortified, are often of low micronutrient density. The energy content of breast and formula milk is predominantly derived from fat and protein. ‘First’ solid foods are often cereal, vegetable and fruit based foods. Early introduction of food may result in a change of the proportion of energy provided by macronutrients away from fat and protein in favour of carbohydrate, which, the infant gut may not be able to digest<sup>11</sup>. Although a displacement of breast or formula milk with the early introduction of solids has been documented, no effect on growth or body composition was noted<sup>11</sup>. The effect on micronutrient status has been hypothesised but not well researched.

#### 5.1.1.2 Gastrointestinal tract

Salivary amylases are present at birth, but it appears that pancreatic amylases become present only from three months of age and adequate to digest starches at around six months of age<sup>12</sup>. Because of this, extensive use of starch foods is not recommended in the first months of life.

#### 5.1.1.3 Facial muscle and physical development

All infants develop at an individual pace and no two infants are the same. The timing of introduction of solids depends on the physiological development of the individual infant. In full term infants the swallowing reflex is developed by about four months. Before this age an infant may not be able to form a bolus required to swallow food. An infant will in general be able to coordinate swallowing movements of semi solid foods at around four to six months of age<sup>13</sup>. If solid foods are introduced before an infant is developmentally ready, the infants will reject hard objects i.e. spoons. This may incorrectly lead caregivers to believe that infants are rejecting foods on the basis of taste as opposed to not being developmentally ready for foods from a spoon<sup>12</sup>.

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<sup>10</sup> Lanigan J, Bishop J, Kimber A, Morgan J. Review: Systematic review concerning the age of introduction of complementary foods to the health full term infant. *Eur J of Clin Nutr* 2001; 55: 309-320

<sup>11</sup> Mehta K, Specker B, Bartholmey S, Giddnes J, Ho M. Trial on timing of introduction to solids and food type on infant growth. *Paediatrics* 1998; 102(3 pt 1): 569-73

<sup>12</sup> Food for Health – Dietary guidelines for children and adolescents in Australia. A guide to healthy eating. National Health & Medical Research Council 2003.

<sup>13</sup> Barness L. Basis for weaning recommendations. *Journal of Paediatrics* 1990; 117: S84-S85 (in Food and Nutrition Guidelines for Healthy Infants and Toddler (Aged 0-2 years) A background paper. Ministry of Health Revised Edition June 2000).

In terms of risks associated with the late introduction of solids, there is evidence of a ‘critical window’ for introducing lumpy solid foods. If these are delayed beyond 10 months of age it may increase the risk of feeding difficulties later on. To meet child developmental needs it is advisable to gradually increase food consistency with age once the minimum age is reached<sup>14</sup>.

#### 5.1.1.4 Kidney capacity

Weaning foods with high protein content may increase the renal solute load (RSL) on the infants’ kidneys. Formula fed infants will already be exposed to a higher Potential RSL (PRSL) than breastfed infants. The formulation of infant formula in accordance with regulatory requirements<sup>15</sup> will restrict the PRSL to safe levels as required. However, the additional intake of protein from weaning foods may increase the risks to the kidney function of the young infant. These risks will increase if an infant is consuming a diet of a higher protein and sodium content especially if the infant is young i.e. before four months<sup>16</sup>.

#### 5.1.1.5 Risk of allergy and atopic dermatitis

The immature gut and immune system in infants has been proposed as the mechanism for increased susceptibility to food allergy and atopic dermatitis. It is not until between 12 and 13 weeks that T-cells become functional and can initiate systematic delayed-hypersensitivity and antibody responses<sup>17</sup> and that gut permeability has diminished<sup>18</sup>. In a 10 year longitudinal study of 1265 New Zealand infants, those infants exposed to four or more types of solid foods before the age of four months, had 2.35 times greater risk of developing eczema than those children not exposed to solid foods before four months of age<sup>19</sup>.

#### 5.1.1.6 Iron deficiency anaemia

The concentration of iron in human breast milk declines from about 0.6 mg/L in colostrum to about 0.3 mg/L in mature milk.

The iron content of human milk is unaffected by maternal iron status or diet<sup>20</sup>. Newborn infants have good iron stores and haemoglobin levels. The haemoglobin levels decrease in the first six to eight weeks of life due to the decrease in erythropoiesis in response to increased postnatal delivery of oxygen to tissues<sup>16</sup>. As erythropoiesis activity increases between the ages of two and four months, iron stores deplete as haemoglobin levels increase. Between four and six months of age there is an increased dependence on dietary iron<sup>16</sup>. Iron deficiency is most common in infants aged six to 24 months. The importance of preventing rather than treating anaemia has been accentuated by findings that chronic iron deficiency anaemia may result in irreversible delayed cognitive function<sup>17</sup>.

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<sup>14</sup> WHO Guiding principles for complementary feeding of the breast-fed child. World Health Organization.

<sup>15</sup> Standard 2.9.1 – Infant Formula Products clause 5 prescribes set limits for potential renal solute load.

<sup>16</sup> Fomon SJ 1993 Nutrition of normal infants (pp 94-95) Mosby-Year book, Inc, Missouri.

<sup>17</sup> Cummins A, Thompson F. Postnatal changes in mucosal immune response: A physiological perspective of breast feeding and weaning. *Immunol Cell Biol* 1997; 75:419-429.

<sup>18</sup> Secker D, Zlotkin S in Essentials of Human Nutrition. Mann and Truswell. Oxford Medical Publications 1998.

<sup>19</sup> Fergusson D, Horwood L, Shannon F. Early solid feeding and recurrent childhood eczema: A 10-year longitudinal study. *Pediatrics* 1990; 84(4): 541-546.

<sup>20</sup> Butte N, Lopez-Alarcon M, Garza C. Nutrient adequacy of exclusive breastfeeding for the term infant during the first six months of life. World Health Organization, Geneva 2002.



In studies of both New Zealand<sup>21</sup> and Australian<sup>22</sup> infants aged between six and 24 months, approximately 30 % had suboptimal iron status.

### 5.1.2 Introduction of solids before four months

There is evidence that infants younger than four months of age are being fed solid foods in Australia and New Zealand despite health recommendations to the contrary. Graham<sup>23</sup> found 29 % of a sample of 115 Victorian infants were fed solids by three months of age. A similarly high incidence of early weaning has also been observed in New Zealand<sup>24</sup> and South Australian<sup>25</sup> infants. More recently, a study of 587 mothers giving birth between September 2002 and July 2003 in Perth showed almost half the mothers starting their babies on solids before they reached four months of age<sup>26</sup>.

### 5.1.3 Risk assessment conclusion

There are a various risks to infants fed solids before four months of age. These risks include: displacement of breast or formula milk for foods lower in nutrient value, an immature gut unable to digest carbohydrates, and increase in RSL on infant kidneys and an increased risk of eczema and allergy. The delaying of solids beyond six months also increases risk as an infant's iron stores become depleted at around six months of age and dietary iron is required to protect from iron deficiency anaemia. Furthermore, there is a 'window' of developmental opportunity when an infant is ready for solid foods, if this opportunity is missed, feeding difficulties can arise resulting in a compromise to the infants nutritional status. For healthy infants there is paucity in the evidence for any health risks associated with the introduction of solid food between the ages of four and six months. However, given the aforementioned risks, the introduction of solids does need to be timed appropriately, based on developmental need of individual infants and parents/carers need to ensure food choices are made with care.

## 5.2 Risk Management

FSANZ's risk assessment has highlighted the importance of appropriate timing of the introduction of solids to the individual development of an infant. In addition, potential risks to infants from the early or late introduction of solids have been identified. It is therefore important that these risks are appropriately managed and that parents/carers have sufficient information to make informed choices in feeding their infant.

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<sup>21</sup> Soh P, Ferguson E, McKenzie J, Homs M, Gibson R. Iron deficiency and risk factors for lower iron stores in 6-24-month-old New Zealanders. *Eur J Clin Nutr*. 2004; 58(1): 71-9

<sup>22</sup> Oti-Boateng P, Seshadri R, Petrick S, Gibson R, Simmer K. Iron status and dietary intake of 6-24-month-old children in Adelaide. *J Paediatr Child Health* 1998; 34(3): 250-3

<sup>23</sup> Graham V.A. et al (1998) Filling the gap: Weaning practices of children aged 0-2 years in western metropolitan Melbourne. *J Paediatr Child Health* 1998; 34: 513-517.

<sup>24</sup> Ford RPK, Schuller PJ, Mitchell EA. New Zealand cot death study group. Factors associated with the age of introduction of solids in to the diets of New Zealand infants. *J Paediatr Child Health* 1995; 31: 469-72

<sup>25</sup> Retallack SJ, Simmer K, Makrides M, Gibson RA. Infant weaning practices in Adelaide: the results of a shopping complex survey. *J Paediatr Child Health* 1994; 30: 28-32

<sup>26</sup> Binns C, Graham K. One step forward, one step back – Draft project report on the Perth Infant feeding study Mark II, 2002-2004, for the Australian Government Department of health and Aging. 2004 (unpublished)

### 5.2.1 *Research conducted*

To assist determining the most appropriate regulatory approach to the minimum age labelling of infant foods, and in the absence of published literature on the role of labelling in the education of, and decision-making by, parent/carers around infant feeding, research was conducted with both consumers and health professionals.

#### 5.2.1.1 Qualitative Consumer Research

In January 2004, FSANZ commissioned surveys in both Australia and New Zealand to assist in the assessment of P274. Specifically, the purpose of the study was to collect information that would assist in determining how primary caregivers make decisions around the weaning of infants; the influence of current labelling on these decisions; and to assess alternate labelling options for minimum age suitability of infant foods to ensure appropriate implementation of infant feeding recommendations in both Australia and New Zealand whilst protecting public health and safety.

A summary of the survey results is provided below. A copy of the full report *A Qualitative Consumer Study Related to Food Labelling of Infant Foods* is provided at Attachment 3

A total of nine focus groups were conducted. The sample was skewed to mothers with children aged four to twelve months (including first and second-time mothers) across all socio-economic groups.

The study found that the decision of ‘when’ and ‘how’ to introduce solids was, for most participants, formed over a period of time, and via a number of (solicited and unsolicited) sources. The three most important sources reported were: the child health nurse; reference materials including books and magazines; and informal mothers/coffee groups.

Most participants relied on two main cues to indicate baby’s readiness for solids: a strong interest in food (indicated by following food with eyes or reaching for food when others are eating) and disturbed sleep patterns. These were seen more as hunger signs rather than developmental readiness. Although other physiological cues were mentioned, most participants did not understand that a number of cues, rather than one or two alone, are a better indication of readiness for solids.

The majority of New Zealand participants introduced solids at four months or just before, compared to about a quarter of Australian participants, with half introducing solids at five months. Australian participants were generally aware that six months was the recommended target age for introducing solids, irrespective of whether their own behaviour emulated this. In New Zealand, participants tended to refer to the target as an age range of four to six months, yet acknowledged that six rather than four was recommended.

Food labels, whilst helpful in the selection of foods once solids have been introduced, had little if any influence on the decision to start solids (generally with rice cereal). First-time mothers placed greater importance on the age and texture information on labels, using the age recommendation as a guide to be used in conjunction with advice from a child health nurse, and often their own mother. Second-time mothers were much more likely to rely on their own experiences, instinct and with what worked or didn’t with their first child.

A number of labelling concepts were presented to participants for consideration with universal endorsement for labelling that provides three core elements. These were:

- an easy to find texture descriptor;
- a consistent age recommendation that offers flexibility through an age range; and
- colour coding.

Texture and age were seen as the most important elements for decision-making about what foods to purchase between the time solids are introduced and 12 months. Most participants tended to be guided more by one than the other, although some used one in conjunction with the other to confirm a purchase decision. There was however no consistent preference for one over the other. Colour coding was seen more as a quick reference for facilitating easy product selection.

#### 5.2.1.2 Public health professional interviews

In addition to the qualitative consumer research, a number of health professionals or policy officers from all Australian jurisdictions were asked to participate in a one-off telephone interview on infant feeding conducted by FSANZ in late November 2003. Details of participants and the discussion outcomes are provided at Attachment 4.

The purpose of the interview was two-fold. Firstly, to assess the level of awareness of the revised NHMRC recommendation among health services/professionals working with parents/carers of infants, and secondly, to determine how ‘around 6 months’ is being interpreted and practically applied by health services/ professionals.

The results indicated that whilst all interviewees were aware of the changes, the statement ‘around 6 months’ was being interpreted in several different ways both within and between jurisdictions. In terms of labelling, a ‘stages with ages’ was the most preferred approach.

#### *5.2.2 Consistency with Australia and New Zealand policy*

At Initial Assessment, the apparent inconsistency between the revised NHMRC infant feeding guidelines (at around six months), and the New Zealand guidelines (four to six months) recommendations on the timing of introduction of solids was acknowledged.

The majority of submitters agreed that there is inconsistency between the Australian and New Zealand guidelines but most submitters recognised this inconsistency as relating more to the adoption of the WHO recommendation on exclusive breastfeeding rather than necessarily a difference on the appropriate timing of solids.

The Royal New Zealand Plunket Society considered there to be no difference in the spirit or intent between the Australian and New Zealand guidelines. It submitted that infants should be appropriately introduced to solids when they display developmental cues suggesting that they are ready at ‘around six months’ but not before 4 months.

The Australian Food and Grocery Council supported the view that any perceived inconsistency in policy was a matter of degree rather than irreconcilable. However, it argued that on this basis, no regulatory change is required expressing concern that it will in practice, increase inconsistency and decrease harmonisation.

A number of submitters including the Australian Breastfeeding Association and the La Leche League New Zealand, expressed disappointment that the current New Zealand policy is inconsistent with the WHO recommendation and thereby does not support and encourage exclusive breastfeeding until six months.

Both the New Zealand Food Safety Authority and the New Zealand Ministry of Health expressed concern that the WHO recommendation does not support the optimal introduction of complementary food for infants who are formula fed. Data provided by the Plunket Society reported 45% of infants seen at three months of age are partially or fully formula fed, increasing to 76% by four to six months. Given the high proportion of New Zealand infants receiving infant formula, feeding recommendations based on physiological development and monitoring rather than a set age was strongly supported.

As a population health recommendation, exclusive breastfeeding until six months may appear mutually exclusive of the recommendation to introduce solids at around six months. However the NHMRC clearly underpins this recommendation with:

*Although exclusive breast-feeding to 6 months of age is recommended, more experience is needed to identify any subgroups that require earlier introduction of solids (but never before 4 months). Six months should be regarded as a group recommendation<sup>27</sup>.*

The New Zealand guidelines also indicate that the appropriate age to introduce solids is linked to stages of development, which vary from infant to infant. Therefore the infant feeding policies of Australia and New Zealand demonstrate some consistency by both acknowledging the natural variation in the physiological development, and therefore nutritional needs, of individual infants.

Thus it can be concluded that the reference to ‘around six months’ can support the policies of both Australia and New Zealand. Further evidence of this interpretation was obtained from the interviews with health professionals (see Section 6.1.2) where a number of respondents indicated that the term ‘around six months’ allows for the introduction of solids prior to six months to meet individual need as required.

#### 5.2.2.1 Consistency of labelling with policy

The majority of submitters supported labelling which is consistent with infant feeding guidelines and accommodated the individual variation of infants. This was seen as important to reaffirm the education messages and advice provided to parents/carers by health professionals.

It has been argued that having infant foods labelled ‘from 4 months’ encourages consumers to perhaps inappropriately start their child on solid foods at four months, when they may not be ready developmentally. Conversely, there is concern that a change in labelling could also mislead parents, who may inappropriately delay giving their ‘developmentally ready’ infant solid foods.

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<sup>27</sup> NHMRC Dietary Guidelines for Children and Adolescents (incorporating Infant Feeding Guidelines for Health Workers) (2002), page 48

Findings from FSANZ's consumer research study<sup>28</sup> highlighted considerable and consistent self-reported evidence from participants in both Australia and New Zealand that either a '4 months', 'from 4 months' or 'from 4-6 months' label encourages the introduction of solids closer to four months. Many of the participants, upon reflection, indicated that had first stage ('blue foods') foods been labelled from '6 months' they would have reconsidered and consequently delayed the introduction of solids for a few weeks to a month or more.

However, participants did indicate that they interpreted 'around 6 months' to mean aiming for 6 months with 2 –3 weeks leeway either side. In the context, of this term being the first age on infant food labels, introducing solids closer to four months was viewed as highly inappropriate. There were a number of first-time mothers who found 'around 6 months' too ambiguous, however they indicated they would have sought assistance from their existing advice sources. Coupled with this view were the responses from more confident mothers who found the absence of an 'exact' age recommendation reassuring, particularly as it did not set up either parent or baby for failure or judgement if baby was not ready for solids at the prescribed age. This was seen as important in the highly competitive environment of mothers groups and often critical family input. Not surprisingly, it was rather difficult for some participants to say retrospectively how they would have reacted to a first food labelled 'from 6 months' particularly as labelling was not reported as a major influencer on the decision to start solids.

### Recommendation

A variation of the minimum age reference to 'around 6 months' allows greater flexibility and will better reflect the current policy guidelines in both Australia and New Zealand. It may also indirectly minimise the potential adverse effects associated with the early introduction of solids. Therefore it is recommended that the minimum age labelling requirements of Standard 2.9.2 be amended by varying the minimum permitted age to 'around 6 months'.

#### *5.2.3 Role of labelling in consumer education*

Traditionally infant food manufacturers have labelled infant foods to indicate the suitability of their products for different infant ages including colour coding. Parents/carers rely on this information to choose products suitable for their infant. In addition parents/carers also receive information and advice on infant feeding from health professionals e.g. doctors, maternal and child health nurses, dietitians and nutritionists.

There was general consensus among submitters to the Initial Assessment Report that the primary role of labelling is to enable parents/carers to make informed choices when purchasing infant foods appropriate for their infant's developmental stage. Labelling was not seen as a key educational tool but rather a supportive one; which should be consistent with policy guidelines and advice provided by government and health professionals.

This was confirmed by the consumer research study (see Section 5.2.1.1) which found the decision of when and how to introduce solids, was informed over a period of time, and via a number of solicited and unsolicited sources, with the most important source of information and advice being the child health nurse.

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<sup>28</sup> TNS Social Research report *A Qualitative Consumer Study Related to Food Labelling of Infant Foods*.

Similarly, anecdotal evidence provided by several health professionals that labelling was not an influential factor on the timing of introducing solids compared to the influence of health workers, family members and friends was supported by the consumer research which concluded that food labels, had little if any influence on the decision to start solids.

