

Consultation paper: Improving commercial foods for infants and young children

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Executive Summary

The nutritional quality of foods infants and young children eat is critical as they have high nutrient requirements (relative to their energy needs) to support growth and development. Consumption of commercial foods for infants and young children is common, as parents see these as convenient, economical, and healthy options. Recent years have seen a significant growth in the market for commercial foods aimed at infants and young children, particularly high energy, low nutrient snack foods. Analysis of products on the market that are targeted for infants and young children found improvements could be made to benefit the dietary intakes of infant and young children consuming commercial foods. The texture of many infant foods doesn't support developmental progression in feeding. Many of the foods on the market are sweet, fruit based, high in sodium, and do not provide key nutrients for this population group. Reviews also identified that labelling does not always support carers to make informed choices, with products names not reflecting the predominant ingredients of the product.

The objective of this work is to improve the composition, labelling and texture of commercial foods for infants and young children to better align infant and young child diets with Australian and New Zealand infant and toddler feeding guidelines.

Purpose and scope of paper

This paper seeks views on the issues identified, the proposed policy options for improving commercial foods for infants and young children and the conclusions made. Suggestions for other options are also welcome. Additional evidence on the benefits and impacts of the potential options and alternative options is requested. Information and feedback will be used by the Food Regulation Standing Committee (FRSC) to refine the policy options and make a recommendation to Food Ministers. Stakeholders are invited to submit information in response to the questions in this document via the Australian Government Department of Health and Aged Consultation Hub.

Proposed policy options

Three policy options to achieve the objective of this work have been identified and are summarised below. These options are not mutually exclusive, and more than one option could be recommended to Food Ministers to address concerns relating to commercial foods for infants and young children.

Option 1 - Status Quo

Current regulations include requirements and restrictions for the composition and labelling of some categories of commercial foods for infants, with fewer requirements for the range of foods aimed at young children. Regulations do not cover texture of commercial foods for infants and young children.

Option 2 - Non-regulatory approaches

This option could include establishing guidance to support industry to voluntarily improve the composition and labelling of foods for infants and young children, by developing voluntary codes, resources, and guidance for industry. This may also include expanding existing reformulation programs in Australia and New Zealand to include commercial foods for infants and young children. Under this option, industry led approaches may also be applied. This option could also include the development of consumer information and education materials to be distributed to parents and caregivers by health professionals such as GPs or maternal and child health nurses. A package of voluntary activities could make positive changes to the foods targeted to infants and young children and support parents' and caregivers' ability to select foods suitable for their child. However, success of this option is dependent on strong and widespread industry uptake of the voluntary measures. Current industry adoption of other voluntary labelling and compositional initiatives (for example the Health Star Rating or Healthy Food Partnership Reformulation Program) have not had widespread industry adoption suggesting that a different non-regulatory approach may be required to achieve

changes in this product category. There are risks that through voluntary approaches the issues identified in the market of foods for infants and young children will remain.

Option 3 - Regulatory approaches

Under this option, Government could review, develop and/or enhance compositional and labelling regulations for commercial foods for infants and young children. Under a regulatory approach, all relevant food products would be required to adhere to the requirements on labelling and composition, therefore increasing the reach and impact of improvements to foods for infants and young children. This option achieves consistent adoption of the regulations and a level playing field because it is not dependent on industry voluntarily changing their products. A regulatory approach supports parents and caregivers who purchase these foods to provide infants and young children with foods that better align with infant and toddler feeding guidelines.

Assessment of policy options

An initial assessment of how well the proposed policy options would achieve the desired outcome assessed:

- The extent to which the composition, labelling and texture of commercial infant and young child foods can be improved.
- Feasibility considerations.

This initial analysis indicates that Option 3- Regulatory approaches is most likely to effectively achieve the objective, with the least feasibility concerns. The option offers the potential for strong and widespread improvements to commercial foods for infants and young children across the industry. However, as a range of issues are explored in this paper it is possible that non-regulatory approaches may be better suited to some issues. More than one preferred option may be recommended to Food Ministers following this consultation process.

Net benefit of the proposed policy options

Early consideration of the impacts and benefits of the proposed options includes economic, social, and environmental impacts for community groups. This consultation seeks information to assist in further understanding impact and benefits where possible.

Benefits: Improving the composition of commercial foods can improve nutrient intakes and offer important health benefits to infants and young children who consume these products. Improved labelling requirements can assist parents, guardians, and carers to make informed choices for their children.

Impacts and costs: All the proposed policy options have costs associated with them. Costs are born by Government, industry, and the community. Consultation questions to gather information on the costs of the proposed options have been included against each option.

Cost to industry would include the costs involved in reformulation and associated labelling changes. Costs to Government(s) would include the work involved in changing regulations and administering and enforcing the regulations, operating a voluntary reformulation program, and delivering industry and consumer education. Costs to the community include the costs associated with long term health and development outcomes for children if changes are not made.

Preferred policy option

Based on the initial analysis undertaken, regulatory approaches to improve composition and labelling of commercial foods for infant and young children has the greatest potential to achieve the objective, however further evidence and costings are required to inform a final policy option. Given the breadth of issues included in this paper there may also be some issues best suited to non-regulatory approaches.

1. Introduction

Purpose of this paper

This policy options consultation paper has been prepared by the Food Regulation Standing Committee (FRSC) to support the Australia and New Zealand Food Ministers' Meeting (Food Ministers) to consider regulatory and non-regulatory options for improving commercial foods for infants and young children.

We are seeking feedback on options for improving commercial foods for infants and young children. Questions are provided at the end of each section. In providing responses to the questions, stakeholders are asked to provide evidence and references to support their statements. Feedback will be used by FRSC to identify a preferred policy option and develop a Policy Paper with a preferred option to recommend to Food Ministers. Further work will be undertaken to implement Food Ministers' preferred policy option(s).

Scope and terminology¹

The products in scope of this work include:

- 'food for infants' and 'formulated supplementary foods for young children' (excluding toddler milk drinks) as defined in the Australia New Zealand Food Standards Code (the Code).
- Other commercial food and drink products marketed towards, or labelled as suitable for, infants and young children (for example finger foods and snacks). This includes products:
 - labelled with the words: 'baby', 'infant', 'toddler', or 'young child', including synonyms such as 'bub', 'tot', or 'little one'
 - labelled with other terms implicitly or explicitly referring to their suitability for or consumption by children less than 4 years of age, such as 'little hands', 'early growth', or 'first foods'
 - displaying an age statement anywhere on product packaging recommending introduction at an age of less than 4 years of age
 - displaying an image of a child who appears to be younger than 4 years of age or feeding with a bottle; and/or
 - that are in any other way presented as being suitable for children under the age of 4 years.

Provision of foods and meals in settings such as day care/early learning services are out of scope for this work. Infant formula products and toddler milk products are also out of scope for this work.

2. Background

In November 2020 Food Ministers considered a paper on composition and availability of commercial foods for infants and young children in Australia and New Zealand [1]. This paper considered recommendations in the²:

- Australian Dietary Guidelines[2]
- Australian Infant Feeding Guidelines (AIFGs)[3]

¹ It is also relevant to note in this paper, the following terminology:

- Compositional limits- regulatory limits on the presence of a nutrient in a particular food or food category.
- Voluntary reformulation- a process whereby the food industry may voluntarily change the composition of foods to improve its nutritional profile with or without government leadership.
- Reformulation- a general term to refer to improved food composition regardless of the approach to achieve this result (i.e. regulatory or voluntary).

² While recognising these are separate documents, they share many similarities, and will be referred to in this document as Australian and New Zealand Infant and Toddler Feeding Guidelines when discussed together.

- Healthy Eating Guidelines for New Zealand Babies and Toddlers (Aged 0 – 2 years old)[4]
- Food and Nutrition Guidelines for Healthy Children and Young People (Aged 2 -18 years): A background paper[5]

Ministers tasked the Food Regulation Standing Committee (FRSC) with exploring issues and potential options to improve commercial foods for infants and young children. Ministers also agreed to refer aspects of this work not suited to regulatory approaches to the Australian Healthy Food Partnership for consideration, such as changes to packaging.

FRSC prepared an issues paper outlining a problem statement for Food Ministers consideration in December 2023³. The issues paper found:

- Evidence that parents consider commercial foods provide healthy choice for their children and believe these products are tightly regulated by Government to ensure they provide good nutrition for children.
- One-third of young children are estimated to exceed the recommended upper limit for dietary sodium intake.
- Intake of vegetables and meat and alternatives is often less than recommended, and these food groups may be displaced with ‘discretionary’ foods high in sugars and/or sodium.
- The main sources of sodium, saturated fats and sugars for infants and young children included family foods (e.g. cakes, biscuits, cheese, vegemite etc) and commercial foods aimed at infants and young children.
- Textures of commercial infant foods typically do not support developmental progression in feeding for older infants.

The issues paper also considered the nutritional profile of commercial foods for infants and young children. Issues identified include:

- many products are marketed as snack foods while dietary guidance does not recommend discretionary foods like snacks for this age group.
- most commercial food products don’t contain iron-rich ingredients or are too low in iron to make an iron content claim, despite iron being an important nutrient for development for this age group.
- most foods promoted as ‘first foods’ have a sweet flavour profile which could limit acceptance of more bitter flavoured foods such as vegetables and may influence sweet flavour preferences.
- many foods aimed at young children are energy-dense and high in sugars and sodium.

A review of the regulatory landscape for foods for infants and young children was also undertaken. The Australia New Zealand Food Standards Code regulates foods for infants (Standard 2.9.2) with some labelling and compositional requirements. For example, sodium limits are established for certain foods (rusks, biscuits, flour, pasta) and a sugar limit for certain drinks. Division 4 of Standard 2.9.3 regulates Formulated Supplementary Foods for Young Children (aged from 1 to 3 years). This includes mandatory requirements for composition and voluntary permissions with minimum and maximum requirements. Labelling requirements and restrictions are also included. This division captures ‘toddler milk’ products and other foods targeted at young children. Other commercial foods

³ Food Regulation - Commercial foods for early childhood: Australia and New Zealand
<https://www.foodregulation.gov.au/resources/publications/commercial-foods-infants-young-children-issues-paper>

targeted at children are subject to the standard labelling and compositional requirements in the Code.

In addition to the work undertaken by FRSC, a review of issues related to commercial foods for infant and young children has been undertaken through the Australian Government Healthy Food Partnership. This work has focused on evidence to inform potential voluntary recommendations to improve aspects of labelling and packaging as well as serving sizes and diversity of flavours. In May 2024 the Healthy Food Partnership Executive Committee considered a summary of evidence and potential recommendations for non-regulatory approaches to these aspects. The Executive Committee considered that these issues are a high priority, of a serious nature and require a systems approach. The Committee therefore decided that the issues identified by the Healthy Food Partnership work be included in the work underway in the food regulation system (i.e. this paper).

