

Maternal and child nutrition

[N] Evidence reviews for interventions to promote appropriate and timely introduction to solids (complementary feeding) for babies from 6 to 12 months

NICE guideline NG247

Evidence reviews underpinning recommendations 1.5.1 to 1.5.5 and 1.5.7 in the NICE guideline

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Final

*These evidence reviews were developed by
NICE*

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Interventions to promote appropriate and timely introduction to solids (complementary feeding) for babies from 6 to 12 months

Review question

What interventions are effective to promote appropriate and timely introduction to solids (complementary feeding) for babies from 6 to 12 months (in line with government advice)?

Introduction

The current UK guidance recommends that a variety of solid foods should be introduced from around the age of 6 months alongside breastmilk (or first infant formula) and that the foods offered should not contain added salt or sugar and should contain iron and potential allergens such as egg and peanut. It is also recommended that different flavours and textures are progressively added to the baby's diet as the child develops. Introduction of healthy foods is important in this period as tastes and preferences are likely to be formed early. Introducing a cup for drinking water from 6 months is also recommended.

It is known that many babies in the UK are still introduced to solids well before the age of 6 months and that the first foods offered are often highly processed and sweet. Until fairly recently parents were advised to avoid potential allergens in the period when solid foods are first introduced, so families may not be aware of the new guidance to introduce foods that can trigger allergic reactions one at a time and in very small amounts so that any reaction can be easily spotted.

Understanding what interventions may be effective to promote appropriate and timely introduction of solids alongside breastmilk (or first infant formula) would enable health care professionals and early years providers to give appropriate advice to parents and carers. The aim of this review is to determine what interventions are effective in promoting appropriate and timely introduction to solids (also known as complementary feeding) for babies from 6 to 12 months.

Summary of the protocol

See Table 1 for a summary of the Population, Intervention, Comparison and Outcome (PICO) characteristics of this review.

Table 1: Summary of the protocol (PICO table)

Population	Babies from 6 months to 12 months and their parents, carers or early years professionals
Intervention	Interventions with a main aim to promote appropriate and timely introduction to solids in the population of interest. Interventions will be organised according to the following groups: <ul style="list-style-type: none"> • Intervention group 1: Interventions using information provision to promote appropriate and timely introduction of solids (complementary feeding)

	<ul style="list-style-type: none"> • Intervention group 2: Behavioural interventions (for example, role modelling or interventions using praise and rewards) • Intervention group 3: Interventions aimed at improving access to baby's first solids (that is, provision of healthy food/drink, welfare schemes designed to enable access to healthy food/drink) • Intervention group 4: Multicomponent interventions (interventions that combine more than 1 intervention listed above) <p>The committee anticipated that, along with the intervention, studies would report at least 1 domain for each of the components noted below. Sensitivity analyses will be done according to these if enough data is available.</p> <ul style="list-style-type: none"> • Component 1: Mode of delivery • Component 2: Intervention aimed at individuals or groups • Component 3: Individualised /tailored interventions or general • Component 4: Who delivers the intervention • Component 5: Where is the intervention delivered • Component 6: Behaviour change models, techniques and theories
Comparison	<ul style="list-style-type: none"> • Another intervention • Status quo/treatment as usual (as defined by study authors, includes no treatment) • Time (before and after)
Outcome	<p>Critical</p> <ul style="list-style-type: none"> • Introduction of appropriate solid foods at around 6 months (including vegetables and fruits, potentially allergenic foods and iron-rich foods) • Appropriate milk feeding (continued breastfeeding or use of formula) and avoidance of unmodified cow's milk before age 1 • No added salt before age 1 <p>Important</p> <ul style="list-style-type: none"> • No snacking before age 1 • Only water given to drink before age 1 (in addition to breastmilk or first infant formula) • Progressive diversification of textures and flavours • Food and drinks offered multiple times

For further details see the review protocol in appendix A.

Methods and process

This evidence review was developed using the methods and process described in [Developing NICE guidelines: the manual](#). Methods specific to this review question are described in the review protocol in appendix A and the methods document (supplementary document 1).

Declarations of interest were recorded according to [NICE's conflicts of interest policy](#).

Effectiveness evidence

Included studies

Overall, 10 randomised controlled trials were included for this review (Cameron 2015, Fildes 2015, Franco 2008, Johnson 1993, O'Sullivan 2017, Palacios 2019, Savage 2018, Watt 2009, Wen 2011 and Wen 2020).

The study populations included parents and caregivers who were pregnant or had an infant between 0 and 6 months of age, but outcomes were measured in the infants. There were no studies that included early years' professionals as the population. Most studies focused on outcomes in children aged 0 to 24 months but only outcomes within the first 1 year were reported in this review.

All included studies reported on intervention group 1 in the protocol: interventions using information provision to promote appropriate and timely introduction of solids (complementary feeding). The comparators included another intervention (from intervention group 1) or status quo/treatment as usual. There were no studies identified for intervention group 2: behavioural interventions (for example, role modelling or interventions using praise and rewards), intervention group 3: interventions aimed at improving access to baby's first solids on their own and intervention group 4: multicomponent intervention combining any of intervention groups 1, 2 and 3).

Six studies compared interventions using information provision to status quo/treatment as usual (Cameron 2015, Fildes 2015, Johnson 1993, Watt 2009, Wen 2011 and Wen 2020), 2 studies compared interventions using infant feeding information provision to general infant's health information provision (O'Sullivan 2017, Palacios 2018), 1 study compared interventions using infant feeding information provision to home safety information provision (Savage 2018), and 1 study compared interventions using scripted and standardized infant feeding information provision to brief counselling (Franco 2008). As per protocol, studies with interventions delivered in the antenatal period only were excluded.

There was evidence for all 3 critical outcomes and 2 of the important outcomes. Nine studies assessed outcomes relating to introduction of appropriate solid foods at around 6 months (Cameron 2015, Fildes 2015, Johnson 1993, O'Sullivan 2017, Palacios 2018, Savage 2018, Watt 2009, Wen 2011, Wen 2020). Six studies assessed outcomes relating to appropriate milk feeding and avoidance of unmodified cow's milk before age 1 (Franco 2008, Johnson 1993, Palacios 2008, Watt 2009, Wen 2011, Wen 2020). One study assessed outcomes relating to no added salt before age 1 (Savage 2018). Two studies assessed outcomes relating to only water given to drink before age 1 (Palacios 2018, Savage 2018). One study assessed outcomes relating to foods and drinks offered multiple times (Watt 2009). There was no evidence for 'no added snacking before age 1' and 'progressive diversification of textures and flavours'. One outcome reported as 'intake of salty snacks' was categorised within the outcome of 'no added salt before age 1'. Three outcomes relating to the use of cups and bottles in infants less than 1 year were reported as proxy outcomes of 'appropriate milk feeding and avoidance of unmodified cow's milk before age 1', and were downgraded for indirectness.

Outcomes relating to introduction of appropriate solid foods around 6 months included:

- introduction of solid foods at ≤ 4 months, 4 to 6 months, 5 months and 6 months
- has not introduced solids at 4 to 6 months
- complementary foods introduced before 5 months, or 6 months

- isolated fruits as first foods
- isolated vegetables as first foods
- intake of unfamiliar fruit puree
- intake of unfamiliar vegetable puree
- fruit and vegetable consumption >1 per week
- appropriate fruits intake at 12 months
- appropriate vegetable intake at 12 months
- proportion of infants meeting fruits and vegetables recommendation at 12 months.

Outcomes relating to appropriate milk feeding and avoidance of unmodified cow's milk before age 1 included:

- exclusive breastfeeding duration at <4 months
- exclusive breastfeeding at 6 months and 12 months
- breastfeeding at 6 months and 12 months
- gave child cow's milk before 26 weeks
- cow's milk (any type) as main drink intake
- introduction of cow's milk
- formula feeding
- appropriate milk intake
- length of time kept on formula feeds
- drinking from a cup (proxy outcome)
- using bottle at 52 weeks (proxy outcome)
- totally weaned from the bottle (proxy outcome).

Outcomes relating to no added salt before age 1 included:

- consumed salty snacks daily at 1 year.

Outcomes relating to only water given to drink before age 1 included:

- introduction of water
- introduction of juices
- consumed any sugar-sweetened beverage at 1 year
- consumed any fruit juices at 1 year.

Outcomes relating to foods and drinks offered multiple times included:

- having 3 solid meals per day at 12 months.

Sensitivity analysis on the various components of the intervention as specified in the protocol was not conducted for this review as outcomes were only reported by single studies. For outcomes with single studies, the different components of the interventions were reported along with the outcome. Evidence could not be analysed according to pre-specified strata (level of socioeconomic deprivation, parental education, parental age) as there was insufficient information. Pre-specified sub-group analysis (geographical variation, religion and cultural considerations, babies or children with disabilities and other physical and mental health conditions, babies and children with developmental problems and ethnicity) could not be conducted as there was no information within the studies to conduct the analysis.

The included studies are summarised in Table 2.

See the literature search strategy in appendix B and study selection flow chart in appendix C.

Excluded studies

Studies not included in this review are listed, and reasons for their exclusion are provided in appendix J.

Summary of included studies

Summaries of the studies that were included in this review are presented in Table 2.

Table 2: Summary of included studies.

Study	Population	Intervention	Comparison	Outcomes	Comments
Cameron 2015 RCT New Zealand	N = 802 mothers Maternal age in years [Mean (SD)]: 31.6 ± 5.2 Maternal education, %: Year 11 or below = 7.8 Year 11 or 12 = 16.5 Post secondary = 14.6 University degree or higher = 61.1 Maternal ethnicity (%): New Zealand European = 85 Maori = 5.7 Pacific Island = 1.6 Asian = 4.9 MELAA = 1 NZDep Score 2006, %: Least deprived 1-3 = 34.8 Neutral 4-7 = 44.1 Most deprived 8-10 = 21.2	<u>Food, activity, and breastfeeding intervention (FAB)</u> Standard maternity care and well-child care, 3 contacts with a lactation consultant focusing on the promotion of breastfeeding (or advice and support for mothers feeding other milk), the best age to introduce complementary foods as around 6 months and delaying the introduction of complementary foods, and educational resources at the 4-mo contact, a “traffic light” resource (the primary focus of the session) and the booklet “Babies, Feeding, and Introducing	<u>Usual care</u> Standard maternity care and well-child care from a maternity care professional and a well-child provider of their choice	<ul style="list-style-type: none"> • Complementary foods introduced at 5 months • Complementary foods introduced at 6 months 	<p>Study was a 4-arm RCT but only the intervention arms most relevant to this review have been reported. The other intervention groups were the “Sleep education” group providing information about infant sleep and the “Combo” group which combined the Sleep and FAB interventions.</p> <p>Details on geographical variation, religion and cultural considerations, disabilities or physical or mental conditions and developmental problems were not reported.</p>

Study	Population	Intervention	Comparison	Outcomes	Comments
	Other sociodemographic characteristics, %: NR	Solid Food,” which outlined how to introduce complementary foods.			
Fildes 2015 RCT UK, Greece, and Portugal	N = 146 women Maternal age in years [Mean (SD)]: 33.0 (4.7) Maternal education, %: Below university = 26.6 Undergraduate or above = 73.4 Maternal ethnicity, %: NR Other sociodemographic characteristics, %: NR	<u>Education provision</u> Information on the importance of introducing vegetables early in the weaning process, the beneficial effects of offering different single vegetables each day, the techniques of exposure feeding, interpreting infants’ facial reactions to food and the need for persistence when an infant initially rejects a food. A leaflet reinforcing these messages (standardised across countries) was also given to participants.	<u>Usual care</u> No offering of any specific guidance, instructions or information on weaning with vegetables. Instead, ‘usual care’ was offered, which varies between European countries.	<ul style="list-style-type: none"> Isolated vegetable as first foods measured 1 month after introducing solids Isolated fruits as first foods measured 1 month after introducing solids Intake of unfamiliar vegetable puree 1 month after introducing solids Intake of unfamiliar fruit puree 1 month after introducing solids 	Details on socioeconomic deprivation, maternal ethnicity, religion and cultural considerations, disabilities or physical or mental conditions and developmental problems were not reported.
Franco 2008 RCT USA	N = 185 parents Maternal age in years [Mean (SD)]: NR Maternal education, %:	<u>Scripted standardised counselling</u> Counselling including the use of feeding cups by 9 months of age, photographs of	<u>Brief counselling</u> Counselling on the use of a feeding cup at six months and bottle	<ul style="list-style-type: none"> Totally weaned from the bottle at 12 months 	No patient characteristics were reported.