As noted above, the consumer research concluded that label information becomes much more helpful and increases its usefulness and importance in guiding the transition to more textured foods when parents/carers begin regularly buying infant foods. Coupled with this was the importance of the role of minimum age labelling information on labels to first-time mothers when faced with pressure from parents or friends to provide solids much earlier than is now recommended.

#### 5.2.3.1 Age versus stage

At Initial Assessment, FSANZ identified two possible sub options for amending the minimum age labelling requirements in Standard 2.9.2; either raising the minimum reference age (Option 2A); or replacing the reference to ‘age’ with an alternate scheme e.g. phases or stages (Option 2B).

In responding to the Initial Assessment Report, the majority of submitters recognised the importance of individual variation in infant’s needs and development, and the corresponding shift in paediatric practice to focus on physiological ‘readiness’ cues rather than age as the basis for introducing solids. Adopting a ‘stages’ approach was strongly supported by New Zealand government and health professionals. Submissions from Australian jurisdictions and health professionals also favoured an amendment to the existing labelling requirements; views differed however as to whether ‘age’, ‘stage’ or a modified version of these label elements i.e. both ‘age’ and ‘stage’ were required.

Similarly there was support from New Zealand consumers to vary the existing standard but again there were divergent views as to what should appear on the label, compared to submissions from Australian consumers who preferred ‘age’ only. Both New Zealand and trans-Tasman companies (Fonterra and Heinz Watties) supported a ‘stages’ approach whereas Australian industry submitters (Golden Circle and AFGC) opted to maintain the status quo.

Comments received from a number of health professionals, and reiterated by several members of the External Advisory Group (see Section 9.2), highlighted the point that although parent/carers are encouraged to use physiological cues as the basis for their decision-making to begin feeding solids, it is a relatively difficult concept for some parent/carers to grasp, and is generally only available to those receiving or seeking out regular advice. The continuation of an age reference on the label was seen by several submitters to be particularly useful for those parent/carers with low literacy levels. In their submission, the Australian Breastfeeding Association expressed concern that labelling for developmental readiness created a risk of encouraging parents to aim for early weaning.

Whilst supporting a modified age/stage approach, the Dietitians Association of Australia cautioned that for some parent/carers, the label might provide the only form of education. The New Zealand Dietetics Association, who favoured a ‘stage’ only approach, also acknowledged disadvantage in the amount of supporting information that will have to be provided to consumers to assist their decision-making.

As part of the consumer research, participants were exposed to a series of label mock-ups displaying the terms ‘stage’ and ‘phase’, with and without age information. References to ‘phases’ were rejected in favour of ‘stages’ whilst reactions to stages presented with ages were much more positive compared to ‘stage’ alone. The ‘stage’ wording was not considered as important as age and texture information, but nonetheless useful for first-time parents/carers.

### Rationale

The premise of any food standard should be population-based. FSANZ must therefore ensure that the label provides sufficient information to parent/carers on the timing (and consistency) of infant foods to allow them to make appropriate choices. Although FSANZ concurs with the merits of using physiological ‘readiness’ rather than age as the basis for introducing solids, it has concluded that a stage only approach would be a difficult message to convey on a label. Retaining an age reference will address this issue and will also assist those parents/carers with poor literacy skills to make appropriate food selection. This provision should not hinder industry innovation in moving towards the use of developmental variation on infant foods (as noted in the marketplace); rather it will mean that the information will need to be set within an age context (which does not appear to deviate from current industry practice). FSANZ is of the view that retaining the age reference will help maximise the supporting role of labelling in the education of parents/carers.

#### 5.2.3.2 Advisory statement

Although FSANZ is supportive of the shift towards developmental cues underpinning the decision to introduce solids rather than simply relying on age criteria, it recognises that this concept can be rather complex, requires a greater level of understanding of physiological changes and is generally not accessible to those who are not receiving regular advice. FSANZ is therefore recommending the inclusion of a mandatory advisory statement to encourage parents/carers to seek assistance from health professionals to guide their decision-making.

It is anticipated that the advisory statement will be seen as a positive, educative message, which will serve as a prompt for parents/carers to actively seek assistance (rather than relying on food labelling) when considering when to introduce solids. FSANZ also expects the mandatory statement to foster consistent health messages that reflect current feeding guidelines and which indirectly will affirm the message to use developmental readiness as a key to beginning solids.

The advisory statement aligns Australia and New Zealand with the proposed draft<sup>29</sup> Codex standard (CODEX STAN 74-1981) for cereal-based foods for infants and children (at Step 6) which requires that *the label shall include a statement indicating that the decision when precisely to begin complementary feeding, including any exception to six months of age, should be made in consultation with a health worker, based on the individual infant’s specific growth and development.*

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<sup>29</sup> Report of the 25<sup>th</sup> Session of the Codex Committee on Nutrition and Foods for Special Dietary Uses (ALINORM 04/27/26 APPENDIX VI)

Concerns have been expressed that such a statement may be seen as medicalising infant foods. The issue of label space to accommodate such a statement was also highlighted. In light of the potential benefits to be gained from parents/carers seeking out and subsequently receiving professional advice during their decision-making, FSANZ does not believe this to be an onerous request on industry, particularly as it would be seen to be supporting health education messages. FSANZ notes one manufacturer currently includes such a message on the label of its '1<sup>st</sup> stage' foods. FSANZ is also of the opinion that the advisory statement will complement and support the role of labelling in consumer education. Encouraging parents/carers to seek assistance may also mitigate the risk of any confusion arising from the label change to the 'around 6 months'.

### Recommendation

Retain the minimum age reference labelling and introduce a mandatory advisory statement i.e. words to the effect that parents/carers should be encouraged to consult health professionals to seek assistance when introducing solids on the label of foods recommended for infants 'around 6 months'.

#### *5.2.4 Warning statement: 'Not recommended for infants under the age of 4 months'*

Current regulations do not allow the label on an infant food to include a recommendation, express or implied, that it is suitable for infants less than four months. Furthermore, infant foods that are recommended for infants between four and six months require the warning statement *not recommended for infants under the age of four months* to be included on the label.

### Rationale

Despite public health initiatives to encourage mothers to breast feed longer and delay the introduction of solids, as mentioned above in Section 5.2, there is evidence that infants younger than four months of age in both Australia and New Zealand are continuing to be fed solid foods.

The six submitters who provided comment in response to the Initial Assessment Report on this issue, were in favour of the statement remaining in Standard 2.9.2 for safety reasons. One health professional commented that the statement was not in the spirit of the revised NHMRC guidelines and implied no change in policy, however they favoured the wording in the absence of any other reference to age on a food label.

The consumer research found very few participants were aware of the current warning statement on infant foods until their attention was drawn to it during the group discussions. Those who were aware of it tended to be more avid label readers, and those more likely to seek child health nurse advice more regularly. Most participants did not consider a co-existence scenario of the warning statement with an 'around 6 months' recommendation to be problematic given their typical process of checking and validating feeding decisions with a child health nurse or reference materials. A small number however, particularly in New Zealand, saw the potential for confusion and indicated they would have needed to seek direction from their child health nurse.



The purpose of the warning statement is to protect infant health and safety by discouraging the early introduction of solid foods. As the concerns around the early introduction of solid foods remain valid, FSANZ is of the opinion that the warning statement should be retained.

### Recommendation

Retain the warning statement ‘not recommended for infants under the age of 4 months’ on the labels of those foods promoted as suitable from ‘around 6 months’.

#### *5.2.5 Consistency that minimises the risk of choking*

Currently, subclause 2(4) of Standard 2.9.2 requires food intended for infants under the age of six months to be formulated and manufactured to a consistency that minimises the risk of choking. The corresponding editorial note explains the intent of subclause 2(4) and describes the required consistency as being ‘soft and free of lumps’.

In addition to the above requirement, Standard 2.9.2 subclause 5(3)(a) requires manufacturers to include a statement on the label indicating the consistency of the food, including those intended for infants under the age of six months.

Although there is a potential risk of an infant choking during the transition from liquid to solid foods, infants are first introduced to solid foods under the supervision of an adult.

Not all first foods however are commercially produced; the majority are prepared from home or are foods that are not specifically intended as ‘first foods’. In many instances, the supervising adult would have been directly involved in determining the texture of the food.

It is the responsibility of manufacturers to formulate foods to a consistency appropriate for the age of infant for whom the food is promoted as being suitable. In addition, all infant foods are required to carry a statement indicating the consistency of that food. Regardless of whether the food is a commercially manufactured or prepared in the home, it becomes the responsibility of the caregiver to assess and choose appropriate textured food to feed the infant and in doing so minimise the risk of the infant choking.

During the development of the Code there was considerable discussion regarding the enforceability of subclause 2(4) which culminated in the inclusion of the editorial note. There is still ongoing debate as to the enforceability of this clause.

### Rationale

FSANZ considers the ‘consistency’ declaration requirement of subclause 5(3)(a), together with the proposed mandatory warning and advisory statements of Standard 2.9.2 to provide sufficient information to enable parents/carers to determine the appropriateness of commercial foods for individual infants according to their stage of development and therefore select suitable products to minimise the risk of choking. With this in mind, and noting the difficulties associated with the enforcement of subclause 2(4), FSANZ is of the opinion that subclause 2(4) is redundant.

## Recommendation

Remove the existing subclause 2(4) from Standard 2.9.2.

### *5.2.6 Additional compositional provisions for cereal-based foods*

Clause 3 of Standard 2.9.2 currently permits cereal-based food containing more than 70 % cereal and promoted as being suitable for infants over the age of six months, to contain thiamine, niacin, vitamin B6, vitamin C, folate and magnesium<sup>30</sup> added to restoration levels, and mandates a minimum amount of iron (20 mg/100 g). Cereal-based food containing more than 70 % cereal manufactured and marketed as suitable for infants from four months of age are permitted the voluntary addition of iron and vitamin C only. There is no mandatory requirement for the addition of iron.

## Rationale

During the assessment of Proposal P215, the composition of infant foods was considered. The decision to permit cereal-based food containing more than 70 % cereal manufactured for infants aged over six months, to contain a variety of voluntary added vitamins and minerals as well as a minimum iron requirement was based on:

- the Codex Alimentarius General Principles for the Addition of Essential Nutrients to Foods<sup>31</sup> which states that: '*nutrients may be added to special purpose foods including foods for special dietary uses to ensure an appropriate and adequate nutrient content*'; and
- the importance of these foods as a source of iron for infants.

The proposed amendment to the Code to remove the current permissions for foods to be labelled as suitable from four months renders the particular reference to these foods (subclause 3(2)) redundant.

## Recommendation

Vary Standard 2.9.2 by removing subclause 3(2) and amending subclause 3(1) to permit all cereal-based foods for infants the voluntary addition of thiamine, niacin, vitamin B6, vitamin C, folate and magnesium to restorative levels, and to mandate a minimum amount of iron.

### *5.2.7 Other issues raised in submissions*

#### 5.2.7.1 International trade barriers

In developing and varying standards, FSANZ must also have regard to the promotion of consistency between domestic and international food standards and the desirability of an efficient and internationally competitive food industry.

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<sup>30</sup> The addition of the listed vitamins and minerals are permitted in accordance with the permitted forms in schedule 1 of Standard 2.9.1 - Infant formula products

<sup>31</sup> General principles for the addition of essential nutrients to foods CAC/GL09-1987 (amended 1989,1991)

In its submission, manufacturer Golden Circle noted that given the inconsistency of the Australian policy, not only with New Zealand, but also the UK, USA and Canada, FSANZ may in fact be ignoring the promotion of consistency between domestic and international food standards which may in turn impact negatively on fair-trading and competitiveness.

### Rationale

As mentioned above (refer to section 6.2), FSANZ is of the opinion that the recommendation to introduce solids at around six months supports the policies of both Australia and New Zealand. The consistency of standards between Australia and New Zealand therefore remains constant. In terms of promoting consistency with other international standards, FSANZ's responsibility first and foremost is to protect the public health and safety of Australians and New Zealanders. Varying the proposed amendments to Standard 2.9.2, as outlined in this Proposal to more closely align with other international regulations such as the US who do not require an age reference for example, may possibly compromise their health status and would therefore not be considered to be in the best interests of Australian and New Zealand infants

Given the vast majority of infant foods are locally manufactured in both Australia and New Zealand, FSANZ considers it likely that this Proposal will have little (if any) effect on international trade.

### Recommendation

FSANZ is not proposing any further action in relation to this point.

#### 5.2.7.2 Transitional arrangements

To allow manufacturers and importers of infant foods sufficient time to comply with the proposed new regulations FSANZ expects the customary transition period of 12 months, provided under subclause 1(2) of Standard 1.1.1, to apply. An industry submission from Heinz Watties indicated a longer transition period (two years) would be necessary to facilitate an economical changeover of labels, with an extended stock-in-trade provision of two years, to avoid added expense and possible stock destruction. Heinz Watties also noted that there have already been recent labelling changes to meet requirements of the joint Code.

### Rationale

Given the minimum changes being proposed to Standard 2.9.2, it is anticipated that infant food manufacturers would not require a transition period beyond that allowed for the implementation of other food standards. FSANZ acknowledges the resultant labelling changes from the introduction of the joint Code but would argue that this occurred some time ago and that a two-year transition period was introduced to address this impost on industry.

### Recommendation

A 12 months transition period is considered sufficient lead-in time for industry to implement the proposed changes to Standard 2.9.2.

## 6. Regulatory Options

At Initial Assessment two regulatory options were proposed. Option 2 at the time included replacement of the reference to ‘age’ with an alternate scheme e.g. phases or stages (Option 2B). From the consumer research and discussions with health professionals (see Section 6.1), FSANZ has determined that replacement of age with an alternate scheme will not address the specific objectives of this Proposal, particularly the provision of information to assist carers to make appropriate infant feeding choices. Therefore FSANZ is proposing the following two regulatory options at Draft Assessment:

### 6.1 Option 1 – Maintain Status Quo

Under this option, there would be no change to the current regulatory arrangements for the minimum age labelling of infant foods. Consequently, infant foods would continue to require labelling using an ‘age’ reference and be permitted to label as ‘from 4 months’.

### 6.2 Option 2 – Amend the minimum age labelling requirements in Standard 2.9.2 by varying the minimum reference age to ‘around six months’

With this option, the requirement to label an infant food with an age reference would remain although the minimum reference age permitted would be varied to ‘around six months’. In addition other consequential amendments to Standard 2.9.2 would occur to reflect the variation of the minimum age reference.

## 7. Impact Analysis

### 7.1 Affected Parties

Those parties who are potentially affected by this Proposal include but are not limited to:

- **consumers** particularly the parents/ carers of infants who rely on food labels to provide sufficient information to make informed choices in feeding their infants;
- the **Governments** of New Zealand, the States and Territories and Australia, including enforcement agencies and the health sector; and
- the manufacturers and/or importers of infant food (**industry**) who supply the Australian and New Zealand markets.

### 7.2 Impact Analysis

FSANZ is required to assess the relative impact of each of the proposed options on the identified parties as discussed above. The regulatory impact assessment is conducted to identify and evaluate the advantages of regulation, particularly in meeting the objectives of this Proposal. FSANZ invites submitters to provide details of potential costs and benefits of the proposed options and invites comments of those costs and benefits as identified below:

### 7.2.1 *Option 1 – Maintain the status quo*

By maintaining the current approach to labelling, **consumers** will continue to receive information on the suitability of infant food products. However, current labelling could genuinely confuse parents/carers who may receive advice from health professionals based on infant feeding recommendations of introduction of solids ‘around six months’. There is a risk, in this case, that some may disregard both the labelling and guidelines and make inappropriate and potentially harmful decisions for their infant on the introduction of solid foods.

Similarly, **parents/carers** who may be influenced by the labelling on infant foods (e.g. ‘from 4 months’) when making a decision to introduce foods to their infants may prematurely commence their infant on solids at four months. Again in this situation infant health may be compromised.

There are inherent risks to **industry** in maintaining the status quo as some manufacturers are already receiving feedback from consumers and health professionals that current labelling is inconsistent with infant feeding recommendations. Consumers may perceive no change to labelling as industry acting irresponsibly and undermining infant feeding recommendations. This may lead consumers to lack confidence in manufacturers and distrust their products, and consequently choose not to purchase them.

There are possible risks associated with Option 1 for **government**, particularly in Australia, as maintaining current labelling may contradict the Government’s education efforts on infant feeding recommendations and thereby reduce the desired public health gain resulting from the implementation of the infant feeding guidelines.

### 7.2.2 *Option 2 – Amend the minimum age labelling requirements in Standard 2.9.2 by varying the minimum reference age to ‘around six months’*

If labelling was changed as proposed in Option 2, **parents/carers** will continue to be provided with information on the suitability of infant food products but in a manner that is likely to be more consistent with, and will therefore reinforce, infant feeding recommendations in both Australia and New Zealand. Option 2 is more likely to minimise any potential consumer confusion, and may actually encourage consumers to seek guidance from a health professional on identifying the best time i.e. age, to introduce solids to their infant based on developmental need.

Under Option 2, **industry** is likely to incur significant costs in new labels. An estimation of costs for a labelling change is \$320 000 which includes complete label redesign, advertising and educational materials. However, by changing labelling to be more consistent with infant feeding policy there is likely to be a benefit to **industry** from increased consumer confidence.

Option 2 will continue to maintain harmonised food regulations in Australia and New Zealand as well as ensuring consistency of regulatory approaches between trading partners, thereby providing greater clarity in the regulatory environment as a whole for **government**. However, a change to the labelling of infant foods may require an education strategy to ensure parents/carers understand the meaning of the new labelling, particularly in the context of infant feeding guidelines. The prime responsibility for, and cost of this education, is likely to fall to **government**.

## **8. Consultation**

### **8.1 Public consultation**

#### *8.1.1 Initial assessment*

FSANZ received a total of 34 submissions in response to the Initial Assessment Report during the public consultation period of 16 July to 9 September 2003. Of these, 18 were from New Zealand, 15 from Australia, and one represented Australasian interests.

Twelve submissions were received from public health organisations and/or professionals. There were also six submissions from government, five from the industry sector and four from consumer groups and individual consumers.

The majority of submissions (n=30) agreed that the current standard should be amended. However, views differed in the approach with 14 favouring an increase in the minimum reference age compared to nine submitters who opted for an alternate phases/stages scheme. Several submitters (n=7) suggested a modified version of Option 2. One submitter deferred a decision until the Draft Assessment has been completed whilst another did not state any preferred regulatory option. There was very little support (n=2) for maintaining the status quo (Option 1).

A summary of submissions is at Attachment 2. Issues raised in submissions have been addressed in Section 5 of this Report.