3. Statement of the problem

The first 2000 days of a child's life (from conception) is a critical time for development of physical, cognitive, social, and emotional health. There is a growing body of evidence demonstrating that early nutrition and lifestyle have long-term effects on later health and disease outcomes (referred to as developmental or metabolic programming)[6]. Supporting parents, guardians, carers and families to develop healthy habits during this stage of their child's life can positively impact later life [7].

To ensure nutrient requirements of infants are met as they transition from breastmilk or infant formula, food based dietary guidelines recommend a range of foods are introduced. Infants and children consume smaller volumes of foods and have higher nutrient requirements relative to energy than adults. For example, a 7- to 12-month-old baby needs more iron than an adult male, but only one-third of the energy.

Despite the vulnerability of this population and the importance of nutrition in this critical period, there are limited regulations for the composition and nutritional quality of food for infants and foods aimed at young children. There has been significant growth in commercial foods aimed at infants and young children. A recent survey of Australian parents found half of children (aged under 5 years) in Australia consume commercial foods for infants and young children every week, with 20% consuming them most days. The survey indicated that a significant proportion of parents believed infants and young children need different foods to regular family foods and half of parents incorrectly believed commercial foods are healthier than, or as healthy as, homemade foods (with tight regulation by government to ensure this is the case)[8].

Based on the above, the following problem statement has been developed:

Commercial foods for infants and young children are poorly aligned with some aspects of the Australian and New Zealand Infant and Toddler Feeding Guidelines. These commercial foods are often high in sugar (infant and young child foods), sodium (young child foods) and either do not contain iron-rich ingredients or are too low in iron to make a claim (infant and young child foods). Labelling does not support carers to make informed choices for infants and young children due to product naming not always accurately reflecting ingredients. There are also concerns the texture of commercial infant foods typically do not match developmental progression in feeding.

The following sections provide more detail on this problem.

3.1 Adherence to Infant and Toddler Feeding Guidelines in Australia and New Zealand

Introduction of foods

The guidelines recommend infants exclusively receive breastmilk or infant formula (when an infant is not receiving breastmilk) until around 6 months. Foods should be introduced from around 6 months

of age, when developmentally ready. First foods should be iron-rich foods in recognition of the importance of iron for babies' development and diminishing iron stores by 6 months of life. Adherence to recommended timing of introduction of first foods is high in Australia with both the 2010 Australian National Infant Feeding Survey and the 2021 OzFits study, reporting that most surveyed infants ($\geq 92\%$) had started solids by 6 months of age [8].

In New Zealand, the First Foods NZ (FFNZ) study⁴ found that 75.4% of caregivers introduced solids foods at around 6 months [9]. The mean age of introduction of solid foods was 5.18 months, with the majority starting by 6 months. The 2022/23 New Zealand Health Survey reported that 5.4% of infants were being introduced solid foods before 4 months. There has been a reduction in the number of children introduced solid foods before 6 months between the 2011/12 and 2021/22 surveys (54.8% vs 34.4%)[10, 11]. The FFNZ study reported notably better adherence to the guidelines for the introduction of solid foods than earlier studies in New Zealand. However, the study also found that a higher proportion of Pacific mothers did not meet the recommendations, along with those with lower education levels and those living in areas of high socioeconomic deprivation, for whom more targeted support may be required[9].

Texture and type of foods

Infant feeding guidelines in both Australia and New Zealand recommend infants be offered a range of foods of an appropriate texture and consistency for their developmental stage. The range and quantity of foods should be increased so that by 12 months the infant is consuming a wide variety of family foods, particularly nutrient-dense foods from the 5 food groups (Australia) and four food groups (New Zealand)⁵. First foods should include iron-rich foods such as iron-enriched infant cereal, meat, poultry, fish, tofu, and legumes. The Healthy Eating Guidelines for New Zealand Babies and Toddlers (0 – 2 years old) state that prolonged use of puréed foods and delaying the introduction of lumpy textures beyond the age of 9 months is associated with feeding difficulties in older children and a lower intake of nutritious foods, such as vegetables and fruit.

Evidence suggests Australian infants and young children do not meet several dietary recommendations for the types and quantities of foods to be consumed. This includes below recommended frequency and amounts of iron-rich foods such as meat and meat alternatives [12-14], and vegetables[15]. While data on textures progression among Australian infants and young children is lacking, recent market surveys have identified a high proportion of infant food products in Australia are of smooth texture, even among products targeted at older infants where lumpy textures are more appropriate[16, 17].

In New Zealand, the FFNZ study found most infants met the recommendations for puréed foods textures (80.3%), spoon-feeding (74.1%) and the introduction of iron-rich foods (88.3%)[9]. During the time when solid foods were introduced, 61.4% and 65.6% of infants consumed infant rice cereal and red meat, respectively. It was highlighted that at the age of participation in the study (7-10 months) 86% of the infants were no longer fully spoon-fed, which aligns with the recommendation that encourages self-feeding from an early age.

Flavour profile, salt, and sugar

Early food experiences can influence long term dietary preferences and habits with studies suggesting that early and repeated exposure to sweet, salty, and bitter flavours (such as in green

⁴ First Foods NZ is an observational cross-sectional study that follows 625 babies aged 7-9 months from the Auckland, Wellington, and Dunedin area.

⁵ In Australia, fruit and vegetables are counted as separate food groups, while in New Zealand fruits and vegetables are grouped into the one food group.

leafy vegetables) influences acceptance and preference for certain foods [18-24]. The foods that young children receive and are exposed to in their first two years of life form the basis of their eating patterns and food preferences[3, 4]. Infants given salty or very sweet foods may acquire a taste for them, which can result in eating patterns associated with negative health outcomes. The Healthy Eating Guidelines for New Zealand Babies and Toddlers (0 – 2 years old) note a variety of foods with different tastes, including naturally sweet, savoury, and bitter flavours should be provided.

Australian and New Zealand Infant and Toddler Feeding Guidelines advise that foods with added sugars or salt are unsuitable for infants and young children and are recommended to be avoided. The Guidelines recommend avoiding adding salt to foods for infants, and to provide low salt foods due to the limited maturity of infants' organs, particularly the kidneys, and their ability to conserve fluids and excrete sodium. Excess sodium in the diet can also increase the excretion of calcium. In addition to creating a preference for sweet foods, consumption of added sugars is associated with poor diet quality, obesity, increased risk of non-communicable diseases and increased dental caries.

The Australian SMILE Study (Study of Mothers' and Infants' Life Events Affecting Oral Health) found 21% of infants had consumed foods and/or drinks containing added or free sugar by 6–9 months. At 1 year, 96% of children had consumed discretionary foods, which contributed on average 11.2% of total energy. Between 1 and 2 years, intake of free sugars increased sharply, from 3.6% of total energy to 22.5%. The greatest contributors to free sugars⁶ intake at 1 year were commercial infant foods (26.6%) and cereal based products (19.7%). At 2 years, the main sources were discretionary foods, such as fruit juice, biscuits, cakes, desserts, and confectionery; with yoghurt and non-dairy milk alternatives two notable core-food exceptions.

The 2011-12 Australian National Nutrition and Physical Activity Survey estimated that 30% of total energy intake for young children aged 2-3 years old comes from discretionary items⁷ with biscuits (4.8%)[25] contributing the most to the energy intake from discretionary foods for children aged 2-3 years old.

The FFNZ study looked at adherence to the Guidelines on the addition of salt and sugar to food preparation in New Zealand. Most participants met the recommendation to avoid adding salt (75.7%) or sugar (90.9%) in food preparation[9]. When salt was added it was to roasted meats and vegetables, family meals and potato fries. Sugar was most often added to baking, breakfast cereals, fruit purées and family meals. The Growing Up in New Zealand (GUiNZ) study found that, half of infants (52.7%) had tried sweets, chocolate, hot chips, or potato crisps by 9 months of age. By nine months of age, two out of five infants (38.8%) had tried a drink that was not appropriate for their age, the main drink being fruit juice. Fewer infants (15.9%) had salt added to their food or milk, and 14.3% had sugar added to their food or milk at 9 months of age[26].

Consumption of commercial foods for infants and young children

Both the AIFG and the New Zealand Healthy Eating Guidelines for Babies and Toddlers (0-2 years old) advise that if consuming commercially prepared foods, these should only be consumed from time to time and over-reliance on these products may reduce the variety of flavours and textures in a baby's diet. The guidelines also advise that special complementary foods or milks are not required for young children and discretionary foods are not recommended due to infants' and young children's high nutrient needs relative to their energy requirements. The New Zealand Guidelines also specify that

⁶ Free sugars include all added sugars in any form; all sugars naturally present in fruit and vegetable juices, purées and pastes and similar products in which the structure has been broken down; all sugars in drinks (except for dairy-based drinks); and lactose and galactose added as ingredients.

⁷ Discretionary foods are food and drink not necessary to provide the nutrients the body needs. These foods are often high in energy, saturated fat, sugars, and salt.

commercial teething biscuits (often called rusks) contain salt and sometimes sugars, so a teething ring or cold flannel/washcloth is a better option.

Evidence from Australia and New Zealand suggest consumption of commercial infant and toddler foods is commonplace. The Victorian Royal Children’s Hospital survey of caregivers of infants and young children (aged 4 month -<5 years) found that 1 in 5 (19%) of babies and young children eat commercially prepared ready-made foods most days of the week. For 2 in 5 (39%) babies and young children, ready-made foods made up at least half of their meals and snacks, and for 22% these products made up most or all of their diet [27].

The FFNZ study reported that 28% of infants (aged 7 to 10 months) surveyed frequently consumed commercial pouch foods. Usage appears to decline in older age, with only 11.1% of children surveyed in the Young Foods New Zealand Study (YFNZ) aged 1 to 3.9 years considered ‘frequent’ users, and of these children 65% always consumed the pouch from the nozzle[28]. These findings are consistent with surveys in other high-income countries that found around 40 – 60% of infants consume commercial foods for infants, and that usage generally peaks at age 6 – 12 months[29].

Consultation question 1 – Are there additional studies on the **consumption** of commercial foods for infants and young children in Australia and New Zealand?