Study	Population	Intervention	Comparison	Outcomes	Comments
	NR Maternal ethnicity, %: NR Other sociodemographic characteristics, %: NR	early childhood caries (ECC) and use of a dental model to point out the lingual aspect of upper incisors as early and easily missed sites of ECC.	weaning at 9 and 12 months. No photographs of ECC or dental model were shown.		
Johnson 1993 RCT Ireland	N = 262 mother and infant pairs Mothers' age in years [Mean (SD)]: Intervention = 24.1 (4.4) Control = 23.1 (3.7) Mothers' education (age of leaving school) in years [Mean (SD)]: Intervention = 15.9 (1.4) Control = 15.7 (1.7) Mothers' ethnicity, %: NR Sociodemographic characteristics, n: <i>Mothers' employment, n</i> <i>Employed</i> Intervention = 37 Control = 18 <i>Unemployed</i>	<u>Community mothers visits</u> Support consisting of educational development, language development and cognitive development via a cartoon, which had been used for child development programme previously, delivered once a month until infant's first birthday. Participants also received standard support from their local public health nurse, including invitation for primary immunisations and a development assessment.	<u>Standard care</u> Standard support from their local public health nurse including invitation for primary immunisations and a development assessment.	<ul style="list-style-type: none"> • Appropriate vegetables intake at 12 months • Appropriate fruits intake at 12 months • Appropriate milk intake at 12 months • Length of time kept on formula feeds measured at 12 months • Gave child cow's milk before 26 weeks 	

Study	Population	Intervention	Comparison	Outcomes	Comments
	<p>Intervention = 90 Control = 87</p> <p><i>Geographical variation- lived in deprived area, n</i></p> <p>Intervention = 141 Control = 121</p> <p><i>Social class: I, II, IIIM (higher class), n</i></p> <p>Intervention = 16 Control = 8</p> <p><i>Social class IIIM, IV, V (lower class), n</i></p> <p>Intervention = 110 Control = 93</p> <p><i>Social class unknown, n</i></p> <p>Intervention = 1 Control = 4</p>				
O'Sullivan 2017 RCT Ireland	<p>N = 233 pregnant women</p> <p>Mothers' age in years [Mean (SD)]: Intervention = 25.46 (5.85) Control = 25.30 (5.99)</p> <p>Mothers' education (low education) in %: Intervention = 33.7 Control = 39.6</p>	<p><u>Community based home visiting programme (HVP) and an additional parenting course</u></p> <p>Involved 2 one-hour home visits per month where mentors offered parents information, emotional support, access to community services and instruction on</p>	<p><u>Control</u></p> <p>Involved providing parents with child developmental materials and book packs, including recommendations to attend public health workshops on stress management and healthy eating.</p>	<ul style="list-style-type: none"> Proportion of infants meeting fruit and vegetables recommendation at 12 months 	

Study	Population	Intervention	Comparison	Outcomes	Comments
	<p>Sociodemographic characteristics, %:</p> <p><i>Resides in social housing</i></p> <p>Intervention = 55.3</p> <p>Control = 55.4</p> <p><i>Employed</i></p> <p>Intervention = 36.5</p> <p>Control = 39.6</p> <p>Mothers' ethnicity, %: NR</p> <p>Other sociodemographic characteristic, %: NR</p>	<p>parenting practices, using tip sheets. Topics included child nutrition and dietary recommendations such as iron and calcium, breast-feeding, food groups and food pyramid, provided alongside child developmental materials and book packs. Intervention also included Positive Parenting Program between 2 and 3 years of infant's age.</p>	<p>Parents were also given access to a support worker to help them access and benefit from community services.</p>		
<p>Palacios 2019</p> <p>RCT and feasibility trial</p> <p>Puerto Rico and Hawaii</p>	<p>N = 202</p> <p>Caregiver's age in years [Mean (SD)]:</p> <p>Intervention = 26.9 (5.27)</p> <p>Control = 27.0 (5.02)</p> <p>Caregiver's education, %:</p> <p><i>Less than college</i></p> <p>Intervention = 22.2</p> <p>Control = 22.0</p> <p><i>College or higher</i></p> <p>Intervention = 28.3</p> <p>Control = 36.0</p> <p>Ethnicity and race, %:</p> <p><i>Asian</i></p>	<p><u>Infant feeding Information</u></p> <p>Intervention SMS focused on reinforcing WIC messages on breastfeeding, preventing overfeeding, delaying introduction of solid foods, and delaying and reducing baby juice consumption</p>	<p><u>General health information</u></p> <p>Control SMS were related to general infant's health issues related to sleeping, bathing, teething, traveling in a car, medications, handling baby, and smoking, information related to immunization, and care of common illnesses.</p>	<ul style="list-style-type: none"> • Introduction of solids at 4 to 6 months • Has not started solids at 4 to 6 months • Any breastfeeding at 4 to 6 months • Formula feeding at 4 to 6 months • Introduction of cow's milk at 4 to 6 months • Introduction of water at 4 to 6 months • Introduction of juice at 4 to 6 months 	<p>Details on socioeconomic deprivation, religion and cultural considerations, disabilities or physical or mental conditions and developmental problems were not reported.</p>

Study	Population	Intervention	Comparison	Outcomes	Comments
	Intervention = 21.6 Control = 20 <i>American Indian</i> Intervention = 54.9 Control = 4 <i>Black</i> Intervention = 14.7 Control = 12 <i>Hispanic</i> Intervention = 62 Control = 61.2 <i>Native Hawaiian</i> Intervention = 14.7 Control = 12 <i>Pacific Islander</i> Intervention = 9.8 Control = 7 <i>White</i> Intervention = 33.3 Control = 45 Type of health centre: Community health centre = 52.6% Private office = 47.4% Other sociodemographic characteristic, %: NR				
Savage 2018 RCT	N = 279 Maternal age in years [Mean (SD)]:	<u>INSIGHT intervention – responsive parenting</u>	<u>Home safety information</u> Receipt of an	<ul style="list-style-type: none"> Introduced solids between 4 to 6 months 	Details on socioeconomic deprivation, geographical variation, religion and

Study	Population	Intervention	Comparison	Outcomes	Comments
USA	<p>Intervention = 28.7 (4.6) Control = 28.7 (4.9) Maternal education, %: <i>High School graduate or less</i> Intervention = 11.4 Control = 11.5 <i>Some college</i> Intervention = 26.4 Control = 25.9 <i>College graduate</i> Intervention = 34.3) Control = 37.4 <i>Graduate degree +</i> Intervention = 27.9 Control = 25.2</p> <p>Maternal ethnicity and race, %: <i>Hispanic/Latino</i> Intervention = 8.6 Control = 5.0 <i>Black</i> Intervention group = 7.1 Control group = 5.0 <i>White</i> Intervention group = 87.1 Control group = 91.4 <i>Native Hawaiian or Pacific Islander</i> Intervention group = 0.7</p>	<p>Focused on responsive parenting (RP) in four domains of infant behaviour: drowsy, sleeping, fussy and, alert and calm, and involved the delivery of feeding guidance information during home visits. Intervention materials were also mailed to all participants.</p>	<p>intervention that was similar in intensity to the INSIGHT intervention but focused on home safety. Feeding-related messaging in the safety curriculum was focused on food safety and choking prevention</p>	<ul style="list-style-type: none"> • Vegetable as first foods at 28 weeks • Consumed vegetables daily at 1 year • Using bottle at 52 weeks • Consumed salty snacks daily at 1 year • Consumed sugar-sweetened beverages at 1 year • Consumed fruit juice at 1 year 	<p>cultural considerations, disabilities or physical or mental conditions and developmental problems were not reported.</p>

Study	Population	Intervention	Comparison	Outcomes	Comments
	Control group = 0 <i>Asian</i> Intervention group = 3.6 Control group = 2.9 <i>Other</i> Intervention group = 1.4 Control group = 0.7 Sociodemographic characteristics, %: NR				
Watt 2009 RCT UK	N= 312 women Maternal age in years [Mean (SD): Intervention = 29.3 (6) Control = 31 (6.2) Maternal education, %: <i>Left full time education <16 years</i> Intervention = 25 Control = 21 Maternal ethnicity, %: <i>White</i> Intervention = 50 Control = 50 <i>Minority ethnic group</i> Total = 50 Lone parent = 28%	<u>Information provision</u> The offer of practical and non-judgemental support and advice on infant feeding practices, in particular complementary feeding, to empower women to follow current guidance on when to introduce solids, the types of foods and drinks to give a child with emphasis on the importance of fruit and vegetables, and when to stop using a feeding bottle. The intervention	<u>Standard care</u> Women in the control group only received standard professional support from health visitors and GPs	<ul style="list-style-type: none"> • Introduction of solids at 4–6 months • Fruit and vegetable consumption more than 1 per week at 12 months • Exclusive breastmilk duration for <4 months • Cows' milk (any type) as main drink at 12 months • Having three solid meals per day at 12 months • 	Details on geographical variation, religion and cultural considerations, disabilities or physical or mental conditions and developmental problems were not reported.

