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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0490016 / C03091

April 2004
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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 the 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\(^1\); 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.

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\(^1\) 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.
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.

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 1st Stage, 2nd Stage, 3rd 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.

<table>
<thead>
<tr>
<th>STAGE</th>
<th>Parental experience</th>
<th>Education / SES</th>
<th>Affinity?</th>
<th>Location</th>
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<tbody>
<tr>
<td>1</td>
<td>1st time parent</td>
<td>Low education / SES</td>
<td>Paired affinity</td>
<td>Melbourne</td>
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<td></td>
<td>1st time parent</td>
<td>Middle – upper education / SES</td>
<td>Full affinity</td>
<td>Sydney</td>
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<td></td>
<td>2nd + time parent</td>
<td>Low education / SES</td>
<td>Full affinity</td>
<td>Melbourne</td>
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<td></td>
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<td>Middle – upper education / SES</td>
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<td>Low education / SES</td>
<td>Paired affinity</td>
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<td></td>
<td>1st time parent</td>
<td>Middle – upper education / SES</td>
<td>Paired affinity</td>
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<td>2nd + time parent</td>
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<td>1st time parent</td>
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<td></td>
<td>1st time parent</td>
<td>Mixed education / SES</td>
<td>Full affinity</td>
<td>Sydney</td>
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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.²

2.2. Sampling & Recruitment

To ensure quality recruitment services, and compliance with confidentiality legislation, all participants were recruited using IQCA³ 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.

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² 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)

² Food Labelling Issues: Quantitative Research with Consumers. FSANZ Evaluation Report Series No 4

³ 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.
Results
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 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.

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4 Resolution of breast feeding issues or problems may involve the switch to infant formula.
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.

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 as 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 7?’, 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:

<table>
<thead>
<tr>
<th>1st Stage</th>
<th>2nd Stage</th>
<th>3rd Stage</th>
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</thead>
<tbody>
<tr>
<td>Pureed</td>
<td>Mashed</td>
<td>Chunky</td>
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</table>

<table>
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<tr>
<th>1st Phase</th>
<th>2nd Phase</th>
<th>3rd Phase</th>
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</thead>
<tbody>
<tr>
<td>Pureed</td>
<td>Mashed</td>
<td>Chunky</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>1st Stage</th>
<th>2nd Stage</th>
<th>3rd Stage</th>
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<tbody>
<tr>
<td>around 6 months</td>
<td>from 7 months</td>
<td>from 8 months</td>
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<tr>
<td>Pureed</td>
<td>Mashed</td>
<td>Chunky</td>
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<table>
<thead>
<tr>
<th>1st Phase</th>
<th>2nd Phase</th>
<th>3rd Phase</th>
</tr>
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<tbody>
<tr>
<td>around 6 months</td>
<td>from 7 months</td>
<td>from 8 months</td>
</tr>
<tr>
<td>Pureed</td>
<td>Mashed</td>
<td>Chunky</td>
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</table>