3.2 Determinants of parental food choice for infants and young children

The Victorian Royal Children’s Hospital survey of caregivers of infants and young children (aged 4 months -<5 years) asked why they chose ready-made foods for their children. Most parents (92%) reported choosing these foods for convenience, and 36% stated that they might choose these foods because of a lack of knowledge of how to prepare healthy meals at home. Parents also believe commercial foods are an economical choice, with 68% of parents reporting they would be at least somewhat likely to feed their child ready-made foods because they were cheap[27, 30].

Most parents surveyed (73%) reported giving their children ready-made baby and toddler foods because they believed them to be a healthy choice. Half of parents (49%) believed ready-made foods are healthier than, or as healthy as, food made at home, and 2 in 5 parents (41%) of babies and/or young children believed that young children have different nutritional needs to the rest of the family meaning they cannot eat regular family food. The majority of parents (53%) believed that the content of commercial ready-made food products for infants and young children is tightly regulated by government to ensure that it provides good nutrition for children [27, 30].

In New Zealand, 2 studies have looked at parental perceptions of baby food pouches. A qualitative study was conducted in 6 parenting forums[31]. Perceptions of baby food pouches fell into 2 broad categories – benefits and concerns. The most reported themes related to benefits were convenience, health, enjoyed by babies, variety, and cost. The most common concerns reported were health, cost, lack of dietary exposure, dependence, and waste. Many parents reported both benefits and concerns.

These results are similar to the FFNZ study. Of those that used pouches, 90% reported that ‘convenience’ was why they used pouches, with ‘easy to use’ (63%) and ‘practical’ (53%) cited as the main reasons. In contrast, 62% of participants reported that they did not like using these products, due to ‘health concerns’ (26%) or ‘environmental concerns’ (17%)[28].

3.3 Dietary intake of infants and young children compared with recommended nutrient intakes

The Nutrient Reference Values for Australia and New Zealand set out recommended intakes and limits for various vitamins and minerals, as well as energy, carbohydrate, and protein.

Australia

Studies from Australia suggest generally adequate nutrient intake among infants and young children [32, 33], with an exception of the 2021 OzFits study which found a high proportion (90%) of infants, and a moderate proportion (25%) of young children did not meet the Estimated Adequate Requirement (EAR) for iron, and 20% of infants did not meet the EAR for zinc [34]. The high prevalence of inadequate iron intake could indicate population risk of iron deficiency among Australian infants and young children. However, the authors note that, compared to other life stages, the EARs for iron and zinc are very high, and inadequate intakes are frequently reported for this age group in other high-income countries. It should also be noted that other studies have reported a lower, although in some cases still moderate, prevalence of inadequate iron and zinc intake among infants and young children in Australia [32, 35, 36].

Further, while there is a lack of recent data on the prevalence of iron deficiency in Australian children aged 6 months to 2 years old, studies conducted in the late 1990s found a high proportion of infants and young children with sufficient blood iron levels [37, 38]. However, there was significantly less reliance on commercial foods for infants and young children at the time these studies were conducted. These findings may not be applicable to Aboriginal and Torres Strait Islander people given several studies have reported concerning prevalence of anaemia in infants and young children [39, 40]. While the cause of anaemia in Aboriginal and Torres Strait Islander populations is thought to be multi-factorial, inadequate intake of iron rich foods has been identified as a contributing factor [40]. This is consistent with reportedly low dietary iron intake among young Aboriginal and Torres Strait Islander children [41, 42].

Several studies have also reported excessive sodium intake among young children in Australia [32, 33, 42-44]. Studies reporting on the main sources of sodium identified family foods, such as breads, cereals and cheese, as the largest contributors to sodium intake [43, 44]. In one study, discretionary foods accounted for approximately 35% of sodium intake [44]. It is not reported whether the cereals, dairy or discretionary foods were commercial foods aimed at young children, or foods for the broader consumer base.

Consultation question 2 – Are there additional studies on the **prevalence of iron deficiency** in **Australian** children, including among Aboriginal and Torres Strait Islander children and children living in rural and/or remote areas and other groups, including vulnerable populations?

New Zealand

The New Zealand FFNZ and YFNZ studies are currently analysing the dietary intake data of infants and young children. An early paper from this study looking at the contribution of commercial infant foods to the diets of infants aged 6.9-10.1 months, showed that almost half of the infants surveyed consumed a baby food pouch on the day of recall. These pouches contributed 25.5% to total energy, less than 1% added sugar⁸ and greater than 30% carbohydrate and total sugars consumed from complementary foods that day [45]. More broadly, in those infants that consumed any commercial infant foods, these foods contributed 21% to total energy and 40% of iron from complementary foods consumed that day.

⁸ Free sugars and added sugars were calculated as for the New Zealand food composition database, FOODfiles¹⁸, but with fruit purées in commercial infant foods considered to contribute total sugars but not free or added sugars. The authors made this decision because infant feeding guidelines recommend that fruits such as apple, are cooked and puréed to make their texture appropriate as first foods for infants, in contrast to their use purely as sweeteners in adult diets.

Another paper from the FFNZ study investigated iron status in infants, with the estimated prevalence of iron deficiency found to be 14%[46]. The prevalence of iron deficiency anaemia was 3%. The study also looked at the effect of feeding methods (frequency of pouch use vs baby-led weaning) on iron status, finding neither feeding method significantly predicted body iron concentrations nor the odds of iron sufficiency.

A separate study conducted between May 2019 and May 2020 with New Zealand infants found that 92% of the study group had sufficient blood iron levels at 9 months of age [47].

3.4 Current areas of concern in relation to the commercial infant and young children food market in Australia and New Zealand

The size of the market for infant and young children foods has grown substantially over recent years, particularly in the young children snack category [48]. Compared to regular foods (i.e. those not targeted specifically at infants and young children), foods aimed at young children have been found to be more expensive and generally of poorer nutritional quality [48].

This section summarises the evidence which assesses how well the commercial infant and young children food market is aligned with the recommendations in the Australian and New Zealand Infant and Toddler Feeding Guidelines, with a focus on composition and information on product labels.

Composition

Australia

Studies of Australian commercial foods for infants and young children have identified poor alignment with some aspects of dietary recommendations. The main areas of concern were related to iron, sweet flavour/sugar content, sodium content and texture.

Iron – Most products surveyed were poor sources of iron and few declared iron content, except for fortified cereals and snack foods[16, 17]. Some fortified cereals and finger foods and snack products declared iron content [16], however, these products accounted for a very small proportion of infant and young children foods available. For example, Moumin et al [17] found only 12% of products surveyed declared iron content. The authors also identified that based on the declared meat content of commercial mixed main dishes, these products on average would provide only 2% of the recommended dietary intake of iron for infants aged 7 – 12 months.

This is consistent with findings from the database of commercial foods for infants and young children developed by The George Institute for Global Health and the Department of Health and Aged Care through the work of the Foods for Early Childhood Reference Group. The database showed only 9% of products were fortified with iron and only 6% included an iron claim. Fortification primarily occurred in the dry cereals (100%⁹) and finger foods and snacks (27%) categories, with only 8% of breakfast foods and 1 product in the dairy category being fortified. No main meals, drinks or fruit and vegetable based first foods were fortified. All products that were fortified with iron contained an iron-claim, except for the finger foods and snacks category where only 1 in 2 (48%) iron fortified products included a claim.

The Department of Health and Aged Care also conducted an analysis of the presence of iron-rich ingredients in main meals and breakfast food products based on the Dietitian's Australia list of iron-rich foods. This analysis revealed less than a third (29%) of products in the main meals category, and under half (45%) of breakfast foods contained one or more iron-rich ingredient. The amount of iron

⁹ Infant cereals are required under Standard 2.9.2 of the Food Standards Code to contain at least 20mg iron per 100g.

provided from these foods was low, with no unfortified products having sufficient iron to make a claim.

Sweet flavour profile – Commercial foods for infants and young children frequently contained fruit ingredients such as purees as the primary ingredient. Where vegetables were present, they were often sweeter varieties such as carrot and sweet potato [17], or they were mixed with free sugars¹⁰ [16]. As a result, commercial foods were found to frequently have sweet profiles and contain added and/or free sugars. Australian surveys estimated between 40 – 75% of products contained added or free sugars[16, 17, 49, 50].

Sodium content – Foods for young children were reported to contain above recommended sodium levels[49, 50]. Scully et. al. [49] reported only 38% of toddler/young children foods surveyed were compliant with recommendations in the *WHO Europe Nutrient Profile Model for Commercially Available Complementary Foods* (more information on this model is provided at [Section 7](#)).

Texture – Surveys suggest that there are limited products that support texture progression even when marketed towards older infants. The survey by Moumin et. al.[17] found almost half of all products aimed at infants 8 months and older were packaged in squeeze pouches and were predominantly smooth pureed foods. In another survey of pouch products only, Brunacci et. al. [16] found almost 90% of products surveyed were categorised as smooth, and only 30% of products marketed as suitable for infants aged 8 months and older were of a developmentally appropriate lumpy texture.

New Zealand

Two cross-sectional studies have analysed commercial foods for infants and toddlers in New Zealand and identified similar compositional and textural concerns as Australian products [51, 52]. These studies reported:

- The iron content of all forms of infant foods was very low, except for prepared “dry cereals” which were fortified with iron[51].
- Most infant and young children foods had a sweet profile, were based on fruit, and generally contained sweet over bitter tasting vegetables [51, 52].
- A considerable proportion (34%) of products surveyed contained added sugars[52].
- Infant food pouches contained similar median amounts of energy, iron, and vitamin B12 to other forms of commercial infant foods but contained considerably more total sugars (8.4 g/100 g vs. 2.3 g/100 g)[51].
- There was limited texture diversity among wet ‘spoonable’ products with the majority having low textural complexity (smooth, puréed, super smooth). Textural complexity increased along the age gradient for savoury (vegetable, meat, or poultry-based meals) but not for fruit-based meals and breakfasts[52].

¹⁰ Free sugars include all added sugars in any form; all sugars naturally present in fruit and vegetable juices, purées and pastes and similar products in which the structure has been broken down; all sugars in drinks (except for dairy-based drinks); and lactose and galactose added as ingredients.

Consultation question 3 – Are there additional studies on the **composition** of commercial foods for infants and young children in Australia and New Zealand?

Consultation question 4 – Are there additional studies on the **texture** of commercial foods for infants and young children in Australia and New Zealand?

Consultation question 5 – Food manufacturers- what **reformulation** or other activities have you undertaken to **change/improve** in the last 5 years related to commercial foods for infants and young children? What was the purpose of the activity?

Packaging

The number of commercial foods for infants and young children that are packaged in pouches with spouts is rapidly increasing, growing from approximately 1.2 billion pouches sold globally in 2015, to around 2.2 billion in 2021[31].