Study	Population	Intervention	Comparison	Outcomes	Comments
	Living in social housing = 57%	was a 12-session programme delivered over 4 weeks			
	Receiving income support/ jobseekers allowance = 33%				
Wen 2020 RCT Australia	N = 1155 pregnant women Maternal age in years [Mean (SD)]: NR Maternal age in years, % 16-24 years = 8 25-29 years = 24 30-34 years = 38 35-39 years = 23 40-49 years = 7 Maternal education, %: Up to HSC to TAFE or diploma = 34 University = 66 Unknown = 0.2 Father's educational level, %: Up to HSC to TAFE or diploma = 39 University = 57 Unknown = 4	<u>Group 1: Telephone support</u> Receipt of intervention booklets by participants, followed by provision of telephone support using a support script, to discuss the intervention information provided in the booklets and issues raised by the mother. <u>Group 2: SMS support</u> One week after mailing out intervention booklet, a set of SMS messages were sent to the participant twice a week for 4 weeks via a 2-way automated SMS system at a predetermined time (10 AM to 1 PM). These messages were used to reinforce the intervention	<u>Usual care</u> Receipt of home safety promotion materials and a newsletter on "Kids' Safety" at the third trimester and at 3, 6, and 9 months of child age as one of the retention strategies	<ul style="list-style-type: none"> • Introduction of solid foods at 6 months • Exclusive breastfeeding at 6 months • Breastfeeding at 6 months and 12 months • Drinking from cup at 6 months and 12 months 	<p>Study was a 3-arm RCT, all of which are relevant to this review and have been reported accordingly.</p> <p>Details on socioeconomic deprivation, geographical variation, religion and cultural considerations, disabilities or physical or mental conditions and developmental problems were not reported.</p>

Study	Population	Intervention	Comparison	Outcomes	Comments
	Language spoken at home, %: English = 54 Other = 46 Other sociodemographic characteristics, %: NR	information and key messages in the booklets			
Wen 2011 RCT Australia	N = 667 pregnant women Maternal age in years [Mean (SD)]: NR Maternal age in years, %: ≤24 Intervention = 42.7 Control = 41.0) 25-29 Intervention = 33.2 Control = 34.5 ≥30 Intervention = 24.1 Control = 24.5 Maternal education, %: <i>Completed primary school to school certificate</i> Intervention = 19.6 Control = 21.6 <i>HSC to TAFE certificate or diploma</i> Intervention = 53.6 Control = 56.1 <i>University</i>	<u>Staged intervention</u> 6 home visits (1 antenatal and 5 postnatal) by research nurse addressing 4 key areas: infant feeding practices, infant nutrition and active play, family physical activity and nutrition, as well as social support. The key intervention messages included “breast is best”; “no solids for me until 6 months”; “I eat a variety of fruits and vegetables every day”; “only water in my cup”; and “I am part of an active family”.	<u>Usual care</u> 1 home visit within a month of birth as needed. Additional visits at baseline and 12 months were conducted by a research assistant for data collection purposes only.	<ul style="list-style-type: none"> • Introduction of solid foods regularly at ≤4 months, at 5 months and at 6 months • Exclusive breastfeeding at 6 months • Breastfeeding rate at 6 months and 12 months 	Details on socioeconomic deprivation, geographical variation, religion and cultural considerations, disabilities or physical or mental conditions and developmental problems were not reported.

Study	Population	Intervention	Comparison	Outcomes	Comments
	Intervention = 26.8 Control = 22.3 Language spoken at home, %: <i>English</i> Intervention = 90.2 Control = 88.1 <i>Other</i> Intervention = 9.8 Control = 11.9 Other sociodemographic characteristics, %: NR				

FAB: food, activity, and breastfeeding; GLB: Growing leaps and bounds; GPs: general practitioners; HSC: higher school certificate; HVP: home visiting programme; INSIGHT: Intervention Nurses Start Infants Growing on Healthy Trajectories; MELAA: Middle Eastern, Latin American and African; NR: Not reported; NZDep: New Zealand deprivation; RCT: randomised controlled trial; RP: responsive parenting; SD: standard deviation; SSB: sugar sweetened beverage; SMS: short messaging service; TAFE: technical and further education; TTM: transtheoretical model

See the full evidence tables in appendix D. No meta-analysis was conducted (and so there are no forest plots in appendix E).

Summary of the evidence

See appendix F for full GRADE tables.

The below paragraphs summarise the evidence for 4 comparisons:

1. interventions using information provision versus status quo (including no treatment)
2. interventions using information provision on infant feeding versus general infant's health/development information provision
3. interventions using information provision on infant feeding versus home safety information provision
4. interventions using scripted and standardized information provision on infant feeding versus brief counselling.

For all outcomes, additional information on the intervention components (mode of delivery, intervention aimed at individuals or groups, who delivers the intervention, where the intervention is delivered and behaviour change models, techniques and theories) is included in the summary.

Comparison 1: Interventions using information provision versus status quo (including no treatment) – Mixed strata for level of socioeconomic deprivation, parental education and parental age

Six studies were included in this comparison. The quality of the evidence ranged from high to very low.

Overall, interventions using infant feeding information provision showed inconsistent findings for the outcomes introduction of appropriate solid food at around 6 months, and appropriate milk feeding and avoidance of unmodified cow's milk before age 1, when compared with status quo. There was no important difference for the outcome foods and drinks offered multiple times.

The evidence from 1 study showed that there was an important benefit for information provision for the outcome introduction of solid foods regularly at ≤ 4 months and at 6 months, and appropriate milk feeding –breastfeeding rate at 6 and 12 months when compared to status quo. There was no important difference for the outcome introduction of solid foods regularly at 5 months. There was no evidence of important difference for the outcome appropriate milk feeding – exclusive breastfeeding at 6 months (yes). The intervention for these outcomes were face-to-face, aimed at individuals, general information, delivered by a healthcare practitioner (community research nurse), during home visits and no theory was mentioned.

The evidence from 1 study showed that there was no evidence of important difference between information provision and status quo for the outcome introduction of solids at 4 to 6 months and fruits and vegetable consumption >1 per week at 12 months – pears. There was no important difference between the groups for the outcome exclusive breastfeeding duration <4 months and cow's milk (any type) as main drink at 12 months, fruits and vegetable consumption intake >1 per week at 12 months – banana or apples or carrots or leafy green vegetables and having 3 solid meals per day at 12 months. The intervention for these outcomes was face-to-face, aimed at individuals, general information, delivered by healthy eating 'champions' (trained local mothers), during home visits and using a social support theoretical model.

The evidence from 1 study showed that there was no evidence of important difference between information provision and status quo for the outcome complementary foods introduced before 5 months. There was no important difference between information provision and status quo for the outcome complementary foods introduced before 6 months. The intervention for these outcomes was face-to-face and printed, aimed at groups and individuals, general and tailored information, delivered by a lactation consultant, during antenatal group meetings and individual visits and no theory was mentioned.

There was evidence from 1 study with 2 approaches to delivering the intervention (information provision): telephone and SMS (both of which included a printed element) and the results have been analysed and presented separately for the different intervention approaches. The study adjusted for the confounding factor: recruitment sites.

Telephone intervention: The evidence showed that there was an important benefit for information provision delivered over the telephone for the outcomes introduction of solid foods at 6 months, and drinking from cup at 6 months and at 12 months when compared with status quo. There was no evidence of important difference between information provision delivered over the telephone and status quo for the outcome any breastfeeding at 12 months and exclusive breastfeeding at 6 months. There was no important difference between

information provision delivered over the telephone and status quo for the outcome any breastfeeding at 6 months.

SMS intervention: There was a possible important benefit for information provision delivered via SMS for the outcome drinking from cup at 6 months when compared with status quo. There was no evidence of important difference between the groups for the outcomes drinking from cup at 12 months and exclusive breastfeeding at 6 months. There was no important difference between information provision delivered via SMS and status quo for the outcomes introduction of solid foods at 6 months, and any breastfeeding at 6 months and at 12 months.

The intervention for the above outcomes for telephone and SMS delivery were printed and electronic (phone) or textual, aimed at individuals, general information, delivered by healthcare practitioner (child and family health nurse), delivered over the phone, and using Health belief model.

The evidence from 1 study showed that there was an important benefit for information provision for the outcome vegetable as first foods offered to infant measured 1 month after introducing solids when compared to status quo. There was no important benefit between information provision and status quo for the outcome fruit as the first foods offered to infants measured 1 month after introducing solids. There was no important difference for the outcomes intake of unfamiliar fruit puree and intake of unfamiliar vegetable puree measured 1 month after introducing solids. The intervention for these outcomes was face-to-face and printed, aimed at individuals, general information, delivered by healthcare practitioner (paediatrician) or researcher, in a healthcare setting (paediatrician's office) or during home visit, and no theory was mentioned.

The evidence from 1 study showed that there was an important benefit for information provision for the outcome appropriate fruits intake at 12 months and appropriate vegetables intake at 12 months, appropriate milk intake at 12 months, and length of time kept on formula feeds, when compared with status quo. The evidence showed that there was no important difference for the outcome gave child cow's milk before 26 weeks when compared with status quo. The intervention for these outcomes was face-to-face, individual based, tailored intervention, healthy eating 'champions' (volunteer community mother), during home visits, no theory mentioned.

Comparison 2: Interventions using information provision on infant feeding versus general infant's health/development information provision – Mixed strata for level of socioeconomic deprivation, parental education and parental age

Two studies were included in this comparison. The quality of the evidence was low to very low.

The evidence from 1 study showed that for intervention using infant feeding information provision compared with general infant's health/development information provision, there was a possible important benefit for the outcome introduction of solids at 4 to 6 months, and no important benefit for the outcome has not introduced solids at 4 to 6 months. There was no important difference between information provision on infant feeding and general information provision for the outcomes any breastfeeding at 4 to 6 months, formula feeding at 4 to 6 months, and introduction of cow's milk at 4 to 6 months. There was no evidence of important difference between information provision on infant feeding and general information provision for the outcome introduction of water at 4 to 6 months and introduction of juices at 4 to 6 months. The intervention for these outcomes was textual, aimed at individuals, general information, delivered by a researcher, via SMS and using trans-theoretical model.

The evidence from 1 study showed that there was no evidence of important difference between information provision on infant feeding and other information provision for the outcome proportion of infants meeting fruits and vegetables recommendation at 12 months. The intervention for this outcome was face-to-face, individual based, tailored intervention, peer (mentors who had degree in education, social care and youth studies), during home visits, no theory mentioned,

Comparison 3: Interventions using information provision on infant feeding versus home safety information provision – Mixed strata for level of socioeconomic deprivation, parental education and parental age

One study was included in this comparison. The quality of the evidence was moderate to very low.

The evidence showed that there was an important benefit for the intervention using infant feeding information provision for the outcomes vegetable as first food, using bottle at 52 weeks, consumed salty snacks daily at 1 year, consumed any sugar-sweetened beverage at 1 year and consumed any fruit juice at 1 year, when compared with provision of home safety information. There was no important difference between the groups for the outcomes of introduction to solids between 4 to 6 months, and consumed vegetables daily at 1 year. The intervention for these outcomes was face-to-face and printed, aimed at individuals, general information, delivered by healthcare practitioner (research nurse), during home visits and no theory was mentioned.

Comparison 4: Interventions using scripted and standardized information provision on infant feeding versus brief counselling – Mixed strata for level of socioeconomic deprivation, parental education and parental age

One study was included in this comparison. The quality of the evidence was very low.

The evidence showed that for intervention using scripted and standardised information provision compared with brief counselling, there was no evidence of important difference for the outcome totally weaned from the bottle by 12 months. The intervention for this outcome was face-to-face and visual, aimed at individuals, general information, delivered by healthcare practitioner, at well-baby clinics and no theory was mentioned.

Economic evidence

Included studies

No economic studies were identified which were applicable to this review question. See the literature search strategy in appendix B and economic study selection flow chart in appendix G.

Excluded studies

No economic studies were reviewed at full text and excluded from this review.

Economic model

No economic modelling was undertaken for this review because the committee agreed that other topics were higher priorities for economic evaluation.

The committee's discussion and interpretation of the evidence

The outcomes that matter most

Introduction of appropriate solid foods at around 6 months, appropriate milk feeding and avoidance of unmodified cow's milk before age 1, and no added salt before age 1 were prioritised as critical outcomes by the committee. These were prioritised as critical outcomes because they align directly with the government guidance on solid food introduction as outcomes most likely to impact on health.

The committee agreed that no snacking before age 1, only water given to drink before age 1 (in addition to breastmilk or first infant formula), progressive diversification of textures and flavours, and foods and drinks offered multiple times should be important outcomes. This is because they also indicate appropriate introduction of solids for infants less than one year based on guidance.

Evidence was available for all the protocol outcomes except 'no added snacking before age 1' and 'progressive diversification of textures and flavours'.

The quality of the evidence

The quality of the evidence was assessed using GRADE and ranged from moderate to very low quality, with most of the evidence being low quality. The main issues with the quality were due to methodological risk of bias, imprecision and indirectness. Risk of bias was most commonly due to issues with randomisation and measurement of outcomes. Studies were downgraded for indirectness for reporting proxy outcomes, for example drinking from a cup (positive outcome) and using bottle at 52 weeks (negative outcome) were reported as proxy outcomes for appropriate milk feeding.

