Commercial foods for early childhood: Australia and New Zealand

FOOD STANDARDS

AUSTRALIAN GOVERNMENT DEPARTMENT OF HEALTH

The Australian Government Department of Health developed this background paper for presentation to the 15th Australia and New Zealand Ministerial Forum on Food Regulation (now known as the Food Ministers Meeting) in November 2020. This paper was also presented to the Healthy Food Partnership Executive Committee in March 2021.

This paper was prepared and finalised in 2020 and is based on evidence available at the time of writing.

Table of Contents

EXECUTIVE SUMMARY	3
INTRODUCTION	5
1. SETTING THE SCENE	7
1.1 Current Regulations in Australia and New Zealand	7
1.1.1 Composition	7
1.1.2 Labelling	7
1.1.3 Activities outside of the Code	8
1.2 National Guidelines for feeding infants and young children aged 6 to 48 months	8
1.2.1 Infant Feeding Guidelines	8
1.3 Current research base	9
1.3.1 Allergen information and evidence	.10
1.3.2 Setting the palate	.10
1.4 Dietary patterns and commercial foods	.12
1.4.1 Data on dietary patterns in early childhood	.12
1.4.2 Use of commercial baby foods and drinks and their contribution to the diet	.14
1.5 Labelling and Marketing	.14
1.5.2 Partnerships with children's characters	.14
2. EVIDENCE FOR ACTION: Nutrient profile of foods in Australia	.15
2.1 The baby food market in Australia	.15
2.2 Market analysis	16
2.3 Product serving sizes	18
2.4 Packaging	19
2.5 Name and description of the food	21
2.6 Finger foods	22
2.7 Ingredient variety	.23
2.8 Nutrient analysis	25
2.8.1 Sugar	25
2.8.2 Salt	26
2.8.3 Energy intake	26
2.9 Yoghurt	27
3. SUPPORTING EVIDENCE	29

3.1 Composition of infant and toddler foods in Australia	29
3.2 Composition of infant foods in England	30
4. CONCLUSION	31
ATTACHMENTS	33
ATTACHMENT A	34
Attachment A: Infant feeding guidelines around the world	34
ATTACHMENT B	41
Attachment B: Products included in baby meals and finger foods analysis	41
ATTACHMENT C	49
Attachment C: Products included in yoghurt pouch analysis	49

EXECUTIVE SUMMARY

This background paper summarises the current environment relating to infant and toddler nutrition in Australia and New Zealand including examining commercially available foods for children aged 4 to 48 months.

Early childhood is a critical time where poor dietary patterns can have life-long impacts on health and wellbeing. Healthy eating is important to prevent nutrient deficiencies, provide nutrients required for healthy growth and development, and to support development of healthy taste preferences and life-long healthy eating behaviours. There is also a growing awareness of the concept of biological programming where early nutrition can influence underlying physiological processes in ways that have life-long consequences.

National guidelines in Australia and New Zealand recommend children be exclusively breastfed, with the introduction of solid foods, without added sugar and salt, around six months once a baby is showing signs of readiness and transitioning to family foods from 12 months.

Commercially available foods for infants and toddlers play an important part in the nutrition of children in Australia and New Zealand. The *Australia New Zealand Food Standards Code* (the Code) sets out specific compositional requirements for foods for infants and also specifies labelling requirements for infant foods. Consumer laws protect buyers against misinformation through false, misleading or deceptive representations or claims.

This paper examines the composition and availability of commercially available foods aimed at infants and young children in Australia. Key findings include:

- Commercial foods frequently prioritise sweet flavours for 'meals', which creates issues for setting the palate and lifelong taste preferences;
- Commercial infant foods may be a major contributor of sugar to the diet, using processed fruit products and sugar to sweeten goods;
- Manufacturer recommended serving sizes are often far larger than recommended in the Australian Dietary Guidelines. Even when sugar is not added, having large servings promote overconsumption of food and increase the amount of sugar consumed;
- Pouches are the predominant packaging method for meals for children up to eight months. Purees in pouches reduce opportunities for optimal physical and cognitive development and decreases access to transition through food textures;
- Some baby foods are not labelled to reflect key ingredients, potentially misleading caregivers about the foods they are choosing;
- While some finger food products contain added salt, overall salt was not a concern across any of the categories; and

• Yoghurt pouches marketed to children often contain added sugar, although some reformulation work has been undertaken.

Implementing strategies to support optimal infant nutrition, including investment in breastfeeding and optimal complementary feeding in the early years, can help caregivers establish healthy food preferences to optimise nutrition and development from a young age. This paper highlights that commercially available products in supermarkets are playing to instinctive preferences for a sweet flavour profile and setting lifelong preferences for sweet foods which is known to be associated with negative health conditions. Large serving sizes may also be driving overconsumption of foods, and packaging foods in pouches could be hindering the physical and cognitive development expected from transitioning to solid foods. Addressing these issues has the potential to translate into long term health outcomes for future generations.

INTRODUCTION

The first 1,000 days, from conception until a child's second birthday, is a key developmental window which shapes children's bodies and brains. What happens during the first 1,000 days is instrumental in influencing lifelong health and wellbeing, including the risk of obesity, heart disease, Type-2 diabetes, osteoporosis, asthma, lung disease and some forms of cancer^{1,2}. Infants are a vulnerable population group due to their developmental stage and dependence on caregivers to meet their basic needs. Children are also nutritionally vulnerable up until five years of age due to their rapid growth and development, with long-term effects on their physical and cognitive maturation if under-nutrition or nutrient deficiencies are present³. Appropriate interventions implemented during this critical phase of development can lay the foundation for healthy development and habits and reduction of risk for obesity and chronic diseases.

There is growing evidence about interventions to transform outcomes for this vulnerable population. Optimal maternal and child nutrition is a key pillar to shape wellbeing, with benefits including improved cognitive, motor and socioemotional development, improved school performance and learning capacity, decreased obesity and non-communicable diseases (NCD), and increased work capacity and productivity⁴.

In Australia in 2017-18, around one in four children aged between five and 14 years were overweight or obese⁵. In New Zealand in 2018-19, around one third of children aged two to four years were overweight or obese, which is an estimated 258,000 children⁶. One in nine New Zealand children aged two to 14 years were obese⁷. Evidence shows that weight gain across the first two years of life is strongly predictive of later adiposity in childhood and adolescence⁸. Overweight and obesity is also likely to persist and rise with age. An

¹ C. Mameli, S. Mazzantini, G.V. Zuccotti (2016). Nutrition in the first 1000 Days: The origin of childhood obesity *International Journal of Environmental Research and Public Health*, 13 (9)

² Moore, T. & Arefadib, Noushin & Deery, Alana & West, Sue. (2017). *The First Thousand Days: An Evidence Paper*. Available at:

https://www.researchgate.net/publication/320057527_The_First_Thousand_Days_An_Evidence_Paper

³ National Health and Medical Research Council. (2013). *Australian Dietary Guidelines*. Available at: <u>https://www.eatforhealth.gov.au/sites/default/files/content/n55_australian_dietary_guidelines.pdf</u>

⁴ The Lancet. (2013). *Executive summary of The Lancet maternal and child nutrition series*. Available at: <u>https://www.thelancet.com/pb/assets/raw/Lancet/stories/series/nutrition-eng.pdf</u>

⁵ Australian Institute of Health and Welfare. (2020). *Australia's Children*. Available at: <u>https://www.aihw.gov.au/reports/children-youth/australias-children/contents/health/overweight-and-obesity</u>

⁶ Ministry of Health NZ. (2019). *Annual Data Explorer 2018/19: New Zealand Health Survey*. Available at: <u>https://minhealthnz.shinyapps.io/nz-health-survey-2018-19-annual-data-explorer/</u> (Accessed: 1 October 2020)

⁷ Ministry of Health NZ. (2019). Obesity statistics. Available at: <u>https://www.health.govt.nz/nz-health-statistics-and-data-sets/obesity-statistics</u> (Accessed: 31 August 2020)

⁸ Zheng, M, Lamb, KE, Grimes, C, Laws, R, Bolton, K, Ong, KK & Campbell, K 2018, 'Rapid weight gain during infancy and subsequent adiposity: a systematic review and meta-analysis of evidence', *Obesity reviews*, vol. 19, no. 3, pp. 321–332.

Australian study showed children with obesity at age six to seven are very unlikely to return to a normal BMI by the ages 14 to 15 (7.6%)⁹.

Taste preferences begin programming in utero through exposure to flavours in the mother's diet via the amniotic fluid and continue through breastmilk^{10,11}. Complementary foods from weaning form a substantial portion of lifelong taste preferences and set feeding behaviours and palate preferences for life¹². Infant feeding guidelines in Australia and New Zealand recommend not adding sugar or salt to infant foods and limiting intake for toddlers for health reasons, however this also assists with balancing taste preferences. A large New Zealand study with 6,435 participants concluded one in six infants had salt added to their food or milk, and one in seven infants had sugar added to their food or milk at nine months of age.

Commercial baby foods may provide many infants with their first taste experience beyond formula or breast milk and may form an ongoing proportion of their diet. In 2019, commercial baby food experienced strong double-digit value growth¹³. The commercial infant food environment in Australia provides a range of packaged meals and snacks in a variety of packaging options. Research on infant food consumption in Australia and New Zealand, including the proportion of infants' diets which comprise commercial foods, is limited. Small non-representative studies in Australia only look at consumption beyond 12 months.

Nutrient and food requirements for children vary depending on age, gender and activity level¹⁴. While parents ultimately make food and drink choices for their children, feeding preferences, eating behaviours and dietary patterns are influenced by biological, social, and environmental factors. Georgina Russell et al. summarise the multifaceted reasons that parents struggle to feed their children well, as follows:

• individual-level parent factors (socio-economic status, education level, ethnicity, gender etc.);

⁹ Liu T, Lingam R, Lycett K, Mensah F, Muller J, Hiscock H et al. (2018). Parent-reported prevalence and persistence of 19 common child health conditions. *Archives of Disease in Childhood 103*:548–556. Available at: doi:10.1136/archdischild-2017-313191.

¹⁰ Beckerman, J.P. et al. (2017) 'The Development and Public Health Implications of Food Preferences in Children', *Frontiers in nutrition (Lausanne)* 4: n. pag. Web.

¹¹ Scott, J., Chih, T., & Oddy, W. Food variety at 2 years of age is related to duration of breastfeeding. *Nutrients*, *4*(10), (2012): 1464–1474. https://doi.org/10.3390/nu4101464

¹² Beckerman, J.P. et al. (2017) 'The Development and Public Health Implications of Food Preferences in Children', *Frontiers in nutrition (Lausanne)* 4: n. pag. Web.

¹³ Euromonitor International. (2019). *Baby Food in Australia*. Available at: <u>https://www.euromonitor.com/baby-food-in-australia/report</u>

¹⁴ National Health and Medical Research Council. (2012) *Infant feeding guidelines information for health workers*, Available at:

https://www.eatforhealth.gov.au/sites/default/files/files/the_guidelines/n56_infant_feeding_guidelines.pdf

- individual-level child factors (such as pestering, temperament and food fussiness); and
- societal factors (food availability, marketing, labelling).

Parents may rely on marketing and front of package messaging to influence decision making^{15,16}. Messaging and marketing on some infant and toddler food products conflicts with national recommendations for infant and young child feeding and may cause confusion for parents.

1. SETTING THE SCENE

1.1 Current Regulations in Australia and New Zealand

Food standards are developed under the *Australia New Zealand Food Standards Code* (the Code) with the main aim to protect public health and safety in Australia and New Zealand.

A summary of the relevant regulations for foods for infants and young children is provided below.

1.1.1 Composition

Australia New Zealand Food Standards Code

Standard 2.9.2 – Food for infants of the Code requires foods for infants to meet specific compositional requirements. The Code defines an infant as a person under the age of 12 months. Foods designed for children older than 12 months do not have the same compositional requirements. The specific compositional requirements for infant foods include upper limits for sodium content, specific compositional requirements for cereal and non-cereal-based foods (e.g. sodium and iron content) as well as requirements around the voluntary addition of vitamins and minerals.

1.1.2 Labelling

Australia New Zealand Food Standards Code

Standard 2.9.2 – Food for infants also specifies labelling requirements for infant foods. These include restrictions on claims about vitamins and minerals and additional labelling requirements in relation to the age appropriateness and consistency of foods and drinks. The Code also requires certain labelling identifying the food as 'sweetened' if the monosaccharide and disaccharide content of added sugars and honey on foods for infants is more than 4 g/100 g.