A study of over 400 Australian commercial foods for infants and young children found that half of all products audited were packaged in squeeze pouches[17]. This is consistent with analysis of the Australian Government Healthy Food Partnership Foods for Early Childhood database, which found that roughly 56% (n=206) of products were packaged in pouches with spouts, noting this total includes drinks, cereals, and snacks which have minimal to no pouch products[50].

The popularity of these products is concerning, as the practice of sucking directly from the spout does not align with current evidence supporting spoon feeding and finger foods as the preferred consumption methods when transitioning to solid foods[6]. Sucking foods directly from spouts deprives children of seeing, tasting and feeling the food and reduces opportunities to learn how to eat with a spoon[6, 53]. It may also have an impact on appetite regulation, as chewing is an essential indicator for satiety and may impact the ability to recognise hunger and satiety cues[6, 54].

The FFNZ study found that frequent use of commercial foods for infants and young children in pouches was not associated with Body Mass Index (BMI) or energy intake, but was associated with greater food responsiveness¹¹, food fussiness and selective/restrictive eating[55].

Texture

Paediatric nutrition experts have concerns that the trend towards more foods in pouches with spouts will limit the texture of commercial foods for infants and young children. The smooth texture of these products can hinder infant and young child oromotor development[56].

The complementary feeding period relies on transitioning oromotor skills from a basic sucking and swallowing action to biting and chewing[57]. Oromotor skills develop alongside gross and fine motor skills to enable children to develop self-feeding practices. These skills include the development of tongue lateralisation, chewing, gagging and swallowing – all of which require different movements from the mouth - and learning to eat with fingers and hands[58].

There is also evidence that suggests children who consume large volumes of food from spouts may have poorer acceptance of foods with lumpy textures as the textures of products need to be smooth and small enough to enable foods to be squeezed out from the spout. Due to these requirements the pouch and spout type packaging may limit the variety of complex textures available [6, 17, 59].

¹¹ The food responsiveness subscale uses five items, with higher scores indicating a greater desire to eat in response to external food cues regardless of hunger.

Serving size

There are concerns that serving sizes of commercial foods may lead to infants and young children exceeding recommended amounts of fruit (and associated free sugars if fruit juices and fruit juice concentrates are used in the product).

Australian surveys have found that the majority of foods for infants and young children are sold as a serving size of 110 – 120g[1, 16]. The Australian Dietary Guidelines recommend infants aged 7-12 months consume 10g fruit per day. Using the upper serving size of 120g, a single package could provide around 6 days' worth of fruit serves, assuming that the product is equal parts fruit and vegetable (and noting that there would also be water present to create the appropriate texture).

In New Zealand, the FFNZ study quantified the amount of a pouch that was consumed in a single sitting by those infants aged 7-10 months that consumed infant pouches. Overall, infants consumed ~62% of an infant food pouch on a single eating occasion, which represented 74g of food.

Even if an infant consumed only two-thirds of a pouch, they could still easily exceed the recommended daily intake of fruit where such products are predominantly fruit based[60]. The standard serving size of these foods may also contribute to high intakes of free sugars, particularly in fruit-dominant products if fruit juices and fruit juice concentrates are used in the product.

Labelling and Marketing

Claims

Several studies of the Australian market have reported that most commercial infant and young children foods display at least 1 marketing or nutrition claim, with many displaying multiple claims [61-63]. Claims not specifically regulated in Standard 1.2.7 (e.g. lack of additives, preservatives, colours and flavours) were more common than regulated claims such as low sugar or gluten-free [61] [16]. Two studies that assessed nutrient content claims found 'no added sugar' claims were common (present on 50 – 59% of products surveyed) even where products contained free sugars[16, 62].

The Victorian Royal Children's Hospital survey of caregivers of infants and young children (aged 4 months -<5 years) reported that the claims on the packaging about the contents of the product (such as organic, natural sweetness and no added sugar) were very or extremely likely to influence most parents' choices. The claims 'natural ingredients' and 'made with fruit and vegetables' were the most likely to increase uptake, with 93% of parents agreeing it was 'at least somewhat likely' to make them choose to buy that particular product [30].

Naming and description of the food

The Code requires food labels to display the name of the food. Standard 1.2.2 outlines that the name of the food must, where a prescribed name exists, be the prescribed name, otherwise must be a name or description sufficient to indicate the true nature of the food. While there is no requirement to list all ingredients in the product name, the omission of certain ingredients in the names of infant foods may be cause for concern in relation to truth in labelling. For example, a product named 'barley, banana and spinach' would indicate the major, if not the only ingredients, in the food are the named ingredients. However, the ingredients list states apple as the ingredient with the largest ingoing weight, with the addition of pear and sweet potato also being more prominent than two of the characterising ingredients on the label (barley 5% and spinach 5%).

A desk top review by the Department of Health in 2020 found this practice was widespread, with apple (including puree, juice or paste) present in the vast majority of pouch products[1]. On the other end of the scale, declarations about the inclusion of ingredients within a product may contain minute amounts of the named product. For example, a product named 'cheese chickpea pops' had just 0.1% ingoing weight of cheese. These findings are supported by other recent studies that

similarly found that product names of infant and toddler foods available in Australian supermarkets frequently did not accurately reflect composition[16, 64].

Partnerships with children's characters

There are a range of products available in Australia and New Zealand that make use of children's characters as a marketing tool. For example, popular television characters from children's shows have partnered with manufacturers of yoghurt and custard pouches, flavoured milks, and sweet and savoury biscuits. These foods do not typically indicate that they are targeted to infants and young children but are considered within scope as they would be appealing to a child under the age of four years. There is also work underway in the Food Regulation System to consider options to strengthen restrictions on advertising of unhealthy foods and drinks to children with a focus on product packaging¹².

For products specifically targeted to older infants and toddlers, some food companies also create their own unique characters associated with their food brands. A 2021 online supermarket survey found such branded characters were common, with 11% of infant foods and 26% of toddler foods employing the use of branded characters[63].

Evidence shows products with such depictions on packages and labels draw children's attention and influence their food preference and choice[65].

3.5 Impacts of poor nutrition in infancy and early childhood

This section reviews the prevalence of health outcomes associated with poor dietary patterns such as overweight and obesity and dental caries in Australia and New Zealand. These conditions can be inter-related with a recent meta-analysis finding children under 6 years with overweight and obesity had a significantly higher level of dental caries compared with children of a healthy weight [66].

Very few studies have examined associations between the dietary patterns of young children (i.e. whole diet) and health. One systematic review reported results from two birth cohorts showing healthier dietary patterns at age 1 were associated with better lean mass, cognition, and behaviour, but not with bone mass or body mass index at 4 years [67].

Overweight and obesity

The health consequences and economic impact of overweight and obesity are significant. Excess body weight increases individual risk of cardiovascular disease, type 2 diabetes, some cancers, and premature mortality[68]. Over 4 in 5 children who are well above a healthy weight will become adults who are well above a healthy weight [69]. Obesity is difficult to reverse so early intervention is critical to get the best start in life. Early childhood is a risk period for weight gain greater than that which would be associated with normal growth and development [70]. There are many factors that contribute to the development of overweight and obesity including, poor dietary intake, insufficient or poor-quality sleep, insufficient physical activity, environmental factors, early life experiences and psychology.

Social determinants of overweight and obesity include socioeconomic position, early life circumstances, social exclusion, social connections, relationships and values, employment and work, housing, and the residential environment [71]. The Australian Institute of Health Welfare (AIHW) reports that children of a parent with an education level of a bachelor degree or higher qualification were less likely to have overweight or obesity than those without it. Those living in the highest

¹² This work is on hold while the Australian Government undertakes a feasibility study on options to restrict marketing of discretionary foods to children

income households had lower rates of obesity than those living in the lowest income households [72].

The Australian Health Survey 2011-13 found 1 in 5 Australian children (21%) aged 2-4 years were above a healthy weight [73]. The more recent National Health Survey 2017-2018 found 1 in 4 children aged 2-4 year olds (24.6%) were above a healthy weight [74]. The proportion of Aboriginal and Torres Strait Islander children aged 2-4 years above a healthy weight was 21.6% in 2018-19 [75].

The New Zealand Health Survey 2022/23 found 27.3% of 2-4 year olds were considered above a healthy weight. Children living in the most disadvantaged areas were 2.2 times as likely to be well above a healthy weight as children living in the least disadvantaged areas, after adjusting for differences in age, gender and ethnicity [76].

Dental caries

Poor nutrition, particularly consumption of sugary drinks and snacks is a risk factor for dental caries. Early childhood caries are defined as the presence of one or more decayed, missing (due to caries), or filled tooth surfaces in any primary tooth in a child under the age of 6 years. In those under 3 years, any sign of smooth-surface caries is indicative of severe early childhood caries. If left untreated this can result in pain, infection, delayed growth and cognitive development, and restriction of normal daily activities in the short term. Early childhood caries is also the best predictor of future dental caries [77]. Rates of hospitalisations to remove decayed baby teeth are also rising [78].

Dental decay is common in children in both Australia and New Zealand, with between 35% - 40% of five year olds experiencing early childhood dental decay or cavities [79, 80].

Australia

In 2006 about half of children in Australia entered primary school with some form of untreated dental caries [81]. Previous research has assessed the dental health of school-aged children, and less work has been undertaken in children under 5 years. A 2006 study of 4606 children aged 2-3 years found parental/carer reported early childhood caries rates across Australian jurisdictions ranged from 2.5 – 5.6 percent [82].

Several researchers [77, 83, 84] have found early childhood caries rates increase steeply in children between 18–36 months of age. They associate this increase with dietary changes, the introduction of high sugar foods and beverages, poor oral hygiene such as irregular tooth brushing, parental oral health, knowledge and behaviour, and lack of water fluoridation. Early childhood caries prevalence among 6 to 7-year-old children was tenfold that of 2 to 3-year-old children [83].

Aboriginal and Torres Strait Islander children are more at risk of dental caries than non-Aboriginal and Torres Strait Islander children. Rural Aboriginal and Torres Strait Islander children were generally at a disadvantage compared with their urban counterparts [85].

In a cross-sectional study of Australian children (5-10yrs) and (8-14yrs), consumption of sugar-sweetened beverages was associated with dental caries for both groups, and irregular tooth brushing was also significantly associated with dental caries for Aboriginal and Torres Strait Islander children [86].