Individual studies were assessed for methodological quality using the Cochrane Risk of Bias 2.0 tool for randomised studies.

Benefits and harms

The committee used evidence from this review and qualitative evidence from evidence review R to make recommendations on this topic. The committee discussed that the evidence in this review was carried out among healthy full-term babies and therefore the recommendations relate to this population.

Overall, the committee noted that the quantitative evidence was relatively limited as it only included information provision interventions, mostly of low quality and generally not particularly helpful in informing recommendations on how to promote appropriate introduction to solids in line with existing guidance.

The committee considered the important benefits or possible important benefits of the interventions using information provision for outcomes introduction of appropriate solids at 6 months, promoting any breastfeeding at 6 months and 12 months, promoting fruit intake of >1 per week at 12 months, promoting vegetables as the first solid food offered and promoting drinking from a cup at 6 months and 12 months. Based on this and their experience, they agreed that providing adequate information to parents and carers is an effective intervention to promote appropriate and timely complementary feeding. Based on this and supported by the qualitative evidence in evidence review R, the committee agreed that commissioners and service providers should ensure that health professionals who encounter parents or carers

are aware of the government advice on complementary feeding and the information shared with parents and carers is accurate and consistent. The committee discussed that to ensure accuracy, the information needs to be evidence-based and non-commercial for example from NHS websites and recommendations by the Scientific Advisory Committee on Nutrition (SACN). The committee discussed that commercial baby food companies often give out information products for promotional purposes but they can be misleading or not evidence-based and provide information that is against the government guidance.

The committee considered the evidence on who delivers the intervention. This included healthcare practitioners (lactation consultants, paediatricians, nurses, and other clinic staff), healthy eating champions (community/local mothers) and researchers. The committee discussed the moderate quality evidence on information provision intervention delivered by a community research nurse which showed an important benefit in promoting breastfeeding at 6 and 12 months. The committee noted that in practice, guidance on introducing solids is often provided to parents by health visitors. The committee recognised that the expertise on introducing solids may vary among health visitors. The committee also discussed that including a wider range of healthcare practitioners might increase the avenues where parents and carers can obtain adequate information on introducing solids, however, they recognised that this might require further training for healthcare staff, such as GPs and paediatricians, who have contact with parents and carers but who might not have the most up to date information on introducing solids. Therefore, the committee discussed ways to create opportunities where information can be provided to parents and carers, which may also improve the knowledge of introducing solids among healthcare staff who lack the specialist knowledge. The committee discussed that health professionals with most knowledge about introducing solids may not interact with parents and carers so they agreed that equipping other non-specialist healthcare staff with the information on introducing solids can give parents the opportunity to get the right information when they need it. They explained that this was to ensure that at every opportunity, parents or carers are given clear messages about appropriate infant feeding. There was some evidence for interventions delivered by a health champion, but the committee acknowledged the inconsistency in the evidence. Evidence showed that there was important benefit in terms of increased intake of some fruit and vegetables when the intervention was delivered by health champions, when compared with status quo and important benefit for the outcome vegetable as first foods offered, when the intervention was delivered by health practitioners or researcher, when compared with status quo. The committee noted that these outcomes were specifically on intake of individual fruits/vegetables and not groups of foods e.g. all vegetables and fruits as in the protocol; where benefits were observed they were only small and there was uncertainty around them. There was no difference for other outcomes (e.g. apples, carrots and leafy green vegetables intake >1 per week at 12 months) when the intervention was delivered by a health champion. Therefore, based on the limited low-quality evidence and their experience, the committee agreed that health care professionals who have the expertise in complementary feeding (e.g. health visitors) can act as champions to share the messages about complementary feeding with other health care professionals who may have more regular contact with parents and carers around the time when information on complementary feeding will be required.

The committee discussed that to prevent too early introduction of solids, parents and carers need to be aware of the appropriate time to introduce solid foods. The committee considered the moderate to low quality evidence on interventions delivered during the antenatal and postnatal periods which showed no important benefit but explained that from their experiences, mothers may introduce solids to infants prior to the subject coming up during a contact. Therefore, the committee agreed that in order to promote the timely introduction of

solids at around 6 months, information provision should start during the antenatal period and continue after birth. They noted from the evidence that interventions which included an antenatal component where messages of the appropriate time to introduce solids (around 6 months) were discussed antenatally were found to be effective. They also noted that interventions that showed an important benefit or possible important benefit were delivered multiple times. Therefore, the committee agreed that parents and carers should initially receive information on complementary feeding in the final trimester of pregnancy. This key information would include information that the appropriate timing for introducing solids is around 6 months alongside usual milk feeds. The committee were aware that many families struggle with the cost of healthy foods and formula milk. Government schemes such as the Healthy Start scheme offer support and assistance in accessing healthy foods and vitamins during pregnancy and for young children for those eligible. Based on committee consensus, they agreed that people should be reminded of the Healthy Start scheme in the final trimester of pregnancy, or other relevant food or income support schemes that offer assistance to accessing healthy foods for their babies.

Postnatally, health visiting teams usually have routine contact with babies and their parents and carers at the following time points: 8-10 days, 6 weeks, 9 months, 12 months, and 2 years in England (with an additional visit at 3-4 months in Scotland). The committee discussed how information provision on introduction to solid foods may fit within these routine contacts. Evidence on information delivered to parents at 1, 3, 5, 9 and 12 months showed an important benefit in encouraging introducing solids at 6 months, and breastfeeding at 6 and 12 months. The committee agreed that in the postnatal period, further reminders about the timely introduction of complementary feeding should be provided to parents or carers at regular intervals, using every opportunity and interaction with a health professional.

Overall, the evidence for different modes of delivery of information provision, including face-to-face, printed, electronic, visual, and textual, showed equal benefit and therefore the committee did not recommend one over the other. They discussed that the interventions could be delivered in different ways, for example email or paper letters or text messages could be used as low-cost interventions at around 2, 3 and 4 months to remind parents and carers that the appropriate time to introduce solids is around 6 months.

The committee discussed that more detailed information about complementary feeding is needed nearer to the time of starting solids. The Institute of Health Visiting are considering to mandate a 3-to-4-month contact (this is not currently offered in England but is offered in Scotland); however the feedback from parents from the committee's experience was that the information provided at 3 to 4 months may be difficult to recall at around 6 months when they may be ready to introduce solids. Therefore, they agreed that by the time the infant is 4 to 5 months of age and nearing the age when solid foods should be introduced, more detailed information on complementary feeding should be provided by health visiting teams or other community health services. The committee discussed that this is already happening in many areas, however, it is not universally provided so for some areas this may be new.

Most of the interventions were aimed at individuals. There was only evidence on delivering interventions in groups combined with individual input, so it was not possible to estimate effectiveness of group versus individual interventions. The evidence was moderate to low quality and showed no important difference on the timing of introducing solids compared to status quo.

Because the evidence was inconclusive, the committee agreed that the provision of this information can be done individually or in a group. It could be done as a face-to-face appointment or a telephone consultation, or online in a group session, for example. In

addition, signposting parents and carers to accurate information from reliable non-commercial sources online such as the NHS website and Start for Life, as well as printed materials is important to provide easy, accessible and accurate information to the parents. The committee discussed that there are also charities, such as First Steps Nutrition, that provide accurate and independent advice according to guidelines.

Based on the government guidance (including the recommendations by the Scientific Advisory Committee on Nutrition) on appropriate complementary feeding, their knowledge and experience, and the qualitative evidence from evidence report R, the committee identified topics which should be included in the discussion with parents at the 4-to-5-month session (see evidence report R for more details). The committee referred to the qualitative evidence which showed that parents and carers may have limited knowledge on what foods are appropriate to offer infants when introducing solids and therefore they may opt for commercially made foods for convenience. From their knowledge and experience they agreed that homemade foods should be preferred to ensure exposure to a wider range of textures and flavours and less sweet foods than in the pre-packaged foods, and reiterated the need to inform parents about the benefits of homemade foods. They agreed that at every contact, parents should be asked about their child's feeding to identify any issues and to remind them about the advice on complementary feeding (such as diversifying textures and flavours, not adding salt or sugar to foods) and supporting them as necessary. In addition to any ad-hoc contacts that health professionals may have with the family, the Healthy Child Programme developmental review at 8 to 12 months provides an opportunity to ask parents or carers about their child's feeding and reminding the families of the topics discussed previously.

The committee also discussed the setting in which information should be provided. There was evidence on interventions delivered during home visits, in healthcare settings particularly in specialist clinics, and at well-baby clinics which showed inconsistent findings. Based on the evidence and their experience, the committee agreed that interventions may be effective irrespective of the setting they are delivered in and therefore may be delivered at home, in healthcare settings or in community settings so no particular recommendation on this was made.

There was evidence on the component behaviour change models, techniques and theories. Due to lack of sufficient evidence the committee did not refer to behaviour change models as key in delivering interventions to improve appropriate and timely introduction to solids.

There were no studies identified for behavioural interventions (for example, role modelling or interventions using praise and rewards), interventions aimed at improving access to baby's first solids on their own and multicomponent interventions, hence the committee did not make any recommendations for these interventions. The committee did not prioritise these topics for research recommendations.

There was insufficient information from the evidence on level of socioeconomic deprivation/parental education/parental age, geographical variation e.g. places without adequate provision of primary care (outside cities), religion and cultural considerations, babies or children with disabilities and other physical and mental health conditions, babies and children with developmental problems and ethnicity. Hence the committee were not able to make any specific recommendations for these groups. However, the committee did not make a research recommendation for the above groups as they did not consider it to be a priority for research recommendation.

The review protocol did not consider single and multiple births separately; therefore, the committee did not make specific recommendations for twins and triplets.

Cost effectiveness and resource use

No economic evidence was identified in this area. The recommendations are expected to have low-to-moderate resource implications relating to the additional health professional time required to provide information and advice to parents. In particular, although the recommendation to arrange an appointment with parents when the baby is between 4 and 5 months old to discuss introducing their baby to solid food may reflect current practice in some settings (commonly delivered by a nursery nurse or a community nurse), it will form new practice in other areas, entailing moderate resource implications. All other recommendations around discussions, information and advice on baby's feeding refer to either regular contacts that are currently standard practice (such as the Healthy Child Programme developmental review at 8 to 12 months) or contacts that may have been planned for other reasons and not specifically to discuss and/or advise on the baby's feeding. In such cases, the resource implications relate to the extra time required for discussions and advice within the planned appointments. In addition, some resource implications around formal or informal health professionals' training are expected, to ensure that healthcare professionals have accurate and consistent information about introduction of solid food to babies in line with government advice and that this information can be passed on to other staff. The committee agreed that the recommendations are expected to result in important future clinical benefits for the babies resulting from introduction of appropriate solids, promoting breastfeeding and healthy eating and drinking between the period of 6-12 months after birth, including prevention of obesity and promotion of dental health, which in turn are expected to lead to substantial cost-savings that outweigh implementation costs.

Recommendations supported by this evidence review

This evidence review supports recommendations 1.5.1 to 1.5.5 and 1.5.7. Other evidence supporting these recommendations can be found in the evidence review R on facilitators and barriers to increase the uptake of government advice on appropriate and timely introduction to solids and healthy eating and drinking in children.