¹⁵ Georgina Russell, C., Burke, P., Waller, D., & Wei, E. (2017) 'The impact of front-of-pack marketing attributes versus nutrition and health information on parents food choices', *Appetite*, 116, 323–338. Available at: https://doi.org/10.1016/j.appet.2017.05.001

¹⁶ K. Mehta, C. Phillips, P. Ward, J. Coveney, E. Handsley, P. Carter. (2012) 'Marketing foods to children through product packaging: Prolific, unhealthy and misleading', *Public Health Nutrition*, 15 (9), pp. 1763-1770

The Code also provides additional standards that apply to labelling of infant foods. These include: allergy labelling requirements, nutrition health and related claims such as 'no added sugar', and information requirements that require the statement of ingredients lists ingredients in descending order by ingoing weight. In addition, ingredients that are mentioned in the name of the food, are usually associated with the name of the food or are emphasised on the label through words, picture or graphics must be declared as a percentage in the ingredients list.

Misleading, misinforming or deceptive representations and nutrition or health claims on labels are covered by both fair trading laws and food laws in Australia and New Zealand.

1.1.3 Activities outside of the Code

Health Star Rating (HSR) System

The HSR system is a voluntary front-of-pack food labelling system that is intended to make it easier for consumers to choose healthier packaged foods and drinks. It uses a star rating scale of half a star to five stars to rate the overall nutrient profile of packaged foods. For manufacturers that choose to adopt the HSR system, a product's star rating is presented on the front of the label for packaged products.

Although infant foods (as defined by Standard 2.9.2) should not display a HSR system graphic, some products that are intended for older toddlers over 12 months old are using the system. These products may be presented in the same pouch style packaging as some infant foods, along with similar marketing and labelling practices.

1.2 National Guidelines for feeding infants and young children aged 6 to 48 months

1.2.1 Infant Feeding Guidelines

In Australia, information about introducing solids to infants is contained in the Australian Dietary Guidelines and the Infant Feeding Guidelines. The Australian *Eat for Health: Infant feeding guidelines* (AIFGs) were published in February 2012. Advice on commencing solids in New Zealand is included in the New Zealand Food and Nutrition Guidelines for Healthy Infants and Toddlers (NZIFGs), which were first published in 2008 with a partial update in December 2012.

Both the AIFGs and the NZIFGs recommend commencing solid foods from around six months. Infants should be offered a range of foods of an appropriate texture and consistency for their developmental stage. The Guidelines recommend first foods be ironrich and an increasing range and quantity of foods should be introduced so that by 12 months the infant is consuming a wide variety of family foods. Awareness and knowledge of AIFG recommendations is low ¹⁷.

The AIFGs caution that infants given salty or very sweet foods may acquire a taste for them, resulting in poor food choices later in life. Both the AIFG and the NZIFG recommend solid foods should be provided to children without the addition of sugar or honey. Consumption of added sugars is associated with poor dietary quality, obesity, increased risk of NCDs and increased dental caries¹⁸. 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^{19,20}.

Work is currently underway by Food Standards Australia New Zealand to review labelling for added sugars to consider how the Code should be amended to help consumers make more informed choices about added sugars in food.

Both the AIFG and the NZIFG also recommend avoiding added salt to foods for infants, and to choose lower salt options when available. This is due to the limited maturity of infant's 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. The adequate intake (AI) for sodium for infants from birth to six months of age is 120 mg per day, for infants aged seven to 12 months is 170 mg per day, and for toddlers aged one to two years is 200–400 mg per day.

Since the AIFG publication in 2012 and NZIFG update at the same time, other countries have reviewed and updated their national guidelines to reflect updated evidence. A summary comparison of recommendations for infant feeding in comparable developed countries is included at <u>Attachment A</u>.

1.3 Current research base

In recognition of the fact that updated evidence has become available since the AIFG and NZIFG were published, key developments in research and evidence for infant feeding have been explored.

Organization. Available at: https://apps.who.int/iris/bitstream/handle/10665/149782/9789241549028_eng.pdf?sequence=1_

¹⁷ Begley, A., Ringrose, K., Giglia, R., & Scott, J. (2019) 'Mothers' Understanding of Infant Feeding Guidelines and Their Associated Practices: A Qualitative Analysis', *International journal of environmental research and public health*, *16*(7), 1141. Available at: https://doi.org/10.3390/ijerph16071141.

¹⁸ World Health Organization. (2015). *Guideline: sugars intake for adults and children*. Geneva: World Health

¹⁹ Australian Institute of Health and Welfare. (2020). Australia's children: dental health. Available at <u>https://www.aihw.gov.au/reports/children-youth/australias-children/contents/health/dental-health</u>

²⁰ Aung, Y. M., Tin Tin, S., Jelleyman, T., & Ameratunga, S. (2019). Dental caries and previous hospitalisations among preschool children: findings from a population-based study in New Zealand. *The New Zealand medical journal*, *132*(1493), 44–53.

1.3.1 Allergen information and evidence

Since 2012 the available evidence on the introduction of allergenic solid foods has strengthened. The AIFGs state that more evidence is required on optimal timing to introduce allergenic foods²¹. The Australasian Society of Clinical Immunology and Allergy (ASCIA) now advises to introduce common allergy causing foods by 12 months in an age appropriate form. Further advice that once introduced, these foods should continue to be given to the baby regularly to maintain tolerance is recommended by ASCIA²² and other updated guidance around the world.

Although this evidence is now strong, new research has found the Australian commercial food industry is not adding allergenic foods to its products. From an audit of 251 baby food products from 14 companies, some were found to contain wheat (27 products) and cow's milk proteins (73 products), but none contained peanuts, tree nuts, sesame or shellfish. Only three products contained egg. Furthermore, current labelling practices such as "free from" may be leading parents to believe they should be avoiding giving allergenic foods to their babies. Encouragement for the food industry to include clearly labelled allergenic foods in infant products may be beneficial to ensuring infants have sufficient regular exposure to maintain tolerance²³. However, it should be noted that (appropriately labelled) allergenic foods are widely available beyond the baby food aisle for purchase in both Australia and New Zealand.

1.3.2 Setting the palate

Human taste preferences and aversions are an innate human characteristic. Evolution has shaped our response to certain flavours and our sensory systems evolved to detect and prefer the once rare calorie-rich foods that taste sweet²⁴. Likewise, a sensitivity to and preference for salty foods appears to have an innate component that develops at around four months of age²⁵. However, these instinctive preferences are not conducive to an optimal infant's diet. Infants have immature kidneys that are unable to cope with any added

²¹ National Health and Medical Research Council. (2012) *Infant feeding guidelines information for health workers*. Available at:

 $https://www.eatforhealth.gov.au/sites/default/files/files/the_guidelines/n56_infant_feeding_guidelines.pdf$

²² Australasian Society of Clinical Immunology and Allergy [ASCIA] (2016) *ASCIA Guidelines – Infant feeding and allergy prevention*. Available at: <u>https://www.allergy.org.au/hp/papers/infant-feeding-and-allergy-prevention</u>.

²³ Netting, M.J., Gold, M.S., Palmer, D.J. (2020) Low allergen content of commercial baby foods. *Journal of Paediatrics and Child Health/Early View*. Available at: https://doi.org/10.1111/jpc.15047.

²⁴ Mennella, J. A., & Bobowski, N. K. (2015). 'The sweetness and bitterness of childhood: Insights from basic research on taste preferences', *Physiology & behavior*, *152*(Pt B), 502–507. Available at: https://doi.org/10.1016/j.physbeh.2015.05.015.

²⁵ Cowart, B. J., & Beauchamp, G. K. (1986). 'The importance of sensory context in young children's acceptance of salty tastes', *Child development*, *57*(4), 1034–1039. Available at: https://doi.org/10.1111/j.1467-8624.1986.tb00264.x.

salt²⁶ and the addition of sweet foods to the diet can set enduring eating patterns that are associated with negative health conditions²⁷.

In spite of these innate preferences, both in-utero and after birth, exposure to a variety of flavours also influences taste preferences later in life²⁸. One study demonstrated that infants exposed to the flavour of carrots through amniotic fluid and breast milk, through their mother consuming carrot juice while pregnant or lactating, showed less negative facial expressions and were perceived to enjoy carrot flavoured cereal more than infants who were not previously exposed to this flavour²⁹. This may indicate a requirement for further nutrition based education commencing during pregnancy.

In relation to bitter tastes, these signal to the body the presence of potentially toxic compounds and hence substances that are bitter are generally innately disliked and avoided. Nevertheless, with experience even bitter vegetables can come to be liked. Early experiences with bitter flavours such as green leafy vegetables, sweet flavours such as apple and more volatile flavours such as garlic have the potential to impact long term health through palate setting³⁰.

Furthermore, children learn the *context* in which the sweet taste experience occurs. Through familiarization, children develop a sense of what should, or should not, taste sweet. During childhood, they learn the rules of cuisine: what to eat, how to eat, when to eat and how sweet a food is supposed to taste³¹.

Due to this innate preference for sweet and salty foods and aversion to bitter foods, it is not surprising that the Australian and New Zealand marketplaces include a range of products which include ingredients such as pear and apple for sweetness and cheese for saltiness to mask the bitterness of some vegetable ingredients. Although in the short term, the composition of these products may lead to a higher overall and vegetable intake, research

²⁶ Action on Salt. (n.d). *Salt and Children*. Available at: <u>http://www.actiononsalt.org.uk/salthealth/children/</u> (Accessed 31 August 2020)

²⁷ Herrick, K., Fryar, C., Hamner, H., Park, S., & Ogden, C. (2020) 'Added Sugars Intake among US Infants and Toddlers', *Journal of the Academy of Nutrition and Dietetics*, *120*(1), 23–32. Available at: https://doi.org/10.1016/j.jand.2019.09.007

²⁸ Cowart, B. J., & Beauchamp, G. K. (1986). 'The importance of sensory context in young children's acceptance of salty tastes', *Child development*, *57*(4), 1034–1039. Available at: https://doi.org/10.1111/j.1467-8624.1986.tb00264.x.

²⁹ Mennella, J. A., Jagnow, C. P., & Beauchamp, G. K. (2001) 'Prenatal and postnatal flavor learning by human infants', *Pediatrics*, *107*(6), E88. Available at: https://doi.org/10.1542/peds.107.6.e88.

³⁰ Beauchamp, G. K., & Mennella, J. A. (2011) 'Flavor perception in human infants: development and functional significance', *Digestion*, *83 Suppl* 1(Suppl 1), 1–6. Available at: https://doi.org/10.1159/000323397.

³¹ Mennella, J. A., & Bobowski, N. K. (2015) 'The sweetness and bitterness of childhood: Insights from basic research on taste preferences', *Physiology & behavior*, *152*(Pt B), 502–507. Available at: https://doi.org/10.1016/j.physbeh.2015.05.015.

shows setting the palate in this way may have a detrimental impact on the child's health as they grow³².

1.4 Dietary patterns and commercial foods

1.4.1 Data on dietary patterns in early childhood

Food choices within the first two years of life set taste preferences and eating habits, which can have impacts on lifelong health^{33,34}. Evidence shows a strong association between rapid weight gain during an infant's first 12 months of life and later overweight and obesity risk³⁵. However, there is limited data on infant food consumption data in Australia, with the most recent 2011-12 Australian National Nutrition and Physical Activity Survey and 2007 Australian Children's Nutrition and Physical Activity Survey only collecting data from the population aged two years and above. The 2010 Australian National Infant Feeding Survey³⁶ only reports on the proportion of infants receiving soft/semi-solid/solid foods, rather the types of foods consumed and the nutritional profile of these foods.

Smaller, non-representative, studies on Australian infants' dietary intakes have been undertaken. For example, a 2014 study³⁷ reported the dietary intakes of infants (12-16 months) participating in the South Australian Infants Dietary Intake (SAIDI) Study and NOURISH trial. In this study, 91% of infants surveyed ate discretionary foods at least once on the day of the survey, particularly vegemite (32% of infants), plain sweet biscuits (21%) and butter (19%). Only 56% of infants had a maximum dietary diversity score of five, meaning they consumed foods from each of the five food groups on the day of the survey, with higher intakes of formula associated with lower dietary diversity. A 2016 report³⁸ analysed dietary intake of infants in these trials at 14 and 24 months, and reported infants' dietary patterns shifted towards sweeter, saltier and more highly processed foods as they aged. The number of discretionary foods consumed by at least 10% of infants surveyed almost

³² Beauchamp, G. K., & Mennella, J. A. (2011) 'Flavor perception in human infants: development and functional significance', *Digestion*, *83 Suppl* 1(Suppl 1), 1–6. Available at: https://doi.org/10.1159/000323397.