#### *8.1.2 Draft assessment*

FSANZ is now seeking comment in relation to this Draft Assessment Report. Comments received in response to this Report will be used to assist in the development of a Final Assessment Report.

Submitters are invited to provide comments in relation to:

- the issues discussed in Section 5 of this Report; and
- regulatory options, and potential impacts in relation to these regulatory options.

### **8.2 External Advisory Group**

FSANZ established an External Advisory Group (EAG) in January 2004 to provide expert technical advice specifically in relation to the consumer qualitative research component of the review. The membership of the EAG comprised the following public health professionals and industry representatives:

- Ms Angela Baldwin, Royal New Zealand Plunket Society (Inc.);
- Ms Kay Gibbons, Royal Children's Hospital;
- Ms Anne Hillis, Heinz Watties Australasia;
- Mrs Winsome Parnell, Nutrition Expert; and
- Ms Judith Wilcox, Royal Women's Hospital.

The EAG met on three occasions. The Terms of Reference for the EAG are at Attachment 5. Following completion of the research, the EAG continued working with FSANZ to progress the Draft Assessment Report including the variation to Standard 2.9.2.

### **8.3 World Trade Organization (WTO)**

As members of the World Trade Organization (WTO), Australia and New Zealand are obligated to notify WTO member nations where proposed mandatory regulatory measures are inconsistent with any existing or imminent international standards and the proposed measure may have a significant effect on trade.

Although there are relevant international standards, amending the minimum age labelling requirements for infant foods is unlikely to have a significant effect on international trade as currently the vast majority of infant foods are locally manufactured. Therefore, notification will not be made to the WTO as a Technical Barrier to Trade (TBT) in accordance with the WTO agreements.

## **9. Conclusion and Recommendation**

By maintaining the *status quo* as per Option 1, consumers will continue to receive information on the suitability of infant food products. However, the current labelling may create confusion for parents/carers (both receiving and not receiving advice from health professionals) and as a result, infant health may be compromised by inappropriate and potentially harmful decisions being made on the introduction of solids.

When compared to Option 1 however, Option 2 provides greater benefits as it more likely to minimise any potential consumer confusion, and may actually encourage consumers to seek guidance from a health professional to determine the most appropriate time, i.e. age, to introduce solids to their infant based on developmental need.

In addition to continuing to provide parents/carers with information on the suitability of infant food products, Option 2 is more consistent with, and will therefore reinforce, infant feeding recommendations in both Australia and New Zealand.

Under Option 2, industry will incur costs to change labels to better reflect infant feeding recommendations; however there is likely to be benefits to industry from increased consumer confidence. In addition Option 2 continues to maintain harmonisation of food regulations between Australia and New Zealand.

For these reasons, Option 2 is considered the better option in fulfilling all of the regulatory objectives of this review.

This Draft Assessment therefore concludes that the proposed amendments to the Code, incorporating a variation to the minimum age labelling requirements to 'around six months', be approved for the following reasons:

- the protection of infant health and safety is maintained;

- there is consistency with infant feeding recommendations in both Australia and New Zealand, thereby reinforcing parent education and contributing to the promotion of infant health;
- permits greater flexibility and recognition of the natural variation of individual infants and their developmental needs;
- provides sufficient information to parents/carers in relation to the timing and consistency of infant foods to facilitate appropriate choices; and
- the harmonisation of regulations for Australia and New Zealand is maintained.

The proposed drafting for amendment to Standard 2.9.2 is at Attachment 1 of the Draft Assessment Report. If approved, the variation to the Code will come into effect on the date of gazettal.

## **10. Implementation and review**

Following the second consultation period for this Proposal, a Final Assessment Report will be prepared for consideration by the FSANZ Board. Pending approval by the Board, notification will be made to the Ministerial Council and the amendments to the Code will come into effect shortly thereafter upon gazettal, subject to any request from the Ministerial Council for a review.

The existing stock-in-trade provisions allow a period of 12 months from gazettal for industry to comply with the new labelling requirements.

## **ATTACHMENTS**

1. Draft variations to the *Australia New Zealand Food Standards Code*
2. Summary of Submissions
3. TNS Social Research report *A Qualitative Consumer Study Related to Food Labelling of Infant Foods* – Copy of text
4. Summary of Research with Australian Health Professionals
5. P274 External Advisory Group Terms of Reference



**DRAFT VARIATIONS TO THE AUSTRALIA NEW ZEALAND FOOD STANDARDS CODE**

**To commence: on gazettal**

[1] *Standard 1.1.1 of the Australia New Zealand Food Standards Code is varied by omitting paragraph (d) in the definition of warning statement, substituting –*

(d) paragraph 5(4)(b) and subclause 6(2) of Standard 2.9.2; and

[2] *Standard 2.9.2 of the Australia New Zealand Food Standards Code is varied by –*

[2.1] *omitting subclause 2(4).*

[2.2] *omitting the Editorial note immediately following subclause 2(4).*

[2.3] *omitting subclause 3(1), substituting –*

(1) Cereal-based food for infants which contains more than 70% cereal, on a moisture free basis –

(a) must contain no less than 20 mg iron/100 g on a moisture free basis; and

(b) may contain added iron in the following forms:

(i) electrolytic iron; or

(ii) reduced iron; or

(iii) in the permitted forms set out in Schedule 1 of Standard 2.9.1; and

(c) may contain added thiamin, niacin, vitamin B<sub>6</sub>, vitamin C, folate, magnesium in the forms permitted in Schedule 1 of Standard 2.9.1; and

(d) may contain added vitamin C to a maximum level of 90 mg/100 g on a moisture free basis.

[2.4] *omitting subclause 3(2).*

[2.5] *omitting clause 5, substituting –*

**5 Labelling**

(1) This clause does not apply to packaged water.

(2) The label on a package of food for infants must not include a representation, whether express or implied, that the food is suitable for infants less than 4 months.

(3) The label on a package of food for infants must include –

(a) a statement indicating the consistency of the food; and

- (b) a statement indicating from which age, expressed in numbers, the food is suitable; and
- (c) where the added sugars content of the food for infants exceeds 4 g/100 g, the word –  
  
‘sweetened’; and
- (d) where honey has been used as an ingredient, the words-  
  
‘sterilised honey’.

In addition to the requirements in subclause (3), where the food is suitable for infants aged between 4 and 6 months the label on a package of food for infants must include the following statements –

- (a) ‘Around 6 months’; and
- (b) ‘Not recommended for infants under the age of 4 months’; and
- (c) words to the effect that the decision to begin feeding solids should be made in consultation with a health professional.

**Editorial note:**

This Standard does not place limits on the use of sugars except in the case of a vegetable juice, fruit drink and non-alcoholic beverage.

Claims such as ‘no added sugar’, ‘sweetened’ or words of similar import are subject to the general labelling provisions.

### Summary of Submissions

FSANZ received 34 submissions in response to the Initial Assessment of Proposal P274 – Review of Minimum Age Labelling of Foods for Infants during the public consultation period of 16 July to 9 September 2003. A summary of submitter comments is provided in the table below.

In considering comments, please note the following options as proposed at Initial Assessment:

Option 1 – Maintain Status Quo - current minimum age labelling requirements would be maintained i.e. require labelling using an ‘age’ reference such as ‘from 4 months’

Option 2 – Amend the minimum age labelling requirements in Standard 2.9.2 by either: raising the minimum reference age (Option 2A); or replacing the reference to ‘age’ with an alternate scheme e.g. phases or stages (Option 2B).

No.	Submitter	Submission Comments
1	Auckland Regional Public Health Team	<p><b>Supports Option 2B</b></p> <p>This option is more appropriate for New Zealand and allows for individual variation. Suggests also including statement that the food is not recommended for infants under 4 months.</p> <p>Simple graphics could be used for parents/carers with poor literacy skills and the colour coding currently used by manufacturers could be continued.</p> <p><i>Policy</i></p> <p>There is inconsistency between Australia and New Zealand policy and with the WHO recommendation. The difference appears difficult to reconcile unless a stage/phase approach is adopted.</p> <p>A disadvantage of exclusive breastfeeding is the increased vulnerability to iron deficiency known to be a problem in New Zealand particularly in Pacific Islander babies*. Grant CC et al. J Pediatr Child Health 2003; 39: 100-106.</p>

No.	Submitter	Submission Comments
		<p><i>Education &amp; Labelling</i></p> <p>Anecdotal evidence demonstrates that labelling is not an influential factor on the timing of introducing solids compared to the influence of health workers, family members and friends.</p> <p>Labelling should be consistent with guidelines but should not be seen as a key education tool. Rather its main role is to enable parents/carers to make informed choices when purchasing infant food appropriate for their baby’s developmental stage.</p> <p>Education comes from other sources such as government resources, infant feeding guides (often industry produced) and health workers.</p> <p><i>Impact Analysis</i></p> <p>As it is estimated that up to half of all New Zealand infants start on solids earlier than 4 – 6 months, if labels are changed to 6 months (Option 2A) it may seem so unrealistic for parents/carers that labelling could be completely ignored.</p> <p>Personal experience in training sessions for Maori community health workers has shown it is difficult to get acceptance of minimum age of 4 months for the introduction of solids. Requires good justification to change to 6 months to enable this guideline to be readily promoted in the community.</p> <p>Draws analogy for New Zealand with recent UK review* that states that social and cultural practices are not amendable to a major shift in weaning policy.</p> <p>*Foote KD &amp; Marriot LD Arch Dis Child 2003;88:488-492</p>
2	<p>Australian Breastfeeding Association (ABA)</p> <p>Heather Neil, Coordinator, Advocacy Working Group</p>	<p><b>Supports Option 2A</b></p> <p>The low rates of exclusive breastfeeding to 6 months emphasis that the priority objective for P274 should be to reduce the extent of premature introduction of solids and to support exclusive breastfeeding until 6 months, which is more likely to be achieved with Option 2A. The ABA urges fast tracking this Proposal and its implementation so as to bring in line labelling requirements with infant feeding guidelines.</p> <p><u>Policy</u></p> <p>The NHMRC guidelines are consistent with the scientific evidence that solid foods or drinks are generally unnecessary before 6 months. The New Zealand recommendations are no longer in step with the scientific evidence, and need updating.</p>

No.	Submitter	Submission Comments
		<p><u>Education &amp; Labelling</u></p> <p>Age provides a clear and unambiguous benchmark. Other benchmarks could encourage misleading and deceptive advertising and confusion amongst parents. An age range encourages parents to wrongly focus on the earlier rather than the later age for introducing solids.</p> <p>Information for risk groups (that is, any infant less than 6 months of age and not exclusively breastfed) should be provided by health professionals not the infant food industry. Parents should be encouraged to seek professional guidance and not rely on food labelling.</p> <p>The safety of an alternative scheme (Option 2B) has not been established. Labelling for developmental readiness creates a real risk of encouraging parents to aim for early weaning.</p> <p>Labelling should be required stating that:</p> <ul style="list-style-type: none"> <li>- there are well-established health risks, for both mother and baby, of early solids and weaning from breast milk; and</li> <li>- breastfeeding should continue after 6 months for up to 2 years and beyond to protect both mother and child.</li> </ul> <p>The standard should be extended to cover juices and bottled water, as there is evidence that the premature use of these products is harmful to breastfeeding and infant nutrition, and these products are within the scope of the WHO Code.</p> <p><i>Impact Analysis</i></p> <p>A risk for Option 2B is that solids or drinks are introduced early and exclusive breastfeeding is not maintained, which has substantiated health costs*.</p> <p>*JP Smith et al, Aust NZ J Pub Health 2002; 26(6): 543-551</p> <p>Continued inconsistency confuses parents, creates harmful uncertainty about the appropriate age to introduce solids, and severely damages the credibility of infant food labelling.</p> <p>Need to balance unquantified and theoretical benefits from promoting solid foods (Option 1 &amp; 2B) against the substantiated risk to infant health from undermining exclusive breastfeeding.</p> <p>Option 2A may result in loss of revenue but this will be balanced by reduced economic and health costs for governments and carers of infants.</p>

No.	Submitter	Submission Comments
3	<p>Australian Consumers Association (ACA)</p> <p>Clare Hughes, Food Policy Officer</p>	<p><b>Supports Option 2A</b></p> <p>Supports the NHMRC Guidelines and their use as a basis for health and nutrition advice.</p> <p><i>Education &amp; Labelling</i></p> <p>Consumers gain health and nutrition information from a number of sources including food labels. Therefore messages must be consistent with advice given by health professionals.</p> <p>Believes that infant feeding messages on food labels should reflect the current infant feeding guidelines (i.e. exclusive breastfeeding until 6 months).</p> <p>Messages on food labels should continue to be based on age, but still allow health workers to advise on the introduction of solids earlier than 6 months, where necessary.</p>
4	<p>Australian Department of Agriculture, Fisheries and Forestry (AFFA)</p>	<p>The Australian Quarantine and Inspection Service (AQIS) to defer comment until Draft Assessment.</p>
5	<p>Australian Food and Grocery Council (AFGC)</p>	<p><b>Supports Option 1</b></p> <p>FSANZ has failed to demonstrate any evidence of market failure and has relied on non-current scientific evidence in proposing a change to labelling. Notes government policy on ‘minimum effective regulation’.</p> <p>The basis of evidence for the WHO Expert Consultation is misleading. Notes the delay in release of the revised NHMRC guidelines and believes there is a lack of recent science in the background papers discussed at Initial Assessment e.g. cites a recent review* which indicates that healthy full term infants from developed countries may need separate consideration from those born in developing countries, and which concludes that there is insufficient evidence to support a change in recommendations (from 4 months).</p> <p>* Lanigan JA et al Euro J Clin Nut 2001; 55: 309-20</p>

No.	Submitter	Submission Comments
		<p>Because of the lack of consistent evidence and the demonstrable safe use of complementary foods in the age range 4 – 6 months in both New Zealand and Australia, the AFGC recommends no change be made to the existing regulation. Considers that the current standard is consistent with manufacturers’ intent (i.e. committed to supporting breastfeeding) and with infant feeding guidelines.</p> <p><i>Policy</i> Considers that any perceived inconsistency in policy is a matter of degree rather than irreconcilable and should not therefore require a regulatory change that will in practice, increase the inconsistency and decrease harmonisation.</p> <p><i>Education &amp; Labelling</i> Considers that the existing reference to age is the simplest and most understandable communication that the label can make to assist parents/carers in making appropriate choices.</p> <p>Food labelling can play only a limited role in communicating appropriate messages to parents/carers about the timing of the introduction of solids.</p> <p><i>Impact Analysis</i> FSANZ has not demonstrated any evidence that indicates risk to infant health from the use of suitable complementary feeds in the age range of 4 to 6 months.</p> <p>Disagrees that maintaining the status quo contradicts government education efforts and thereby reduces the desired public health gain as no evidence has been presented to suggest that there is a public health gain from changing infant feeding recommendations.</p> <p>Agrees that industry will incur significant costs in changing labelling (Option 2).</p> <p>Suggests that raising the minimum reference age (Option 2A) would lead to consumer confusion in the use of appropriate starter foods.</p> <p>Replacing the reference to age (Option 2B) would require extensive consumer education at considerable cost to government and industry without providing a net benefit to consumers over existing regulatory arrangements.</p>

No.	Submitter	Submission Comments
6	Maree Callum	<p><b>Supports Option 2A</b></p> <p>Strongly believes infant foods should not be labelled ‘from 4 months’ if the NHMRC recommend delaying the introduction of solids until 6 months.</p> <p>Reports personal experience with an infant daughter with severe allergy.</p>
7	Oliver Chien-Ting Lee  Food Science Student	<p><b>Supports Option 2B (modified)</b></p> <p>Supports this option to accommodate individual variation although notes that a reference age gives a simple clear message. Proposes using both developmental milestones and age in labelling. The additional reference to age would be useful for carers with low literacy.</p> <p>Agrees with maintaining a reference age warning statement to prevent infants being fed solid foods earlier than 4 months.</p>
8	Community Child Health & Disability Service, Auckland  Fiona Smith, Eileen Young, Elizabeth Maritz, Community Paediatric Dietitians	<p><b>Supports Option 2B</b></p> <p><i>Policy</i>            A decision regarding best practise needs to be made to resolve inconsistency between Australia and new Zealand. Australian guidelines may help to increase the age that infants are offered solids to nearer 6 months.</p> <p><i>Education &amp; Labelling</i>            Current experience is that caregivers are keen to start solids so that if an age range on packaging says 4 to 6 months they will identify with 4 months as an appropriate time to start. This is of concern.</p> <p>Support Option 2B but acknowledge that extensive education will be required. This may cause problems for caregivers with minimum English. It would be impossible to fit all required information on packaging and relies on education prior to purchase.</p>



No.	Submitter	Submission Comments
9	Dietitians Association of Australia (DAA)	<p><b>Supports Option 2B (modified)</b></p> <p>Prefers a combination of Options 2A and 2B i.e. phases/stages plus a statement ‘preferably around 6 months’.</p> <p><i>Policy</i> Supports the NHMRC guidelines but recognises that there is wide variation in the age at which infants are developmentally ready for solids and that there are population groups who would be disadvantaged by delaying solids until 6 months.</p> <p>There is inconsistency in policy between Australia and New Zealand that should be addressed to avoid confusion for health workers and consumers in both countries. DAA is concerned that FSANZ is trying to develop harmonised food regulations around an issue where country specific guidelines are different.</p> <p><i>Education &amp; Labelling</i> Labelling should support policy. The challenge is to develop a clear, simple message that, while promoting the best approach for the majority of infants, allows flexibility to also accommodate the needs of infants with special needs.</p> <p>Supports use of colour coding and pictorial representation to assist consumers with low literacy and the inclusion of a statement promoting consultation with a health professional.</p> <p>A comprehensive and appropriate education program for health workers and consumers should accompany labelling changes to assist the understanding and interpretation of labels for the general population and at-risk groups. Collaboration between government, food industry and professional organisations could be efficient and cost-effective use of limited resources.</p> <p>Notes that labelling may provide the only form of education for some parents.</p>
10	Catherine Dixon  Student Dietitian	<p><b>Supports Option 2A</b></p> <p><i>Policy</i> Considers that there is inconsistency in policy that should be rectified before amending the minimum age labelling of infant foods. In order to send a consistent and clear message, New Zealand will need to update infant feeding guidelines to align with WHO recommendations.</p> <p>It is imperative that government and manufacturers take responsibility to ensure that the dissemination of messages is up to date and consistent with international recommendations.</p>