References – included studies

Cameron 2015

Cameron, SL, Heath, AL, Gray, AR et al. (2015) Lactation Consultant Support from Late Pregnancy with an Educational Intervention at 4 Months of Age Delays the Introduction of Complementary Foods in a Randomized Controlled Trial. *Journal of nutrition* 145(7): 1481-1490

Fildes 2015

Fildes, Alison, Lopes, Carla, Moreira, Pedro et al. (2015) An exploratory trial of parental advice for increasing vegetable acceptance in infancy. *British Journal of Nutrition* 114(2): 328-336

Franco 2008

Franco, S; Theriot, J; Greenwell, A (2008) The influence of early counselling on weaning from a bottle. *Community dental health* 25(2): 115-118

Johnson 1993

Johnson, Z.; Howell, F.; Molloy, B. (1993) Community mothers' programme: Randomised controlled trial of non-professional intervention in parenting. *British Medical Journal* 306(6890): 1449-1452

O'Sullivan 2017

O'Sullivan, A.; Fitzpatrick, N.; Doyle, O. (2017) Effects of early intervention on dietary intake and its mediating role on cognitive functioning: a randomised controlled trial. *Public health nutrition* 20(1): 154-164

Palacios 2018

Palacios, C., Campos, M., Gibby, C. et al. (2018) Effect of a Multi-Site Trial using Short Message Service (SMS) on Infant Feeding Practices and Weight Gain in Low-Income Minorities. *Journal of the American College of Nutrition* 37(7): 605-613

Savage 2018

Savage, Jennifer S., Hohman, Emily E., Marini, Michele E. et al. (2018) INSIGHT responsive parenting intervention and infant feeding practices: randomized clinical trial. *International Journal of Behavioral Nutrition & Physical Activity* 15(1): npag-npag

Watt 2009

Watt, R.G., Tull, K.I., Hardy, R. et al. (2009) Effectiveness of a social support intervention on infant feeding practices: Randomised controlled trial. *Journal of Epidemiology and Community Health* 63(2): 156-162

Wen 2020

Wen, L, Rissel, C, Xu, H et al. (2020) Erratum: Effects of telephone and shortmessage service support on infant feeding practices, "tummy time," and screen time at 6 and 12 months of child age: a 3-group randomized clinical trial (*JAMA Pediatr* (2020) DOI: 10.1001/jamapediatrics.2020.0215). *JAMA Pediatrics* 174(8): 807

Wen 2011

Wen, LM, Baur, LA, Simpson, JM et al. (2011) Effectiveness of an early intervention on infant feeding practices and "tummy time": a randomized controlled trial. *Archives of pediatrics & adolescent medicine* 165(8): 701-707

Other**Fleischer Michaelsen 2003**

Fleischer Michaelsen, K, Weaver, L, Branca, F & Robertson, A. (2003). Feeding and nutrition of infants and young children: guidelines for the WHO European Region, with emphasis on the former Soviet countries. World Health Organization. Regional Office for Europe. https://intranet.euro.who.int/__data/assets/pdf_file/0004/98302/WS_115_2000FE.pdf (accessed on 31st August 2024)

Appendices

Appendix A Review protocols

Review protocol for review question: What interventions are effective to promote appropriate and timely introduction to solids (complementary feeding) for babies from 6 to 12 months (in line with government advice)?

Table 3: Review protocol

Field	Content
PROSPERO registration number	CRD42022376759
Review title	Interventions to promote appropriate and timely introduction to solids (complementary feeding) for babies from 6 to 12 months (in line with government advice)
Review question	What interventions are effective to promote appropriate and timely introduction to solids (complementary feeding) for babies from 6 to 12 months (in line with government advice)?
Objective	To determine which interventions are the most effective to promote appropriate and timely introduction to solids (complementary feeding) for babies from 6 to 12 months (in line with government advice).
Searches	<p>The following databases will be searched:</p> <ul style="list-style-type: none"> • Cochrane Central Register of Controlled Trials (CENTRAL) • Cochrane Database of Systematic Reviews (CDSR) • Embase • MEDLINE • Emcare • Epistemonikos • CINAHL • International Health Technology Assessment database

FINAL

Interventions to promote appropriate and timely introduction to solids (complementary feeding) for babies from 6 to 12 months

	<ul style="list-style-type: none"> • HTA (CRD) <p>Searches will be restricted by:</p> <ul style="list-style-type: none"> • English language only • Human studies only <p>The full search strategies for MEDLINE database will be published in the final review. For each search, the principal database search strategy is quality assured by a second information scientist using an adaptation of the PRESS 2015 Guideline Evidence-Based Checklist.</p>
Condition or domain being studied	Introduction to solids from 6 to 12 months
Population	<p>Inclusion:</p> <ul style="list-style-type: none"> • Babies from 6 months to 12 months and their parents, carers or early years professionals <p><i>Note: interventions delivered before 6 months after birth (but not during the antenatal period) will also be eligible for inclusion, as long as all other aspects of the protocol criteria are met. This is because these interventions may be delivered at any point after birth, and not necessarily at 6 months, which is when the introduction to healthy eating practices occur according to government advice. The outcomes should however be measured between 6 and 12 months</i></p> <p>Exclusion:</p> <ul style="list-style-type: none"> • Babies following a specific diet for a medical condition
Intervention	<p>Interventions will be included if the main aim is to promote appropriate and timely introduction to solids in the population of interest. Interventions will be organised according to the following groups:</p> <ul style="list-style-type: none"> • Intervention group 1: Interventions using information provision to promote appropriate and timely introduction of solids (complementary feeding) • Intervention group 2: Behavioural interventions (for example, role modelling or interventions using praise and rewards) • Intervention group 3: Interventions aimed at improving access to baby's first solids (that is, provision of healthy food/drink, welfare schemes designed to enable access to healthy food/drink) • Intervention group 4: Multicomponent interventions (interventions that combine more than 1 intervention listed above)

The committee anticipated that, along with the intervention, studies would report at least 1 domain for each of the components noted below. Sensitivity analyses will be done according to these if enough data is available.

- Component 1: Mode of delivery
 - Face-to-face (in person, videoconference)
 - Printed
 - Electronic
 - Audio
 - Visual
 - Textual (involving written text)
- Component 2: Intervention aimed at individuals or groups
 - Individual based
 - Group based
- Component 3: Individualised /tailored interventions or general
 - On demand, tailored interventions based on needs
 - General, aimed to all the population of interest
- Component 4: Who delivers the intervention
 - Healthcare practitioner, health or social care worker (report what type)
 - Peer (person with professional education on providing information and education on healthy eating)
 - Healthy eating 'champion'
 - Early years professionals
- Component 5: Where is the intervention delivered
 - During home visits
 - Healthcare settings
 - Community pharmacies
 - Specialist clinics

	<ul style="list-style-type: none"> ○ Community venues ○ Religious settings ○ Nurseries/ play groups/ schools ○ Other (report what type) <ul style="list-style-type: none"> ● Component 6: Behaviour change models, techniques and theories <ul style="list-style-type: none"> ○ Trans-theoretical model (stages change) ○ Theory of planned behaviour ○ Theory of reasoned action ○ Health protection theory ○ Protection motivation theory ○ Social cognitive theory ○ Perceptions of risk ○ Other (report what type) ○ No theory mentioned
Comparator	<ul style="list-style-type: none"> ● Another intervention ● Status quo/treatment as usual (as defined by study authors, includes no treatment) ● Time (before and after)
Types of study to be included	<p>Include published full-text papers:</p> <ul style="list-style-type: none"> ● Systematic reviews of RCTs ● Parallel RCTs ● If insufficient parallel RCTs*: <ul style="list-style-type: none"> ○ Quasi-randomised controlled trials ○ Non-randomised controlled trials/Prospective cohort studies ○ Retrospective cohort studies ○ Historically controlled studies ○ Ecological studies (geographical) ○ Controlled before-and-after studies (including before and after surveys)

	<p>*Non-randomised studies will be considered for inclusion if insufficient RCT evidence is available for guideline decision making. Sufficiency will be judged taking into account factors including number/quality/sample size of RCTs, outcomes reported and availability of data from subgroups of interest.</p> <p>Conference abstracts will not be included because these do not typically have sufficient information to allow full critical appraisal.</p>
Other exclusion criteria	<p>Setting:</p> <ul style="list-style-type: none"> • Countries other than high income countries (as defined by the OECD) <p>If any study or systematic review includes <1/3 of parents and carers or early years professionals who received any of the interventions in the above setting, it will be considered for inclusion but, if included, the evidence will be downgraded for indirectness.</p> <p>Intervention:</p> <ul style="list-style-type: none"> • Population-level interventions (for example, TV and online advertising)
Context	The population of this guideline may overlap with the population of women included in other NICE guidelines (such as postnatal care, antenatal care, pregnancy and complex social factors or obesity prevention).
Primary outcomes	<ul style="list-style-type: none"> • Introduction of appropriate solid foods at around 6 months (including vegetables and fruits, potentially allergenic foods and iron-rich foods) • Appropriate milk feeding (continued breastfeeding or use of formula) and avoidance of unmodified cow's milk before age 1 • No added salt before age 1 <p>Note: if the study reports both self-reported and objective measures, only objective measures will be reported</p>
Secondary outcomes (important outcomes)	<ul style="list-style-type: none"> • No snacking before age 1 • Only water given to drink before age 1 • Progressive diversification of textures and flavours

	<ul style="list-style-type: none"> • Food and drinks offered multiple times <p>Note: if the study reports both self-reported and objective measures, only objective measures will be reported</p>
Data extraction (selection and coding)	<p>All references identified by the searches and from other sources will be uploaded into EPPI and de-duplicated. Titles and abstracts of the retrieved citations will be screened to identify studies that potentially meet the inclusion criteria outlined in the review protocol.</p> <p>Dual sifting will be performed on at least 10% of records; 90% agreement is required. Disagreements will be resolved via discussion between the two reviewers, and consultation with senior staff if necessary.</p> <p>Full versions of the selected studies will be obtained for assessment. Studies that fail to meet the inclusion criteria once the full version has been checked will be excluded at this stage. Each study excluded after checking the full version will be listed, along with the reason for its exclusion.</p> <p>A standardised form will be used to extract data from studies. The following data will be extracted: study details (reference, country where study was carried out, type and dates), participant characteristics, inclusion and exclusion criteria, details of the interventions if relevant, setting and follow-up, relevant outcome data and source of funding. One reviewer will extract relevant data into a standardised form, and this will be quality assessed by a senior reviewer.</p>
Risk of bias (quality) assessment	<p>Quality assessment of individual studies will be performed using the following checklists:</p> <ul style="list-style-type: none"> • ROBIS tool for systematic reviews • Cochrane RoB tool v.2 for RCTs and quasi-RCTs • Cochrane ROBINS-I tool for non-randomised (clinical) controlled trials and cohort studies • JBI checklist for prevalence studies • Effective Practice and Organisation of Care (EPOC) RoB Tool for before-and-after studies <p>The quality assessment will be performed by one reviewer and this will be quality assessed by a senior reviewer.</p>
Strategy for data synthesis	<p>Quantitative findings will be formally summarised in the review. Where multiple studies report on the same outcome for the same comparison, meta-analyses will be conducted using Cochrane Review Manager software.</p> <p>A fixed effect meta-analysis will be conducted and data will be presented as risk ratios if possible or odds ratios when required (for example, if only available in this form in included studies) for dichotomous</p>