³³ Birch, L., & Doub, A. (2014). Learning to eat: birth to age 2 y. *The American Journal of Clinical Nutrition*, *99*(3), 723S–728S. Available at: https://doi.org/10.3945/ajcn.113.069047

³⁴ Scott, J. A., Chih, T. Y., & Oddy, W. H. (2012). Food variety at 2 years of age is related to duration of breastfeeding. *Nutrients*, 4(10), 1464–1474. Available at: https://doi.org/10.3390/nu4101464

³⁵ Zheng, M, Lamb, KE, Grimes, C, Laws, R, Bolton, K, Ong, KK & Campbell, K 2018, 'Rapid weight gain during infancy and subsequent adiposity: a systematic review and meta-analysis of evidence', *Obesity reviews*, vol. 19, no. 3, pp. 321–332.

³⁶ Australian Institute of Health and Welfare. (2011). *2010 Australian National Infant Feeding Survey: indicator results*. Available at: <u>https://www.aihw.gov.au/reports/mothers-babies/2010-australian-national-infant-feeding-survey/contents/table-of-contents</u>

³⁷ Byrne, R., Magarey, A. and Daniels, L. (2014) 'Food and beverage intake in Australian children aged 12-16 months participating in the NOURISH and SAIDI studies', *Australian and New Zealand Journal of Public Health*, 38(4), pp. 326–331. Available at: doi: 10.1111/1753-6405.12249.

³⁸ Mauch, C. *et al.* (2017) 'Serve sizes and frequency of food consumption in Australian children aged 14 and 24 months', *Australian and New Zealand Journal of Public Health*, 41(1), pp. 38–44. Available at: doi: 10.1111/1753-6405.12622.

doubled between the ages of 14 and 24 months while the number of vegetables decreased during this period.

A 2018 Australian cross-sectional analysis aimed to identify major food sources of free sugars for Australian children aged 12–14 months³⁹. In this study, 828 participants provided three days of dietary data for analysis. Findings suggest the most common sources of free sugars were commercial infant foods (27%), primarily infant custards and yoghurts (16%) and infant snacks (11%).

There is also limited data on infant food consumption in New Zealand. New Zealand has no nationally representative survey measuring dietary intake of children under five years of age. New Zealand Food Safety has contracted the University of Otago to collect food and nutrient intake data on infants and young children aged six months to four years, with a particular focus on Māori and Pacific ethnicities and those of high socio-economic deprivation. The Young Foods New Zealand Study and the First Foods Study (funded separately) aims to collect data on food intake (two 24 hour recalls) and food behaviours as well as demographic data and anthropometric measures of 900 infants and toddlers living in Auckland, Dunedin and Wellington. The study is aiming to be completed in April 2022, but it is likely there will be delays due to the impact of Covid-19.

A 2016 study⁴⁰ compared the food and nutrient intakes of New Zealand infants following baby-led weaning with those infants following a more traditional spoon-feeding approach to complementary feeding. Of the 51 infants aged six to eight months, almost half (45%) of these infants were offered sweetened foods, and three quarters (76%) offered foods high in sodium on at least one occasion during the weighed diet records (one to three non-consecutive days).

Infant feeding in New Zealand and adherence to the Food and Nutrition guidelines was assessed among infants from the Growing Up in New Zealand cohort (6,435 infants)⁴¹. An infant feeding index, consisting of 13 indicators was developed to assess adherence with the NZIFGs. The average score for infants on the infant feeding guidelines was 70 points, where 100 points means that all of the guidelines were followed. The scores ranged from 13.5 to 100 points. Half of infants (3393, 52.7%) had 'ever tried' sweets, chocolate, hot chips or potato crisps by nine months of age. One in five infants (22.6%) were having fruit juice at least weekly at nine months and one in 18 infants (5.5%) had tried soft drinks by nine months of age. One in six infants (1022, 15.9%) had salt added to their food or milk, and one

³⁹ Devenish, G., Ytterstad, E., Begley, A., Do, L., & Scott, J. (2018). Intake, sources, and determinants of free sugars intake in Australian children aged 12–14 months. *Maternal and Child Nutrition*, *15*(2), e12692–n/a. Available at: https://doi.org/10.1111/mcn.12692

⁴⁰ Morison, B. J. *et al.* (2016) 'How different are baby-led weaning and conventional complementary feeding? A cross-sectional study of infants aged 6-8 months', *BMJ Open*, 6(5). Available at: doi: 10.1136/bmjopen-2015-010665.

⁴¹ de Castro, T. G. *et al.* (2018) *Infant feeding in New Zealand: Adherence to Food and Nutrition Guidelines among the Growing Up in New Zealand cohort.* Available at: <u>https://www.msd.govt.nz/documents/about-msd-</u><u>and-our-work/publications-resources/research/infant-feeding/infant-feeding-in-new-zealand.pdf.</u>

in seven infants (921, 14.3%) had sugar added to their food or milk at nine months of age. One in 13 infants (494, 7.6%) had both sugar and salt added to their food and/or milk.

1.4.2 Use of commercial baby foods and drinks and their contribution to the diet

Data limitations affect a full assessment of the dietary intakes of infants in Australia and New Zealand. However, the available data indicates this is an area that warrants further attention given the poor dietary practices observed and the potential for these poor dietary patterns to continue which may lead to potential nutritional deficiencies, excess consumption of sugar, salt and overall energy, and the establishment of taste preferences for discretionary foods.

There is currently a large piece of work underway looking at nutrition intake in New Zealand infants led from researchers from the University of Otago⁴², which aims to be completed in April 2022 but is likely to be delayed due to the impact of Covid-19.

1.5 Labelling and Marketing

1.5.2 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, *The Wiggles* and *Bluey* are both partnered with yoghurt and custard pouch manufacturers respectively.

In August 2019, the Forum agreed to a suite of activities under *Priority 2- Supporting the public health objectives to reduce chronic disease related to overweight and obesity* of the Food Regulation System. One agreed activity was to consider partnering with regulators for advertising and marketing to develop options to strengthen restrictions on advertising of unhealthy foods and drinks to children. This work is in its early stages, but may encompass these products.

⁴² University of Otago (n.d.) *First Foods NZ Study*. Available at: <u>https://www.otago.ac.nz/diabetes/research/otago713209.html</u>

2. EVIDENCE FOR ACTION: Nutrient profile of foods in Australia

2.1 The baby food market in Australia

In November 2019, Food Standards Australia New Zealand (FSANZ) collected information on food products available through supermarkets and advertised for consumption by children aged four months to four years old. The data were manually collected by FSANZ from manufacturer websites and product labels. The data collected are representative, but not exhaustive, of the individual products available in the 'baby food' aisle of supermarkets at that point in time. It does not include infant formula.

A total of 334 products were selected from 16 different manufacturers, with the majority of products coming from Heinz (20.7%), Rafferty's Garden (15%) and Only Organic (13.2%). The dataset was disaggregated into the food categories and subcategories shown in Table 1. A list of included products is included at <u>Attachment B</u>.

	Product category	Product sub- category	Detail				
	Main meals		Composite main meals Combinations of protein/starchy/fruit and vegetable foods Excludes fruit and vegetable only products				
		Single vegetables	100% (or nearly) fruit and/or vegetables, usually purees				
	Fruit and vegetable first foods	Single fruit	includes products with functional ingredients (i.e. ascorbic acid, water)				
		Mixed fruit (>1)	Excludes products with legumes, beans, starchy ingredients or oils (e.g. cooking sauces and source)				
als		Mixed vegetables (>1)					
aby me		Mixed fruit and vegetables					
B	Dry Savoury		Product name suggests savoury (e.g. vegetable flavour)				
	foods*	Sweet	Product name suggests sweet (e.g. fruit flavour)				
	Breakfasts		Combinations of fruit/dairy/starchy foods Includes ambient yoghurts, breakfasts (not dry, e.g. porridge/muesli made up) including plain flavours Includes fruit purees with added cereals/grains/rice and or water/milk Includes products made with dairy alternatives Excludes chilled yoghurts (these are included in the sugar reduction programme)				
	Desserts		Products marketed as custards				

Table 1. Baby food and drink product categorisation

	Product category	Product sub- category	Detail
	Soups & cooking sauces		Excludes oils and seasonings
	Savoury finger foods		Includes products based on starchy foods and/or pulses Product name suggests savoury/plain, not sweet (e.g. vegetable flavour) Includes puffs, breadsticks, savoury rice cakes, biscuits, wafers and grain-based crisps
foods	Fruit and vegetable based finger foods	Vegetable based crisps/waffles	Includes products with more than 25% fruit or vegetable ingredients
		Fruit crisps	Includes fruit/vegetable based products with added cereal/oats
y finger		Fruit based bars with cereal/oats	Includes plain/coated/flavoured dried fruit/vegetables
Bab		Other fruit-based snacks	
	Sweet finger foods	Biscuits/biscotti/ wafers (includes minis)	Product name suggests sweet, not savoury (eg fruit flavour) Includes fruit flavoured products Includes products with up to 25% fruit or vegetable ingredients
		Cereal/oat bars	

*Excludes plain starchy foods (e.g. baby rice/plain pasta/couscous/oats; Excludes ready to eat products

2.2 Market analysis

Data for 334 commercial baby food products were included in this analysis. **Table 2** shows the number and proportion of products at category and sub-category level. Baby meals make up approximately two-thirds (69%) of all commercial products, with snack finger foods making up almost one-third (31%).

	Number of	Proportion of products within	Proportion of
Product category/sub-category	products	category (%)	all products
Baby meals	231		69.2
Main meals	73	31.6	21.9
Fruit and vegetable first foods	70	21.0	21.0
Dry cereals/foods	17	5.1	5.1
Breakfasts	39	11.7	11.7
Desserts	26	7.8	7.8
Other	6	1.8	1.8
Baby Finger Foods	103		30.8
Savoury finger foods	38	36.9	11.4
Fruit and vegetables based finger			
foods	23	22.3	6.9
Sweet finger foods	42	40.8	12.6
TOTAL	334		

Table 2. Number and proportion of products by category and sub-category

Table 3 shows the profile of products by the age range, according to product packaging.Baby meals are mainly targeted at infants four and six months, while finger foods are morefrequently marketed at infants from 12 months. This is shown graphically in Figure 4.

Table 3. Number and proportion of products marketed at different age groups, by product category

Age range product is marketed at	All products		Baby meals		Finger foods	
	Number	Proportion (%)	Number	Proportion (%)	Number	Proportion (%)
4 months	58	17.4	58	25.1	0	0
5 months	2	0.6	2	0.9	0	0
6 months	108	32.3	104	45	4	3.9
7 months	16	4.8	1	0.4	15	14.6
8 months	43	12.6	40	17.3	3	2.9
9 months	1	0.3	1	0.4	0	0
10 months	15	4.5	9	3.9	6	5.8
12 months	70	20.4	9	3.9	61	59.2
36 months	6	1.8	0	0	6	5.8
1-3 years	6	1.8	0	0	6	5.8
1-5 years	9	2.7	7	3	2	1.9
TOTAL	334	100	231	100	103	100

Figure 1. Number of products for each age group



2.3 Product serving sizes

Most products designed for infants four to six months contain one serving per container according to the nutrition information panel (NIP). The exceptions to this are desserts (custards and rice puddings) which contain two servings, and dry cereals. The majority of products included in this analysis for four to six month old babies have a serving size of 110g-120g. This size is well beyond the 10g per day fruit recommendation and 30-40g vegetable recommendation from the Australian Dietary Guidelines, as seen in Figure 2.

Figure 2. Recommended	daily serves fo	or infants ag	ed 7-12 months ⁴³
-----------------------	-----------------	---------------	------------------------------

Food	Serve size	Serves a day	Serves a week
Vegetables and legumes/beans	20g	1½2	10-14
Fruit	20g	1/2	3–4
Grain (cereal) foods Infant cereal (dried)	40g bread equivalent 20g	1½ 1	10 7
Lean meats, poultry, fish, tofu, eggs	30g	1	7
Breast milk or formula Yoghurt/cheese or alternatives	600ml 20ml yoghurt or 10g cheese	1 ½	7 3–4

Having such large portion sizes in a single container, with the NIP stipulating it as a single serve, promotes overconsumption of foods from a young age. If the product was to be consumed over several days, refrigeration of left-over food in jars is recommended for a

⁴³ National Health and Medical Research Council. (2013) Eat for health: Educator guide. Available at: <u>https://www.eatforhealth.gov.au/sites/default/files/files/the_guidelines/n55b_eat_for_health_educators_guide.pdf</u>

maximum of 48 hr before disposal, while products in baby food pouches should be refrigerated and discarded within 24 hr, which would still exceed maximum daily intakes.