New Zealand

Like Australia, early childhood caries is a problem in New Zealand. School dental data from 2022 shows a dental caries prevalence of around 44% in children at 5 years of age. A higher prevalence of caries at age 5 was observed in Māori children (61%) and Pacific children (66%) [87]. Between 2000 and 2009, dental-based admissions made up 7.3% of all New Zealand hospital admissions for

children aged up to 14 years, with dental conditions the leading cause of potentially avoidable hospital admissions [88].

4. Limitations of actions currently underway in Australia and New Zealand in relation to commercial foods for infants and young children

4.1 Regulatory approaches in the Australia New Zealand Food Standards Code

It should be noted that infants and young children often consume family foods which are not regulated to meet specific requirements for this age group [89]. Some foods consumed by infants and young children are regulated by specific regulations under the Code (e.g. Standard 2.9.2 or 2.9.3) while other foods consumed by this population group are regulated through general food standards which address composition (e.g. permitted additives) and labelling (e.g. nutrition labelling, ingredient labelling) which apply to all packaged foods¹³.

Standard 2.9.2 – Food for infants

Regulatory requirements for specific infant foods are outlined in *Standard 2.9.2 – Food for Infants*. This Standard covers “a food that is intended or represented for use as a source of nourishment for infants”. It does not cover infant formula products; formulated meal replacements; formulated supplementary foods; or unprocessed fruit and vegetables.¹⁴

Compositional regulations

Standard 2.9.2 – Food for infants of the Code [89] requires foods for infants to meet specific compositional requirements as outlined below:

- iron content for cereal-based food for infants
- sodium content for rusks, biscuits, flour, pasta and fruit and vegetable drinks, juices, and ready-to-eat fruit-based foods
- monosaccharide and disaccharide sugars content of drinks, vegetable juice or non-alcoholic beverages
- content of inulin-type fructans or galacto-oligosaccharides for foods for infants.

The standard also includes food safety requirements for the use of honey to reduce *clostridium botulinum* risk.

Food labelling regulations

Standard 2.9.2 – Food for infants specifies labelling requirements for infant foods. Labelling provisions include [89]:

- That food packaging must not say, or imply, that a food is suitable for infants under 4 months of age.
- A statement indicating the consistency of the food.
- A statement indicating the minimum age of the infants for whom the food is recommended.
- Warning statements if the food is recommended for infants under 6 months of age of “Not recommended for infants under the age of 4 months”.
- A food must not be represented as being a sole source of nutrition for infants.
- The label cannot indicate that the food can be added to bottle feeds of an infant formula product.
- The word ‘sweetened’ if the monosaccharide and disaccharide content of added sugars and honey is more than 4 g/100 g.

¹³ There are some exemptions which are outlined in the Australia New Zealand Food Standards Code.

¹⁴ The Code defines an infant as a person under the age of 12 months and young children as aged 1 to 3 years.

- In association with the word ‘honey’, the word ‘sterilised’ in line with requirements for any honey that is being used as an ingredient is treated to inactivate *Clostridium botulinum* spores.
- If a reference is made in the label (including in the name of the food) to milk, eggs, cheese, fish, meat, poultry, nuts or legumes, the percentage of that ingredient is to be included.
- If the food contains more than 3 g of protein/100 kJ the label must include the warning statement ‘Not suitable for infants under the age of 6 months’.

Within *Standard 2.9.2 – Food for infants* there are some requirements for claims about vitamins, minerals and protein in infant foods [89]. These include:

- A claim must not be made that a food for infants is a source of protein unless at least 12% of the average energy content of the food is derived from protein.
- A claim that a food is a good source of a vitamin or mineral may only be made if a reference quantity of the food contains at least 25% Recommended Dietary Intake (RDI) or Estimated Safe and Adequate Daily Dietary Intake (ESADDI), as appropriate. The RDIs and ESADDIs for vitamins and minerals are set out in Schedule 1.
- A claim as to the presence of a vitamin or mineral in a food for infants may only be made if the food contains, in a normal serving, at least 10% RDI or ESADDI, as appropriate. The RDIs and ESADDIs for vitamins and minerals are set out in Schedule 1.
- Limitation that a claim which compares the vitamin or mineral content of a food for infants with another food is not permitted.

Standard 2.9.3 – Formulated supplementary foods for young children

Standard 2.9.3 – Formulated meal replacements and formulated supplementary foods includes ‘formulated supplementary foods for young children’ under Division 4 of the Standard.

This Standard covers food that is intended to supplement a normal diet on occasions where energy and nutrient intake may be inadequate and does not cover general foods targeted to this age group.

Compositional regulations

Division 4, Standard 2.9.3 – Formulated supplementary foods for young children requires minimum composition limits for energy, protein and vitamins and minerals to be met. It also provides maximum concentrations for some vitamins and minerals; inulin-type fructans; galacto-oligosaccharides and lutein.

Food labelling regulations

Division 4, Standard 2.9.3 provides labelling restrictions for formulated supplementary foods for young children, including requirements for the food to be described as a food for supplementing a normal diet and specifications for claims relating to vitamin and mineral content.

General foods

The Code provides standards that apply to labelling of all foods. These include allergy labelling requirements, nutrition health and related claims such as ‘no added sugar’, the requirement for a Nutrition Information Panel and a statement of ingredients which lists ingredients the food in descending order by ingoing weight.

Despite the recommendations for infants and young children to eat iron rich foods, iron content does not need to be declared on the Nutrition Information Panel unless a voluntary nutrient content claim is made about the food’s iron content. This may make it challenging for parents, guardians, and carers to identify commercial foods which contain iron (10% of RDI for infant or young children) or are iron-rich (25% of RDI for infant or young children).

Health and Nutrition Claims

Infant and young children's foods are not an exception to Standard 1.2.7 regarding nutrition content claims or health claims. While infant formula products are not able to carry nutrition content or health claims, this exclusion does not apply to infant foods.

Other work underway

Other potential regulatory changes to the Code that may have an impact on commercial foods for infants and children includes:

- exploring the inclusion of added sugars in the NIP (proposal P1058)
- defining added sugars for claims which will result in some commercial infant and toddler foods unable to make no added sugar claims in the future (proposal P1062)

4.2 Regulatory approaches to advertising and marketing

Australian Consumer Law

The Australian Consumer Law applies in addition to regulations on claims in the Food Standards Code. Under Australian Consumer Law businesses must not mislead consumers by making misleading claims about their products and services. Claims about the value, benefit and qualities of products must be accurate, truthful, and based on reasonable grounds. This applies to any communication by a business, including through advertising, social media and on product packaging.

Reduce children's exposure to unhealthy food and drink advertising

There is an activity on the Food Regulatory System workplan that will consider different ways to limit children's exposure to advertisements for unhealthy food and drink. This activity is on hold while the Australian Government undertakes a feasibility study on options to restrict marketing of discretionary foods to children.

Feasibility study on options to limit unhealthy food marketing to children

The Australian Government has invested nearly \$500,000 in a feasibility study on options to limit unhealthy food advertising and marketing to children. The study will provide a better understanding of the options available to limit such marketing in Australia, including relevant costs and benefits, feasibility, acceptability, impact on priority populations and monitoring and evaluation implications.

4.3 Voluntary approaches

Healthy Food Partnership

There is work underway in Australia through the Healthy Food Partnership to look at approaches for improving commercial foods aimed at infants and young children. The Foods for Early Childhood Reference Group commenced in 2021 with the role of developing voluntary guidance to support the food industry to improve commercial foods for infants and young children. The guide, expected to be finalised in the second half of 2024, will focus on non-regulatory, voluntary changes that can be implemented by industry to improve the following aspects of commercial foods: sweet flavour profile (overuse of sweet ingredients and limited range of flavours available); packaging (over-reliance on pouches with spouts); labelling (including excessive use of marketing claims, inappropriate/unnecessary use of 'free-from' allergy statements and product names not reflecting ingredients); and large manufacturer determined serving sizes.

Membership of the Reference Group includes public health professionals, industry representatives and academics with an interest and professional background in this topic. The Reference Group is chaired by the Australian Government Department of Health and Aged Care and reports to the Healthy Food Partnership Executive Committee.

Health Star Rating System

The Health Star Rating (HSR) system is a voluntary front-of-pack labelling system that rates the overall nutritional profile of packaged food and assigns it a rating from ½ a star to 5 stars. The HSR is in operation in both Australia and New Zealand but is not regulated through the Australia New Zealand Food Standards Code [90].

Currently some foods are excluded from the HSR system. Most special purpose foods captured in Part 2.9 of the Food Standards Code are excluded from the HSR. This includes all foods covered by Standard 2.9.2 – Food for infants – in the Food Standards Code. Similarly, infant formula (Standard 2.9.1) and formulated supplementary foods for young children (Standard 2.9.3), including toddler milks, are also excluded from the HSR system. These foods tend to have regulatory constraints such as specific composition requirements, meaning the HSR is not appropriate for these products. There are other challenges that mean the HSR is not suitable for foods for infants and young children. The HSR algorithm is designed to align with the Australian Dietary Guidelines and the New Zealand Eating and Activity Guidelines, which are for the general population. The nutritional needs of infants and young children are different and, in some cases, a HSR rating may not be an appropriate relative indication of the nutritional status of the food for an infant. For example, the HSR algorithm favours reduced fat dairy (such that a low-fat milk may score 5 stars), but reduced fat milk is not recommended for children under 2.

General foods targeted at young children over 12 months of age would still be eligible to display the HSR [90]. The Australian Government Department of Health and Aged Care purchased an extraction from the George Institute FoodSwitch database[50] to determine the categories of infant foods on the market in 2022. Of the 149 foods targeted towards young children, 34 (23%) displayed the HSR.

4.4 Education and information for consumers on feeding infants and young children

Jurisdictional education and information activities that target infant and toddler feeding practices, centre around providing consumer resources for parents, guardians, and carers. Information on introducing solids is communicated to new parents by Maternal and Child Health nurses at child health checks. Several jurisdictions also produce targeted information for Māori and Aboriginal and Torres Strait Islander peoples.

Face to face programs which focus on providing a range of information, education and support on healthy eating have been found to be effective and are run in some Australian jurisdictions. For example:

- In Western Australia, *Food Sensations for Children*, run by Foodbank Western Australia, is a face-to-face evidence-based program run by qualified nutritionists and dietitians providing food literacy education for parents of 0 – 5 years. The program includes cooking and nutrition education.
- INFANT (INfant Feeding, Active play, and NuTrition) is an evidence based Victorian program developed by Deakin University. INFANT trains Maternal & Child Health nurses and health professionals to deliver evidence based key messages that support parents to establish healthy eating at key developmental times in their child’s first year of life. INFANT has been identified by the United States Centre for Disease Control as the strongest international model for wide-spread implementation of a community complementary feeding intervention[91].
- In Queensland, the Good Start Team works with Māori and Pacific Islander families to talk about healthy pregnancies, healthy babies, and healthy children. It also works with children in schools to teach healthy eating and being active.
- In NSW, the Mid North Coast Local Health District health promotion team in collaboration with Child and Family Health delivers PICNIC (Parents in Child Nutrition Informing Community), a well-established, co-designed, nutrition and feeding practices program. PICNIC provides

information, support, social media and web resources to parents and carers, to on-share amongst parent social networks and focuses on responsive feeding from starting solids onwards.