No.	Submitter	Submission Comments
		<p><i>Education &amp; Labelling</i>            Considers maintaining an age reference (Option 2A) to be the simplest and most effective way to provide information to caregivers on timing and consistency of infant foods.</p> <p>A change to Option 2A is likely to encourage appropriate infant feeding and reduce risks associated with inappropriate infant feeding.</p>
11	Mark Dunstone	<p><b>Supports Option 2A</b></p> <p>Current scientific evidence indicates that there are better public health outcomes from this option. Notes the high compliance with the previous recommendation that solids be introduced between 4 – 6 months and suggests that in this case infants are unnecessarily exposed to increased risk of ill health on the basis of the revised NHMRC guidelines and WHO recommendations. Suggests that this is a strong argument for fast tracking the Proposal through s. 24 – Declaration of Urgency of the <i>FSANZ Act</i> and shortening the transitional arrangements for implementation of any proposed variation.</p> <p><i>Policy</i>            States that the issue of consistency between the infant feeding guidelines of Australia and New Zealand is not a relevant consideration for FSANZ pursuant to s.10(2)(b) of the <i>FSANZ Act</i> (being the promotion of consistency between domestic and international food standards) and because it is not a matter that supports the s.10 (1) objectives of the Act.</p> <p><i>Education &amp; Labelling</i>            Suggests the current terminology used in relation to minimum age labelling (clause 3(b) of Standard 2.9.2) i.e. <i>recommend</i> rather than <i>suitable</i> implies to consumers that this is health advice rather than guidance.</p> <p>Notes that because the current standard does not require manufacturers to label infant foods on how they adversely affect breastfeeding that this supports uninformed decisions by consumers. Believes that Standard 2.9.2 should require the label on all drinks (including bottled water) targeted at infants to state that breast-fed infants do not require additional drinks and that feeding infants such drinks can adversely impact breast milk intake and supply.</p> <p>Labelling should state that after 6 months of age, continued breastfeeding along with appropriate complementary foods is supported by WHO to age 2 and beyond in the interests of mother and child health.</p> <p>Age provides a clear and ambiguous benchmark, which parents can easily interpret and is consistent with international standards eg. WHO recommendations.</p>

No.	Submitter	Submission Comments
		<p>Accommodating the individual variation of infants provides manufacturers with latitude to mislead consumers.</p> <p><i>Impact Analysis</i> Suggests that Option 1 exposes infants to increased risk of ill health, as consumers would not be provided with adequate information to make an informed choice.</p> <p>There is no clinical evidence on the appropriateness of using developmental milestones (Option 2B) as relevant for introducing foods to infants. Use of developmental stages also risks over-emphasis being placed on physical development.</p> <p>No scientific evidence to support the assumption that infants need solids before 6 months of age (Option 1 &amp; 2B).</p>
12	<p>Fonterra Cooperative Group</p> <p>Joan Wright</p>	<p><b>Supports Option 2B</b></p> <p><i>Education &amp; Labelling</i> The timing of weaning depends on development of the GI tract, mechanical factors (e.g. chewing) and nutritional demands for growth. These occur at different times in different infants. Weight provides a better correlation than age.</p> <p>Recommends certain wording be required e.g. <i>suitable as a weaning food at around 6 months of age, but not before 4 months of age.</i></p> <p><i>Impact Analysis</i> A blanket statement such as ‘not recommended for infants under 6 months’ would likely encourage some mothers to feed far less suitable foods (e.g. Weet-bix) instead. Those foods that are appropriate to start weaning should be clearly identified.</p>
13	<p>Food Technology Association of Victoria Inc (FTAV)</p> <p>David Gill, President</p>	<p><b>Supports Option 2B</b></p> <p><i>Education &amp; Labelling</i> Supports mandating colour coding using different and easily recognisable colours for various age groups to aid consumers in making informed and appropriate choices, particularly for consumers of non-English speaking background.</p>

No.	Submitter	Submission Comments
14	<p data-bbox="264 248 389 280">Marcus Ip</p> <p data-bbox="264 352 427 416">Food Science Student</p>	<p data-bbox="535 248 792 280"><b>Supports Option 2B</b></p> <p data-bbox="535 320 1541 352">Considers ‘stages’ are a better reference than age as infants develop at differing rates.</p> <p data-bbox="535 384 808 416"><i>Education &amp; Labelling</i></p> <p data-bbox="535 424 1890 456">Considers that infants from different ethnic backgrounds are different and thus developmental cues are appropriate.</p> <p data-bbox="535 488 1619 520">Extensive education will be required – beyond parent and caregivers e.g. whole community.</p> <p data-bbox="535 552 730 584"><i>Impact Analysis</i></p> <p data-bbox="535 592 1641 624">Option 2B important for trade purposes – both between Australia and NZ, and internationally.</p>
15	<p data-bbox="264 639 423 671">Judith Galtry</p> <p data-bbox="264 743 400 775">Researcher</p>	<p data-bbox="535 639 792 671"><b>Supports Option 2A</b></p> <p data-bbox="535 711 1962 775">Considers current labelling requirements make it too easy for mothers to interpret that the food is suitable from 4 months, and that there is health benefit to introducing solids at this time. This can lead to early weaning of babies.</p> <p data-bbox="535 807 1928 839">Sees raising the minimum reference age as supporting the goal of exclusive breastfeeding for the first 6 months of life.</p>
16	<p data-bbox="264 863 423 895">Kay Gibbons</p> <p data-bbox="264 967 371 999">Dietitian</p>	<p data-bbox="535 863 931 895"><b>Supports Option 2B (modified)</b></p> <p data-bbox="535 927 1585 959">Favours a developmental stages approach that is supported with an age-related statement.</p> <p data-bbox="535 999 618 1031"><i>Policy</i></p> <p data-bbox="535 1031 2002 1094">Labelling and food standards should support policy. It would seem that if feeding guidelines are not similar in Australia and New Zealand, one set of guidelines is, by definition, not ‘based on the best available scientific evidence’</p> <p data-bbox="535 1134 2002 1198">Suggests that nutrition policy needs to be consistent across Australia and New Zealand, if labelling guidelines are to meet its objectives.</p> <p data-bbox="535 1238 808 1270"><i>Education &amp; Labelling</i></p> <p data-bbox="535 1270 2011 1364">Strong move in paediatrics to recognise normal variation in children’s development, and to be responsive to this development, rather than simply use age guidelines. Primary health care professionals are encouraged to assist parents to use eating readiness as a key to beginning solids.</p>

No.	Submitter	Submission Comments
		<p>However this is a difficult message and is generally not accessible to those who are not seeking advice. In this case there is a need for a clear, directive message. Developmental variation needs to be set within an age context.</p> <p>Favours a ‘stages’ labelling system with associated colour coding and 1<sup>st</sup> stage products to require the statement ‘from around 6 months’. This statement gives a number, but is not categorical.</p> <p>Use of ‘not before 4 months’ implies no change in policy and does not appear within the spirit of the revised guidelines. Although favours this wording over absence of an age guideline.</p>
17	<p>Golden Circle Ltd</p> <p>Peter Swain, Technical Manager</p>	<p><b>Supports Option 1</b></p> <p>There is little data to support the exclusion of solids foods to 6 months is a suitable recommendation for formula or partially breastfed infants. Retaining the current labelling minimises the risks to these infants.</p> <p><i>Policy</i> It appears that the Australian guidelines are not only inconsistent with New Zealand, but also with the UK, USA and Canada. FSANZ may be ignoring its own requirement to ‘promote consistency between domestic and international food standards’ which may in turn impact on fair-trading and competitiveness.</p> <p><i>Education &amp; Labelling</i> While age may not be the most appropriate benchmark for assessing development stages, it is easily understood, particularly where literacy may be an issue. It has been successfully used for many years without apparent problems.</p> <p>Required minimum age labelling should focus on the importance of not introducing solids prior to 4 months.</p> <p>Stages may be a more appropriate means of defining milestones provided the consumer is adequately educated to understand what are these milestones. Queries how the government will educate the consumer if labelling is changed away from the fairly simple numerical system.</p> <p>The role of labelled foods in educating consumers is limited, as all families do not use them.</p> <p><i>Impact Analysis</i> An estimation of costs for a labelling change (either Option 2A or 2B) is \$320 000 which includes complete label redesign, advertising and educational materials.</p>

No.	Submitter	Submission Comments
		Proposes an amended version of Option 2B being that legislation only apply to the ‘First food’ category, with a suitably defined prescribed name, texture definition and inclusion of current warning statement. It is at the first stage where products need to be closely regulated. The remaining stages should be left to manufacturers to identify suitable descriptors.
18	Heinz Watties	<p><b>Supports Option 2B</b></p> <p>On the basis that it is applied across the infant food range, not just the ‘from 4 months’ products.</p> <p>Considers that this option is consistent with the revised NHMRC Dietary Guidelines and New Zealand’s infant feeding guidelines, in addition to the implementation of the resolution 54.2 of the WHA (Infant and Young Child Nutrition), and satisfies the objectives of the Proposal.</p> <p>Any review of minimum age labelling must recognise that a number of infants will require the introduction of solids before 6 months. There are no health or safety issues for infants in commencing solids after 4 months but before 6 months.</p> <p><i>Education &amp; Labelling</i></p> <p>There is no evidence that caregivers are starting solids foods at an inappropriate age due to product labelling.</p> <p>It is acknowledged that both the label and support material play an important role in assisting caregivers to make informed choices about when to introduce solids, however other factors may be of even greater influence such as family, ethnicity, socio-economic grouping and previous experience.</p> <p>Supports retaining ‘not recommended for infants under the age of 4 months’ on first stage or phase products.</p> <p><i>Impact Analysis</i></p> <p>Any raising of the minimum age (Option 2A) could lead to further confusion as to which food to select for an infant that requires complementary feeding before the minimum age, but not before 4 months.</p> <p>Due to production it would be necessary to allow long transition time (24 months) for an economical change of labels and extended stock in trade (at least 24 months) to avoid added expense and possible destruction of stock. Heinz notes that there have already been recent labelling changes to meet requirements of the joint Code (Standard 2.9.2).</p> <p>The adoption of this Option 2B should apply across the range of infant foods. An interim scheme that is a combination of ages and stages may be required to minimise consumer confusion.</p>

No.	Submitter	Submission Comments
		A change to an alternative scheme will require an education campaign involving both government and industry. Heinz can assist in educating consumers on an alternative scheme.
19	<p data-bbox="264 320 465 419">Infant Nutrition Advisory Group (INAG)</p> <p data-bbox="264 491 465 624">A New Zealand independent nutrition expert group</p>	<p data-bbox="537 320 792 352"><b>Supports Option 2B</b></p> <p data-bbox="537 389 618 421"><i>Policy</i></p> <p data-bbox="537 424 1944 485">Considers that scientific evidence for application of the WHO recommendation is lacking and not relevant in developed countries.</p> <p data-bbox="537 523 1901 584">Conclude that a move to recommending exclusive breast-feeding until 6 months in New Zealand will not support an improvement in breast-feeding rates in New Zealand.</p> <p data-bbox="537 627 1951 687">New Zealand guidelines have used developmental cues as a sign of eating readiness for some years – there appears to be good understanding of these cues.</p> <p data-bbox="537 727 2007 788">30% of New Zealand infants are exclusively formula fed solids at 3 months. Recommendations for the introduction of solids should consider formula-fed infants as well as breast-fed infants.</p> <p data-bbox="537 828 833 860"><i>Education and Labelling</i></p> <p data-bbox="537 863 1912 924">The current labelling statement identifying foods as “not recommended for infants under the age of 4 months” should remain.</p> <p data-bbox="537 963 730 995"><i>Impact Analysis</i></p> <p data-bbox="537 999 1951 1098">Suggests that changing the current minimum age labelling from 4 to 6 months (Option 2A) may create an unrealistic guideline, which is likely to be widely ignored by health professionals and carers and this will undermine the purpose of labelling.</p> <p data-bbox="537 1134 1977 1195">Option 2A has the potential to have a detrimental effect on breastfeeding as infants may be supplemented with formula if advice is given that solid foods are not appropriate before 6 months.</p>

No.	Submitter	Submission Comments
20	<p data-bbox="264 248 512 316">La Leche League New Zealand</p> <p data-bbox="264 389 512 456">Rosemary Gordon, Director</p>	<p data-bbox="535 248 792 284"><b>Supports Option 2A</b></p> <p data-bbox="535 320 618 355"><i>Policy</i></p> <p data-bbox="535 355 2007 488">Applaud the revised NHMRC guidelines and are disappointed that New Zealand has no plans to review its infant feeding recommendations. Note that other countries (UK, Ireland) have recently adopted the new WHO recommendation. Introduction of solids can affect milk supply and may result in premature weaning. Considers it unwise to advocate weaning from 4 months, as it will negatively impact on exclusive breast-feeding for first 6 months.</p> <p data-bbox="535 525 833 560"><i>Education and Labelling</i></p> <p data-bbox="535 560 1989 627">Notes the current Codex drafting* refers to infants generally from the age of 6 months, which is the strategy which FSANZ should adopt.</p> <p data-bbox="535 627 1946 662">*Proposed Draft Revised Codex Standard for Processed Cereal-based Foods for Infants and Young Children (at Step 3).</p> <p data-bbox="535 699 1951 756">Continued labelling of infant food ‘from 4 months’ is too easily interpreted as an implication that there is suitable health benefit to introducing solid food at this time.</p>
21	<p data-bbox="264 772 427 807">Judith Myers</p>	<p data-bbox="535 772 931 807"><b>Supports Option 2B (modified)</b></p> <p data-bbox="535 844 1995 946">Recommends labelling based on a developmental approach rather than purely chronological age with inclusion of a statement that ‘solids are recommended at around 6 months’. Also include a statement about a developmental approach to introduction of solids and introduce a universal system of categorising infant foods eg. colour coding or pictorial guidelines.</p> <p data-bbox="535 983 1973 1082">Using age alone as the deciding factor in recommendations for commencing solids does not consider the wide variation in normal development. The labelling of products must reflect the worldwide trend towards recommending introduction of solids at a later age to affirm the nutrition messages from health professionals.</p> <p data-bbox="535 1118 833 1153"><i>Education and Labelling</i></p> <p data-bbox="535 1153 1973 1286">Given the paucity of sound evidence regarding the optimal age of introduction of solid foods (versus higher levels of evidence on exclusive breastfeeding until 6 months as a population-based recommendation), professional advice must be based on the individual readiness for solids. It is well recognised that the infant’s developmental readiness for solid foods occurs between around 4 to 6 months.</p>



No.	Submitter	Submission Comments
		<p><i>Impact Analysis</i> Continuation with current labelling will foster inconsistent messages between industry, health professionals and government bodies.</p>
22	<p>Northern Territory (NT) Department of Health and Community Services</p> <p>Carrie Turner, Acting Manager, Nutrition and Physical Activity Unit</p>	<p><b>Supports Option 2B</b></p> <p>Submission provided by NT Nutritionists/Dietitians working with remote Aboriginal people.</p> <p><i>Policy</i> The New Zealand guidelines are more reflective of the practice that occurs in the NT where the introduction of solids is recommended between 4 – 6 months. Has reservations about the application of the WHO recommendation on exclusive breastfeeding to the Aboriginal population.</p> <p><i>Education &amp; Labelling</i> Minimum age labelling of infant foods that accommodates the individual variation of infants (i.e. between 4 – 6 months) is preferred as:</p> <ul style="list-style-type: none"> <li>- low iron status is a significant problem for remote Aboriginal infants</li> <li>- exclusive breastfeeding may accelerate maternal weight loss. NT has a high incidence of teenage pregnancy and underweight women breastfeeding.</li> <li>- exclusive breastfeeding to 6 months doesn't appear to be protecting Aboriginal children against gastrointestinal infections.</li> </ul> <p>Age is appropriate benchmark but should not be the sole marker of readiness for the introduction of solids. In the NT carers are educated about developmental milestones.</p> <p>Believes that the addition of developmental stages on labels would be of great benefit to low literacy/numeracy populations particularly if communicated in pictorial form.</p> <p>Current colour coding associated with infant foods is well known and understood by Aboriginal consumers.</p> <p>An alternative option would be to maintain the current colour coding and amend the words 'from 4 months' to '4 –6 months'. In addition a developmental milestone comment should be included eg. 'holds own head and is interested in food', with a pictorial representation of this concept.</p>

No.	Submitter	Submission Comments
23	<p data-bbox="264 252 512 352">New Zealand Dietetic Association (NZDA)</p> <p data-bbox="264 424 483 485">Carole Gibb, Executive Officer</p>	<p data-bbox="539 252 792 284"><b>Supports Option 2B</b></p> <p data-bbox="539 320 618 352"><i>Policy</i></p> <p data-bbox="539 357 1995 418">Agrees that there is now inconsistency between the New Zealand and Australian Guidelines as to the recommended age for the introduction of solids.</p> <p data-bbox="539 456 1895 517">Notes that the <i>Healthy Eating- Healthy Action</i> strategic framework of the New Zealand Ministry of Health supports exclusive breast-feeding to 6 months of age.</p> <p data-bbox="539 555 813 587"><i>Education &amp; Labelling</i></p> <p data-bbox="539 592 2007 652">Supports ‘stage/step’ approach to labelling as considers that it will resolve conflicting messages between labelling and infant feeding and avoids a ‘dictatorial’ approach to giving guidance to parents.</p> <p data-bbox="539 691 1234 722">Current colour system can be applied to a ‘stage’ approach.</p> <p data-bbox="539 761 1946 821">A disadvantage of a ‘stage’ approach is the amount of supporting information that will have to be given to consumers to assist decision on when to introduce solid food.</p> <p data-bbox="539 860 1995 920">The size of labels makes it impractical to carry more than minimal educational advice. Tear off pads and educational charts at point of sale would assist parents.</p> <p data-bbox="539 959 1888 991">Considers that changes to labelling would need to be made over time to allow for a supporting educational process.</p>
24	<p data-bbox="264 1016 495 1115">New Zealand Food Safety Authority (NZFSA)</p> <p data-bbox="264 1187 490 1315">Carole Inkster, Director, Policy &amp; Regulatory Standards</p>	<p data-bbox="539 1016 792 1048"><b>Supports Option 2B</b></p> <p data-bbox="539 1086 1910 1147">Favours a developmental milestone approach as this reflects New Zealand’s current guidelines, that recommend the introduction of solids around 4 to 6 months but also recognise the importance of physiological signs of development.</p> <p data-bbox="539 1185 618 1217"><i>Policy</i></p> <p data-bbox="539 1222 1984 1315">Support position taken by WHO and Australia that breast-feeding is ideal nutrition for infants, but suggest that the strength of the literature on the benefits of breastfeeding should not be extrapolated to cover the needs of the partially breastfed or formula fed infant.</p>