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 1st 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 1st, 2nd, 3rd 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 B
LIST OF FOODS
<table>
<thead>
<tr>
<th>Age of Introduction</th>
<th>Foods</th>
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<tbody>
<tr>
<td>3 months</td>
<td>Pureed fruit and veges Apple</td>
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<td></td>
<td>Baby Cereal</td>
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<td></td>
<td>Pumpkin</td>
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<tr>
<td></td>
<td>Fruit Cereal</td>
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<td></td>
<td>Banana</td>
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<tr>
<td>4 months</td>
<td>All 4 month baby cans x 2</td>
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<tr>
<td></td>
<td>Potato x 3</td>
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<tr>
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<tr>
<td></td>
<td>Lamb and veges</td>
</tr>
<tr>
<td></td>
<td>Mango x 3</td>
</tr>
<tr>
<td></td>
<td>Pureed veges and fruit x 2</td>
</tr>
<tr>
<td></td>
<td>Pear x 2</td>
</tr>
<tr>
<td>5 months</td>
<td>Apple x 3</td>
</tr>
<tr>
<td></td>
<td>Baby cereal</td>
</tr>
<tr>
<td></td>
<td>banana</td>
</tr>
<tr>
<td></td>
<td>Bread</td>
</tr>
<tr>
<td></td>
<td>Carrot x 3</td>
</tr>
<tr>
<td></td>
<td>Some red label foods</td>
</tr>
<tr>
<td></td>
<td>Courgette</td>
</tr>
<tr>
<td></td>
<td>Custard x 2</td>
</tr>
<tr>
<td></td>
<td>Heinz Banana custard</td>
</tr>
<tr>
<td></td>
<td>Heinz fruit custard x 2</td>
</tr>
<tr>
<td></td>
<td>Pasta x 2</td>
</tr>
<tr>
<td></td>
<td>Yoghurt x 2</td>
</tr>
<tr>
<td>6 months</td>
<td>apple x 3</td>
</tr>
<tr>
<td></td>
<td>apricot and semolina x 3</td>
</tr>
<tr>
<td></td>
<td>avocado x 3</td>
</tr>
<tr>
<td></td>
<td>baked beans</td>
</tr>
<tr>
<td></td>
<td>banana</td>
</tr>
<tr>
<td></td>
<td>brown rice</td>
</tr>
<tr>
<td></td>
<td>carrot x 3</td>
</tr>
<tr>
<td></td>
<td>cereal</td>
</tr>
<tr>
<td></td>
<td>cheese x 4</td>
</tr>
<tr>
<td></td>
<td>chicken x 4</td>
</tr>
<tr>
<td></td>
<td>creamed corn</td>
</tr>
<tr>
<td></td>
<td>Dairy</td>
</tr>
<tr>
<td></td>
<td>fish</td>
</tr>
<tr>
<td></td>
<td>fruit x #</td>
</tr>
<tr>
<td></td>
<td>lamb</td>
</tr>
<tr>
<td></td>
<td>Lambs fry and bacon</td>
</tr>
<tr>
<td></td>
<td>mango</td>
</tr>
<tr>
<td></td>
<td>mashed jars</td>
</tr>
<tr>
<td></td>
<td>Meats x 5</td>
</tr>
<tr>
<td>7 months</td>
<td>cheese</td>
</tr>
<tr>
<td></td>
<td>chicken x 3</td>
</tr>
<tr>
<td></td>
<td>dairy foods</td>
</tr>
<tr>
<td></td>
<td>eggs</td>
</tr>
<tr>
<td></td>
<td>fish</td>
</tr>
<tr>
<td></td>
<td>fruit (pureed &amp; stoned) x 2</td>
</tr>
<tr>
<td>8 months</td>
<td>bread x 2</td>
</tr>
<tr>
<td></td>
<td>cheese x 2</td>
</tr>
<tr>
<td></td>
<td>citrus</td>
</tr>
<tr>
<td></td>
<td>custard x 2</td>
</tr>
<tr>
<td></td>
<td>finger foods</td>
</tr>
<tr>
<td></td>
<td>fish fingers</td>
</tr>
<tr>
<td></td>
<td>fruits</td>
</tr>
<tr>
<td></td>
<td>meats x 5</td>
</tr>
<tr>
<td></td>
<td>pureed vegetables</td>
</tr>
<tr>
<td>9 months</td>
<td>meat</td>
</tr>
<tr>
<td></td>
<td>finger food</td>
</tr>
<tr>
<td></td>
<td>biscuits</td>
</tr>
<tr>
<td></td>
<td>strawberries</td>
</tr>
<tr>
<td></td>
<td>chicken</td>
</tr>
<tr>
<td>10 months</td>
<td>cheese</td>
</tr>
<tr>
<td></td>
<td>meat</td>
</tr>
<tr>
<td></td>
<td>fish fingers</td>
</tr>
<tr>
<td></td>
<td>cooked veges (large) x 2</td>
</tr>
</tbody>
</table>

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