- In New Zealand the Well Child Tamariki Ora programme is a series of health visits that are free to all families for children from around 6 weeks up to 5 years of age. Advice on infant feeding, including breastfeeding, formula feeding, starting solids and general healthy eating advice is provided. Resources on healthy eating for infants and toddlers are available in hardcopy and online. There are many government-funded education and support programmes on healthy eating offered throughout the country. For example:
 - Healthy Babies Healthy Futures is a public health program for pregnant mothers and parents of children under 4 years of age, living in the Auckland and Waitematā localities. The program includes nutrition and wellbeing courses, and services in languages for Māori, Pasifika, Asian and Southeast Asian mothers.

While information and education about healthy eating is available, coverage is limited in some areas and other factors such as marketing, convenience, and price also play a significant role in determining what foods parents, guardians, and carers choose to feed their children.

4.4 International actions to improving commercial foods for infants and young children

The issues paper presented to Food Ministers in December 2023 provided an overview of international actions in relation to foods for infants and young children. There are currently limited regulatory approaches internationally to specifically address issues with labelling, composition, and texture for foods for infants and young children.

In particular, the World Health Organization European Regional Office has developed a nutrient and promotion profile model (NPPM) for commercial infant foods marketed as suitable for infants and young children aged 6-36 months. This was made available as an online tool in March 2023. The NNPM contains compositional thresholds and guidance on product-labelling and promotions. There has also been work in the United Kingdom to develop recommendations for improving marketing, naming, labelling and composition of foods for infants and young children.

5. Why is Government action needed?

Government action on this issue is important to improve health outcomes for Australian and New Zealand Children and to better align commercial foods for infants and toddlers with current infant and toddler feeding guidelines and meet the expectations of parents, guardians, and carers.

5.1 Objective

Under the Overarching Strategic Statement for the Food Regulatory System, the aims of the food regulatory system are:

1. Protecting the health and safety of consumers by reducing risks related to food.
2. Enabling consumers to make informed choices about food by ensuring that they have sufficient information and by preventing them from being misled.
3. Supporting public health objectives by promoting healthy food choices, maintaining, and enhancing the nutritional qualities of food and responding to specific public health issues.
4. Enabling a strong sustainable food industry to assist in achieving diverse, affordable food supply and general economic benefit.

Improving commercial foods for infants and young children is related to the first three objectives of the Food Regulatory System.

This work currently falls under Priority 2 of the Food Regulatory System to support the public health objective to reduce chronic disease related to overweight and obesity.

Considering the description of the problem outlined above and the aims of the food regulation system, FRSC proposes the objective of this work is as follows:

To improve the composition, labelling and texture of commercial foods for infants and young children to better align with the recommendations in the Australian and New Zealand infant and toddler feeding guidelines.

Consultation question 6 – Do you agree with the proposed objective of this work? If not, what is your proposed alternative?

6. Policy options

To achieve the desired outcome, three high level policy options have been identified. The options identified have been separated into voluntary approaches and regulatory approaches. These options are not necessarily mutually exclusive, and more than one option could be pursued. These policy options, including strengths and weaknesses (compared to the status quo) and risks and limitations are described in detail below. It is relevant to note that this paper is only focussing on policy options. Implementation details for the preferred policy option would be determined in due course.

Stakeholder views are sought on additional policy options or approaches within the policy options that could be considered to achieve the desired outcome.

Consultation question 7 – Are there additional policy options that should be considered? Please provide rationale and the benefits and risks of your suggested option.

6.1 Option 1: Status Quo

Description

Section 4 of this paper describes the status quo in relation to government and industry action underway to regulate and improve commercial foods for infants and young children in Australia and New Zealand. In summary, there is some regulation of the composition and labelling of commercial foods for infants, less so for foods aimed at young children noting many products aimed at this age group are not captured by a specific food standard. While education to parents is delivered, the coverage of these programs may not reach all families, and the convenience of packaged foods may be a key factor in infant and young child feeding decisions. This means products may continue to have multiple claims of products with the potential to cause consumer confusion as to the appropriateness of the product in the diets of infants and young children.

Risks and limitations

Maintaining the status quo confers the following risks:

- Commercial foods for infants and young children may not align with Australian and New Zealand infant and toddler feeding guidelines.
- Some products will continue to provide excess sugar and sodium for some age groups, with limited iron content and inadequate texture progression.
- Continued long-term health and developmental impacts for children reliant on these foods.
- Labelling of products will continue to potentially cause consumer confusion as to their nutritional content, which is contrary to food regulatory system objectives.

Consultation question 8 – Are the risks and limitations associated with the status quo described appropriately?

6.2 Option 2: Non-regulatory approaches

Description

Under this option, government could work with industry to voluntarily improve commercial foods for infants and young children so those foods will better align with Australian and New Zealand Infant and Toddler Feeding Guidelines regarding composition, texture, and labelling.

Approaches to working with industry could range from providing guidance that industry could follow, to a more rigorous code of practice which industry can voluntarily commit to and report on. These voluntary approaches could be incorporated into existing initiatives such as the Healthy Food Partnership in Australia and New Zealand Heart Foundation Reformulation Program, and/or through establishing a new trans-Tasman initiative.

Industry led activities could also be applied through this option. A broader range of issues could be incorporated into a non-regulatory approach compared to regulatory approaches and these can also be tailored to specific issues or product types.

Information for health professionals and caregivers could also be improved and promoted.

Composition

Government could work with industry to voluntarily improve the composition of commercial foods for infants and young children with a focus on iron, sugars, and sodium.

Approaches for consideration include:

- Establishing guidance for ingredient use in ready to eat meals for infants and toddlers. For example: use of iron rich ingredients and their minimum iron content, removal of fruit from savoury infant foods (pouches or cans), encouraging use of allergens in formulation.
- Establishing sugar and sodium targets for infant and toddler foods under the Australian Healthy Food Partnership Reformulation Program or New Zealand Heart Foundation Reformulation Program (funded by Health New Zealand). There are already targets established for sugar and sodium in these programs for other foods which has led to improvements in the composition of the food supply. For example, in the first two years of the Healthy Food Partnership Reformulation Program participating companies have removed approximately 208 tonnes of table salt, 261 tonnes of sugar and 470 tonnes of saturated fat from the food supply[92, 93]. Despite these positive results, there is low company participation in the reformulation program.
- Development of trans-Tasman Industry Code of Practice to promote a wider range of foods that align with dietary guidance for infants and young children.

Labelling

Government could work with industry to voluntarily improve the labelling of commercial foods for infants and young children. Industry –led approaches could also be adopted. Texture of products and appropriateness for different ages would also be considered through labelling approaches.

This could include implementing guidance for ingredients in product names to be listed in the order of prominence reducing the number of claims made on products to provide more useful information to consumers on the appropriateness of the product. There could also be guidance to industry about use of characters on food packages.

Education and Information

Improve information for health professionals and caregivers on nutritional requirements for infants and young children. This should include regular updates to guidelines and education campaigns to highlight the importance of good nutrition for infants and young children.

Approaches for consideration include:

- Improving trans-Tasman information for health professionals and consumers on nutritional requirements for infants and young children.
- Developing plain English and translated (and tailored) resources for Culturally and Linguistically Diverse (CALD) groups, including Māori, Aboriginal and Torres Strait Islander people.

Table 1. Strengths and weaknesses of Option 2 compared to status quo¹⁵

Strengths	Weaknesses
Opportunity to work with industry to increase knowledge of Australian and New Zealand infant and toddler feeding guidelines and infant nutritional requirements.	There would be additional work and costs required for industry that choose to adopt the voluntary approaches. If products cost more because of additional work to industry, then price may limit purchasing by some families.
Opportunity to improve products in the market.	
Builds on work already underway through the development of guidance for industry on foods for early childhood under Healthy Food Partnership.	
Better dissemination of infant feeding guidelines will provide valuable information to parents/guardians/carers and health workers on infant and young children's nutritional needs.	

Risks and limitations

- Success of this approach is dependent on industry uptake of the voluntary program to have the intended impact. Voluntary recommendations and targets may not receive sufficient industry uptake to make significant improvements to commercial foods for infants and young children.
- No obligations for industry to adopt or adhere to targets or guidance developed.
- Current voluntary programs such as the Healthy Food Partnership Reformulation Program and Health Star Rating labelling system have not had widespread industry uptake which indicates that an additional voluntary program may also not be widely adopted by industry. However, smaller, and more targeted voluntary initiatives for specific foods or issues may have more success.
- Voluntary measures do not create a level playing field, potentially penalising those that do participate by way of increased costs both via implementing the changes needed to amend products, and increased costs associated with higher iron ingredients.
- Consumers may not be able to identify whether a product has improved its composition for nutrients that are not part of the standard declarations in the Nutrition Information Panel (NIP).
- Success of educational resources is contingent on effective dissemination to relevant target audiences.

¹⁵ Note these are strengths and weaknesses compared to the status quo, not compared to other options.

- Education interventions can have limited reach and may not benefit all populations.

Consultation question 9a – Are the risks and limitations associated with Option 2 described appropriately?

Consultation question 9b – Are there particular approaches in this option that should be further considered?

Consultation question 9c – Food manufacturers- How likely are you to be involved in a voluntary reformulation or labelling program? What would be a suitable time frame for this option to be implemented in your organisation?

Consultation question 9d – What kinds of voluntary measures could be introduced to maximise industry uptake?

Consultation question 9e – What implementation issues need to be considered for this option?

6.3 Option 3: Regulatory approaches

Description

Under this option, Ministers could request FSANZ to review, develop and /or enhance compositional and labelling requirements for commercial foods for infants and young children, so that diets based on these foods will better align with Australian and New Zealand Infant and Toddler Feeding Guidelines.

Consideration could be given to aligning any new regulations with international regulations to reduce barriers to trade and minimise costs to both food importers and exporters noting this is already part of the food standards development process¹⁶.