No.	Submitter	Submission Comments
		<p>Concerned that extrapolation of recommendations for breast-fed infants to formula- fed infants without research to support such a change in recommendations is inappropriate and may not be responsible.</p> <p>New Zealand's position is that feeding recommendations should be based on physiological development and monitoring rather than a set age.</p> <p>Mindful that appropriate infant foods should be commercially available for those infants who require solids between 4 and 6 months of age.</p> <p><i>Education &amp; Labelling</i> Concerned of the negative effects of discouraging introduction of solids until 6 months of age; feel that caregivers may supplement hungry babies with formula rather than solids when aged between 4 and 6 months leading to earlier termination of breast-feeding.</p> <p>Understand that Option 2B will require sufficient work on adequate labelling to ensure consumer understanding.</p>
25	<p>New Zealand Ministry of Health</p> <p>Cynthia Maling, Manager Public Health Policy</p>	<p><b>Supports Option 2B</b></p> <p><i>Policy</i> New Zealand Ministry of Health policy supports and promotes breast-feeding until at least 12 months and includes detailed advice on introduction of complementary foods at around 4 to 6 months, based on developmental cues recognising individual variation. Consider that this approach is working well i.e. practical and useful. The NZ Food and Nutrition Guidelines series are updated via a rolling program of regular review and the most recent review of Guidelines for those aged 0-2 years was in 1999, with further minor amendment in 2000. In-depth consideration and assessment of the WHO new position has not yet occurred but will occur in the future when the guidelines are reviewed.</p> <p>FSANZ has responsibility to develop food standards that take into account nutrition policies in both Australia and New Zealand.</p> <p>Acknowledges that the revised NHMRC Guidelines focus on breast-feeding, including the adoption of the WHO position of exclusive breast-feeding for the first 6 months, however, there is no evidence presented to support the optimal introduction of complementary food for infants who have been formula-fed.</p>

No.	Submitter	Submission Comments
		<p>Notes discussions with James Akre (WHO,) who agreed that WHO had not provided evidence for formula-fed infants and suggested member countries ask WHO to consider holding expert consultation to address this issue.</p> <p><i>Education &amp; Labelling</i> Does not believe that there is a single age for the introduction of solid foods for all infants either in New Zealand or globally.</p> <p>Food labels can provide useful information, but are not necessarily educative unless part of an education package.</p> <p>FSANZ should not make changes without due regard to the consequences in both countries, and would need to work closely with responsible organisations to ensure smooth transition is accompanied by information and education.</p> <p><i>Impact Analysis</i> If a change is made to minimum age of introduction at 6 months (Option 2A) this may result in infants who are developmentally ready for foods before 6 months not being given appropriate or nutritionally adequate foods. Or being given infant formula instead which can adversely affect breastfeeding.</p> <p>Consider that the potential costs and consequences of responding to the change in Australian guidelines has not been adequately quantified and assessed for New Zealand.</p>
26	Paul Rigby  Student Dietitian	<p><b>Supports Option 2A</b></p> <p>Considers Option 2A is most consistent with the objectives of P274, reflects best available scientific evidence (WHO recommendations for exclusive breast-feeding until 6 months) and protects the health and safety of infants by minimizing the risk of early weaning. Amending this option to include a ‘stages’ approach would enable parents/carers to make more appropriate feeding decisions.</p>
27	Queensland Health  Kerry Bell, Principal Advisor, Foods	<p><b>Supports combination of Options 2A and 2B</b></p> <p>Supports a combination of information on appropriate minimum age (Option 2A) and developmental stages (Option 2B).</p> <p>This will assist in addressing current consumer confusion regarding the discrepancy between labelling and infant feeding recommendations.</p>

No.	Submitter	Submission Comments
		<p><i>Education &amp; Labelling</i></p> <p>Considers that age alone is not an appropriate benchmark. Although while developmental milestones are better, without appropriate expert advice age is possibly an easier indicator in the absence of consumer education.</p> <p>Labelling should be based on population health messages. An advisory statement may be necessary to encourage parents to seek individual medical advice.</p> <p>Further work needs to be undertaken to develop another classification scheme or guidelines for classification schemes that provide carers with sufficient guidance to make informed choices. This needs to consider both texture and ingredients appropriate at different ages and developmental milestones.</p> <p>Since labels are not the only source of information provided by manufacturers believes there needs to be consideration given to the regulation of promotional material related to infant foods.</p> <p>Anecdotal evidence and experience indicates that food labels are not used as an education source by parents who are most likely to begin solids before 4 months.</p> <p>Experience suggests that family is the biggest source of information for parents/carers regarding infant nutrition. Parents need food labels that will provide information about food texture and the presence of allergens.</p> <p>Education is the responsibility of the health and family services sector, and relevant non-government organisations. Food labels should compliment other sources of nutrition education but should not be considered a major source of health education.</p> <p><i>Impact Analysis</i></p> <p>The current labelling ‘from 4 months’ is likely to encourage parents/carers to start their infants on solids regardless of developmental status.</p> <p>The benefits of changing the current approach far outweigh the risks to infants associated with either the early or late introduction of solids.</p> <p>Data* indicate that 30% of indigenous infants are given solids before 4 months. The most common solids introduced are Weet-bix and Farex with cow’s milk.</p> <p>*Townsville Aboriginal and Islander Breastfeeding and Infant Feeding Project (1998)</p> <p>*Inala Indigenous Infant Nutrition Project (1998)</p>

No.	Submitter	Submission Comments
28	<p>Vicki Robinson</p> <p>Tutor Dietitian</p>	<p><b>Supports Option 2B</b></p> <p><i>Policy</i> New Zealand guidelines include developmental cues for the introduction of solids. A stage/phase approach is compatible with current New Zealand guidelines.</p> <p><i>Education &amp; Labelling</i> Infant development can be estimated using ‘age’, this marker alone does not accurately predict the age at which an infant will be developmentally ready for solids. An age range on food may encourage early introduction of solids.</p> <p>Labelling as ‘stages’ would encourage caregivers to tune in to developmental cues from their infants. Public education program would be vital to ensure infant cues are not misinterpreted.</p> <p>A possible alternative would be combining ‘stage’ labelling with ages to help consumers.</p> <p><i>Impact Analysis</i> Option 1 correctly implies that some infants are ready for solids before 6 months, but does not support the continuation of exclusive breast-feeding.</p> <p>Option 2B allows for individual variation in development without placing early developers or late developers at risk.</p>
29	<p>Royal New Zealand Plunket Society Inc</p> <p>Angela Baldwin, General Manager, Clinical Services</p>	<p><b>Supports Option 2B</b></p> <p><i>Policy</i> Considers that there is no difference in the spirit or intent between the Australian and New Zealand guidelines.</p> <p>The New Zealand guidelines have proven to be a most useful tool for practitioners.</p> <p>Support of WHO recommendations of exclusive breast-feeding until 6 months but have concerns about how this will be translated into practise. Consider labelling an important part of that translation. Also considers that it is important to take in to account the reality of practice.</p> <p>Plunket data shows that 45% infants seen at 3 months are partially or fully formula-fed, with 76% by 4 to 6 months.</p>

No.	Submitter	Submission Comments
		<p>Submits that in the absence of the ideal (exclusive breast-feeding until 6 months of age), infants should be appropriately introduced to solids when they display developmental cues suggesting that they are ready – around 6 months but not before 4 months.</p> <p><i>Education &amp; Labelling</i>  Would not endorse labelling practises that state not before 6 months (Option 2A) for the following reasons:</p> <ul style="list-style-type: none"> <li>- Unaware of evidence to suggest that a formula-fed baby should wait until 6 months before they are introduced to solids.</li> <li>- Consider that labelling should put forward the realities or risk losing consumer faith.</li> </ul> <p>Considers it important that minimum age labelling of infant foods accommodates the individual stage of variation of infants. Considers ‘stages’ more appropriate then age, when linked to developmental cues.</p> <p>Still need for a “not before 4 months” statement.</p> <p>Suggests a regulatory option that advises: “first foods” are appropriate around 6 months but not before 4 months.</p> <p>Infant food labelling is important – colour by age group being a very important guide for caregivers with low literacy skills.</p> <p><i>Impact Analysis</i>  Agrees with the identified costs and benefits.</p>
30	<p>Caroline Shannon</p> <p>Student Dietitian</p>	<p><b>Supports combination of Option 2A and 2B</b></p> <p>Change to Option 2A would encourage exclusive breast-feeding until 6 months.</p> <p>Option 2B is logical choice as relies on physiological readiness, but relies on caregiver ability to recognise miles stones and would require extensive education.</p>

No.	Submitter	Submission Comments
31	Bronwyn Smyth  Student Dietitian	<p><b>Supports combination of Option 2A and 2B</b></p> <p>Notes that while exclusively breast-fed infants may not require solids until 6 months of age, no data to support this recommendation for partially breast-fed or formula-fed infants.</p> <p>Considers that 2A and 2B better reflect Australian guidelines, but would require changes to current New Zealand guidelines to match the labelling standards.</p> <p>Both Options 2A and 2B would require considerable education - more so for 2B.</p> <p>Believes that including an age on labels will ensure mothers with poor literacy skills will be guided to make appropriate food choices.</p>
32	South Australian Department of Human Services  Joanne Cammans	<p><b>Supports Option 2A</b></p> <p>Supports this option as providing the most consistent message to parents and carers of infants.</p> <p>Agrees that maintaining current labelling may contradict the governments' education efforts on infant feeding recommendations.</p>
33	Antonia Trollip  Student Dietitian	<p><b>Supports Option 2B</b></p> <p>Option 1 would result in discrepancy between the Australian and New Zealand guidelines and has the potential to confuse the public.</p> <p>Stage/phase approach concurs with the New Zealand guidelines.</p> <p>Option 2A decreases the parent food choices if they feel that their child is in need of solids before 6 months of age, and may cause nutritional risk.</p> <p>Option 2B will require significant education with sufficient pre-testing.</p> <p>Considers that the decision about when to use solid foods should be individually determined.</p>



<b>No.</b>	<b>Submitter</b>	<b>Submission Comments</b>
34	Brooke Wellington	Concerned that a change in regulations will make mothers who are unable to breastfeed feel more inadequate.  It is important to look for the signs that a baby is ready for solids as not all are at 4 months.

**TNS CONSUMER RESEARCH REPORT – COPY OF TEXT**

**A QUALITATIVE CONSUMER  
STUDY RELATED TO FOOD  
LABELLING OF INFANT FOODS**

A TNS SOCIAL RESEARCH REPORT

**Prepared For:**

**FOOD STANDARDS AUSTRALIA NEW  
ZEALAND**

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## Executive summary

The 2003 release of the revised Australian National Health and Medical Research Council (NHMRC) *Dietary Guidelines for Children and Adolescents* (incorporating *Infant Feeding Guidelines for Health Workers*) created an inconsistency with New Zealand government policy guidelines and an inconsistency between Australian government policy and current labelling requirements (indicating the age from which the food is suitable, from 4 months). As a result of these changes, Food Standards Australia New Zealand (FSANZ) has undertaken a review (Proposal P274) of the minimum age labelling so that infant food labelling reflects the revised Australian guidelines, and also takes into account New Zealand policy.

The initial assessment report from this review proposed a number of labelling options which FSANZ now has a need to review from a consumer perspective. FSANZ has subsequently commissioned this qualitative research study to investigate how primary caregivers make decisions around the introduction of solids<sup>32</sup>; the influence of current labelling on these decisions; and reactions to alternate labelling options.

The research was conducted with primary caregivers in Australia and New Zealand, via nine focus group discussions. Participants were selected on the basis of their gender (i.e. mothers), their level of achieved education, and the number of children they had (first-time mothers and those with more than one child).

For most participants in this study, the decision of when and how to introduce solids was informed over a period of time, and via a number of solicited and unsolicited sources. There were three most important sources:

- the Child Health Nurse;
- reference materials, such as books and magazines; and
- the informal ‘mothers’ group or ‘coffee’ group’ that most participants in this study were part of.

Most parents relied on two main signals from their baby in determining if he or she was ready for solids – these were regarded more as signs of hunger rather than developmental readiness:

- an indication of strong interest in food by following with their eyes when others eat around them, or reaching for food from an adult’s plate; and
- disturbed sleep patterns at night, indicating that the breast or bottle feed was no longer enough.

Other physiological cues were less well known, and most participants did not understand that a number of physiological cues, rather than one or two alone, are a better indication of developmental readiness for solids.

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<sup>32</sup> The term ‘introduction of solids’ refers to the process during which the infant changes from a purely liquid diet of breast milk or infant formula (or both) to one which contains all the varied foods typical of that family.

Food labels were far less important than these and other sources, and played different roles for parents. Food label information was regarded as helpful in the selection of infant foods once solids have been first introduced, but the label had little if any influence on the decision to start solids (usually with rice cereal). Label information became much more useful when parents began to regularly buy infant foods, and to assist them in the transition to more textured foods.

First-time mothers place considerably greater importance on the age and texture information on food labels, using the age recommendation as a guide that is followed in consultation with the advice of the child health nurse, and often their own mother.

There was considerable and consistent self-reported evidence from the groups in both countries that a '4 months', 'from 4 months' or 'from 4-6 months' food label encourages the introduction of solids closer to 4 months, rather than closer to 6 months. Many participants felt that, on reflection, had first stage ('blue') foods been labelled 'from 6 months' they would have reconsidered, and probably delayed introducing solids by a few weeks to a month or more.

Not surprisingly, it was difficult for some participants to retrospectively say what they would have done had they been faced with first foods labelled 'around 6 months'. Seeing it as label information for the first-time (via label mock-ups on boards and sample products), 'around 6 months' was interpreted to mean aiming for 6 months, with 2-3 weeks leeway on either side. In the context of this recommended age being the first age on food labels, introducing solids at closer to 4 months was viewed as highly inappropriate. Based on the reaction and views of participants in this study, it is unlikely that most parents would contemplate solids before 5 months if there were no other information sources giving them counter information or advice (friends, mothers, child health nurses).

In New Zealand, where health advice ('4-6 months') is most likely to conflict with future label information ('around 6 months') participants indicated their likelihood to over-ride the label recommendation with conflicting advice from their nurse, but not without considerable confusion. Where the child health advice directs parents to delay solids until closer to 6 months, participants would most likely use the label recommendation to substantiate and defend this advice to other conflicting sources, such as 'earlier' generations of first-time parents.

Overall, only a minority of participants were aware of the warning statement 'not recommended for infants under the age of 4 months', until their attention was drawn to it in the group discussion. Those that were aware of it tended to be more avid label readers, and also those more likely to seek child health nurse advice on a frequent basis. Most participants did not regard the co-existence of the warning statement and the 'around 6 months' recommendation on the front of the product as a problem given, their typical process in checking and validating decisions to move from one infant feeding stage to another – via the nurse or reference materials. A small number of participants, particularly in New Zealand, saw the potential for the dual-advice to be confusing and would have needed to seek clarification on this issue from their nurse.

Consequently, it is the advice of the nurse that will determine which age recommendation (4 months in the warning statement, or 6 months on the front of the product) carries more weight.

If a nurse is not consulted during this process, it is the age and graphic depiction of the ‘around 6 months’ recommendation on the front of the product that will most likely drive a parent’s choice of product far more than the warning statement.

A number of alternate label concepts were presented to participants and their reactions were sought. There was widespread endorsement of the concepts that provided colour coded age ranges and texture information at each stage. References to sequential ‘phases’ were rejected in favour of ‘stages’. The 1<sup>st</sup> Stage, 2<sup>nd</sup> Stage, 3<sup>rd</sup> Stage wording was not as important as the texture and age information, but nonetheless useful for first-time parents. It is this final concept that received universal endorsement in the second wave of the research, and it is recommended that FSANZ encourages the adoption of labelling that provides the three core elements that make it useful for parents:

- an easy to find texture descriptor;
- a consistent age recommendation, that offers flexibility through an age range; and
- colour coding.

The first two elements are most important to parents when making decisions about what food to purchase between the age solids are started and 12 months. Not all participants in this study were aware of the colour coding system, but all endorsed it as an excellent concept for quick reference and easy product selection (both for themselves and other family members who are sent to purchase baby food).

## **1. Introduction and study objectives**

### **1.1 Background to the research**

FSANZ is an independent bi-national organisation that has the role, in collaboration with other organisations, to protect the health and safety of the people in Australia and New Zealand through the maintenance of a safe food supply. As part of their responsibility to develop and review food standards, codes of practice and guidelines, FSANZ has a need for information to assist in determining the possible labelling requirements (from a consumer perspective) for minimum age suitability for infant foods..

The current requirements for the labelling of infant foods are prescribed in Standard 2.9.2 – Food for Infants of the Australia New Zealand Food Standards Code (the Code). These requirements reflect the previous NHMRC Dietary Guidelines for Children and Adolescents in Australia and the New Zealand Ministry of Health’s *Food and Nutrition Guidelines for Healthy Infants and Toddlers*, recommendation for the introduction of solids between 4 and 6 months. In June 2003, the NHMRC revised the infant feeding guidelines to recommend the introduction of solids at around 6 months of age, creating an inconsistency with the New Zealand recommendation. The release of the new Australian guidelines also creates inconsistency between Australian government policy and current labelling requirements (indicating the age from which the food is suitable, from 4 months).

As a result of these changes, FSANZ is reviewing the minimum age labelling of infant foods so that the labelling reflects the revised guidelines, but also takes into account New Zealand government policy. FSANZ is considering proposing a number of labelling options which require further assessment from a consumer perspective.

Each of the labelling options has strengths and weaknesses depending on how they are interpreted by consumers, and how consumers are influenced by labelling compared to other information sources. The decision by primary carers of when and how to introduce solids needed to be better understood to enable FSANZ to make final recommendations for the revision of food labelling policy.

### **1.2 Broad research objectives**

The purpose of this research was to explore:

- How primary caregivers make decisions around the introduction of solids process;
- The influence of current labelling on these decisions; and
- To assess alternate labelling options for minimum age suitability of infant foods that will ensure appropriate implementation of public policy in both Australia and New Zealand and protect public health and safety.

### **1.3 Specific research questions**

There was a number of specific information objectives stipulated in the Request For Tender, which for the purposes of clarity are repeated below:

1. Whether primary caregivers receive education as to when to give their infants solid foods and if so, from what sources and what information they receive;

2. The role that food labelling plays in decision making and purchase of infant foods;
3. Whether primary caregivers would understand information about physiological cues if it were used as a feeding guideline on labels;
4. Primary caregivers' attitudes and understanding of a phase/stage approach to labelling of infant foods;
5. Whether primary caregivers are more likely to give infants solid foods at 4 months rather than 6 months because current labelling states 'from 4 months';
6. Primary caregivers' awareness of, and the impact of statements such as 'not recommended for infants under the age of 4 months'; and
7. Alternate labelling approaches to the minimum age labelling of infant foods.