Furthermore, large serving sizes also highlight that while sugar may not be added to commercial baby foods, the amount of sugar being consumed by infants may be excessive due to large intakes of fruit.

2.4 Packaging

Packaged products are often seeking to assist time-poor parents looking for convenient options on supermarket shelves.

Most products contain a mashed combination of ingredients, with the exception of some fruit based products which contain single ingredients. Consistently presenting foods as a blend decreases children's opportunities to experience a broad range of tastes. How products are packaged can reduce learning and acceptance to different food tastes by removing opportunities for important educational and tactile experiences with food, and masking flavours of more bitter vegetables with fruit.

A recent Australian study found half of all products sold for infants and toddlers were purees in squeeze pouches, and one-third of all products were discretionary foods⁴⁴. The infant yoghurt market, also packaged in pouches, is a growing market. Pouches (containers with plastic spouts at the top from which foods can be sucked) are the fastest growing global market within the baby food sector, with ease and flexibility of use driving the demand⁴⁵. Figure 3 shows the increased incidence of pouches in the market for infants four to eight months over other age groups.

⁴⁵ The Nielsen Company. (2015). Oh, baby! Trends in the baby food and diaper markets around the world. Available at: <u>https://www.nielsen.com/wp-</u>

⁴⁴ ⁴⁴ Moumin NA. (2020). "Are the Nutrient and Textural Properties of Australian Commercial Infant and Toddler Foods Consistent with Infant Feeding Advice?" *The British journal of nutrition*. 124.7: 754–760.





The Nutrition Commission of the German Society for Pediatrics and Adolescent Medicine released a position statement in 2019, discouraging feeding of pureed baby foods from baby food pouches⁴⁶. The reasons for this are multifaceted. The initial reasons are based in the assumption that children suck directly from the spout, although there is insufficient evidence to determine whether this is the case. They contest that sucking from a pouch does not deliver the gradual developmental learning for chewing and mandible movements for manipulating food with the tongue and lips, and may delay learning skills associated with spoon feeding or finger food eating⁴⁷. Sucking from the pouch does not provide opportunities for texture development and reduces important responsive feeding practices between the child and their parents or caregivers. This approach may also increase the speed in which a child is fed, reducing the time for the stomach to signal the brain of satiety. It is likely that the way in which foods are given to the infant, and the interaction between parent and infant during feeding, may influence outcomes such as food and dietary preferences and appetite regulation⁴⁸.

⁴⁶ Koletzko, et al,. (2019). Complementary foods in baby food pouches: position statement from the Nutrition Commission of the German Society for Pediatrics and Adolescent Medicine (DGKJ, e.V.). Molecular and Cellular Pediatrics. 6. 10.1186/s40348-019-0089-6. Available at: https://molcellped.springeropen.com/articles/10.1186/s40348-019-0089-6

⁴⁷ Westland, S., Crawley, H. (2018). Fruit and vegetable based purees in pouches for infants and young children. London: First Steps Nutrition Trust.

⁴⁸ Fewtrell, et al,. (2017). Complementary Feeding: A Position Paper by the European Society for Paediatric Gastroenterology, Hepatology, and Nutrition (ESPGHAN) Committee on Nutrition, Journal of Pediatric Gastroenterology and Nutrition: Volume 64 - Issue 1 - p 119-132 doi: 10.1097/MPG.00000000001454

2.5 Name and description of the food

Fair trading laws and food laws in Australia and New Zealand require that labels do not misinform consumers through false, misleading or deceptive representations. Foods must be labelled with an accurate name or description that indicates the true nature of the food, for example 'Strawberry Yoghurt' should contain strawberries. If it were to contain strawberry flavouring rather than real strawberries, the label should indicate that it is strawberry flavoured yoghurt.

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 (Figure 4) 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 characterizing ingredients on the label (barley 5% and spinach 5%). This practice is widespread with apple (including puree, juice or paste) present in the vast majority of pouch products during an initial scan of the market.

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, 'cheese chickpea pops' have just 0.1% ingoing weight of cheese (Figure 5).

Figure 4. Product names which do not identify key ingredients



Suitable for 6+ months | 120g

Our Barley, Banana & Spinach pouch is made with the goodness of wholegrain barley, in a deliciously balanced blend of fruit & veggies that your baby will love. NO artificial colours or flavours

NO preservatives

NO added salt or sugar

NO added concentrates

NO added juices

NO GM ingredients

Ingredients: Apple, Water, Banana (17%), Pear, Sweet Potato, **Barley** (5%), Spinach (5%), Citric Acid.

Figure 5. Product names which contain small amounts of main ingredient



Chickpea Flour (43%), Rice Flour, Tapioca Starch, Sunflower Oil, Dried Yeast, Onion Powder, Salt, **Buttermilk** (**Milk**), Yeast Extract, Lemon Powder, Garlic Powder, **Whey** (**Milk**), Spice, **Cheese** (**Milk**) (0.1%), Antioxidant (Rosemary Extract).

2.6 Finger foods

Evidence suggests that from nine months most infants are capable of feeding themselves and drinking from a cup using both hands⁴⁹. The "baby-led weaning" approach suggests infants feed themselves with hand-held foods instead of being spoon-fed by an adult, providing the infant with greater control over their dietary intake. It has been suggested this may improve eating habits and reduce the risk of overweight and obesity, however data is lacking⁵⁰.

Commercially available finger foods are not designed to facilitate this method of weaning, and are snacks which may contribute a large portion of energy and sugar to the diet if given to infants and toddlers (discussed in more detail below). An emerging market targets the sale of snack foods to infants from seven months of age with products such as flavoured puffed corn and lentil snacks, and rice and quinoa wafers.

The products below at Figure 6 are all targeted to seven month old infants and contain one serving (one bag). Each serving contains a considerable contribution towards the daily energy allocation for solid foods for a seven month old. These products contain limited nutrients, vitamins and minerals at a time of rapid growth for infants and when infants are susceptible to nutrient deficiencies⁵¹, with a recent study showing a third of infants and a fifth of toddlers have inadequate iron intake⁵².

⁴⁹ Fewtrell, et al,. (2017). Complementary Feeding: A Position Paper by the European Society for Paediatric Gastroenterology, Hepatology, and Nutrition (ESPGHAN) Committee on Nutrition, Journal of Pediatric Gastroenterology and Nutrition: Volume 64 - Issue 1 - p 119-132 doi: 10.1097/MPG.000000000001454

⁵⁰ Cameron SL, Heath A-LM, Taylor RW. (2012). How feasible is baby-led weaning as an approach to infant feeding? A review of the evidence. *Nutrients*; 4:1575–1609.

⁵¹ Fewtrell, et al,. (2017). Complementary Feeding: A Position Paper by the European Society for Paediatric Gastroenterology, Hepatology, and Nutrition (ESPGHAN) Committee on Nutrition, Journal of Pediatric Gastroenterology and Nutrition: Volume 64 - Issue 1 - p 119-132 doi: 10.1097/MPG.00000000001454

⁵² Atkins, L., McNaughton, S., Campbell, K., & Szymlek-Gay, E. (2016). Iron intakes of Australian infants and toddlers: Findings from the Melbourne Infant Feeding, Activity and Nutrition Trial (InFANT) Program. *British Journal of Nutrition*, *115*(2), 285-293. doi:10.1017/S0007114515004286

Figure 6. Examples of finger food products marketed to 7 month olds



2.7 Ingredient variety

Food manufacturers know that the word 'fruit' is associated with healthiness by consumers⁵³. Many products use this association to their advantage by sweetening products with highly processed fruit products, or using fruit as the primary ingredient in foods. Presenting large quantities of fruit as an infant's introduction to solids sets the infant's taste preferences for life.

Studies have highlighted a lack of vegetable variety in commercially prepared foods, with a preference for fruits and sweet vegetables such as carrot and sweet potato rather than bitter tasting vegetables^{54,55}.

Table 4 shows the number and proportion of products marketed to four month old infants and the product's primary ingredient. Almost all (94%) of products contained fruit or sweet vegetables as their primary ingredient. Apple based products overwhelmingly contained large quantities of Twenty-two out of the 24 products with apple as a primary ingredient contained upwards of 50% apple. Two thirds of the products with fruit as a primary ingredient were solely fruit, and only five products did not contain any fruit. These findings highlight the predominant flavour profile being provided to infants through commercially available infant foods is sweet.

⁵³ Sütterlin, B & Siegrist, M 2015, 'Simply adding the word "fruit" makes sugar healthier: The misleading effect of symbolic information on the perceived healthiness of food', *Appetite*, vol. 95, pp. 252–261.

⁵⁴ Mesch CM, Stimming M, Fotarek K, et al. (2014). Food variety in commercial and homemade complementary meals for infants in Germany. Market survey and dietary practice. *Appetite*: 76:113–119.

⁵⁵ Garcia AL, McLean K, Wright CM. (2016). Types of fruits and vegetables used in commercial baby foods and their contribution to sugar content. *Mat Child Nutr*; 12:838–847.

	Number of products	Proportion of total (%)	Average proportion of primary ingredient (%)
Apple	24	43.6	69.4
Pear	16	29.1	71.6
Banana	5	9.1	44.2
Mango	1	1.8	27
Grape	1	1.8	32
Pumpkin	3	5.5	38.7
Sweet potato	1	1.8	21
Sweetcorn	1	1.8	18
Rice	6	5.5	64
Overall total	58	100	

Table 4. Primary ingredient of products for four month olds.

In Australia and New Zealand, it is recommended that infants commence solids around six months of age. When the examined product range is expanded to include products for infants aged four to six months of age, other primary ingredients such as flours and milk are included (Figure 7). However, the majority of products still have fruit (apple 25%; pear 16%; and other fruit 11%) as their primary ingredient. Sweet vegetables, including pumpkin, sweet potato and sweet corn, contribute about half of the main ingredients in the vegetable category.

Figure 7. Main ingredient in products for infants aged 4-6 months



A similar Australian study looked at 414 foods infant and toddler food, comprising mostly mixed main dishes, fruit and vegetable first foods, and snacks⁵⁶. The study concluded most

⁵⁶ Moumin NA. (2020). "Are the Nutrient and Textural Properties of Australian Commercial Infant and Toddler Foods Consistent with Infant Feeding Advice?" *The British journal of nutrition*. 124.7: 754–760.

products were poor sources of iron, and 80% of first foods were fruit-based. Inadequate iron consumption for infants and toddlers is a previously identified issue in Australia⁵⁷.

2.8 Nutrient analysis

2.8.1 Sugar

The World Health Organization (WHO) recommends all population groups keep intake of free sugars, including those added to foods and sugars naturally present in honey, syrups, fruit juices and fruit juice concentrates, to less than 10% of total energy intake and conditionally recommends a further reduction to less than 5% of energy⁵⁸. Infant feeding guidelines recommend infants under 12 months do not have any added sugar.

While a recent analysis showed that 80% of children aged 12-14 months complied with the WHO 5% recommendation, and almost all comply with the 10% recommendation, a substantial contribution to free sugars was provided by products which contained added fruit juice. Under current labelling rules, consumers are unable to determine what is added sugar and what is naturally occurring, such as in whole fruit⁵⁹.

Table 5shows 93 products (28%) contained added sugars⁶⁰, in the form of sugar, fruit juice concentrates or fruit juices. Overall 54 products (16%) contain added sugar as an ingredient (not juice or concentrate) and nearly half of all finger foods were sweetened. Desserts (custard and rice pudding) were also overwhelmingly sweetened, with over 90% of products in the category containing a sweetener.

https://apps.who.int/iris/bitstream/handle/10665/149782/9789241549028 eng.pdf?sequence=1

⁵⁷ Atkins, LA, McNaughton, SA, Campbell, KJ & Szymlek-Gay, EA 2016, 'Iron intakes of Australian infants and toddlers: findings from the Melbourne Infant Feeding, Activity and Nutrition Trial (InFANT) Program', *British journal of nutrition*, vol. 115, no. 2, pp. 285–293.

⁵⁸ World Health Organization. (2015). *Guideline: sugars intake for adults and children*. Geneva: World Health Organization. Available at:

⁵⁹ Devenish, G., Ytterstad, E., Begley, A., Do, L., & Scott, J. (2018). Intake, sources, and determinants of free sugars intake in Australian children aged 12–14 months. *Maternal and Child Nutrition*, *15*(2), e12692–n/a. Available at: https://doi.org/10.1111/mcn.12692

⁶⁰ For the purpose of this paper this refers to any sugars-based ingredients added to foods by manufacturers during processing or manufacturing, or by consumers and cooks during food preparation or at the time of consumption. In this paper, the term 'added sugars' may include what are referred to as 'free sugars' such as honey.