	<p>outcomes, and mean differences or standardised mean differences for continuous outcomes. Heterogeneity in the effect estimates of the individual studies will be assessed using the I² statistic. Alongside visual inspection of the point estimates and confidence intervals, I² values of greater than 50% and 80% will be considered as significant and very significant heterogeneity, respectively. Heterogeneity will be explored as appropriate using sensitivity analyses and pre-specified subgroup analyses. If heterogeneity cannot be explained through subgroup analysis then a random effects model will be used for meta-analysis, or the data will not be pooled.</p> <p>The confidence in the findings across all available evidence will be evaluated for each outcome using an adaptation of the 'Grading of Recommendations Assessment, Development and Evaluation (GRADE) toolbox' developed by the international GRADE working group: http://www.gradeworkinggroup.org/</p> <p>Minimally important differences:</p> <ul style="list-style-type: none"> Validated scales/continuous outcomes: published MID_s where available All other outcomes & where published MID_s are not available: 0.8 and 1.25 for all relative dichotomous outcomes ; +/- 0.5x control group SD for continuous outcomes
Analysis of subgroups	<p>Evidence will be stratified by:</p> <ul style="list-style-type: none"> Level of socioeconomic deprivation/parental education/parental age <p>Evidence will be sub-grouped by the following only in the event that there is significant heterogeneity in outcomes:</p> <ul style="list-style-type: none"> Geographical variation e.g. places without adequate provision of primary care (outside cities). Religion and cultural considerations Babies or children with disabilities and other physical and mental health conditions Babies and children with developmental problems Ethnicity <ul style="list-style-type: none"> White Asian/Asian British Black/African/Caribbean/Black British Mixed/Multiple ethnic groups Other ethnic group

FINAL

Interventions to promote appropriate and timely introduction to solids (complementary feeding) for babies from 6 to 12 months

	Where evidence is stratified or sub-grouped the committee will consider on a case by case basis if separate recommendations should be made for distinct groups. Separate recommendations may be made where there is evidence of a differential effect of interventions in distinct groups. If there is a lack of evidence in one group, the committee will consider, based on their experience, whether it is reasonable to extrapolate and assume the interventions will have similar effects in that group compared with others.		
Type and method of review	<input checked="" type="checkbox"/>	Intervention	
	<input type="checkbox"/>	Diagnostic	
	<input type="checkbox"/>	Prognostic	
	<input type="checkbox"/>	Qualitative	
	<input type="checkbox"/>	Epidemiologic	
	<input type="checkbox"/>	Service Delivery	
	<input type="checkbox"/>	Other (please specify)	
Language	English		
Country	England		
Anticipated or actual start date	17/11/2022		
Anticipated completion date	22/11/2023		
Stage of review at time of this submission	Review stage	Started	Completed
	Preliminary searches	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Piloting of the study selection process	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Formal screening of search results against eligibility criteria	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Data extraction	<input type="checkbox"/>	<input checked="" type="checkbox"/>

FINAL

Interventions to promote appropriate and timely introduction to solids (complementary feeding) for babies from 6 to 12 months

	Risk of bias (quality) assessment	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Data analysis	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Named contact	5a. Named contact National Institute for Health and Care Excellence (NICE) 5b. Named contact e-mail mandcnutrition@nice.org.uk 5c. Organisational affiliation of the review National Institute for Health and Care Excellence (NICE)		
Review team members	From the National Guideline Alliance: <ul style="list-style-type: none"> • Senior Systematic Reviewer • Systematic Reviewer 		
Funding sources/sponsor	This systematic review is being completed by the National Institute for Health and Care Excellence (NICE)		
Conflicts of interest	All guideline committee members and anyone who has direct input into NICE guidelines (including the evidence review team and expert witnesses) must declare any potential conflicts of interest in line with NICE's code of practice for declaring and dealing with conflicts of interest. Any relevant interests, or changes to interests, will also be declared publicly at the start of each guideline committee meeting. Before each meeting, any potential conflicts of interest will be considered by the guideline committee Chair and a senior member of the development team. Any decisions to exclude a person from all or part of a meeting will be documented. Any changes to a member's declaration of interests will be recorded in the minutes of the meeting. Declarations of interests will be published with the final guideline.		
Collaborators	Development of this systematic review will be overseen by an advisory committee who will use the review to inform the development of evidence-based recommendations in line with section 3 of Developing NICE guidelines: the manual . Members of the guideline committee are available on the NICE website: https://www.nice.org.uk/guidance/indevelopment/gid-ng10191		
Other registration details	None		

FINAL

Interventions to promote appropriate and timely introduction to solids (complementary feeding) for babies from 6 to 12 months

URL for published protocol	https://www.crd.york.ac.uk/PROSPERO/display_record.php?RecordID=376759	
Dissemination plans	<p>NICE may use a range of different methods to raise awareness of the guideline. These include standard approaches such as:</p> <ul style="list-style-type: none"> • notifying registered stakeholders of publication • publicising the guideline through NICE's newsletter and alerts • issuing a press release or briefing as appropriate, posting news articles on the NICE website, using social media channels, and publicising the guideline within NICE. 	
Keywords	Interventions, baby, feeding, solid food, complementary feeding	
Details of existing review of same topic by same authors	Not applicable	
Current review status	<input type="checkbox"/>	Ongoing
	<input type="checkbox"/>	Completed but not published
	<input checked="" type="checkbox"/>	Completed and published
	<input type="checkbox"/>	Completed, published and being updated
	<input type="checkbox"/>	Discontinued
Additional information	None	
Details of final publication	www.nice.org.uk	

CDSR: Cochrane Database of Systematic Reviews; CENTRAL: Cochrane Central Register of Controlled Trials; DARE: Database of Abstracts of Reviews of Effects; GRADE: Grading of Recommendations Assessment, Development and Evaluation; HTA: Health Technology Assessment; MID: minimally important difference; NGA: National Guideline Alliance; NICE: National Institute for Health and Care Excellence; OECD: Organisation for Economic Co-operation and Development; RCT: randomised controlled trial; RoB: risk of bias; SD: standard deviation; TV: television

Appendix B Literature search strategies

Literature search strategies for review question: What interventions are effective to promote appropriate and timely introduction to solids (complementary feeding) for babies from 6 to 12 months (in line with government advice)?

This was a combined search to cover both this review and review O on interventions to promote healthy eating and drinking practices in children from 12 months to 5 years (in line with government advice).

Effectiveness Searches

Database: MEDLINE

Date of last search: 21/11/2022

#	Searches
1.	exp Parents/
2.	family relations/ or exp maternal behavior/ or exp parent-child relations/ or parenting/ or paternal behavior/ or Infant Care/
3.	(famil* or father* or husband* or mother* or partner* or spous* or maternal* or parent* or paternal* or grandparent* or care giver* or caregiver* or guardian*).ti,ab.
4.	exp Child/ or exp Infant/ or Minors/ or exp Pediatrics/ or pediatric nursing/
5.	(child* or baby or babies or boy? or girl? or infan* or juvenile? or kid? or kindergar* or minors or p?ediatric* or preschool* or schoolchild* or school age? or toddler*).ti,ab.
6.	(child* or baby or babies or infan* or juvenile? or kindergar* or p?ediatric* or schoolchild* or school age?).jw,nw.
7.	or/1-6
8.	Weaning/ or Infant Food/
9.	Child Nutritional Physiological Phenomena/ or Maternal Nutritional Physiological Phenomena/ or Infant Nutritional Physiological Phenomena/
10.	((complementary or supplement* or introduc*) adj2 (feed* or food*)).ti,ab.
11.	((solid or baby or soft or finger or mash* or puree* or infant*) adj2 (food* or fruit* or veg*)) or solids or babyfood*).ti,ab.
12.	wean*.ti,ab.
13.	or/8-12
14.	Diet/ or Diet, Healthy/
15.	Feeding Behavior/
16.	Nutritive Value/ or Nutritional Requirements/ or Energy Intake/
17.	fruit/ or vegetables/
18.	((food* or feed* or diet* or nutrition* or nutritive or feed* or eating) adj4 (habit* or behavior* or attitude* or belief* or practice*)).ti,ab.
19.	((nutrition* or nutrient* or micronutrient* or micro-nutrient* or alimentary or diet* or energy or calorie* or fruit? or vegetable?) adj4 (intake or consum* or requirement* or value*)).ti,ab.
20.	((health* or balance* or nutrition*) adj4 (food* or eat* or diet*)).ti,ab.
21.	family food*.ti,ab.
22.	sodium, dietary/ or sodium chloride, dietary/

#	Searches
23.	artificially sweetened beverages/ or sugar-sweetened beverages/ or carbonated beverages/
24.	((salt* or sugar* or sodium) adj2 (intake or consum*)) or soda* or candy or chocolate* or sweet* or confection*).ti,ab.
25.	((soft or fizzy or sugar*) adj1 (drink* or beverage*)).ti,ab.
26.	or/14-25
27.	13 or 26
28.	7 and 27
29.	*Access to Information/ or *Information Centers/ or *Information Services/ or *Information Dissemination/ or *Information Seeking Behavior/ or *Communication/ or *Communications Media/ or *Consumer Health Information/ or exp *Health Information Management/ or *Health Communication/ or *Health Promotion/ or *Health Education/ or exp *Patient Education as Topic/ or *Patient Education Handout/ or *Pamphlets/ or *Posters as topic/ or *Audiovisual aids/ or *Books, illustrated/ or *Medical illustration/ or *Computers, Handheld/ or *Decision Support Systems, Clinical/ or *Internet/ or *Internet-Based Intervention/ or *Social Media/ or *Social Networking/ or *Mobile Applications/ or *Blogging/ or *Electronic Mail/ or exp *Cell phone/ or *Hotlines/ or *Telephone/ or *Teaching materials/
30.	((inform* or educat* or advice or support* or guid*) adj4 (access* or dissem* or model* or need* or program* or provid* or provision or requir* or shar* or service* or seek* or network* or centre* or center*)).ti.
31.	((medical or health or electronic or virtual) adj4 (inform* or educat* or support* or learn* or guid*)).ti.
32.	(app or apps or blog* or booklet* or brochure* or dvd* or ehealth* or e-health* or elearn* or e-learn* or email* or e-mail* or facebook or facetime or face time or forum* or handout* or hand-out* or helpline* or hotline* or internet* or ipad* or iphone* or leaflet* or myspace or online or magazine* or mobile phone* or newsletter* or online or pamphlet* or palm pilot* or personal digital assistant* or pocket pc* or podcast* or poster? or skype* or smartphone* or smart phone* or social media or social network* or sms or text messag* or twitter or tweet* or video* or web* or wiki* or written or youtube*).ti.
33.	(mobile* adj2 app*).ti.
34.	*Therapy, Computer-Assisted/ or *Telemedicine/
35.	*Diet Therapy/ or *Behavior Therapy/ or *Empowerment/
36.	*health behavior/ or *health knowledge, attitudes, practice/
37.	((behavio* or diet* or nutrition*) adj2 (therap* or intervention* or modif* or change* or treat* or train* or support* or strateg* or program* or educat*)).ti.
38.	(health* adj2 (behavio* or belief*)).ti.
39.	role model*.ti.
40.	*Access to Healthy Foods/ or *Food Assistance/ or *Dietary Services/ or *Food Security/
41.	exp *Social Support/
42.	*social welfare/ or *child welfare/ or *infant welfare/
43.	((government* or federal or welfare or aid* or social security or relief) adj2 (advice or guid* or support* or sponsor* or service* or grant* or scheme* or program* or provide* or provision* or assist* or gift* or handout* or donat* or voucher* or subsid*)).ti.
44.	((food* or nutrition*) adj2 (aid* or program* or assist* or stamp* or supplement* or bank* or package* or secur*)).ti.
45.	((social* or communit*) adj2 (support* or intervention*)).ti.
46.	or/29-45
47.	28 and 46
48.	letter/
49.	editorial/
50.	news/
51.	exp historical article/