The study results (Sections 5-11) are presented in the context of these seven objectives.

## 2. Methodology

The research was entirely qualitative in nature, and consisted of a two stage iterative approach. The purpose of stage 1 was to explore the range of views, beliefs and influences on the introduction of solids and labelling perceptions. Stage 2 was conducted after a feedback and synthesis consultation with FSANZ. This consultation was used to report the findings of stage one, and implement changes to the stage 2 discussion guide to provide further insight into areas of interest to FSANZ.

### 2.1 Group Structure

A total of n=9 focus groups were conducted with mothers caring for children aged 4-12 months in both Australia and New Zealand. Care was taken to ensure a mix of parental experience (first-time or second-time parents) and socio-economic status across all groups. A summary of the groups is presented below.

STAGE	Parental experience	Education / SES	Affinity?	Location
<b>1</b>	1 <sup>st</sup> time parent	Low education / SES	Paired affinity	Melbourne
	1 <sup>st</sup> time parent	Middle – upper education / SES	Full affinity	Sydney
	2 <sup>nd</sup> + time parent	Low education / SES	Full affinity	Melbourne
	2 <sup>nd</sup> + time parent	Middle – upper education / SES	Paired affinity	Sydney

<b>FEEDBACK AND SYNTHESIS</b>				
<b>2</b>	1 <sup>st</sup> time parent	Low education / SES	Paired affinity	Auckland
	1 <sup>st</sup> time parent	Middle – upper education / SES	Paired affinity	Auckland
	2 <sup>nd</sup> + time parent	Low education / SES	Paired affinity	Auckland
	1 <sup>st</sup> time parent	Low education / SES	Full affinity	Sydney
	1 <sup>st</sup> time parent	Mixed education / SES	Full affinity	Sydney

### ***Full affinity vs Paired affinity groups***

There were four full affinity groups included in the study, with the remaining six being paired affinity. The full affinity groups consisted of participants who were friends with one another, in this case, they were members of an established mothers group who consulted each other for advice and support about parental issues. Paired affinity group participants consisted of four friendship pairs that had babies of similar ages.

### ***Education Levels***

Participants with higher and lower levels of education levels were recruited for the research, because education level is a primary determinant of socio-economic status (in addition to income). Previous labelling research has also revealed differences in label use according to level of education.<sup>33</sup>

## **2.2 Sampling & Recruitment**

To ensure quality recruitment services, and compliance with confidentiality legislation, all participants were recruited using IQCA<sup>34</sup> accredited recruitment companies. Where possible, the groups were conducted in a focus group facility with client viewing facilities, and were held at times which were convenient for mothers with young children (i.e. mid morning or mid- afternoon).

In addition to being screened on the criteria in the table above, all participants were mothers of children aged 4-12 months. In each group, there were n=6 mothers with infants aged 4-9 months, and the remaining two mothers were of children aged 10-12 months. Further, all participants purchased or intended to purchase infant food products for their child.

<sup>33</sup> Food Labelling Issues: Qualitative Research with Consumers. FSANZ Evaluation Report Series No 3 and A qualitative consumer study related to nutrient content claims on food labels, July 2003 (as yet unpublished)

<sup>33</sup> Food Labelling Issues: Quantitative Research with Consumers. FSANZ Evaluation Report Series No 4

<sup>34</sup> Interviewer Quality Control Australia (IQCA).



### 2.3 Group procedure

Upon arrival, participants were asked to complete a brief form that recorded the history of their baby's feeding. The session began by talking about the introduction of solids in general, and the Moderator guided the discussion to gradually understand and unpack the steps in the decision process to introduce solids. Brainstorming and individual written tasks were used to uncover an exhaustive list of information and education sources, and the relative influence and importance of each source. The role of labelling in introducing solids was discussed in detail, as well as how participants interpret various minimum age recommendations. Towards the latter part of the group discussion, participants were presented with a range of alternate label concepts for the labelling of infant foods and their reactions to these, preferences and reasons for their preferences were elicited. Label concepts were presented on boards, as well as via label mock ups on a range of product examples.

A copy of the Discussion Guide can be found in Appendix A

#### *Baby sitting*

Babysitters were hired using professional babysitting agencies, to care for infants in a separate room to the group. Participants appreciated this service, and it also served to decrease distractions during the group.

#### *Respondent Incentives*

All respondents were provided with \$50 for participating in the research.

## 3. A Description of Study Participants' Infant Feeding Practices

On arrival, and prior to the commencement of the group discussion, participants completed a brief questionnaire that recorded the current age of their baby, whether their baby was mostly breastfed or formula fed prior to the introduction of solids, the age of their baby when they stopped breast / formula feeding, and the age of their baby when they first introduced solids, or when they intend to introduce solids.

The following summary is provided to give the reader a better feel for the diverse stages of infant feeding that were captured in the study, rather than to provide empirical evidence of infant feeding practices.

#### Group 1 (Melbourne, full affinity)

This group consisted of eight first-time parents with low education. Their baby's ages ranged from 5 to 12 months. Five parents had primarily breastfed their baby. All except two parents were continuing to feed their baby formula or breast milk; those who had stopped (both breast and formula), had at around 6 months. One mother had not yet introduced their baby to solid foods; the baby was 5 months old and she thought she would introduce solids at 6 months. Of those who had introduced solid foods this was most commonly at 5 months, with two at 4 months.

#### Group 2 (Melbourne)

This group of five parents had more than one child and were had achieved higher education levels. The age of their baby ranged from 4 to 10 months (but primarily younger). All parents had breastfed and were continuing to do so. All babies, except for one had been introduced to solid foods and this occurred at 4-5 months old.

### Group 3 (Sydney)

This group of six parents had more than one child and were from lower education backgrounds. The age of the babies ranged from 4 to 11 months. Half had breastfed and the others had used formula. One mother had ceased breastfeeding (at 6 months) and one had ceased formula (at 10 months). All but two babies had been introduced to solid foods, one at 3 months and the others at 4-6 months. The two parents that had not yet introduced solids felt that this would happen at 5 and 6 months respectively.

### Group 4 (Sydney, full affinity)

This group was with six first-time parents with high education, all with 6 month old babies. All but one had breastfed, and most were continuing to do so. All parents had introduced solid foods into their baby's feeding, with most doing this at 5 months, and some at 4 months.

### Group 5 (Auckland)

There were eight first-time parents with higher education in this group, but only seven questionnaires completed. Two mothers were known to have a Maori background. The babies' ages were diverse from 4 to 13 months (but tending to the older ages). One mother had breastfed and given infant formula in equal proportions, but ceased breastfeeding at 3 months. Of the remaining six, half had fed infant formula (and continued to do so) and half had breastfed (with only one continuing to do so, the other had ceased at 9 and 12 months). Five parents had introduced solid food at ages ranging from 3 to 5 months. Of those who hadn't, one mother wasn't sure when she would introduce solid foods and the other thought this would be at 6 months.

### Group 6 (Auckland)

There were seven first-time parents in this group, with lower education levels. Their babies were aged from 5 to 12 months, but most were aged 11-12 months. Two parents declared that they were married to a Maori man, and one other was Maori herself. Four parents had mainly fed their baby infant formula and were continuing to do so. The rest had breastfed, but only one was continuing to do so. All babies had been introduced to solid foods, from 4 to 6 months of aged (mostly 4 months).

### Group 7 (Auckland)

In this group of second-time parents with lower education, the babies' ages ranged from 4 to 13 months. One parent was married to a Tongan, and another two were Maori. All but one mother had breastfed and most were continuing to do so. The one mother who had stopped breastfeeding had done so at 6 months. The mother who had given her baby infant formula stopped at 10 months. All parents had introduced solid foods to their baby, except for the mother with the 4 month old who thought this would happen at 6 months. The parents who had introduced solid foods had done so between 3 and 5 months.

### Group 8 (Sydney, full affinity)

This group of six first-time parents of mixed levels of education had babies aged 4-5 months. Most had breastfed and were continuing to do so. One mother had breastfed and used infant formula equally but had stopped breastfeeding at 4 months. Four parents had introduced their baby to solid foods, around 3-5 months of age. Of those parents who hadn't, one was planning to do this at 5 months and the other at 6 months.

Group 9 (Sydney, full affinity)

This group of six tertiary educated first-time parents all had babies aged 9 to 10 months. Of these two, mainly fed their baby infant formula and were still doing so. Of the four breastfed babies, two parents had now stopped (one at 6 months and one at 8 months). All parents had introduced their baby to solid foods, one parent at 3 months and the remainder at 5-6 months.

Participants also recorded their baby's first non-milk food, and subsequent foods they introduced at monthly intervals. In almost all cases, the first non-milk food introduced was rice cereal. A full list of subsequent foods introduced from 3 months onwards is provided in Appendix B.

## 4. Overall Comments and Observations

### 4.1 General observations

Before the results are presented against the specific research objectives there are some general observations that can be made at a broader level, across all group discussions.

There was a great deal of consistency in the findings across all groups, in both countries, in terms of the way in which parents are informed about introducing solids, their process and pathway through trial and transition to more textured foods, and the role that food labels play in that process. Similarly, participants in the study responded to the labelling issues and concepts in only one of a few different ways, rather than having wide-ranging reactions, and these reactions were not country-specific.

First-time parents differed markedly from second-time parents in terms of their confidence in introducing solids and the attention they place on information sources, but not in the importance they attribute to those sources. Second-time mothers were much more likely to ‘throw the book away’ with their second child, and much more likely to rely on their own experience and instinct, and what worked or didn’t work with their first child.

Amongst the participants in this study, the majority of New Zealand parents introduced solids at 4 months or just before, compared to about quarter of the Australian parents with about half introducing solids at 5 months,. Parents in Australia were mostly aware that the age of 6 months was the recommended target age for introducing solids, irrespective of whether their own behaviour followed this. New Zealand parents however were more likely to refer to the target as an age range of 4-6 months, although acknowledging that 6 rather than 4 months was recommended.

Across the New Zealand groups, participants were much more familiar with the breadth of physiological cues, such as the tongue extrusion reflex, that indicate a baby’s readiness for solids than were participants in Australia (see Section 7).

### 4.2 Limitations of the study

From the onset of the project, FSANZ and the project Reference Group were concerned that the inclusion of parents with babies under 4 months of age might be inadvertently encourage them to introduce solids prior to 4 months of age, or that their involvement in the study might be misinterpreted as encouraging these parents to introduce solids early. Parents with babies under 4 months of age were therefore excluded from the study.

It became evident during the first wave of fieldwork that it was somewhat difficult for some participants to isolate the likely impact and implications of potential labelling changes from their current and previous experience, and the advice of their child health nurse. Given that the majority of participants had introduced solids, and all others had thought about it and discussed it with others, their views about what they might have done or thought in the context of the proposed labelling changes were unavoidably influenced by what they had in fact done, or now knew.

At this point it was identified that, although presenting the ethical dilemma described earlier, the study may have benefited from the inclusion of one or two additional groups with first-time mothers with babies under the age of 3 months (and hence prior to the exposure of unsolicited or solicited advice about introducing solids, whether that be from the child health nurse, family or friends). Alternatively, it was identified that the inclusion of women in late-term pregnancy might also provide a similar ‘uncontaminated’ perspective.

There are several reasons why it was not possible to include this additional group of parents:

- limited project budget which prevented the conduct of additional focus groups via professional recruitment; and
- limited time frame which prevented the conduct of additional focus groups recruited via local maternal health services, which would require ethics committee clearance.

The researcher therefore highlights this area of inquiry as a priority for future research.

## **5. INFORMATION ABOUT INTRODUCING SOLIDS**

### **OBJECTIVE 1: Whether primary caregivers receive education as to when to give their infants solid foods and if so, from what sources and what information they receive.**

The decision about when and how to introduce solids is informed over a period of time, and via a number of solicited and unsolicited sources. These could be considered both formal and informal types of education.

#### *Early influences*

The initial trigger to thinking about introducing solids can occur at several points:

- ante-natal classes, where it is mentioned fleetingly, and usually forgotten until the parent is reminded at a subsequent point;
- whilst in hospital after the birth, via literature given to the parent by the hospital, infant food manufacturers, or parental aids such as the ‘bounty bag’. Once again, for the mother the focus at this time is on mastering breastfeeding, and little attention is paid to information about solids. At this point, some mothers will store the information away for future reference, which may or may not be used again, and for others it will be forgotten until a subsequent trigger causes them to recall this developmental stage, and reinforces it’s importance;
- early prompting by a child or maternal health nurse (at 3-4 months of age), or an older family member, usually the parent’s mother/father or mother-in-law. Often this prompt is given much earlier than the prompt by the child health nurse – as early as 2-3 months of age.

As these initial prompts occur very early on, they are often dismissed by the parent as a lesser priority to the much more immediate issues at hand; labour and breastfeeding.

The issue of introducing solids rises in perceived importance as each of these tasks are resolved<sup>35</sup> and therefore it takes on greater salience as it is reinforced by subsequent triggers and prompts which tend to carry more weight. Parents then move into a more active decision process.

### ***Active decision process***

For most parents in this study, their active decision process around introducing solids commenced with one or a combination of:

- A. Suggestion by their child health nurse, at 3-4 months of age, more likely to be in response to a parent's confusion, distress or uncertainty about their baby's sleeping or feeding behaviour – an indirect and solicited prompt;
- B. Prompting by their child health nurse or community health centre, generally from 4-6 months of age – more likely to be an unsolicited prompt. At least a few parents in most groups mentioned attending a solids course promoted at the child health centre, and in a few cases this was prompted by the nurse at the 3 monthly check:

*“...I just went along to my 3 month check and at the time one of the [name withheld] nurses said they were doing a little group session on feeding your baby and so I booked into one of them and watched a video and had a couple of leaflets and someone just to talk to about what to do, because you do sort of think, well, what do you do?”*

- C. Information and advice in books, magazines and reference materials;
- D. The opinions and behaviour of other mothers – via the mothers' 'coffee group', family or friends with children, and the feeding progress of other babies the same age;
- E. The advice of a parent's own mother;
- F. The need to return to work, at least part-time – this was expressed by only a few participants, who acknowledged they were 'fast tracking' their baby.

Some of the above points are expanded upon below.

### ***Parent's confusion, distress or uncertainty about their baby's sleeping or feeding behaviour can include:***

- Baby's disturbed sleeping patterns – no longer sleeping through the night – often justified because *'he obviously needs it'* or *'he's not getting enough from my breast milk anymore'*;
- Identification of signs of reflux – several parents reported that they had a 'reflux baby' and were encouraged by their child health nurse or GP to start solids as a way of helping to ease reflux;
- Changes in baby's feeding patterns – taking longer to finish a bottle or a breast feed;
- Signs from their baby of showing an interest in food – watching adults or older siblings eat, eyes following food from plate to mouth, reaching for or grabbing food.

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<sup>35</sup> Resolution of breast feeding issues or problems may involve the switch to infant formula.

In these situations, many participants sought the advice of their child health nurse for confirmation of readiness for solids, however there were also parents in each group that decided to start solids based on advice from mothers in their mothers group, or their own mother, without confirmation by a child health nurse. In these cases the parents had started during or just before 4 months.

*“for me, it wasn’t any sign, I just thought I’d heard that at about four, four and a half months was about the time to start off and so I decided to give it a go and she seemed to know what to do.”*

There were also participants who were prompted to introduce solids by their child health nurse at this point – a greater number in the New Zealand groups than in the Australian groups, however cases such as this did occur in both study locations:

*“[name removed], he was not a good sleeper, still isn’t, and the [name removed] nurse actually suggested I should try some baby rice to see if that would help take him through the night. It didn’t work though but that’s why I started on 4 months and didn’t wait later.”*

There was no agreement, and much confusion as to whether these signs were correct indicators of readiness for solids. In most groups there was at least one participant who felt they had introduced solids prematurely as a ‘quick fix’ to solving sleeping or feeding problems, which had not resolved with introducing solids. At the same time, most groups also included participants with babies for whom this had worked, and thus the introduction of solids was contested as the solution to the problem.

First-time parents were more likely to rely on their baby showing interest in food as a cue for readiness for solids, and expressed strong concern about doing ‘the right thing’ by their baby, and guilt about depriving their child by holding solids back – particularly if they felt their child was showing strong signs of readiness from 4 months or earlier and their child health nurse was advising them to wait till closer to 6 months. Their concerns were two fold:

- That they might be depriving their child of food – a hunger issue; or
- That they might be holding their child back from an important milestone, which may well be a window of opportunity that, if missed, could have longer term detrimental consequences – a developmental issue.

There were a couple of parents however who were still contemplating introducing solids (baby aged around 4.5-5 months) and had observed signs of interest in food in their child, but wondered if this was just their baby showing an interest in lots of different adult behaviours, including eating. These mothers challenged the assertion that these signs were automatic cues to readiness for solids.

Second-time parents were more likely to be led by physiological cues (see Section 7). Some second-time parents also claimed, and others agreed, that their second child was ready for solids well before their first child because in the parent’s opinion, their baby was modelling on their older sibling’s eating – *“she wants what he’s got”*.

### ***Books, magazines and reference materials***

Reference materials were more frequently mentioned, but not limited to, the groups of higher educated parents. Popular books included Robin Barker's 'Baby Love' (frequently mentioned in Australia); 'What to Expect in the First Year', 'Baby Wrangling', 'New Zealand Baby and Toddler' and the Plunket 'Well Book'. Baby magazines were more often but not exclusively mentioned by parents with lower levels of education. Other useful information materials included the Heinz feeding chart fridge magnet; Heinz booklet given out in hospital, as part of the 'bounty bag', or at the child health centre; and to a much lesser extent, articles in women's magazines.

### ***Relative importance of information sources***

The introduction of the solids decision process involves both consciously and unconsciously evaluating solicited and unsolicited, trusted and less trustworthy advice and information. This information is filtered by the parent by attributing importance to each source and piece of advice, and the process generally extends over the period of a few days to a week before solids are first introduced, or a decision is made to delay until their baby is older.

After discussing all of the various sources of information and advice about introducing solids, participants were asked to individually rank each source in terms of how important they regarded each to be, from highest to lowest.