		Sugar	Fruit concentrate	Fruit juice	TOTAL		Proportion (%) of total products
	Main meals	1	3	1	5	51	9.8
eals	Fruit and vegetable first foods	0	3	5	8	68	11.8
Σ	Dry cereals/foods	0	6	2	8	46	17.4
Bab	Breakfasts	0	4	1	5	33	15.2
	Desserts (custards & rice pudding)	18	1	3	22	24	91.7
				TOTAL	48	231	20.8

Table 5. Products with added sugar, fruit juice concentrate or fruit juices, by product category

		Sugar	Fruit concentrate	Fruit juice	TOTAL		Proportion (%)
oods	Fruit and vegetable based finger foods	9	6	1	16	38	42.1
ıger f	Savoury finger foods	7	0	0	7	23	30.4
Fin	Sweet finger foods	19	3	0	22	42	52.4
			SUB	TOTAL	45	103	43.7

2.8.2 Salt

Salt was listed on the ingredient list for 13 products (3.9% of total products), with 11 of the products being finger foods. Four of these products were rusks, with manufacturers noting the salt was added to make the rusks hard. The rusks all contained 330mg-345mg of sodium per 100g. Most other products ranged between 106mg of salt per 100g to 680mg per 100g, with one outlier – being Rafferty's Garden's cheese wafer bites – with 1160mg per 100g, with an average manufacturer's recommended serving size of 10g

2.8.3 Energy intake

While both main meals and finger foods contribute to the energy requirements of an infant's or toddler's diet, finger food snacks have the potential to provide a large contribution to their overall energy requirements.

Table 6 below outlines the energy density ranges for finger foods (or snacks) which start being marketed to infants as young as six months. While the four products advertised for six month olds are all rusks, the products for 7 month olds include flavoured puffed corn and lentil snacks, and rice and quinoa wafers. Energy density remains fairly consistent across the age groups, with most products' recommended serving sizes between 5g and 30g. These products all have a significantly higher energy density than baby meals, with reduced nutritional value.

		Energy (kcal/10	Og)
Age groups	Number of products	Average	Range of energy content
6 months	4	1,517	1,450 – 1,550
7 months	15	1,739.9	1,494 – 1,900
8 months	3	1,619	1,510 – 1,700
10 months	6	1,698	1,468 – 1,790
12 months	61	1,730.9	1,189 – 2,380
36 months	6	1,756.7	1,600 – 1,940
1-3 years	6	1,578.5	1,410 - 1,750
1-5 years	2	2,084	2,084

Table 6. Average energy (kcal/100g) content of finger foods, by advertised month

2.9 Yoghurt

Pouch yoghurts marketed for children were explored in a separate analysis by the Department of Health, as yoghurts were not included in the initial product selection undertaken by FSANZ. A total of 52 yoghurt products from nine different manufacturers were included for examination. Products were selected using a desktop search of Australian Coles and Woolworths websites and a physical search of an Australian Aldi store in September 2020. A list of products is included at <u>Attachment C</u>.

Products were selected as they marketed themselves to children, often from six months plus, with all product pouches containing one serving. Pouch sizes varied considerably, ranging from 70g – 140g and are summarised in Figure 8 below. The Australian recommended serve size of yoghurt for seven to 12 month olds is 10ml per day, with one serve recommended daily⁶¹.

⁶¹ National Health and Medical Research Council. (2013) *Eat for health: Educator guide.* Available at: <u>https://www.eatforhealth.gov.au/sites/default/files/files/the guidelines/n55b eat for health educators guide.pdf</u>

Figure 8. Product sizes for pouch yoghurts



All yoghurt products are not equal, with energy, sugar and calcium availability in products widely varied. One serving of Yoplait Petit Miam Plain (70g pouch), contained 180.6kJ of energy and 2.87g of sugar. By comparison, Vaalia Kids Lactose free Yoghurt Blueberry (140g pouch) contained 558.6kJ of energy and 14.14g of sugar. Calcium content ranged from 89.6g to 306.6g per serving.

While some companies have voluntarily reformulated their sweetened yoghurts over recent years, many products still contained sweeteners in the form of fruit, sugar or both. Fruit is consistent with the flavour profile expected of a yoghurt, however some products (41%) still declare sugar in their ingredient list. A summary of products with sugar or fruit listed in their ingredient list is provided in Figure 9.



Figure 9. Products with added sugars and fruit

A unique attribute of yoghurt pouches is a tendency to include television or movie characters on the front of the label. Brownes yoghurts all featured The Wiggles, and Paul's yoghurts had partnerships with Cars, Disney Princesses and Toy Story. Product associations for marketing purposes are not uncommon, however were uncommon when compared with the other food products targeted at infants and toddlers included in this analysis, highlighting the broad target demographic of this often sweetened product.

3. SUPPORTING EVIDENCE

3.1 Composition of infant and toddler foods in Australia

In late 2019, the Obesity Policy Coalition undertook a comprehensive data collection of 250 infant and toddler foods from 21 brands at the three major supermarkets in Australia. Foods in these categories were analysed to determine composition, variety, and labelling and to estimate how frequently Free Sugars are present in these products, similar to the analysis undertaken in this paper. The first two research briefs we have prepared summarise the findings of this research in two categories of food - squeezable pouches and toddler snacks.

Concerns about concentrated fruit sugars and sweetening of products were highlighted in the analysis. The research briefs raised concerns about packaging and serving sizes, adding fruit to savoury meals encouraging a preference for sweet foods, labelling products which do not align with the ingredient composition, and the increasing size of the market for snack foods with 44% having high sugar contents. The conclusions from research briefs echo the findings of this paper.

The research briefs explored two issues beyond this paper – the composition of cereal-based infant foods and custard pouches. This paper analysed custards in jars, but did not include any custard pouches.

Cereal products (oats, oatmeal, porridge, muesli, rice cereal and quinoa) made up 15% of total products. The authors found the cereal content ranged from 1% to less than 20% of the product. The labelling of these products often draws attention to the cereal ingredient despite being predominantly made up of fruit.

Custard-based pouches made up 14% of total products. The custard-based products contained between 5-12% total sugar, or between 2.3 and 3.5 teaspoons of total sugar per pack.

The paper from the Obesity Policy Coalition recommends higher standards should be set for how infant and toddler foods are made, marketed, and sold including:

- 1. labelling regulation to ensure that:
 - labelling accurately reflects product content and is not misleading or confusing;
 - the main ingredients of infant and toddler products are clearly reflected in the labelling and marketing, with front-of-pack product names listed in descending order of content;
 - Free Sugars (*defined as Total Sugars less naturally occurring sugars in intact fruits and vegetables and the natural sugars in milk*) are easily identified; and
 - commercially available foods are not marketed as appropriate to infants under 6 months old.

- 2. compositional limits to ensure that:
 - both infant (6-12 months) and toddler (12-36 months) foods are regulated;
 - Free Sugars are not used in infant and toddler foods (with specific exceptions for purees for infants only and for small amounts of minimally processed fruits (pureed and dried) in certain categories of infant and toddler foods); and
 - sweet snacks and confectionary are not marketed as suitable for infants and toddlers.

3.2 Composition of infant foods in England

Public Health England has recently undertaken a piece of work examining the composition and sales of foods and drinks aimed at infants and young children⁶². Key findings of this work include:

- Some commercial baby foods contain added sugar and/or added salt, or ingredients that are high in sugar or salt. This was most common in baby finger foods, which are often marketed as snacks.
- Sweet finger foods such as biscuits, wafers and fruit shapes comprise two-thirds of the baby finger food market. The highest sugar content is found in processed dried fruit products which are often marketed as heathy snacks due to their high fruit content (largely fruit purees, fruit juices or concentrates which are all 'free sugars')
- Savoury finger foods contain the highest levels of salt per 100 g across all product types
- The balance of products on the market does not reflect the recommendation to start the introduction of solid foods with single vegetables and fruits, and feeding vegetables that are less sweet. Only 15% of products on the market are single vegetables or fruits
- Product names do not always reflect the range and balance of ingredients used in products. This can mean that the product name sounds savoury whereas the main ingredient is sweet
- There is strong growth in the baby finger food market (nearly 11% in 2017/18). The way products are labelled and marketed is encouraging snacking.

Public Health England made recommendations to address the marketing and labelling of foods for infants and young children to ensure they were consistent with Government advice about infant feeding, and to improve the nutrient composition of commercial baby foods and drinks.

Foods and drinks aimed at infants and young children June 2019.pdf

⁶² Tedstone A et al 2019, *Foods and drinks aimed at infants and young children: evidence and opportunities for action,* Public Health England, London. Viewed 12 August 2020 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/812204/

A similar analysis was undertaken by the WHO regional Office for Europe⁶³ which looked at the availability, composition and marketing of baby foods in four European countries. While there are established nutrition and compositional criteria for foods for infants and young children, this report identified concerns that products complying with these criteria may still be too high in saturated fat, sugars or salt. Key findings include:

- high levels of total sugars in products;
- sweet tastes predominated which may encourage a life-long preference for sweetfoods;
- fat content of products increased with the products' target age group (despite evidence that as children age their requirements for fat decrease);
- use of salty ingredients (such as cheese or ham) despite advice that babies should not be given foods containing added salt; and
- while very high sodium foods were rare, certain products contained more than
 50 mg of sodium per 100 kcal which can establish preferences for salty foods and undermine heathy eating behaviours.

4. CONCLUSION

The first 1,000 days of a child's life is important for their optimal development. A key pillar of this time period is nutrition, encompassing exclusive breastfeeding and transitioning to solid foods. Parents may rely on marketing and front of package messaging to influence decision making when selecting commercial foods. Many of the products available use associations of fruit and vegetables to promote healthiness. However, many of the products are highly processed fruit products, resulting in high sugar ingredients such as fruit juices, pastes and concentrates which may not provide the beneficial nutrition content or fibre found from consuming whole fruit. Some products, such as pouch yoghurts and custards, sweeten with sugar directly.

While national guidance on introducing solids is available for healthcare professionals and caregivers through the AIFG and the NZIFG, evidence has evolved since their development. There is also little awareness of the Australian guidelines among caregivers. Guidance on nutrition for toddlers is available in the Australian Dietary Guidelines, which are currently being updated, however recommendations to limit sugar and salt are unlikely to change unless they are strengthened.

Available evidence shows infants and toddlers are consuming discretionary foods, with vegetable intake decreasing with age and replaced with a shift towards sweeter, saltier and more highly processed foods. While data is not yet available to understand the current

⁶³ WHO Regional Office for Europe (2019) Commercial foods for infants and young children in the WHO European Region. Available at: <u>http://www.euro.who.int/ data/assets/pdf file/0003/406452/CLEAN Commercial-</u>

foods 03July disclaimer LV.pdf?ua=1.

contribution of commercial foods to overall dietary patterns, there is a noticeable increase in product availability of processed snacks from 12 months of age.

Assisting parents to make informed healthy choices for their children can help establish healthy food preferences from a young age. The potential to translate into long-term health outcomes for future generations highlights the importance of investing in interventions targeted at the formative years.

The available evidence indicates there is a need for greater promotion of appropriate and nutritious foods for infants. There is potentially scope within the current food regulatory system to advance the products available to consumers, through reformulation, compositional limits and clearer naming of products. Additionally, more comprehensive education and guidance materials could support parents to comprehend introducing solids using the most up-to-date evidence and empower them to take the health of the next generation into their hands.

ATTACHMENTS

<u>Attachment A</u>: Summary comparison of recommendations for infant feeding in comparable developed countries

Attachment B: Products included in baby meals and finger foods analysis

Attachment C: Products included in yoghurt pouch analysis

ATTACHMENT A

Attachment A: Infant feeding guidelines around the world

Compared with the advice on the introduction of solids in other countries' guidelines, the recommendations made in the AIFGs are limited in the detail regarding signs of readiness, the transition to solid foods, meal frequency, texture progression and the food environment. The advice provided in other guidance documents is more practical, making it more accessible to caregivers. For example, while the AIFGs state that foods should be of an appropriate texture, they do not specify what these textures are, and at what age they should introduced. In contrast, the guidelines for Canada and United Kingdom provide specific advice regarding signs of readiness and texture progression, including the importance of not delaying progression as it has been associated with later speech and feeding difficulties and low fruit and vegetable intake.

Full details of the comparison against infant feeding guidelines around the world is included in the table below.