#	Searches
52.	Anecdotes as Topic/
53.	comment/
54.	case report/
55.	(letter or comment*).ti.
56.	or/48-55
57.	randomized controlled trial/ or random*.ti,ab.
58.	56 not 57
59.	animals/ not humans/
60.	exp Animals, Laboratory/
61.	exp Animal Experimentation/
62.	exp Models, Animal/
63.	exp Rodentia/
64.	(rat or rats or mouse or mice).ti.
65.	or/58-64
66.	47 not 65
67.	limit 66 to English language
68.	Meta-Analysis/
69.	Meta-Analysis as Topic/
70.	(meta analy* or metanaly* or metaanaly*).ti,ab.
71.	((systematic* or evidence*) adj2 (review* or overview*)).ti,ab.
72.	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
73.	(search strategy or search criteria or systematic search or study selection or data extraction).ab.
74.	(search* adj4 literature).ab.
75.	(medline or pubmed or cochrane or embase or psychlit or psyclit or psychinfo or psycinfo or cinahl or science citation index or bids or cancerlit).ab.
76.	cochrane.jw.
77.	or/68-76
78.	randomized controlled trial.pt.
79.	controlled clinical trial.pt.
80.	pragmatic clinical trial.pt.
81.	randomi#ed.ab.
82.	placebo.ab.
83.	drug therapy.fs.
84.	randomly.ab.
85.	trial.ab.
86.	groups.ab.
87.	or/78-86
88.	Clinical Trials as topic.sh.
89.	trial.ti.
90.	or/78-82,84,88-89
91.	67 and (77 or 90)
92.	Observational Studies as Topic/
93.	Observational Study/

#	Searches
94.	Epidemiologic studies/
95.	exp case control studies/
96.	exp Cohort Studies/
97.	Cross-Sectional Studies/
98.	Controlled Before-After Studies/
99.	Historically Controlled Study/
100.	Interrupted Time Series Analysis/
101.	Comparative Study.pt.
102.	case control\$.tw.
103.	case series.tw.
104.	(cohort adj (study or studies)).tw.
105.	cohort analy\$.tw.
106.	(follow up adj (study or studies)).tw.
107.	(observational adj (study or studies)).tw.
108.	longitudinal.tw.
109.	prospective.tw.
110.	retrospective.tw.
111.	cross sectional.tw.
112.	or/92-111
113.	67 and 112
114.	113 not 91
115.	afghanistan/ or africa/ or africa, northern/ or africa, central/ or africa, eastern/ or "africa south of the sahara"/ or africa, southern/ or africa, western/ or albania/ or algeria/ or andorra/ or angola/ or "antigua and barbuda"/ or argentina/ or armenia/ or azerbaijan/ or bahamas/ or bahrain/ or bangladesh/ or barbados/ or belize/ or benin/ or bhutan/ or bolivia/ or borneo/ or "bosnia and herzegovina"/ or botswana/ or brazil/ or brunei/ or bulgaria/ or burkina faso/ or burundi/ or cabo verde/ or cambodia/ or cameroon/ or central african republic/ or chad/ or exp china/ or comoros/ or congo/ or cote d'ivoire/ or croatia/ or cuba/ or "democratic republic of the congo"/ or cyprus/ or djibouti/ or dominica/ or dominican republic/ or ecuador/ or egypt/ or el salvador/ or equatorial guinea/ or eritrea/ or eswatini/ or ethiopia/ or fiji/ or gabon/ or gambia/ or "georgia (republic)"/ or ghana/ or grenada/ or guatemala/ or guinea/ or guinea-bissau/ or guyana/ or haiti/ or honduras/ or independent state of samoa/ or exp india/ or indian ocean islands/ or indochina/ or indonesia/ or iran/ or iraq/ or jamaica/ or jordan/ or kazakhstan/ or kenya/ or kosovo/ or kuwait/ or kyrgyzstan/ or laos/ or lebanon/ or liechtenstein/ or lesotho/ or liberia/ or libya/ or madagascar/ or malaysia/ or malawi/ or mali/ or malta/ or mauritania/ or mauritius/ or mekong valley/ or melanesia/ or micronesia/ or monaco/ or mongolia/ or montenegro/ or morocco/ or mozambique/ or myanmar/ or namibia/ or nepal/ or nicaragua/ or niger/ or nigeria/ or oman/ or pakistan/ or palau/ or exp panama/ or papua new guinea/ or paraguay/ or peru/ or philippines/ or qatar/ or "republic of belarus"/ or "republic of north macedonia"/ or romania/ or exp russia/ or rwanada/ or "saint kitts and nevis"/ or saint lucia/ or "saint vincent and the grenadines"/ or "sao tome and principe"/ or saudi arabia/ or serbia/ or sierra leone/ or senegal/ or seychelles/ or singapore/ or somalia/ or south africa/ or south sudan/ or sri lanka/ or sudan/ or suriname/ or syria/ or taiwan/ or tajikistan/ or tanzania/ or thailand/ or timor-leste/ or togo/ or tonga/ or "trinidad and tobago"/ or tunisia/ or turkmenistan/ or uganda/ or ukraine/ or united arab emirates/ or uruguay/ or uzbekistan/ or vanuatu/ or venezuela/ or vietnam/ or west indies/ or yemen/ or zambia/ or zimbabwe/
116.	"organisation for economic co-operation and development"/
117.	australasia/ or exp australia/ or austria/ or baltic states/ or belgium/ or exp canada/ or chile/ or colombia/ or costa rica/ or czech republic/ or exp denmark/ or estonia/ or europe/ or finland/ or exp france/ or exp germany/ or greece/ or hungary/

#	Searches
	or iceland/ or ireland/ or israel/ or exp italy/ or exp japan/ or korea/ or latvia/ or lithuania/ or luxembourg/ or mexico/ or netherlands/ or new zealand/ or north america/ or exp norway/ or poland/ or portugal/ or exp "republic of korea"/ or "scandinavian and nordic countries"/ or slovakia/ or slovenia/ or spain/ or sweden/ or switzerland/ or turkey/ or exp united kingdom/ or exp united states/
118.	european union/
119.	developed countries/
120.	or/116-119
121.	115 not 120
122.	91 not 121
123.	114 not 121

Database: Embase

Date of last search: 21/11/2022

#	Searches
1.	exp parent/
2.	family relation/ or exp child parent relation/ or infant care/
3.	(famil* or father* or husband* or mother* or partner* or spous* or maternal* or parent* or paternal* or grandparent* or care giver* or caregiver* or guardian*).ti,ab.
4.	child/ or exp infant/ or preschool child/ or school child/ or toddler/ or "minor (person)"/
5.	pediatrics/ or child psychiatry/ or pediatric emergency medicine/ or pediatric nursing/
6.	(child* or baby or babies or boy? or girl? or infan* or juvenile? or kid? or kindergar* or minors or p?ediatric* or preschool* or schoolchild* or school age? or toddler*).ti,ab.
7.	(child* or baby or babies or infan* or juvenile? or kindergar* or p?ediatric* or schoolchild* or school age?).jw.
8.	or/1-7
9.	weaning/ or infant feeding/ or baby food/
10.	complementary feeding/
11.	child nutrition/ or maternal nutrition/ or infant nutrition/
12.	((complementary or supplement* or introduc*) adj2 (feed* or food*)).ti,ab.
13.	((solid or baby or soft or finger or mash* or puree* or infant*) adj2 (food* or fruit* or veg*)) or solids or babyfood*).ti,ab.
14.	wean*.ti,ab.
15.	or/9-14
16.	diet/ or healthy diet/
17.	feeding behavior/ or eating habit/ or dietary pattern/
18.	nutritional value/
19.	nutritional requirement/
20.	food intake/ or energy consumption/
21.	dietary intake/ or caloric intake/ or exp nutrient intake/
22.	fruit/ or vegetable/
23.	vegetable consumption/
24.	((food* or feed* or diet* or nutrition* or nutritive or feed* or eating) adj4 (habit* or behavio* or attitude* or belief* or practice*)).ti,ab.
25.	((nutrition* or nutrient* or micronutrient* or micro-nutrient* or alimentary or diet* or energy or calorie* or fruit? or vegetable?) adj4 (intake or consum* or requirement* or value*)).ti,ab.
26.	((health* or balance* or nutrition*) adj4 (food* or eat* or diet*)).ti,ab.
27.	family food*.ti,ab.
28.	sodium intake/ or salt intake/ or sodium restriction/ or high sodium intake/
29.	artificially sweetened beverage/ or sweetened beverage/ or sugar-sweetened beverage/ or sweetening agent/

#	Searches
30.	((salt* or sugar* or sodium) adj2 (intake or consum*)) or soda* or candy or chocolate* or sweet* or confection*).ti,ab.
31.	((soft or fizzy or sugar*) adj1 (drink* or beverage*)).ti,ab.
32.	or/16-31
33.	15 or 32
34.	8 and 33
35.	*access to information/ or *information/ or *information center/ or *information service/ or *information dissemination/ or *information seeking/ or *help seeking behavior/ or *interpersonal communication/ or *communication/ or *consumer health information/ or *medical information system/ or *health promotion/ or *health education/ or *education program/ or *patient education/ or *patient information/ or *medical information/ or *publication/ or *visual information/ or *personal digital assistant/ or exp *decision support system/ or *patient decision making/ or *internet/ or *web-based intervention/ or *web browser/ or *social media/ or *blogging/ or *social network/ or *mobile application/ or *e-mail/ or *email support/ or *text messaging/ or *text messaging support/ or *hotline/ or *telephone/ or *telephone support/ or exp *mobile phone/ or *teleconsultation/ or exp *teaching/
36.	((inform* or educat* or advice or support* or guid*) adj4 (access* or dissem* or model* or need* or program* or provid* or provision or requir* or shar* or service* or seek* or network* or centre* or center*)).ti.
37.	((medical or health or electronic or virtual) adj4 (inform* or educat* or support* or learn* or guid*)).ti.
38.	(app or apps or blog* or booklet* or brochure* or dvd* or ehealth* or e-health* or elearn* or e-learn* or email* or e-mail* or facebook or facetime or face time or forum* or handout* or hand-out* or helpline* or hotline* or internet* or ipad* or iphone* or leaflet* or mspace or online or magazine* or mobile phone* or newsletter* or online or pamphlet* or palm pilot* or personal digital assistant* or pocket pc* or podcast* or poster? or skype* or smartphone* or smart phone* or social media or social network* or sms or text messag* or twitter or tweet* or video* or web* or wiki* or written or youtube*).ti.
39.	(mobile* adj2 app*).ti.
40.	*computer assisted therapy/ or *telehealth/ or *telemedicine/
41.	*diet therapy/ or *behavior therapy/ or *empowerment/ or *lifestyle modification/
42.	*health behavior/ or *attitude to health/
43.	((behavio* or diet* or nutrition*) adj2 (therap* or intervention* or modif* or change* or treat* or train* or support* or strateg* or program* or educat*)).ti.
44.	(health* adj2 (behavio* or belief*)).ti.
45.	role model*.ti.
46.	*healthy food access/ or *food assistance/ or *dietary service/ or *food security/
47.	exp *social support/
48.	*social welfare/ or *child welfare/ or *infant welfare/
49.	((government* or federal or welfare or aid* or social security or relief) adj2 (advice or guid* or support* or sponsor* or service* or grant* or scheme* or program* or provide* or provision* or assist* or gift* or handout* or donat* or voucher* or subsid*)).ti.
50.	((food* or nutrition*) adj2 (aid* or program* or assist* or stamp* or supplement* or bank* or package* or secur*)).ti.
51.	((social* or communit*) adj2 (support* or intervention*)).ti.
52.	or/35-51
53.	34 and 52
54.	letter.pt. or letter/
55.	note.pt.
56.	editorial.pt.
57.	case report/ or case study/
58.	(letter or comment*).ti.
59.	or/54-58
60.	randomized controlled trial/ or random*.ti,ab.
61.	59 not 60
62.	animal/ not human/
63.	nonhuman/
64.	exp Animal Experiment/
65.	exp Experimental Animal/
66.	animal model/