The most important or trusted sources of information and advice are:

- The child health nurse (or Plunket nurse in New Zealand), who is seen as entirely credible, trustworthy and is regarded as the 'specialist', compared to other health professional such as a GP or paediatrician;
- Books and magazines;
- The 'mother's group' – which is regarded as more important and helpful for the parent than advice from other friends or family, even if they have babies the same age; and
- For some participants only, one's own mother.

The least important or trusted sources of information and advice are:

- Mother-in-law;
- Chemists, GPs and Paediatricians – because they less accessible rather than being less credible;
- Internet websites
- Help & support organisations, such as Tresillian, Karitane;

Occupying the 'middle ground', in terms of perceived importance, were sources such as:

- Food labels;
- Information given in hospital, particularly the 'bounty bag'
- Introducing solids courses;
- Coles Baby Club information;



- Family, friends and other mothers
- TV programs – such as a recent ABC Reality Bites series, and segments in lifestyle programs;
- TV advertising – mentioned in Auckland only, where many participants talked about a recent Plunket & Watties television ad ‘when to start your baby on solids’.
- Heinz information.

Food labels were not mentioned spontaneously in any group as a source of information or advice, and thus made their way onto the list after prompting by the Moderator. However, when prompted, most participants acknowledged that labels offered some level of assistance in selecting foods, but did not play a role in their decision about when to first introduce solids, or what to introduce first. This issue is discussed in detail in Section 6.

First-time parents were much more likely to trust the advice of the child health nurse implicitly, and take her advice without question, particularly if the parent felt comfortable with the nurse and had developed a trusting relationship early on. There were a few instances where first-time mothers had not liked the nurse they saw first, and objected to the advice/information they were given, or the way in which it was given. In these cases, a couple of parents had simply abandoned using a child health nurse, except for essential ‘check up’ milestones, and the rest had switched to another child health nurse, on recommendation from the mothers’ group. There was a strong understanding amongst most of the focus groups that one could ‘shop around’ for a child health nurse that was preferred for personality or convenience reasons.

Similarly, first-time parents were more likely to trust books and reference materials, and filter their information through their mothers’ group. Second-time parents were more likely to ‘throw the book away’. These parents mostly felt confident with their second or third child, and reported that they had introduced solids at a time when they judged their baby was ready. Readiness was more likely to be described around definite physiological or developmental cues, and these parents often used terms such as “*you just know*” or “*your baby let’s you know*”.

### ***Reasons for delaying solids***

In each groups discussion there were one or a number of parents that had observed speculated signs of readiness for solids, but chosen to delay the introduction until their baby was closer to 5 or 5.5 months (usually their intention was to wait till 6 months). Reasons for delay were both practical and emotional, and mostly expressed by breastfeeding mothers:

- For breastfeeding mothers who had a well-established routine and the convenience of ‘portability’ that breastfeeding offers, there was an acknowledgement that breastfeeding was ‘so easy’ and they wanted to enjoy it a bit longer;
- A mother’s reluctance to progress to another significant milestone that signifies that their baby is getting older, and grief associated with no longer solely breastfeeding;

Many breastfeeding and infant formula feeding parents had experienced disrupted sleeping patterns (for them and their baby) at the time when they were also contemplating introducing solids. Some of these parents expressed as another reason for delaying solids their reluctance to tackle solids, which they anticipated to be a difficult task, at an already difficult time.

## 6. ROLE OF FOOD LABELS

### **OBJECTIVE 2: The role that food labelling plays in decision making and purchase of infant foods.**

Label information is used differently by parents – some parents regard the label as more useful or important than others, relative to their other information sources, and parents also place importance on different types of label information.

All focus groups were consistent in that they regarded the food label as helpful and important in the purchasing of infant foods, once solids had been introduced, but that the label did not have any bearing on their decision to start solids. Most described the baby food aisle in a supermarket as foreign territory until they were buying baby rice cereal for the first-time, having now made the decision to start solids.

There were a few exceptions where overly curious parents with babies aged 2-3 months had wanted to explore their options for solids for later on – in these cases they had taken the minimum age information (from 4 months) very seriously. Whilst these parents were not necessarily intending to start solids at this point in time, the result of their inquiry had one or both of two consequences:

- the age information ensured that they delayed introducing solids; and/or
- the ‘from 4 months’ age recommendation was cemented as a ‘target’ age to aim for.

The minimum age information on food labels also became very important to first-time mothers when faced with pressure from their own well-meaning parents or friends who promoted solids much earlier than is now recommended:

*“...that’s the first I look at because if it’s not in his age group I don’t look any further, so that’s the first thing in my brain, and that’s I think what stopped me, because everyone was saying to me, ‘you know, he’s 3 months but you could try him on a bit of farex’, and I said ‘no, the label says 4 months’, and I stuck to that because the label said so’.*

Label information became much more useful for many parents when they began to regularly buy infant foods. The types of information most frequently mentioned as useful were:

- **Content/ingredient information** (usually mentioned first) – this was important to most parents, who were concerned about nutritional content and wanting to avoid products with salt and sugar. Some parents wanted to ensure the ‘naturalness’ of the product, and avoid starches, additives and preservatives, or ingredients that could be food allergens such egg. Many parents were also seeking to establish how many different foods were included – looking to buy just single foods rather than combined foods, or vice versa;

- **Brand and price** – based on individual preference;
- **Age information**;
- **Texture information** – smooth, pureed, chunky etc;
- **Colour coding** – only some parents were aware of this, but those that were referred to foods as ‘blue foods’ or ‘red ones’ and were aware that colours were aligned with ages.

Either age or texture information was very important to almost every participant – most tended to be guided more by one than the other, although some parents used one in conjunction with the other to confirm a purchase decision. There was no consistent preference for one of these two types of information over the other. The implications of this are discussed in more detail in Section 10 when reactions to alternate label concepts are reported.

Label information increased in usefulness and importance when it was used to guide a parent to move from one food ‘stage/age’ to another – i.e. moving from ‘blue’ foods to ‘red’ foods to ‘green’. Although there were a few exceptions, most participants and first-time parents in particular, took the age information very seriously and reported that they had not, or would not, move to the next food age until their baby had reached that age. This was viewed as more critical when starting 4 month foods, and moving to 6 month foods. For more confident or less concerned parents, adhering strictly to the minimum age recommendation was less critical from 9 months onwards. As parents became more confident introducing new foods and textures, they were more likely to be guided by the texture of the food, and texture information on the product, rather than a minimum age recommendation.

The only circumstance in which label information was likely to influence a parent’s decision making about when to introduce solids was revealed by a small number of participants who had been given infant food products, such as a box of rice cereal or a jar/tin of pureed fruit by friends or via product samples in hospital or by joining clubs such as the Coles Baby Club, or from baby expos. These parents had observed the ‘from 4 months’ recommendation on the front of the product and stored the foods in their pantry for later use, which had inadvertently served as a visual reminder and ‘countdown’ to when they could begin to use these foods. For a couple of these participants, they were eagerly waiting ‘the big day’. However another parent with a 5 month old felt emotionally compromised as she was endeavouring to hold off introducing solids until closer to 6 months and was wrestling with a sense of guilt about potentially depriving her child every time she opened the pantry and saw the ‘from 4 months’ label. At this point several other parents indicated they had experience similar feelings when they had been given baby foods before their baby was ready for solids, and storing those foods in the pantry served as a constant call to *‘hurry up and feed your baby’*.

Whilst the obvious solution to this dilemma would be to simply remove the product from the pantry, this scenario illustrates the potential power of the minimum age recommendation in influencing the decision making process.

Label information also assisted parents by providing alternate suggestions of what to feed their baby, and when. Many participants reported using the ingredient information, the label pictures and observing the jar contents to give them ideas of what foods or combinations of foods they could prepare at home.

## 7. PHYSIOLOGICAL CUES

### **OBJECTIVE 3: Whether primary caregivers would understand information about physiological cues if it were used as a feeding guideline on labels**

Participants in the New Zealand groups were much more aware of a range of physiological cues for readiness for solids than Australian participants (although New Zealanders did not use this language, referring instead to ‘signs’ or ‘signals’). Parents in the higher educated groups (in both Australia and New Zealand) were also more familiar with multiple physiological cues and referred to them when describing how one knew when their baby was ready for solids.

Parents in the lower educated groups in New Zealand and more generally in Australia were likely to attribute this knowledge to mother’s instinct or to rely on only the more obvious signs of readiness - their baby showing strong interest in food or disrupted sleep patterns, and did not mention other physiological cues as often.

In addition to the obvious signs described above, more knowledgeable parents mentioned additional signs such as the baby putting its fingers/hand in its mouth and making sucking or swallowing movements when hungry. The disappearance of the tongue-extrusion reflex was mentioned frequently in the New Zealand groups – often using that term precisely, and at other times described as babies stopping ‘*the tongue extrusion thing*’ or their baby no longer ‘*poking their tongue out to feed*’. Reference to this physiological cue as a sign of readiness was referred to by very few Australian participants, and most of them were second-time parents.

No participants mentioned other cues of baby holding its head up, or tongue action that would support swallowing. Furthermore, participants in either country generally did not appear to understand that the overall assessment for ‘readiness’ should be based on a combination of physiological cues – cumulative evidence. Rather, most had been led by one or two signs only – generally their baby’s interest in food and for more knowledgeable mothers, a matured tongue action.

When the physiological cues were discussed in more detail, almost all participants across both levels of education showed capacity to understand and recognise the range of physiological cues. However most were sceptical that this kind of information could be provided on a food label in sufficient detail for them to feel confident about interpreting physiological cues and assessing readiness. Many would felt they would be likely to continue to rely on only one or two dominating cues, and would need clarification to understand the less obvious cues.

For parents who more frequently visited their child health nurse, any label information about physiological cues would be discussed or clarified at those visits. From the researcher’s point of view, whilst coded or symbolic information about physiological cues would help to reinforce child health nurse advice, or perhaps prompt questions from parents, on its own it may add to confusion or misinterpretation. It is difficult to see how physiological cue information on foods could work without additional and consistent education strategies used by nurses and solids courses, and reference books that some parents use.

## 8. 'FROM 4 MONTHS' VS 'AROUND 6 MONTHS'

### **OBJECTIVE 5: Whether primary caregivers are more likely to give infants solid foods at 4 months rather than 6 months because current labelling states 'from 4 months';**

There was considerable and consistent self-reported evidence from the groups in both countries that a '4 months', 'from 4 months' or 'from 4-6 months' food label encourages the introduction of solids closer to 4 months, rather than closer to 6 months. Many participants felt that, on reflection, had first stage (blue) foods been labelled 'from 6 months' they would have reconsidered, and probably delayed introducing solids by a few weeks to a month or more.

As reported earlier, the minimum age information on food labels also became very important to first-time mothers when faced with pressure from parents or friends to offer solids much earlier than is now recommended. For many participants, the 'from 4 months' label was used to justify to others the delaying of solids until 4 months. Many of these felt that had the label advised 'around 6 months', they would have tried to delay solids even further.

This part of the research was somewhat limited by the fact that the majority of participants had already introduced, or seriously contemplated introducing solids. Therefore, in asking participants about the likely influence of the 'around 6 months' label, they were speculating about what they would have done, with knowledge and experience behind them, rather than what they would do. It is also difficult to isolate the influence of the label age from the advice received from the child health nurse, reference books and the influence of family, particularly parents' own mothers. Often several sources are used concurrently, highlighting the importance of consistent recommendations from each of these sources.

In the future, when a first-time parent is exposed to an 'around 6 months' label on first foods, and receives no conflicting advice from trusted sources that challenges the label information, it is highly likely that she or he would resist introducing solids until as close as possible to 6 months, depending on their understanding and timing of their child's physiological cues.

However, for participants in this study, the speculation raised concerns about how both baby and mother would have coped had baby been showing obvious signs of readiness close to 4 months. For most parents in the study, familiar with an 'approved' solids start of 4-6 months, the gap between 4 months and waiting till 6 months seemed too long to contemplate and unfair on their baby.

Participants were asked to interpret the meaning of each of the age recommendations in turn.

#### **From 4 months**

The general and consistent interpretation of a 'from 4 months' label was that it meant definitely not before 4 months. How long after 4 months was then debated by participants. Some less confident first-time mothers viewed this as a precise recommendation to be adhered to exactly. They had delayed introducing solids until 4 months even though they felt their child was showing keen interest in food and was hungry prior to that age.

Most participants felt that the only circumstances in which it would be acceptable to introduce solids prior to 4 months, in the face of a ‘from 4 months label’ was if a baby was not gaining weight, or was a very big baby with greater feeding requirements that could not be satisfied by breast/formula milk alone. In each case, confirmation from the child health nurse would be sought.

There were also several instances where participants interpreted the ‘from 4 months’ recommendation on the label as pertaining just to that particular commercially prepared food, not as a general recommendation for infant feeding. Several spoke not about themselves but of other people they knew, who were less educated, of different ethnic backgrounds such as Pacific Islanders, Tongan, and Maori, not engaged with the mainstream child health nursing system. Their view was that for some of these people the introduction of solids closer to 3 months was well-entrenched, and label advice would have no influence on when home-prepared first foods, such as taro, were introduced.

### **From 4 - 6 months**

Label advice that gave an age range was preferred by most participants, however this was based on their current knowledge and understanding of minimum age recommendations for introducing solids.

Many participants who had already introduced solids reported that, on reflection, they felt that label information that gave a 4-6 month age range would have encouraged them to aim further away from the 4 month mark. Given this age range and asked how this might have influenced when they started solids, participants generally nominated one of two revised ages – a mid-way point at 5 months, or that they would strive for closer to 6 months.

This age range was preferred because it was viewed as more realistic; giving parents more leeway for trial and error, without causing them or others to judge their baby’s ability at taking solids.

### **Around 6 months**

Not surprisingly, it was difficult for some participants to retrospectively say what they would have done had they been faced with first foods labelled ‘around 6 months’. Seeing it as label information for the first-time (via label mock-ups on boards and sample products), ‘around 6 months’ was interpreted to mean aiming for 6 months, with 2-3 weeks leeway on either side. In the context of this age being the first age on food labels, introducing solids at closer to 4 months was viewed as highly inappropriate. Based on the reaction and views of participants in this study, it is unlikely that most parents would contemplate solids before 5 months if there were no other information sources giving them counter information or advice (friends, mothers, child health nurses).

There were quite a few first-time mothers that found the ‘around’ wording far too ambiguous for their needs, and did not feel confident that their interpretation of ‘around 6 months’ was correct or appropriate for their child. In this situation, they would seek out their existing advice sources to assist them (child health nurse, mothers group, books etc).

*“I think if I was doing it all over again and I got given this age I would have to ring up and say ‘well, it says around 6 months, is that 4 months, 5 or ??’, you know, I’d have to ask somebody”.*

However coupled with this view was the opinion of more confident mothers who found the absence of an 'exact' age recommendation reassuring as it did not set up a parent or baby for failure or judgement if their baby was not ready for solids at the prescribed age. This was important in the highly competitive environment of mothers groups and often critical family input.

Many parents in this study were concerned about how they would have made a decision, or indeed future mothers will decide, in the likely event that the confirmatory advice they received was dismissive of the 'around 6 months' age, and promoted an age closer to 4 months (as had been the case for many participants in this study).

Some parents and second-time parents in particular, were aware that the introduction of solids was an important contributing step towards speech development. Here they faced deep concern that an 'around 6 months' label was potentially harmful to a baby who might be deprived of solids if its window of opportunity for early speech development is far earlier than 6 months.

Parents who were very familiar with the colour coding of 4, 6 and 9 month foods were also concerned about how they would know when and how quickly to graduate from first foods (rice cereal, pureed fruit and vegetables) to more textured foods (formerly known as 6 month foods) and what the difference between those foods would now be. This led to the presentation by the Moderator of alternate new label concepts and discussion amongst participants' about their reactions to them (see Section 10).

## 9. AGE WARNING STATEMENT

### **OBJECTIVE 6: Primary caregivers' awareness of, and the impact of statements such as 'not recommended for infants under the age of 4 months'.**

In the context of the new 'first food' age label stating 'around 6 months' (using the product mock-ups), participants' attention was drawn to the warning statement 'not recommended for infants under the age of 4 months'. In each group one or two participants had already noticed the warning statement and asked for clarification about whether the statement would remain on 'around 6 month' foods.

Before allowing the discussion about the dual-age information to unfold, the Moderator firstly inquired about participant's awareness of the warning statement, the value that they placed on it, and what they interpreted it to mean.

Very few participants in each group had noticed the warning statement, which is invariably located on the back of the product, prior to the attendance at the group. About a quarter to a third of each group noticed the statement when the mock up products were passed around earlier in the discussion. When asked what, if any, difference there was between the two different pieces of information about age, the statement was consistently interpreted as much stronger advice, or 'a warning' from the manufacturer, rather than just a guide. There was a clear understanding amongst the majority of participants that the statement was about safety or health issues.

The warning statement, in conjunction with the 'around 6 months' label, was mostly interpreted to be giving an indication that it was ok to use the product from 4 months of age, but that it was not obligatory. However for some participants, there was a great deal of confusion about which age they should rely on, and the presence of the warning statement age caused them to re-think their earlier strong leaning towards a 6 month target for introducing solids.

*"I think it's confusing, I don't know why it's saying 'around 6 months' and then having a statement that says 'not under four', it's like, make up your mind!"*

*"If they feel that babies shouldn't have solids before 6 months, the fact that they have food that says 'from 4 months' makes you think, 'well that's fine, that's what's accepted, you can give your baby food from 4 months'"*

Based on the reactions of participants, there is also some risk that the warning statement would be used to rationalise introducing solids closer to 4 or 5 months when a parent felt that the baby's need for solids (based on the known cues described earlier) was acute. Nonetheless, most participants felt that during product purchase, it was the front of the product and therefore the 'around 6 months' label that they would notice first and pay most attention to.



## 10. ALTERNATE LABELLING APPROACHES

**OBJECTIVE 4: Primary caregivers' attitudes and understanding of a phase/stage approach to labelling of infant foods.**

**OBJECTIVE 7: Alternate labelling approaches to the minimum age labelling of infant foods**

Through a controlled exposure process, participants were shown a range of label concepts over the two waves of the research. Reactions to concepts shown in Wave 1 were used to refine and develop concepts that were presented in Wave 2.