	Australia ⁶⁴	NZ ⁶⁵	US ⁶⁶	Canada ⁶⁷	UK ⁶⁸	EU (based off Joint Research Council (JRC) compilation report of 31 countries' Food Based Dietary Guidelines covering 0 – 36 months) ⁶⁹
<6 months	 Exclusive breastfeeding (no other fluids) until baby is ready, around 6 months. If offering pacifier (only after 4 weeks), do not dip into sweet substances. 	 Exclusive breastfeeding (no other fluids) until baby is ready, around 6 months. 	 Exclusive breastfeeding (no other fluids) until baby is ready, around 6 months. 	 Exclusive breastfeeding (no other fluids) until baby is ready, around 6 months. 	 Exclusive breastfeeding (no other fluids) until baby is ready, around 6 months. 	 Most of the guidelines covered in the JRC's report recommend breastfeeding until at least 6 months.
6-9 months	Timing	Timing	Timing	Timing	Timing	Timing

⁶⁴ National Health and Medical Research Council 2012, Infant Feeding Guidelines: Information for health workers, National Health and Medical Research Council, Canberra, viewed 31 August 2020, www.eatforhealth.gov.au/sites/default/files/files/the guidelines/n56b infant feeding summary 130808.pdf.

⁶⁵ Ministry of Health 2008, Food and Nutrition Guidelines for Healthy Infants and Toddlers (Aged 0–2) - A background paper – partially revised 2012; Ministry of Health, Wellington, viewed 28 August 2020

www.health.govt.nz/system/files/documents/publications/food-and-nutrition-guidelines-healthy-infants-and-toddlers-revised-dec12.pdf.

Ministry of Health 2012, Food and Nutrition Guidelines for Healthy Children and Young People (Aged 2–18 Years) – A background paper. Partially revised February 2015. Ministry of Health, Wellington, viewed 28 August 2020 www.health.govt.nz/system/files/documents/publications/food-nutrition-guidelines-healthy-children-young-people-background-paper-feb15-v2.pdf.

⁶⁶ Centres for Disease Control, Infant and Toddler Nutrition, viewed 12 August 2020, www.cdc.gov/nutrition/InfantandToddlerNutrition/index.html.

⁶⁷ Health Canada, Canadian Paediatric Society, Dietitians of Canada, and Breastfeeding Committee for Canada 2015, Nutrition for healthy Term Infants: Recommendations from birth to six months, Health Canada; Ontario, viewed 12 August 2020 www.canada.ca/en/health-canada/services/canada-food-guide/resources/infant-feeding/nutrition-healthy-term-infants-recommendations-birth-six-months.html

Health Canada, Canadian Paediatric Society, Dietitians of Canada and Breastfeeding Committee for Canada 2015, Nutrition for Healthy Term Infants: Recommendations from Six to 24 Months, viewed 12 August 2020 www.canada.ca/en/healthcanada/services/canada-food-guide/resources/infant-feeding/nutrition-healthy-term-infants-recommendations-birth-six-months/6-24-months.html

⁶⁸ From the UK government webpages Start4lifeand NHS, summarised in Public Health England's report: Tedstone A et al 2019, Foods and drinks aimed at infants and young children: evidence and opportunities for action, Public Health England, London. Viewed 12 August 2020 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment data/file/812204/Foods and drinks aimed at infants and young children June 2019.pdf

Scientific Advisory Committee on Nutrition (SACN) 2018, Feeding in the first year of life: SACN report, Public Health England, London, viewed 12 August 2020 www.gov.uk/government/publications/feeding-in-the-first-year-of-life-sacn-report.

⁶⁹ Evangelia Grammatikaki, Jan Wollgast, Sandra Caldeira, 2019, Feeding infants and young children. A compilation of national food-based dietary guidelines and specific products available in the EU market; PUBSY No. 115583, viewed 31 August 2020 https://ec.europa.eu/jrc/sites/jrcsh/files/processed cereal baby food online.pdf. This report covers all EU Member States plus Norway and Switzerland.

Australia ⁶⁴	NZ ⁶⁵	US ⁶⁶	Canada ⁶⁷	UK ⁶⁸	EU (based off Joint Research
					Council (JRC) compilation report of 31 countries' Food
					Based Dietary Guidelines
					covering 0 – 36 months) ⁶⁹
- Introduce solid foods at	- Introduce solid foods at	- Introduce solid foods at	- Introduce solid foods at	- Introduce solid foods at	- Weaning generally
around 6 months, based	around 6 months, based	around 6 months, based on	around 6 months, based	around 6 months, based	recommended
on developmental signs	on developmental signs of	developmental signs of	on developmental signs	on developmental signs of	between 5 to 7
of readiness.	readiness.	readiness.	of readiness.	readiness.	months.
- Continue breastfeeding	- Continue breastfeeding	- Continue breastfeeding until	- Continue breastfeeding	- Continue breastfeeding	Allergies
until 12 months and	until 12 months and	12 months or as long as	until 24 months and	until 12 months and	
beyond.	beyond.	mutually desired by baby and	beyond.	beyond.	- Generally most
Allergies	Allergies	mother.	Allergies	- 'Critical window' to	guidelines recommend
		Allergies		introduce foods between	introducing common
- Delaying solids until	- Delaying introduction of		- Delayed introduction of	4 and 6 months not	allergenic foods around
after 6 months may	some foods to 6 months	- New foods introduced one at	food allergens not	supported, delayed	6 months, with
Increase risk of	may increase risk of	a time and 3-5 days between	recommended as way to	introduction to 6 months	exceptions for some
developing allergies.	allergies, as well as iron	each new food.	prevent allergies.	not associated with later	countries that suggest
- Introduce foods such as	deficiency and growth	Types of foods	- Common food allergens	feeding difficulties.	delays for eggs (2), nuts
peanuts at around 6	faitering.	For a food to be Minorite	should be introduced at	Allergies	(3) and fish (2).
months (in a suitable	- Introduce new roods one	- Ensure foods include vitamin	around 6 months.		Types of foods
form such as a paste).	at a time, wait 2-4 days	D sources (some fish, eggs,	- No evidence that order	- Introduce foods that can	
Types of food	between each new food.	yognurt, cereals and some	of foods affects risk of	trigger allergic reactions	- Many (5) guidelines
First foods are iron rich	Types of food	Juices).	allergy.	one at a time, in small	recommend
- First 1000s are inon non,	First foods are iron rich	- Introduce roods that contain	- When introducing roods,	iust like other foods	from 4 months but no
from the five feed	- First foods don't need to	from Pair non-maerin from	avoid more than one	just like other roods	later than 6 months
groups Examples: Iron-	- First roods don't need to	fruits and vogotables	days before introducing	without delay.	Three recommend >6
enriched infant cereals	- As varied as possible	- By 7-8 months should be	another common food	Types of foods	months
nureed meats noultry	including presentation	esting variety of foods from	allergen	- Wide range of foods	- Most guidelines
fish tofu legumes	- Homemade rusks or	different food groups		nrovided (including iron	recommend alternating
vegetables fruits and	commercial teething	Including infant cereals	Types of foods	containing foods) in age-	nrotein sources (excent
dairy (full fat yoghurt	biscuits can beln with	meats other proteins fruits	- From 6-12 months	appropriate form	milk and dairy)
cheese and custard)	teething and learning to	vegetables, grains, voghurts	provided 1-2 iron rich	- Include non-sweet	- Most recommend 1-2
added.	chew and bite.	and cheeses.	foods per day.	vegetables, including	serves fruit and >3
 Fruit and vegetable 		- Infant cereals must be	- Between 6-9 months.	bitter flavours.	serves vegetables each
purees should be varied	Foods to limit/avoid	fortified.	introduce food groups	- Gradually increase	day, being offered at all
to ensure adequate	- Don't add sov sauce.		including vegetables.	amount and variety of	or most meals.
energy and nutrient	cream, butter, margarine.	Foods to limit/avoid	fruit and milk products	foods.	- Most recommend fish
supply.	salt, sugar, honey and	- Do not only offer infant rice	such as cheese and		1-2 per week
- Cow's milk products can	other sweeteners as may	cereal due to potential arsenic	yoghurt.	Foods to limit/avoid	
be provided - full fat	alter palate.	risk.	- Recommend iron rich	- Do not add salt or sugar.	Foods to limit/avoid
-			meat, meat alternatives	Salt can damage kidneys	

Australia ⁶⁴	NZ ⁶⁵	US ⁶⁶	Canada ⁶⁷	UK ⁶⁸	EU (based off Joint Research
					report of 31 countries' Food
					Based Dietary Guidelines
					covering 0 – 36 months) ⁶⁹
 only but not as a main drink. Solid foods introduced in same way for breast and formula fed infants. Nutrient requirements as per NRVs. Key nutrients are adequate iron and zinc, fat, protein, vitamins and other essential minerals. Range of dietary patterns are appropriate, culturally appropriate foods and preparation encouraged if nutritionally suitable. Foods to limit/avoid Avoid whole nuts and other hard foods to reduce risk of choking. 	 Do not provide honey due to risk of bacterial infection. Do not provide other beverages other than breast/formula or water from 7 – 12 months. How to feed Cup feeding recommended for liquids. Use a small teaspoon and put the food in the middle of infant's tongue. Order of foods Introduce solids after milk feed as a 'top up' until around 8 months. From 8-9 months, provide foods before milk feed. Milk products (cheese, 	 Do not provide honey or unpasteurised drinks/foods, fortified cow's milk or juice. Limit added sugars, high salt foods, juice and sweetened beverages including flavoured milk. Do not provide other Beverages other than breast/formula milk or water until 12 months. Avoid honey and unpasteurised foods for risk of poisoning. How to feed Never give child cereals or other foods from a bottle. When feeding cereals or mashed foods use a spoon. Order of foods 	 and iron-fortified cereals as first foods. Foods to limit/avoid Avoid uncooked animal products, honey, unpasteurised milks and juices, and choking hazards. Recommend little or no added salt or sugar, encourage nutritious, higher fat foods. Avoid fruit juice and sweetened beverages (water instead). Commercial infant foods are not needed and can be high in added sugar. How to feed Place small amount of 	 and sugar can cause tooth decay. Do not provide beverages other than breast/formula milk or water until 12 months. Order of foods First foods start with single vegetables and fruits, or baby rice mixed with usual baby milk. Texture From pureed/blended foods to mashed, lumpy and finger foods. Frequency and amount Begin with small amount of food once a day. From 7-9 months, move 	 Based Dietary Guidelines covering 0 – 36 months)⁶⁹ Most recommend limiting sugars (added or free), choosing low sugar starchy foods and dairy products. Limit fruit juices recommended by most, with 6 countries recommending diluting juice with water. Majority recommend limiting sodium, not adding salt and avoiding rice-based porridge every day (due to arsenic risk). France recommends avoiding high fibre foods until 3 years. Most recommend not replacing milk, cheese or calcium rich soy
- Do not add sugar or	yoghurt, cottage cheese,	- No specific order.	food in front of infant,	towards eating 3 meals a	products with rice, oat
noney to infant foods as increases risk of dental	custard, milk puddings), not cows milks, can be	Texture	they may play, touch or taste.	 day. No need for snacks (<12months) offer extra 	or nut drinks. How to feed
 Sweet drinks, fruit juice, tea, herbal teas, coffee and other drinks not recommended. Do not add salt to foods for infants. Avoid discretionary foods. Order of foods Other than iron rich 	 At 8 months, moderately fibrous foods can be introduced (white or wholemeal cereals). Commercial infant foods with milk or milk products can be introduced at 6 months onwards. Texture First foods should be thin 	 start with mashed, pureed, strained and very smooth foods. Mix with breast milk, formula or water to make smooth. Encourage child to pinch or pick up food. Frequency and amount Start small with 1 – 2 tablespoons and gradually increase. 	 Ose an open cup to provide non-breastmilk and avoid 'sippy cups'. Order of foods No particular order for introduction of foods or food groups (except cow's milk). Texture 	milk instead.	 Many (8) guidelines recommend self- feeding with hands or spoon when possible. Two guidelines do not recommend using pouches. One guideline does not recommend processed cereal based foods fed through bottle.
foods, no	smooth puree (may be				

Australia ⁶⁴	NZ ⁶⁵	US ⁶⁶	Canada ⁶⁷	
 recommendation order of foods or the number of new foods to be introduced at one time. Slow introduction not necessary. How to feed Cup can be introduced at around 6 months to teach infants sipping skills. Texture Introduce foods of 'an appropriate texture and consistency for their developmental stage'. From 6 to 12 months progress from pureed, mashed, minced to chopped foods. At 8 months should manage 'finger food'. There is a possible critical window at 6 to 9 months to introduce textured foods to prevent later feeding difficulties. Frequency and amount Range and quantity of foods introduced should increase with time. 	 diluted with expressed breast or formula milk), slowly increasing the consistency. Progress from pureed to mashed to chopped. Frequency and amount Small amounts, starting with 0.5 – 2 teaspoons after milk feeding. Amount should increase gradually, aiming for 2 tablespoons to half a cup as a meal, before increasing the number of meals. 6-8 month olds should have meals provided 2 – 3 times per day. 	- Provide something to eat or drink around every 2-3 hours/5-6 times a day (3 meals and 2-3 snacks)	 Important to provide a range of textures including soft textures and finger food from 6 months. Important not to delay progression to lumpy foods, due to association with later feeding difficulties and low fruit and vegetable intake. Offering finger foods early encourages selffeeding. By 9 months, lumpy textures should be offered. Frequency and amount Start with 1-2 teaspoons of food and gradually increase. Feeding based on principles of responsive feeding. At 6-8 months, need 2-3 feedings and 1-2 snacks, depending on appetite. 	