Composition

Review and develop regulatory compositional requirements for commercial foods for infants and young children. This should include, but not be limited to:

- Extending minimum iron levels to further categories of foods targeted to infant and young children.
- Extending maximum sugar and sodium content to further categories of foods targeted to infant and young children.

Labelling

Review and enhance labelling requirements for commercial foods for infants and young children, in consultation with consumer law regulators as appropriate. This could include, but not be limited to:

- Reviewing the Nutrition Information Panel (NIP) to ensure it is fit for purpose for this age group, such as requiring the declaration of iron content.
- Reviewing claim permissions (e.g. nutrition content claims) to ensure claims enable carers to make informed choice and do not mislead, such as restrictions on added sugar claims (if not addressed by P1062) or the number of claims permitted on pack.
- Reviewing marketing aspects of foods for young children, including use of characters on packaging and provision of toys.

¹⁶ The FSANZ Act requires FSANZ to have regard, among other matters, to achieving consistency between domestic and international food standards when it is considering the development of food standards,

- Reviewing the naming requirements for foods to ensure current regulations enable informed consumer choice. This could include requiring product names to list ingredients in the order of prominence.
- Require pouch products with a spout to include a statement that indicates the food should not be consumed by sucking from the package (spout) and should be decanted into a bowl or onto a spoon prior to consumption.
- Require foods packaged in pouches with spouts to include a statement that these products are not suitable for consumption for children over 12 months.

Texture

- Including labelling information about the appropriateness of the texture of the food and a child's developmental stage.

Table 2. Strengths and weaknesses of Option 3 compared to status quo¹⁷

Strengths	Weaknesses
This option ensures composition, texture and labelling of all relevant products better align with infant feeding guidelines	May be complex to administer. Additional burden on regulators, including compliance burden.
Provides consistent information on labels to support informed consumer choice.	Increased regulatory burden for industry. Domestic and imported food producers must adhere to additional requirements.
Reduces potential for commercial infant and toddler foods to mislead consumers.	
Opportunity for industry product innovation with updated nutrition composition.	
Ensures any fortification permissions and encouragement to increase iron levels within foods is within safe limits.	
Links to existing work already underway to explore inclusion of added sugars in the NIP (proposal P1058). Also links to P1062 (defining added sugars for claims) which will result in some commercial infant and toddler foods unable to make added sugar claims in the future.	
Links with Australian Government Feasibility study on options to limit unhealthy food marketing to children: Policy options for public consultation.	

Risks and limitations

- Potential for long implementation period but a more permanent solution.
- There are several relevant product sub-categories within young child foods this approach would require detailed definitions and specifications for each product sub-category and evidence

¹⁷ Note these are strengths and weaknesses compared to the status quo, not compared to other options.

would be required to justify a prescriptive approach. Any standards would have to nuance requirements by category as appropriate.

- Labelling changes require some level of consumer understanding to achieve intended outcome.
- Potential to create a more complex regulatory environment by changing the NIP requirements for a specific subset of foods.
- As the dietary guidance is reviewed and updated there may be a need to be update requirements where relevant.
- Potential to create barriers to trade, however, a technical barrier to trade application can be made to the World Trade Organisation if required to address this issue.

Consultation question 10a – - Are the risks and limitations associated with Option 3 described appropriately?

Consultation question 10b –Are there particular approaches in this option that should be further considered?

Consultation question 10c – Food manufacturers- please provide information on the impact of potential composition options. What would be a suitable time frame for these options to be implemented in your organisation.

Consultation Question 10d – Food manufacturers- how would the labelling options impact you? What would be a suitable time frame for these options to be implemented in your organisation?

Consultation question 10e – What implementation issues need to be considered for this option?

7. How effectively the proposed policy options could achieve the objectives

This section assesses the proposed policy options to determine how well they meet the objective of this work. For this assessment, the objective has been split into components focussing on food composition and labelling – see table 3 below. An additional column on feasibility has also been included to identify any implementation barriers.

A colour code system has been used, with green indicating that the option can address the component of the objective, orange indicating that it has some potential to meet the objective, and red indicating the option is unlikely to meet the objective.

This initial analysis indicates that Option 6.3- Regulatory approaches is most likely to effectively achieve the objective of the work and have the least feasibility concerns. More than one option may be recommended to Food Ministers. Due to the range of issues being considered in this paper it is likely that some issues may be better suited a non-regulatory approach and therefore both options may be suitable depending on the issue to address. Feedback is sought on this conclusion. Information provided from stakeholders will be used to refine this assessment and any other options proposed by stakeholders can also be considered through this framework in the next stages of this work.

Consultation question 11 – Do you agree with the analysis of how well the proposed options would achieve the proposed objective? If not, please describe why and provide references with your response.

Consultation question 12 – Which issues in this paper do you consider are more suitable to regulatory and non-regulatory approaches?

Table 3. Assessment of policy options against the objective

Option	Composition	Labelling	Texture	Feasibility considerations
<p>Option 2: Non-regulatory approaches</p>	<p>Improvements to the composition of foods for infants and young children can be achieved through non-regulatory approaches but is dependent on strong and widespread uptake of the voluntary reformulation.</p> <p>More guidance can be provided for specific sub-categories of infant and young child foods on specific issues and best practice than can be achieved through food regulation.</p> <p>Experience with the Australian Healthy Food Partnership Reformulation Program indicates changes to improve the composition of foods is possible, however, strong and widespread industry uptake of a voluntary reformulation program may be unlikely[92, 93]A more targeted and specific voluntary approach may have benefits.</p>	<p>Improvements to labelling of foods for infants and young children is dependent on strong and widespread uptake of the voluntary recommendations. While some labelling changes such as labelling iron content may be supported and adopted by industry, there may be other labelling elements such as reducing the amount of product claims on a label that are less likely to be adopted by industry.</p> <p>Experience from the Health Star Rating voluntary labelling system indicates that strong and widespread industry uptake of a voluntary labelling scheme may be unlikely. However a more targeted and specific voluntary labelling approach may have benefits.</p>	<p>Improvements to texture of foods for infants and young children is dependent on strong and widespread uptake of the voluntary recommendations.</p> <p>Experience with voluntary actions to change labelling or composition indicate that uptake of voluntary guidance on texture may be limited. However a more targeted and specific voluntary approach may have benefits.</p>	<p>Industry guidance can be modified easily if dietary guidelines are updated, or to address feedback or feasibility issues.</p> <p>May be difficult to sustain.</p> <p>Requires a new approach for monitoring implementation.</p>
<p>Option 3: Regulatory approaches</p>	<p>This option can set a level playing field for industry for all products in relation to key nutrients for some categories of infant foods. For example, all relevant products would need to adhere to maximum sodium or sugar levels. This would allow consumers to ensure that</p>	<p>Reduces potential for commercial infant and toddler foods to mislead consumers by setting consistent labelling requirements. Provides consistent information to consumers.</p>	<p>Food texture is not regulated in Australia or New Zealand, and this would be a new concept to regulate and may be challenging to implement and enforce.</p> <p>Labelling approaches may be more appropriate to inform</p>	<p>Implementation can be through existing structures such as the Australia and New Zealand Food Standards Code. Food industry is familiar with the Code must comply with the Code.</p>

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Option	Composition	Labelling	Texture	Feasibility considerations
	<p>product composition is suitable for infants and young children.</p> <p>Some aspects of composition which are more subjective, or ingredient based (e.g. fruit content) may not be able to be regulated.</p>	<p>Sets an even playing field for industry.</p>	<p>consumers of different texture of foods.</p>	<p>Legislated processes are in place for the development and review of food regulatory measures.</p> <p>Potential for long implementation period but a more permanent solution.</p> <p>More difficult to change if guidelines are updated or new product types come onto the market.</p> <p>Existing systems are in place for enforcing food regulatory measures.</p>

8. Likely net benefit of each option

To determine the preferred option, this section considers the likely net benefit of each option. As this policy paper is taking a high-level approach to identify a suitable option to recommend to Food Ministers, costs and benefits are largely qualitative in nature. Once a preferred policy option has been identified then more detailed cost benefit analysis can be undertaken. For example, if a regulatory approach is recommended to Food Ministers and Food Ministers refer this work to Food Standards Australia New Zealand (FSANZ), then a detailed assessment of costs and benefits can be undertaken as part of its legislated regulatory processes.

The analysis considers the costs and benefits of each option for the groups most likely to be affected. If other options are identified through stakeholder consultation, these will also be considered for their potential benefits and costs.

8.1 Groups most likely to be affected by changes to commercial foods for infants and young children

The groups most likely to either bear a cost or receive a benefit from the options are:

- Australian and New Zealand infants and young children that consume commercial foods designed for this age group who will benefit from improved composition of these foods, potentially leading to improved nutritional status.
- Parents/guardians/carers of Australian and New Zealand infants and young children who purchase commercial foods for infants and young children, who will potentially benefit from consistent labelling.
- Australian and New Zealand manufacturers of infant and young child foods who will be required to comply with composition and labelling regulations and will face compliance costs.
- Food regulators who will enforce the changes and will face implementation and monitoring costs.
- Australian and New Zealand Governments costs to fund public health systems given the long-term health consequences of the nutritional inadequacies created for infants and young children relying on commercial foods.

8.2 Benefits

The first 2000 days of a child's life is important for their optimal development. A key pillar of this life stage is nutrition, encompassing exclusive breastfeeding and transitioning to solid foods. Frequent use of, or reliance on, commercial foods for infants and young children may not provide the appropriate nutritional intake for healthy growth and development. Improving the composition of these foods offers important health benefits to the target population.

Assisting parents, guardians, and carers to make informed healthy choices for their children through improved labelling requirements can help establish healthy food preferences from a young age. This has the potential to translate into long-term health outcomes for future generations.

The costs associated with each option are detailed in Table 4. It is recognised that causes of poor dietary patterns, dental caries and obesity are multi-factorial, with a strong influence of the social determinants of health. Therefore, any changes to the composition, texture and labelling of infant foods may not have benefits that can be easily measured and attributed directly to this work.