Wave 1 concepts were developed by FSANZ and included versions with 'stage' versus 'phase' references, with and without age information:

<b>1st Stage</b>	<b>2nd Stage</b>	<b>3rd Stage</b>	<b>1st Phase</b>	<b>2nd Phase</b>	<b>3rd Phase</b>
Pureed	Mashed	Chunky	Pureed	Mashed	Chunky
<b>1st Stage</b>	<b>2nd Stage</b>	<b>3rd Stage</b>	<b>1st Phase</b>	<b>2nd Phase</b>	<b>3rd Phase</b>
around <b>6 months</b>	from <b>7 months</b>	from <b>8 months</b>	around <b>6 months</b>	from <b>7 months</b>	from <b>8 months</b>
Pureed	Mashed	Chunky	Pureed	Mashed	Chunky

The presentation of concepts using colour coding was included so as to reflect how infant the main infant food manufacturers currently label infant food age categories. However, variations to the colour coding were not tested in the concept variations, either at stage one or two, because it is not FSANZ's intention to prescribe or enforce this characteristic of the label.

## **Phases**

Reactions to the phases versions were consistently negative and universally rejected by the first four focus groups in favour of the stages versions. The word ‘phase’ was seen to have overly negative connotations that conjured up undesirable images amongst parents.

*“It sounds like you’re going through a phase”*

*“It’s a word my mother-in-law would use!”*

*“It makes it sound like a fad”*

The word ‘phase’ was not one that parents readily related to baby development and did not resonate with the majority of participants in the study.

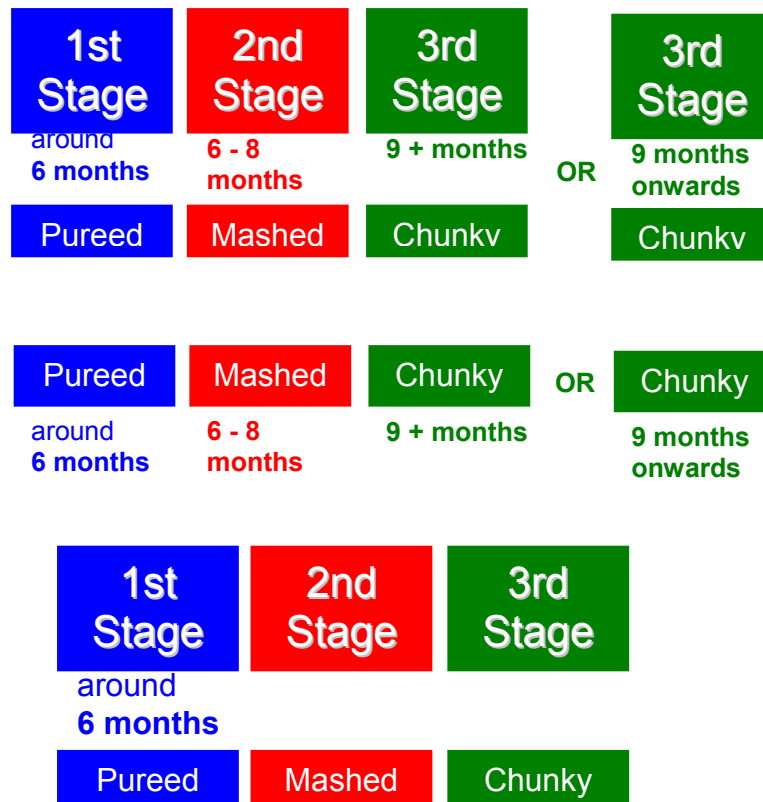
## **Stages**

The stages versions, as a whole, were universally preferred over the phases versions. In contrast ‘stages’ had much more positive connotations and was suggestive of the progressive steps that a baby takes, referred to as ‘stepping stones’ by many parents.

However there was no agreement of the usefulness of the word ‘stage’ relative to the age and texture information in the label concepts, and for some the ‘stages’ word lost some of its appeal as the discussion unfolded and participants began to give the concepts more thought. There were a couple of parents in each group for whom the ‘stage’ wording was not relevant and they became confused trying to work out what the word ‘stage’ actually meant.

It was concluded in Wave 1 that while the stage information was useful for some parents, it was not integral to the overall appeal of the concept – most participants found the clarity and structure of the other information (age and texture) more useful. The appeal of the ‘stage’ reference was therefore re-examined in Wave 2.

For those that relied heavily on the age information, the suggested ages in the Wave 1 concepts were regarded as too narrow and prescriptive by many participants, both first-time and second-time mothers. The age information was viewed by some as most useful at the first stage, but there was no clear preference for the ages at the second and third stages. Based on these findings, the concepts were revised and three new versions were presented at Wave 2 (see over page).



Reactions to the age ranges presented in these versions were much more positive.

The first two differed only by the wording used the 9 month age – 9+ months or 9 months onwards. There was a slight preference for 9+ months, but most parents agreed that it made little difference to them and could be determined by what fitted or looked better on the final label.

Parents universally endorsed a ‘texture approach’ to each stage. There was also definite and consistent preference for age information at each texture stage. First-time parents were more insistent about the value of age information, however second-time mothers also spontaneously advocated for age information for the benefit of first-time mothers. Most second-time mothers reported that they did not rely on the age/texture information on the label as critically as they did with their first baby, and many first-time mothers with older infants (9-12 months) also acknowledged that whilst age information was vitally important to them with their first child, they doubted they would refer to it as much the second-time around.

Participants were also in agreement that an age reference should be provided at each texture stage, not just the 1<sup>st</sup> stage as this was needed to guide them through the transition to more textured foods.

Almost all participants in Wave 2 endorsed the age ranges suggested in these label concepts, and were highly complimentary about the clarity and usefulness of information being provided. One of the strengths of this concept was that the age ranges provided for the individuality of a baby’s feeding progression and offered mothers flexibility to transition to more textured foods without guilt or pressure.

Over the whole study, there was no clear preference for keeping or excluding the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> Stage reference. Second-time parents were less likely to insist on the need for stage information and whilst first-time parents did not view the stage reference as being as useful or important as the age and texture information, most felt it was nonetheless better to have it there than not. The inclusion of the stage reference had indirect benefits to mothers, such as being an easy way to direct husbands and relatives to shop for the right food for their baby at any point in time, as well as assisting sleep and time deprived mothers to quickly select products from the supermarket shelf.

Although the labels used are in concept stage only, and may not be adopted by product manufacturers it is worth noting that the majority of participants commented about the usefulness of the second texture stage - 'mashed' - and commented on the current difficulty in finding foods with a texture between very smooth (pureed) and chunky.

## **11. Information and Education Issues**

The change of minimum age for 'first' foods (i.e. to 'around 6 months') will have significant implications for first-time parents if they are concurrently exposed to conflicting advice from other trusted sources:

- Child health nurses;
- Reference materials; and
- 'Earlier' generations of mothers.

Whilst second-time parents may also experience confusion or conflict as they assimilate the 'old' label with the 'new, this is less likely to be problematic because second-time parents are significantly more confident about introducing solids.

In the context of the new label, parents reported a need not for additional information, but for consistency with the advice they receive from other key sources. First-time parents made a number of suggestions of where and how such information should be made available:

- The child health nurse and the information given out by the nurse, the community health centre, and courses run by the centre;
- Popular books and magazines;
- Supermarket shelf-talkers – leaflets that parents can tear off the baby food shelves;
- Pamphlets in GP waiting rooms and other health specialists;
- Fridge magnet information guides from product manufacturers;
- Hospitals, such as the bounty bag
- Baby expos
- Mothers and parenting websites - particularly chat style sites

There were no suggestions for additional information on the label, per se; participants acknowledged early in the discussion that it would be very difficult for manufacturers to fit more information on the label that in many cases was already congested. Their preference was to be able to readily access this information at the point of sale, such as via shelf-talkers and tear off leaflets in the supermarket aisle.

In addition, every group advocated for wider community information dissemination of the new label recommendations so as to reduce the extent of conflicting advice given by family members, friends, and 'earlier' generations of parents. Television advertising was regarded as the best way to reach these audiences, and many participants in New Zealand cited the Plunket/Watties television ad as a good example.

Obviously the implications of the changing label are far greater in New Zealand where mothers are almost certainly likely to receive conflicting advice between the nurse and the new food label. Advice from the nurse will need to be tailored and in the context of the 'around 6 months' label.

Advice sources could also be more helpful if consistent information was given out that explained why the age recommendations have changed, and presented the case for delaying solids to closer to 6 months in a way that is more easily understood by parents.

# APPENDIX A: DISCUSSION GUIDE

- 1 *WELCOME & INTRODUCTION* (5 MINS)
- 2 *ROUND TABLE INTRODUCTIONS* (5 MINS)
  - Baby feeding history
- 3 *DECISION PROCESS* (30 MINS)
  - Initial need to introduce solids & prompts, developmental cues
  - Information search, most/least important sources (+ written exercise) – where labels fit
  - Trial & outcomes – process of introducing solids
- 4 *LABEL INFORMATION* (10 MINS)
  - Role of labels in decision making
  - Awareness of age feeding recommendations
  - Role of age/texture information
- 5 *MINIMUM AGE RECOMMENDATIONS* (20 MINS)
  - Awareness, understanding and impact of:
    - 'From 4 months;
    - 'From 4 to 6 months'
    - 'Around 6 months'

## 6 PROPOSED LABEL CHANGES

(15 MINS)

Show concept boards (rotate order).

### Wave 1:

- Stages, no ages
- Stages, and ages
- Phases, no ages
- Phases, and ages

### Wave 2:

- Stages, ages (9+) and texture
- Stages, ages (9 onwards) and texture
- Ages and texture, no stages
- Stages, age for Stage 1 only, and texture

### FOR EACH

- Initial reactions
- Label interpretation, link to developmental stage
- What does 'stage' mean? PROBE for 1<sup>st</sup> stage, 2<sup>nd</sup> stage, 3<sup>rd</sup> stage?
- Likely use and impact on decision making
- Comparison to the existing label - more/less confusing? Helpful?
- Preference

## 7 WARNING STATEMENT

(5 MINS)

- Unprompted & prompted awareness
- Reactions and interpretation

## 7 EDUCATION ISSUES

(5 MINS)

- Other information needs & sources
- Most effective communication channels, methods, locations, publications, influencers etc.

THANK AND CLOSE

## APPENDIX B

Age of Introduction	Foods		
		*	*
3 months	Pureed fruit and veges Baby Cereal Pumpkin Fruit Cereal Banana		Apple Pear Sweet Corn All veges Meats
4 months	All 4 month baby cans Apples Avocado Banana Beef Carrot Cereal Chicken Lamb Lamb and veges Mango Pear	x 2 x 4 x 2 x 3 x 2 x 2 x 2 x 2 x 2 x 2 x 2	Potato Pumpkin Pureed apple and pear Pureed veges and fruit Rusks Single veges Stewed apple Sweet potato Sweetcorn Vanilla Custard Veges
5 months	Apple Baby cereal Baby juice banana Breads Carrot Courgette Custard Heinz Banana custard Heinz fruit custard Pasta Pear	x 3 x 3 x 2 x 2 x 2	Potato Pumpkin Puree fruit Ricotta Soft pieces of fruit Some red label foods Tinned dairy food (relative to age) Tinned food Tinned foods with 'lumps' Veges Veges and fruit Yoghurt
6 months	apple apricot and semolina avocado baked beans banana brown rice carrot cereal cheese chicken creamed corn Dairy fish fruit lamb Lambs fry and bacon mango mashed jars Meats	x 3 x 3 x 3 x 4 x 4 x 4 x 5 x 5	parsnip pasta potato pumpkin pumpkin, potato and beef pureed fruit and veges ricotta risotto rusks silver beet squash Steak and veges sweet potato tinned meals Toast tomato veges wheat products yoghurt zucchini
7 months	cheese chicken dairy foods eggs fish fruit (pureed & stoned)	x 3 x 2	Meat (red) prepared foods (eg Watties) toast tuna veges (mashed) yoghurt
8 months	bread cheese chicken citrus custard finger foods fish fingers fruits meats pureed vegetables	x 2 x 2 x 2 x 2 x 2 x 5	rice rusks sandwiches soy milk tinned foods with 'lumps' tuna vegemite weetbix weetbix yoghurt
9 months	meat finger food biscuits strawberries chicken	x 2	pasta bread olives cherries
10 months	cheese meat fish fingers	11 months	crackers & biscuits cooked veges (large)

\* Denotes the number of occurrences of this food as a response



### Summary of Research with Australian Health Professionals

In November 2003, FSANZ contacted a total of 15 Australian health professionals or policy officers from Australian jurisdictions (see Attachment 4a) to participate in a one-off telephone interview. The purpose of the research was to:

- assess the level of awareness of the revised NHMRC's recommendation amongst health services/professionals working with the parents/caregivers of infants; and
- determine how 'around 6 months' is being interpreted and practically applied by health services/professionals when educating parents/carers on infant feeding.

The findings of the research would be used to assist FSANZ in progressing Proposal P274 – Review of Minimum Age Labelling of Foods for Infants.

#### Research findings

##### *Levels of awareness*

All interviewees were aware of the recent changes to the NHMRC guidelines; only some had obtained copies of the revised publication.

##### *Interpretation of 'around six months'*

The statement 'around six months' was being interpreted in several different ways both within, and between, jurisdictions. These interpretations included:

- advising of before 6 months but after 4 months if required;
- 4-6 months;
- 5-7 months;
- 6-7 months;
- 5-6 months;
- around 6 months depending on individual infant;
- around but not '6 months per se';
- 6 months but earlier if the signs are there; and
- 6 months plus or minus two weeks (but NOT 5 months).

##### *Preferred approach*

'Stages with ages' was the most preferred approach, as the label space would not allow sufficient information regarding developmental cues for a stages only approach. There were also concerns that using stages only may be difficult for poorly educated parents, who are also more likely to introduce solids early, to interpret. One respondent preferred an age statement of 'around six months' on first foods only noting if subsequent foods were labelled with ages and the introduction of solids occurred later there was a potential risk that some mothers could skip one stage. Although physiological cues are harder to interpret for parents, one respondent commented that this approach would not impact on breast-feeding rates.

A 'Stages' approach was considered to be less prescriptive but an 'age' approach was considered somewhat clearer. Some interviewees voiced concerns that parents who considered their infants to be developed may in fact misinterpret cues.

### **Not before 4 months**

There were mixed feelings in relation to warning statement 'not before 4 months' but the overall conclusion was to retain the statement for safety reasons. It was also noted that this statement could portray the message that feeding after the age of four months is acceptable. A few respondents believed that the statement was contrary to the guidelines.

### **Additional issues**

#### *Formula fed infants*

Some interviewees considered that the guidelines were not as appropriate for formula fed infants as breast fed infants and were giving individuals information accordingly. Others were recommending delaying the introduction of solids until 6 months of age regardless of feeding regimes.

#### *Lack of implementation plans/guidance*

There was a concern among several respondents that the guidelines did not fully explain how to implement the guidelines and did not provide a 'plan' for introducing solids. There was also concern that it was going to take a very long time to introduce foods when a new food was being given every 5-10 days.

#### *'Missing the opportunity'*

Concerns were also expressed about infants who were not being given solids until too late and that the 'window of opportunity' was being missed, making the feeding of solids difficult in the long term.

#### *Nutritional compromise*

More than one respondent mentioned the issue of nutritional compromise particularly in relation to iron.

## List of Telephone Interviewees (15)

<b>Name</b>	<b>Jurisdiction</b>
Leanne Albright	Australian Capital Territory
Bethanie Allanson	Western Australia
Gail Clee	Northern Territory
Lindy Danvers	New South Wales
Kay Gibbons	Victoria
Veronica Graham	Victoria
April Hyde	New South Wales
Natalie Jones	Australian Capital Territory
Robyn Leeson	South Australia
James Maclachlan	Tasmania
Peta Picton	Queensland
Jane Raymond	South Australia
Jean Shaw	Tasmania
Judith Wilcox	Queensland
Julie Williams	Tasmania

## **External Advisory Group – Terms of Reference**

### **P274 - Review of Minimum Age Labelling of Foods for Infants**

The purpose of the External Advisory Group (EAG) is to:

1. enable EAG members to provide advice and expertise, specifically in relation to the labelling of infant foods, as part of the consumer qualitative research component of P274;
2. Assist in the development of a draft discussion guide, to be prepared by TNS Social Research for use with focus groups;
3. Consider and provide feedback on the preparation of the draft and final reports, to be prepared by TNS Social Research, over the duration of the focus group consultations;
4. Following the completion of the qualitative consumer research, the EAG may again be asked to consider issues raised in order to progress the development of the P274 Draft Assessment to be prepared by FSANZ for public consideration.

In undertaking the above, members should disclose to the Group and FSANZ any conflicts of interest, and maintain confidentiality of all activities, draft and final versions the discussion guide and draft and final versions of reports, unless stated otherwise by FSANZ.

#### **Conflict of interest**

1. EAG members warrant that, to the best of his or her knowledge after making diligent inquiry, in the matter being considered or about to be considered by the EAG no conflict with the interest of FSANZ exists (whether inside or outside of Australia), or is likely to arise in the during the meetings.
2. If, during the meeting a conflict of interest arises, or appears likely to arise, the member agrees to:
  - (a) notify the FSANZ immediately in writing;
  - (b) make full disclosure of all relevant information relating to the conflict; and
  - (c) take such steps as FSANZ may reasonably require to resolve or otherwise deal with the conflict.
3. If a member does not notify FSANZ or is unable or unwilling to resolve or deal with the conflict as required, FSANZ may terminate his or her membership to the EAG.

#### **Confidentiality**

**Confidential Information** means all information that:

- (a) by its nature is confidential;

- (b) is designated by the FSANZ as confidential;
- (c) an EAG member knows or ought to know is confidential; or
- (d) is confidential commercial information as defined under section 3 of the *Food Standards Australia New Zealand Act 1991*.

### 1. *Obligations*

The members agree as a condition to participation in the EAG to:

- a. keep Confidential Information confidential;
- b. only use or copy the Confidential Information as strictly necessary for the meetings;
- c. not disclose the Confidential Information to any person other than to:
  - i. the member's representative who have a need to know for the meeting of the EAG;
  - ii. any other person approved by FSANZ; and
- d. immediately notify FSANZ if the member becomes aware that any of the Confidential Information:
  - i. has been used, copied or disclosed; or
  - ii. is required to be disclosed by law.

### 2. *Exceptions*

The obligation of confidentiality does not apply to information that is:

- a. in the public domain or known by the members (unless it is in the public domain or known because of a result of a breach of confidence);
- b. independently developed by the member; or
- c. required to be disclosed by law.

### 3. *Return or destruction of Confidential Information*

If:

- a. FSANZ asks the members to return or destroy any or all copies of Confidential Information; or
- b. the member's involvement in the Group ends, then the member must immediately:
  - i. stop using, copying or disclosing the Confidential Information; and
  - ii. comply with FSANZ's request to return to FSANZ or destroy all copies or forms of Confidential Information.