UK ⁶⁸	EU (based off Joint Research Council (JRC) compilation report of 31 countries' Food Based Dietary Guidelines covering 0 – 36 months) ⁶⁹			
	 Two guidelines recommend using a 'sippy' cup or beaker from 6 months. 			
	Texture			
	 Gradually introduce coarser food recommended by five countries. 			
	Frequency and amount			
	 Nutrient recommendations are provided in report, not food based recommendations. 			

	Australia ⁶⁴	NZ ⁶⁵	US ⁶⁶	Canada ⁶⁷	UK ⁶⁸	EU (based off Joint Research Council (JRC) compilation
						Based Dietary Guidelines covering 0 – 36 months) ⁶⁹
9-12 months	 Principles for 6-9 month olds apply, in addition to: Types of food Increase exposure and opportunity to sample wide variety of foods so by 12 months infant consuming wide variety of foods from five food groups. Frequent consumption of added sugars is associated with increased risk of dental caries and may alter taste preferences. 	 Principles for 6-9 months apply, in addition to: Amount and frequency Increase frequency of meals to 3-4 times per day, with 1-2 healthy snacks as required. 	Advice as above (general advice for 6 -24 months is provided).	 Principles for 6-9 months apply, in addition to: Types of foods Continue providing 1-2 iron rich foods per day. Frequency and amount Timing as per responsive feeding principles. 9-11 month need up to 3 feedings and 1-2 snacks, depending on appetite. Formula fed infants No clinical benefit for continuing commercial infant formula after 12 months. Introduce cow's milk (as above) at 9-12 months. 	 Principles for 6-9 months apply, in addition to: Frequency Three meals a day in addition to milk feeds. Types of foods Lunch and dinner include main and pudding (e.g. fruit or yoghurt). 	Principles for 6-9 months apply, in addition to: Texture: - One guideline recommends stopping eating puree by 10 months.
12-24 months	 Infant consuming wide variety of family foods. Full fat, fortified (≥100mg/100ml calcium) rice and oat milks can be provided as long as protein and B12 are provided, under the supervision of health professionals. How to feed Milk and other drinks should be offered in a 	 Foods By 12 months, consuming wide variety of family foods from Four Food Groups (with necessary texture adjustments and not restricting fat or being high in fibre). Small meals, regularly (3 meals and 2 healthy snacks) Only breast/formula, whole milk or suitable alternatives, and water for this age range. 	 Fluids Can introduce Vitamin D fortified cow's milk from 12 months. If formula feeding, switch to fortified cow's milk. 100% juice may be provided (less than 4 ounces/115ml per day) Toddler milks/drinks/ formulas not necessary. 	 Types of foods From 12 months, children should consume regular schedule of meals and snacks. Varied diet of the four food groups as per Canada's Food Guide. Limit added salt and sugar, juices (max 125- 175ml/day) and sugar sweetened beverages. Iron rich foods offered at every meal. 	 Frequency Three meals per day, plus two healthy snacks in between if needed (e.g. fruit, vegetable sticks, toast, bread or yoghurt). Fluids Cow's milk (whole) and full fat dairy can be introduced. First infant formula not needed, in addition to 'toddler milk', 'growing up milk' 	 Types of foods One guideline recommends only introducing wholegrains at 18 months. Three guidelines recommend juice only after 12 months. Sweden recommends leafy green vegetables introduced only after 12 months.

	Australia ⁶⁴	NZ ⁶⁵	US ⁶⁶	Canada ⁶⁷	UK ⁶⁸	EU (based off Joint Research Council (JRC) compilation report of 31 countries' Food Based Dietary Guidelines covering 0 – 36 months) ⁶⁹
	cup rather than a feeding bottle.	Water and whole milks can be provided, no more than 500ml milk per day. - Toddler milks are unnecessary if eating a balanced and varied diet.		 Texture Variety of textures including modified textures of family foods such as mashed, ground, chopped. Frequency Establish a regular schedule of regular meals and snacks. 	- Avoid sweet drinks.	 France recommends avoiding pulses until 15 – 18 months. Eating practice By 12 months, bottles with teats should not be used.
24-36 months	 Feeding frequency Small frequent nutrient dense foods from five food groups. Types of foods Family foods consistent with Dietary Guidelines (DGs), continue to provide iron-fortified, meat or iron rich foods. Special complementary foods or milks for toddlers are not required for healthy children. Water or pasteurised full cream milk preferred drinks. Limit sugar sweetened beverages, fruit juice, tea, coffee. 	 Feeding frequency From 24 months, 3 meals and 2-3 small snacks, at regular times. Types of foods In line with DGs and four food groups. Texture Do not give small hard foods (like whole nuts or large seeds) until children are at least 5 years old. 	Diet as outlined in the USDA Dietary Guidelines.	From 2 years, diet should follow healthy eating as per Canada's Food Guide. Sizes - Portion sizes for older infants and young children are roughly one quarter to one half of an adult portion.	Semi-skimmed milk can be provided from 2 years if eating and growing well.	 Types of food Most guidelines recommend general healthy eating, including predominantly whole grains, fruits and vegetables and limiting salt and sugar. Low fat milk and dairy recommended from 2 years, recommended by a few countries including Germany and Sweden. Denmark recommends from 24 months, switch to low fat (0.5%) cow's milk.

Australia ⁶⁴	NZ ⁶⁵	US ⁶⁶	Canada ⁶⁷	UK ⁶⁸	EU (based off Joint Research Council (JRC) compilation report of 31 countries' Food Based Dietary Guidelines covering 0 – 36 months) ⁶⁹
 Low and reduced fat milks can be introduced at 24 months. 					

ATTACHMENT B

Attachment B: Products included in baby meals and finger foods analysis

Annabel Karmel puree blocks, beef and kale

Annabel Karmel puree blocks, chicken apple and butternut pumpkin

Annabel Karmel puree blocks, lentils and vegetables

Annabel Karmel puree blocks, my first bolognese

Annabel Karmel puree blocks, salmon and hoki with orange

Baby macro, apple and blueberry

Baby macro, beef with rice and vegetables

Baby macro, carrot apple mango and sweet potato

Baby macro, lamb with vegetables

Baby macro, pasta, chicken with sweetcorn

Baby macro, pasta, pumpkin spinach ricotta

Baby macro, pear and apple

Baby macro, pear pea potato and spinach

Baby macro, pumpkin sweetcorn potato and carrot

Baby macro, sweet potato carrot and zucchini

Bambini organic, banana and apple with DHA

Bambini organic, blueberry banana and pear with DHA

Bambini organic, mango and pear with DHA

Bambini organic, pear and pumpkin with DHA

Bambini organic, pear and strawberry with DHA

Bellamy's organic, bar, apple strawberry sultana and mango

Bellamy's organic, snacks, apple

Bellamy's organic, snacks, apple and pear

Bellamy's organic, apple puree, raspberry blueberry and strawberry

Bellamy's organic, apple puree, watermelon and guava

Bellamy's organic, banana pear apple and mango with brown rice

Bellamy's organic, berries and apple with cinnamon

Bellamy's organic, blueberry mango and apple with brown rice

Bellamy's organic, grape apple and peach with brown rice

Bellamy's organic, pear puree, cherry and pomegranate

Bellamy's organic, pumpkin sweet potato and tomato with brown rice

Bellamy's organic, sweet potato carrot and apple with brown rice

Bellamy's organic, beef and vegetable with brown rice

Bellamy's organic, chicken sweet potato and couscous with brown rice

Bellamy's organic, custard, banana with flaxseed

Bellamy's organic, custard, cherry with cocoa

Bellamy's organic, pear puree, banana pineapple and passionfruit

Bellamy's organic, pear puree, kiwifruit and blueberry Bellamy's organic, spring vegetable macaroni with brown rice

Bellamy's organic, yoghurt, apple and mango with DHA

Bellamy's organic, yoghurt, banana and strawberry with DHA

Bellamy's organic, yoghurt, pear and peach with DHA

Bellamy's organic, brown rice pasta stars

Bellamy's organic, custard, vanilla and pear with chia seeds

Bellamy's organic, spelt macaroni

Bellamy's organic, veggie pasta alphabets

Bellamy's organic baby porridge

Bellamy's organic baby porridge, apple and cinnamon

Bellamy's organic baby rice, milk and vanilla

Bellamy's organic baby rice, pumpkin with prebiotic

Bellamy's organic baby rice, with prebiotic

Bellamy's organic organic teething rusk, milk

Bellamy's organic, veggie macaroni

Bellies baby bellies, organic apple and cinnamon puffs

Bellies baby bellies, organic blueberry puffs

Bellies baby bellies, organic carrot puffs

Bellies baby bellies, organic pumpkin roundabouts

Bellies baby bellies, organic strawberry pick up sticks

Bellies baby bellies, organic sweet potato pick up sticks

Bellies baby bellies, organic sweetcorn roundabouts

Bellies baby bellies, organic teething rusk, banana

Bellies baby bellies, organic teething rusk, carrot

Bellies little bellies, organic animal biscuits

Bellies little bellies, organic apple and blueberry softcorn

Bellies little bellies, organic banana softcorn

Bellies little bellies, organic carrot and apple nibblers Bellies little bellies, organic fiddlesticks, cheese and herb

Bellies little bellies, organic fiddlesticks, tomato

Bellies little bellies, organic gingerbread men

Bellies little bellies, organic green pea stars, carrot and sweetcorn

Bellies little bellies, organic green pea stars, cheddar cheese

Bellies little bellies, organic lentil wheels, beetroot and strawberry

Bellies little bellies, organic lentil wheels, sweet potato and apple

Bellies little bellies, organic oat cakes, beetroot and carrot

Bellies little bellies, organic oat cakes, cheese

Bellies mighty bellies, lentil puffs, bbq

Bellies mighty bellies, lentil puffs, salt and vinegar

Bubs organic, little fingers, broccoli and pumpkin

Bubs organic, little fingers, tomato

Bubs organic, little rollies snack, coconut

Bubs organic, little rollies snack, hazelnut

Bubs organic, tiddly bar, chickpea and zucchini

Bubs organic, tiddly bar, plum and goji

Bubs organic, mango peach and banana

Bubs organic, pear and white grape

Bubs organic, sweet potato carrot and pumpkin

Bubs organic, blueberry and banana with quinoa

Bubs organic, congee, vegetable

Bubs organic, strawberry and pear with quinoa

Bubs organic, sweetcorn and pumpkin with chia

Bubs organic, smiley square wafers, mango and purple carrot

Bubs organic, smiley square wafers, pear and beetroot

Bubs organic oat cereal

Bubs organic porridge, ancient grain

Bubs organic porridge, apple

Bubs organic rice cereal

Bubs organic rice cereal, banana

Heinz, organic, sweet baby vegetables

Heinz, apple peach and mango

Heinz, apple strawberry and pear

Heinz, apple sweet potato and zucchini

Heinz, banana pear and blueberry

Heinz, golden sweetcorn and chicken

Heinz, pear and banana

Heinz, pear banana and apple

Heinz, pumpkin corn chicken and rice

Heinz, pumpkin potato and beef

Heinz, pureed fruit, apple and mango

Heinz, pureed fruit, apples

Heinz, pureed fruit, pear

Heinz, apple and blueberry muesli

Heinz, apple and oatmeal

Heinz, banana apple mango and berries

Heinz, chicken sweetcorn and mango

Heinz, chocolate custard

Heinz, creamy banana porridge

Heinz, custard with banana

Heinz, custard with strawberry and banana

Heinz, egg custard

Heinz, lamb and vegetables with ricotta

Heinz, lamb pumpkin and sweet potato

Heinz, organic, creamy vanilla rice with apple

Heinz, summer fruits gel

Heinz, teething rusks

Heinz, vanilla custard

Heinz, alphabet pasta tomato and beef

Heinz, apple blueberry and strawberry

Heinz, apple pear and berries

Heinz, apple strawberry and passion fruit

Heinz, beef and vegetable casserole

Heinz, chicken and veg risotto

Heinz, chicken veg and quinoa

Heinz, creamy pasta and tuna mornay

Heinz, junior dippers, curry cauliflower hummus dip Heinz, junior dippers, pumpkin and sweet potato hummus dip