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Table 4. Benefits of each option

	Option 1: Status Quo	Option 2: Non-regulatory approaches	Option 3: Regulatory approaches
Benefits to the community	Nil	<p>Benefits to the community are dependent on widespread industry adoption of the non-regulatory approaches.</p> <p>Reducing the total sugar content of commercial foods may have positive effects on dental carries.</p> <p>Improving iron content of commercial foods for infants and young children may lead to improvements in iron status of infants and young children who regularly consume these foods. Based on the NZFF study where 23% of infants had sub-optimal iron, and 28% of infants (aged 7 to 10 months) frequently consume pouches, approximately 16,000¹⁸ infants in New Zealand may directly benefit if these changes are implemented by whole of industry.</p>	<p>Children who are regular consumers of commercial foods for infants and young children will directly benefit from improvements to those foods.</p> <p>Reducing the total sugar content of commercial foods may have positive effects on dental carries.</p> <p>Improving iron content of commercial foods for infants and young children may lead to improvements in iron status of infants and young children who regularly consume these foods. Based on the NZFF study where 23% of infants had sub-optimal iron, and 28% of infants (aged 7 to 10 months) frequently consume pouches, approximately 16,000¹⁹ infants in New Zealand may directly benefit if these changes are implemented by whole of industry.</p> <p>The benefit would be greater than the non-regulatory approaches as all of industry is required to meet requirements.</p>
Benefits to Industry	A benefit of maintaining the status quo is no increase in costs.	Industry members who choose to voluntarily reformulate their products may benefit from the positive associations with making these foods healthier compared with their competitors.	Level playing field for industry.
Benefits to Government ²⁰	No costs associated with administering voluntary or regulatory changes.	Ensuring good nutrition in the early years has the potential to translate into better health outcomes, resulting in savings for the health system. Improvements to dental health may result in savings related to the treatment of dental issues. These benefits can only be achieved if there is strong and widespread adoption of voluntary measures to improve commercial foods for infants and young children.	<p>Better nutrient intake for children eating commercial foods in the early years has the potential to translate into better health outcomes, resulting in savings for the health system. Improvements to dental health may result in savings related to the treatment of dental issues.</p> <p>Compared to Option 2, these benefits are more likely since this option ensures widespread adoption of improvements to foods for infants and young children.</p>

¹⁸ Based on the estimated number of 1 year olds living in New Zealand in 2023 [View table - Infoshare - Statistics New Zealand \(stats.govt.nz\)](https://www.stats.govt.nz/view/table-infoshare)

¹⁹ Based on the estimated number of 1 year olds living in New Zealand in 2023 [View table - Infoshare - Statistics New Zealand \(stats.govt.nz\)](https://www.stats.govt.nz/view/table-infoshare)

²⁰ As the Australia and New Zealand Food Regulation System involves multiple levels of Government, several Governments may be impacted.

Consultation question 13a – Do you agree with the description of the possible benefits associated with the proposed options?

Consultation question 13b – Are there additional benefits associated with all or some of the proposed options that have not been captured? Please provide data and references for your response.

8.3 Costs

All the proposed policy options have costs associated with them. Costs are born by Government, industry, and the community. Consultation questions to gather information on the costs of the proposed options have been included against each option.

Costs to Government(s) would include the work involved in changing regulations and administrating and enforcing the regulations (Option 3), operating a voluntary reformulation and/or labelling program (Option 2), long-term costs related to chronic disease from poor dietary patterns (Option 1) and delivering industry education (relevant to all options).

This paper seeks more information from stakeholders to understand the costs associated with the proposed options. A preliminary assessment of costs associated with each option are detailed in Table 5.

Table 5. Costs of each option

	Option 1: Status Quo	Option 2: Non-regulatory approaches	Option 3: Regulatory approaches
Costs to the community	Costs to the community include the long-term costs associated with long term health and development outcomes if the status quo is maintained.	Noting that there may be costs for reformulation and labelling changes, and these costs may be passed on to consumers. This may have unintended flow-on effects such as consumers having less money available to spend on other foods suitable for their family such as fruits and vegetables. Alternatively, increased product costs may shift purchasing away from commercial foods for infants and young children.	Noting that there may be costs for reformulation and labelling changes, and these costs may be passed on to consumers. This may have unintended flow-on effects such as consumers having less money available to spend on other foods suitable for their family such as fruits and vegetables. Alternatively, increased product costs may mean that parents choose not to buy commercial foods for infants and young children. However, sufficient transition periods can enable manufacturers to adopt the regulatory changes as part of otherwise scheduled labelling updates or product reformulations to reduce costs and impact on industry. Other market considerations such as reduced competition from manufacturers choosing to leave the market instead of reformulating under option 3.
Costs to Industry	Nil additional costs	Costs to industry in product development and associated labelling changes. Non-regulatory options would only have costs to industry who voluntarily chose to participate. For example, there would be costs to manufacturers who chose to voluntarily reformulate their products as part of a voluntarily reformulation program. It is not expected that there would be costs to food retailers associated with this option.	Costs to industry in reformulation and associated labelling changes. If regulatory approaches are pursued, these costs would impact all manufacturers of infant and young child foods. However, sufficient transition periods can enable manufacturers to adopt the regulatory changes as part of otherwise scheduled labelling updates or product reformulations to reduce costs and impact on industry. It is not expected that there would be costs to food retailers associated with this option.
Costs to Government ²¹	Maintaining the status quo will incur long-term costs related to chronic disease from poor dietary patterns. The medical costs due to childhood obesity has been estimated to be about \$43 million (in 2015 AUD) per year[94]. The additional 3-year costs of healthcare for a child with obesity compared	Costs to Government(s) would include the work involved in developing, operating, and monitoring a voluntary program. There will also be costs associated with delivering industry education.	Costs to Government(s) would include the work involved in changing regulations and administrating and enforcing the regulations. There will also be costs associated with delivering industry education.

²¹ As the Australia and New Zealand Food Regulation System involves multiple levels of Government, several Governments may be impacted.

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	Option 1: Status Quo	Option 2: Non-regulatory approaches	Option 3: Regulatory approaches
	with healthy weight are estimated to be \$825 for general patients and \$1332 for concession card holders (in 2014 AUD)[95].		

Consultation question 14a – Do you agree with the assessment of the costs associated with the proposed options?

Consultation question 14b – Are there additional costs associated with all or some of the proposed options that have not been captured? Please provide data and explain your rationale and your calculations.

9. Preferred Policy Option

This consultation will help to inform and identify the preferred policy option(s) to recommend to Food Ministers. The preferred policy option(s) will be the option likely to have the highest net benefit, considering how well the proposed options achieve the objective of the work.

Based on the initial analysis undertaken in this document, Option 3 - regulatory approaches to improve composition and labelling of commercial foods for infant and young children, has the greatest potential to achieve the objective, however further evidence is required, and other options can be proposed before any recommendation is made to Food Ministers.

Consultation question 15 – What do you consider to be the preferred policy option(s) to recommend to Food Ministers? Please provide your rationale for your preference.

10. Consultation

The Consultation Regulatory Impact Statement (RIS) will be made available online through the Australian Government Department of Health and Aged Care Consultation Hub, on a Food Regulation branded page. The New Zealand Ministry for Primary Industries website will provide a link to the consultation.

Notifying stakeholders

Stakeholders will be notified of the consultation opportunity through the Food Regulation Secretariat's mailing list.

Consultation period

The consultation will run for a 6-week period, from August to September 2024.

Written consultation

Stakeholders will be invited to submit information in response to the questions in the Consultation RIS via the Consultation Hub. All consultation questions are listed throughout this document and included at [Attachment 1](#).

11. Implementation and review

Unless the preferred option is to maintain the status quo, implementation of the preferred policy option(s) would be undertaken by Government and/or industry depending on the nature of the option.

Technical implementation issues and monitoring approaches will be considered once a preferred policy option has been identified. Possible implementation issues may include costs, timeframes, and feasibility issues. Further consultation and regulatory analysis may be required.

Consultation question 16 – Please provide any other information on costs, timeframes, and feasibility for the options discussed above.

Consultation question 17 – Please provide any other comments or points for consideration that may not have been addressed in this document

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Consultation Questions

Consultation question 1 – Are there additional studies on the **consumption** of commercial foods for infants and young children in Australia and New Zealand?

Consultation question 2 – Are there additional studies on the **prevalence of iron deficiency** in **Australian** children, including among Aboriginal and Torres Strait Islander children and children living in rural and/or remote areas and other groups, including vulnerable populations?

Consultation question 3 – Are there additional studies on the **composition** of commercial foods for infants and young children in Australia and New Zealand?

Consultation question 4 – Are there additional studies on the **textures** of commercial foods for infants and young children in Australia and New Zealand?

Consultation question 5 – Food manufacturers- what **reformulation** activities have you undertaken in the last 5 years related to commercial foods for infants and young children? What was the purpose the reformulation activity?

Consultation question 6 – Do you agree with the proposed objective of this work? If not, what is your proposed alternative?

Consultation question 7 – Are there additional policy options that should be considered? Please provide rationale and the benefits and risks of your suggested option.

Consultation question 8 – Are the risks and limitations associated with the status quo described appropriately?

Consultation question 9a – Are the risks and limitations associated with Option 2 described appropriately?

Consultation question 9b – Are there particular approaches in this option that should be further considered?

Consultation question 9c – Food manufacturers- How likely are you to be involved in a voluntary reformulation or labelling program? What would be a suitable time frame for this option to be implemented in your organisation?

Consultation question 9d – What kinds of voluntary measures could be introduced to maximise industry uptake?

Consultation question 9e – What implementation issues need to be considered for this option?

Consultation question 10a – Are the risks and limitations associated with Option 3 described appropriately?

Consultation question 10b – Are there particular approaches in this option that should be further considered?

Consultation question 10c – Food manufacturers- please provide information on the impact of potential composition options, including cost estimates where available. What would be a suitable time frame for these options to be implemented in your organisation.

Consultation question 10d – What implementation issues need to be considered for these options?

Consultation Question 10e – Food manufacturers- how would the labelling options impact you (include cost estimates where available)? What would be a suitable time frame for these options to be implemented in your organisation.

Consultation question 10f – What implementation issues need to be considered for these options?

Consultation question 11 – Do you agree with the analysis of how well the proposed options would achieve the proposed objective? If not, please describe why and provide references with your response.

Consultation question 12 – Which issues in this paper do you consider are more suitable to regulatory and non-regulatory approaches?

Consultation question 13a – Do you agree with the description of the possible benefits associated with the proposed options?

Consultation question 13b – Are there additional benefits associated with all or some of the proposed options that have not been captured? Please provide data and references for your response.

Consultation question 14a – Do you agree with the assessment of the costs associated with the proposed options?

Consultation question 14b – Are there additional costs associated with all or some of the proposed options that have not been captured? Please provide data and explain your rationale and your calculations.

Consultation question 15- What do you consider to be the preferred policy option(s) to recommend to Food Ministers? Please provide your rationale for your preference.

Consultation question 16 – Please provide any other information on costs, timeframes, and feasibility for the options discussed above.

Consultation question 17 – Please provide any other comments or points for consideration that may not have been addressed in this document.