Heinz, junior dippers, white bean and peas and spinach dip

Heinz, little sprout, white beans and sweet potato and pumpkin and olive oil

Heinz, little sprouts, cauliflower and sweetcorn and white bean

Heinz, mango and vanilla flavoured custard

Heinz, meal base, butter chicken

Heinz, meal base, Mediterranean-style tomato

Heinz, organic, spring lamb with baby vegetables

Heinz, organic, tender beef with vegetable mash

Heinz, pear apple and pineapple

Heinz, strawberry and vanilla flavoured custard

Heinz farex, baby rice cereal

Heinz farex, baby rice cereal, pear and banana

Heinz farex, on the go, baby rice with pear and apricot Heinz farex, muesli with pear and banana

Heinz farex, multigrain cereal, original

Heinz farex, on the go, apple and oatmeal

Heinz farex, on the go, creamy baby porridge with apple

Heinz farex, muesli with apple

Heinz little kids, Bolognese and veg with spiral pasta

Heinz little kids, brekky to go, banana mango muesli with Greek style yoghurt

Heinz little kids, brekky to go, banana oats with cinnamon

Heinz little kids, brekky to go, berry and pear muesli with Greek style yoghurt

Heinz little kids, corn cakes, tomato

Heinz little kids, custard, chocolate

Heinz little kids, custard, vanilla

Heinz little kids, ravioli Bolognese

Heinz little kids, ravioli with pumpkin and cheese sauce

Heinz little kids, wholegrain cereal bar, apple and blueberry Heinz little kids, wholegrain cereal bar, apple and strawberry with yoghurt

Heinz little kids, yoghurt muesli fingers, fruit salad

Heinz ruskettes, light multigrain, apple spinach and kale flavour

Kiddylicious coconut rolls

Kiddylicious crispie tiddlers, raspberry

Kiddylicious fruit wigglers, apple

Kiddylicious fruit wigglers, strawberry

Kiddylicious fruity puffs, banana flavour

Kiddylicious fruity puffs, blueberry flavour

Kiddylicious fruity puffs, strawberry flavour

Kiddylicious oaty bar, raspberry

Kiddylicious smoothie melts, banana mango and passion fruit

Kiddylicious smoothie melts, strawberry and banana

Kiddylicious straws, cheesy

Kiddylicious straws, lentil, sour cream and chives

Kiddylicious straws, veggie

Little quackers brown rice puffs, banana flavour

Little quackers brown rice puffs, beetroot and sweet potato flavour

Little quackers brown rice puffs, vegetable flavour

Little quackers coconut rice rolls, banana flavour

Little quackers coconut rice rolls, original flavour

Little quackers rice biscuits, banana flavour

Little quackers rice biscuits, strawberry flavour

Mamia, apple banana and blueberry

Mamia, apple banana and peach

Mamia, organic, apple and pear with cinnamon

Mamia, organic, pear apple and berries

Mamia, organic, pear banana and mango

Mamia, pear and apricot

Mamia, apricot chicken

Mamia, custard, chocolate flavoured

Mamia, custard, vanilla flavoured

Mamia, organic, pumpkin spinach pasta and ricotta

Mamia, organic, vegetables with beef

Mamia, organic, vegetables with sweet potato and lamb

Mamia, rice pudding, strawberry

Mamia, vegetable and lamb polenta

Mamia, winter vegetables and beef

Mighty bellies, brown rice crispy bar, cocoa

Mighty bellies, brown rice crispy bar, vanilla

Mum-mum organic rice cracker, sweet potato and carrot

Mum-mum organic rice rusk, apple and pumpkin

Mum-mum organic rice rusk, original

Nestle cerelac, muesli and pear

Nestle cerelac, muesli with banana and apple

Only organic teething rusk

Only organic, chicken Bolognese

Only organic, mango chicken and coconut rice

Only organic, sweet potato lamb and couscous Only organic, vegetable lasagne

Only organic, apple peach and apricot

Only organic, banana and apple

Only organic, banana kumara and quinoa

Only organic, carrot pumpkin and apple

Only organic, mango sweet potato and quinoa

Only organic, pear and mango

Only organic, prune, pear and purple carrot

Only organic, sweet potato and apple

Only organic, apple banana and mango

Only organic, banana blueberry and quinoa

Only organic, cauliflower broccoli and cheddar

Only organic, custard, apple

Only organic, custard, mango

Only organic, custard, vanilla bean

Only organic, mango coconut and quinoa

Only organic, mango spinach and kale

Only organic, pear banana and apple

Only organic, wild rice risotto and spring lamb

Only organic, ancient grains risotto

Only organic, banana raspberry and vanilla

Only organic, brekkie, banana berries and yoghurt

Only organic, brekkie, mango and yoghurt

Only organic, carrot red lentils and cheddar

Only organic, creamy rice pudding

Only organic, custard, cacao and berry

Only organic, kumara carrot and coconut rice

Only organic, mango rice pudding

Only organic, minted peas, blackcurrants and lamb

Only organic, pasta Bolognese

Only organic, pumpkin potato and beef

Only organic beef Bolognese pasta

Only organic brekkie, banana vanilla and Greek yoghurt Only organic brekkie, mango goji berries and Greek yoghurt

Only organic coconut banana and acai

Only organic coconut strawberry and goji

Only organic mini rice cakes, strawberry yoghurt

Only organic mini rice cakes, yoghurt

Only organic vegetable chicken risotto

Only organic vegetable macaroni cheese

Rafferty's Garden, beef and hearty vegetable lasagne

Rafferty's Garden, beef Bolognese and macaroni

Rafferty's Garden, chicken and tomato pasta

Rafferty's Garden, risoni and garden vegetables

Rafferty's Garden, shepherd's pie

Rafferty's Garden, chickpea pops, cheese

Rafferty's Garden, chickpea pops, original

Rafferty's Garden, freeze dried fruit, pear apple and banana

Rafferty's Garden, snack bar, banana Rafferty's Garden, snack bar, blueberry banana and apple

Rafferty's Garden, wafer bites, beetroot and shallot

Rafferty's Garden, wafer bites, cheese

Rafferty's Garden, yoghurt buttons, mixed berry

Rafferty's Garden, yoghurt buttons, strawberry

Rafferty's Garden, apple

Rafferty's Garden, apple banana and peach

Rafferty's Garden, apple pear and cinnamon

Rafferty's Garden, banana pear and mango

Rafferty's Garden, blueberries banana and apple

Rafferty's Garden, mango apple and sweet potato

Rafferty's Garden, pear

Rafferty's Garden, pear and apricot

Rafferty's Garden, pear and prune

Rafferty's Garden, pear and super berries

Rafferty's Garden, pumpkin apple and sweetcorn Rafferty's Garden, spinach apple and broccoli

Rafferty's Garden, sweet potato carrot and apple

Rafferty's Garden, barley banana and spinach

Rafferty's Garden, barley carrot and sweet potato

Rafferty's Garden, beef sweet potato and parsnip

Rafferty's Garden, chicken peas and wholemeal pasta

Rafferty's Garden, chicken vegetable and rice

Rafferty's Garden, custard, chocolate

Rafferty's Garden, custard, vanilla

Rafferty's Garden, quinoa apple, and apricot

Rafferty's Garden, wholegrain cereal, apple and mango

Rafferty's Garden, wholemeal macaroni pumpkin and basil

Rafferty's Garden, yoghurt, banana

Rafferty's Garden, yoghurt, blueberry

Rafferty's Garden, yoghurt, natural

Rafferty's Garden, yoghurt, peach and mango

Rafferty's Garden, yoghurt, strawberry

Rafferty's Garden, wholegrain cereal, banana and apricot

Rafferty's Garden, black bean quinoa and corn

Rafferty's Garden, brown rice and bean and pumpkin

Rafferty's Garden, chickpea and corn and carrot

Rafferty's Garden, red lentil and carrot and sweet potato

Rafferty's Garden teething rusk, banana milk

Rafferty's Garden, snack bar, apple

Rafferty's Garden, snack bar, apple and raspberry

Whole kids, organic popcorn, manuka honey

Whole kids, organic popcorn, sea salt

Whole kids frooshie, banana and apple

Whole kids frooshie, banana strawberry and apple

Whole kids frooshie, mango banana and carrot Whole kids organic wholegrain mini abc's, apple and chia

Whole kids organic barefoot bars, apple and date

Whole kids organic barefoot bars, cocoa

Whole kids organic chia and quinoa wafer, original

Whole kids organic cookies, apple

Whole kids organic cookies, vanilla milk

Whole kids organic dinosaur puffs, cheese and leek

Whole kids organic farm animal biscuits, cocoa

Whole kids organic fruit bar, apple and blackcurrant

Whole kids organic fruit bar, apple and sultana

Whole kids organic fruit bar, apricot

Whole kids organic probiotic bites, fruity cocoa

Whole kids organic probiotic bites, tropical orange

Whole kids organic rice and corn puffs, apple

Whole kids organic rice crackers, sea salt

Whole kids organic rice crackers, tamari

Whole kids organic rice wafers, sweet potato

Whole kids organic turtle puffs, sweetcorn and carrot

Woolworths smiling tums, apple and banana with oats Woolworths smiling tums, apple and pear with cinnamon

Woolworths smiling tums, apple pea and zucchini

Woolworths smiling tums, beef and vegetables

Woolworths smiling tums, chicken and vegetables Woolworths smiling tums, fruit custard, apple and banana

Woolworths smiling tums, fruit custard, apple and raspberry

Woolworths smiling tums, pear and banana and mango

Woolworths smiling tums, sweet potato and carrot and parsnip

ATTACHMENT C

Attachment C: Products included in yoghurt pouch analysis

Brooklea Yogurt squishy Blueberry

Brooklea Yogurt squishy Strawberry

Brooklea Yogurt squishy Vanilla

Brooklea No Added Sugar Banana

Brooklea No Added Sugar Strawberry

Brownes Wiggles Natural Blueberry Lactose Free

Brownes Wiggles Natural Mango Lactose Free

Brownes Wiggles Natural Strawberry Lactose Free

Brownes Wiggles Vanilla Bean Lactose Free

Coles Banana Yoghurt

Coles Strawberry Yoghurt

Coles Vanilla flavoured Yoghurt

Dairy Dream Kids No Added Sugar Blueberry

Dairy Dream Kids No Added Sugar Strawberry

Dairy Dream Kids No Added Sugar Vanilla

Pauls Cars Strawberry Yoghurt

Pauls Disney Princess Strawberry Yoghurt Pauls Limited Edition (Frozen) Birthday Cake Flavoured Yoghurt

Pauls Milky Max Strawberry Yoghurt

Pauls Milky Max Vanilla Flavoured Yoghurt

Pauls Moana Fruit Salad Yoghurt

Pauls Toy Story Vanilla Flavoured Yoghurt

Rafferty's Garden Banana yoghurt

Rafferty's Garden Natural yoghurt

Rafferty's Garden Peach and mango yoghurt

Rafferty's Garden Strawberry yoghurt

Tamar Valley Kids Greek Banana Yoghurt Pouch

Tamar Valley Kids Greek Blueberry Yoghurt Pouch

Tamar Valley Kids Greek Raspberry Yoghurt Pouch

Tamar Valley Kids Greek Strawberry Yoghurt Pouch

Tamar Valley Kids Greek Tropical Yoghurt Pouch

Tamar Valley Kids Greek Vanilla Yoghurt Pouch The Collective Organic Blueberry Yoghurt

The Collective Organic Strawberry Yoghurt

Vaalia Kids Yoghurt Strawberry

Vaalia Kids Yoghurt Vanilla

Vaalia Kids Lactose free Yoghurt Blueberry

Vaalia Kids Yoghurt Banana

Vaalia Kids Yoghurt Tropical

Woolworths Select Banana yoghurt

Woolworths Select Strawberry yoghurt

Woolworths Select Vanilla flavoured yoghurt

Yoplait Petit Miam Apple and Blackcurrant

Yoplait Petit Miam Banana Yoghurt

Yoplait Petit Miam Blueberry Yoghurt

Yoplait Petit Miam Fruit Salad

Yoplait Petit Miam Plain

Yoplait Petit Miam Plain no added sugar Yoplait Petit MiamYoplait Petit Miam VanillaStrawberry and Bananaand Apple no addedYoghurt - no added sugarsugarYoplait Petit MiamYoplait Petit Miam VanillaStrawberry YoghurtYoghurt