#	Searches
67.	exp Rodent/
68.	(rat or rats or mouse or mice).ti.
69.	or/61-68
70.	53 not 69
71.	limit 70 to English language
72.	(conference abstract* or conference review or conference paper or conference proceeding).db,pt,su.
73.	71 not 72
74.	systematic review/
75.	meta-analysis/
76.	(meta analy* or metanaly* or metaanaly*).ti,ab.
77.	((systematic or evidence) adj2 (review* or overview*)).ti,ab.
78.	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
79.	(search strategy or search criteria or systematic search or study selection or data extraction).ab.
80.	(search* adj4 literature).ab.
81.	(medline or pubmed or cochrane or embase or psychlit or psyclit or psychinfo or psycinfo or cinahl or science citation index or bids or cancerlit).ab.
82.	((pool* or combined) adj2 (data or trials or studies or results)).ab.
83.	cochrane.jw.
84.	or/74-83
85.	random*.ti,ab.
86.	factorial*.ti,ab.
87.	(crossover* or cross over*).ti,ab.
88.	((doubl* or singl*) adj blind*).ti,ab.
89.	(assign* or allocat* or volunteer* or placebo*).ti,ab.
90.	crossover procedure/
91.	single blind procedure/
92.	randomized controlled trial/
93.	double blind procedure/
94.	or/85-93
95.	73 and (84 or 94)
96.	Clinical study/
97.	Case control study/
98.	Family study/
99.	Longitudinal study/
100.	Retrospective study/
101.	comparative study/
102.	Prospective study/
103.	Randomized controlled trials/
104.	102 not 103
105.	Cohort analysis/
106.	cohort analy\$.tw.
107.	(Cohort adj (study or studies)).tw.
108.	(Case control\$ adj (study or studies)).tw.
109.	(follow up adj (study or studies)).tw.
110.	(observational adj (study or studies)).tw.
111.	(epidemiologic\$ adj (study or studies)).tw.
112.	(cross sectional adj (study or studies)).tw.
113.	case series.tw.
114.	prospective.tw.

#	Searches
115.	retrospective.tw.
116.	or/96-101,104-115
117.	73 and 116
118.	117 not 95
119.	afghanistan/ or africa/ or "africa south of the sahara"/ or albania/ or algeria/ or andorra/ or angola/ or argentina/ or "antigua and barbuda"/ or armenia/ or exp azerbaijan/ or bahamas/ or bahrain/ or bangladesh/ or barbados/ or belarus/ or belize/ or benin/ or bhutan/ or bolivia/ or borneo/ or exp "bosnia and herzegovina"/ or botswana/ or exp brazil/ or brunei darussalam/ or bulgaria/ or burkina faso/ or burundi/ or cambodia/ or cameroon/ or cape verde/ or central africa/ or central african republic/ or chad/ or exp china/ or comoros/ or congo/ or cook islands/ or cote d'ivoire/ or croatia/ or cuba/ or cyprus/ or democratic republic congo/ or djibouti/ or dominica/ or dominican republic/ or ecuador/ or el salvador/ or egypt/ or equatorial guinea/ or eritrea/ or eswatini/ or ethiopia/ or exp "federated states of micronesia"/ or fiji/ or gabon/ or gambia/ or exp "georgia (republic)"/ or ghana/ or grenada/ or guatemala/ or guinea/ or guinea-bissau/ or guyana/ or haiti/ or honduras/ or exp india/ or exp indonesia/ or iran/ or exp iraq/ or jamaica/ or jordan/ or kazakhstan/ or kenya/ or kiribati/ or kosovo/ or kuwait/ or kyrgyzstan/ or laos/ or lebanon/ or liechtenstein/ or lesotho/ or liberia/ or libyan arab jamahiriya/ or madagascar/ or malawi/ or exp malaysia/ or maldives/ or mali/ or malta/ or mauritania/ or mauritius/ or melanesia/ or moldova/ or monaco/ or mongolia/ or "montenegro (republic)"/ or morocco/ or mozambique/ or myanmar/ or namibia/ or nauru/ or nepal/ or nicaragua/ or niger/ or nigeria/ or niue/ or north africa/ or oman/ or exp pakistan/ or palau/ or palestine/ or panama/ or papua new guinea/ or paraguay/ or peru/ or philippines/ or polynesia/ or qatar/ or "republic of north macedonia"/ or romania/ or exp russian federation/ or rwanda/ or sahel/ or "saint kitts and nevis"/ or "saint lucia"/ or "saint vincent and the grenadines"/ or saudi arabia/ or senegal/ or exp serbia/ or seychelles/ or sierra leone/ or singapore/ or "sao tome and principe"/ or solomon islands/ or exp somalia/ or south africa/ or south asia/ or south sudan/ or exp southeast asia/ or sri lanka/ or sudan/ or suriname/ or syrian arab republic/ or taiwan/ or tajikistan/ or tanzania/ or thailand/ or timor-leste/ or togo/ or tonga/ or "trinidad and tobago"/ or tunisia/ or turkmenistan/ or tuvalu/ or uganda/ or exp ukraine/ or exp united arab emirates/ or uruguay/ or exp uzbekistan/ or vanuatu/ or venezuela/ or viet nam/ or western sahara/ or yemen/ or zambia/ or zimbabwe/
120.	exp "organisation for economic co-operation and development"/
121.	exp australia/ or "australia and new zealand"/ or austria/ or baltic states/ or exp belgium/ or exp canada/ or chile/ or colombia/ or costa rica/ or czech republic/ or denmark/ or estonia/ or europe/ or exp finland/ or exp france/ or exp germany/ or greece/ or hungary/ or iceland/ or ireland/ or israel/ or exp italy/ or japan/ or korea/ or latvia/ or lithuania/ or luxembourg/ or exp mexico/ or netherlands/ or new zealand/ or north america/ or exp norway/ or poland/ or exp portugal/ or scandinavia/ or sweden/ or slovakia/ or slovenia/ or south korea/ or exp spain/ or switzerland/ or "Turkey (republic)"/ or exp united kingdom/ or exp united states/ or western europe/
122.	european union/
123.	developed country/
124.	or/120-123
125.	119 not 124
126.	95 not 125
127.	118 not 125

Database: Emcare

Date of last search: 24/11/2022

#	Searches
1.	exp parent/
2.	family relation/ or exp child parent relation/ or infant care/
3.	(famil* or father* or husband* or mother* or partner* or spous* or maternal* or parent* or paternal* or grandparent* or care giver* or caregiver* or guardian*).ti,ab.
4.	child/ or exp infant/ or preschool child/ or school child/ or toddler/ or "minor (person)"/
5.	pediatrics/ or child psychiatry/ or pediatric emergency medicine/ or pediatric nursing/
6.	(child* or baby or babies or boy? or girl? or infan* or juvenile? or kid? or kindergar* or minors or p?ediatric* or preschool* or schoolchild* or school age? or toddler*).ti,ab.
7.	(child* or baby or babies or infan* or juvenile? or kindergar* or p?ediatric* or schoolchild* or school age?).jw.
8.	or/1-7
9.	weaning/ or infant feeding/ or baby food/
10.	complementary feeding/

#	Searches
11.	child nutrition/ or maternal nutrition/ or infant nutrition/
12.	((complementary or supplement* or introduc*) adj2 (feed* or food*)).ti,ab.
13.	((solid or baby or soft or finger or mash* or puree* or infant*) adj2 (food* or fruit* or veg*)) or solids or babyfood*).ti,ab.
14.	wean*.ti,ab.
15.	or/9-14
16.	diet/ or healthy diet/
17.	feeding behavior/ or eating habit/ or dietary pattern/
18.	nutritional value/
19.	nutritional requirement/
20.	food intake/ or energy consumption/
21.	dietary intake/ or caloric intake/ or exp nutrient intake/
22.	fruit/ or vegetable/
23.	vegetable consumption/
24.	((food* or feed* or diet* or nutrition* or nutritive or feed* or eating) adj4 (habit* or behavior* or attitude* or belief* or practice*)).ti,ab.
25.	((nutrition* or nutrient* or micronutrient* or micro-nutrient* or alimentary or diet* or energy or calorie* or fruit? or vegetable?) adj4 (intake or consum* or requirement* or value*)).ti,ab.
26.	((health* or balance* or nutrition*) adj4 (food* or eat* or diet*)).ti,ab.
27.	family food*.ti,ab.
28.	sodium intake/ or salt intake/ or sodium restriction/ or high sodium intake/
29.	artificially sweetened beverage/ or sweetened beverage/ or sugar-sweetened beverage/ or sweetening agent/
30.	((salt* or sugar* or sodium) adj2 (intake or consum*)) or soda* or candy or chocolate* or sweet* or confection*).ti,ab.
31.	((soft or fizzy or sugar*) adj1 (drink* or beverage*)).ti,ab.
32.	or/16-31
33.	15 or 32
34.	8 and 33
35.	*access to information/ or *information/ or *information center/ or *information service/ or *information dissemination/ or *information seeking/ or *help seeking behavior/ or *interpersonal communication/ or *communication/ or *consumer health information/ or *medical information system/ or *health promotion/ or *health education/ or *education program/ or *patient education/ or *patient information/ or *medical information/ or *publication/ or *visual information/ or *personal digital assistant/ or exp *decision support system/ or *patient decision making/ or *internet/ or *web-based intervention/ or *web browser/ or *social media/ or *blogging/ or *social network/ or *mobile application/ or *e-mail/ or *email support/ or *text messaging/ or *text messaging support/ or *hotline/ or *telephone/ or *telephone support/ or exp *mobile phone/ or *teleconsultation/ or exp *teaching/
36.	((inform* or educat* or advice or support* or guid*) adj4 (access* or dissem* or model* or need* or program* or provid* or provision or requir* or shar* or service* or seek* or network* or centre* or center*)).ti.
37.	((medical or health or electronic or virtual) adj4 (inform* or educat* or support* or learn* or guid*)).ti.
38.	(app or apps or blog* or booklet* or brochure* or dvd* or ehealth* or e-health* or elearn* or e-learn* or email* or e-mail* or facebook or facetime or face time or forum* or handout* or hand-out* or helpline* or hotline* or internet* or ipad* or iphone* or leaflet* or myspace or online or magazine* or mobile phone* or newsletter* or online or pamphlet* or palm pilot* or personal digital assistant* or pocket pc* or podcast* or poster? or skype* or smartphone* or smart phone* or social media or social network* or sms or text messag* or twitter or tweet* or video* or web* or wiki* or written or youtube*).ti.
39.	(mobile* adj2 app*).ti.
40.	*computer assisted therapy/ or *telehealth/ or *telemedicine/
41.	*diet therapy/ or *behavior therapy/ or *empowerment/ or *lifestyle modification/
42.	*health behavior/ or *attitude to health/
43.	((behavior* or diet* or nutrition*) adj2 (therap* or intervention* or modif* or change* or treat* or train* or support* or strateg* or program* or educat*)).ti.
44.	(health* adj2 (behavior* or belief*)).ti.
45.	role model*.ti.
46.	*healthy food access/ or *food assistance/ or *dietary service/ or *food security/
47.	exp *social support/
48.	*social welfare/ or *child welfare/ or *infant welfare/

#	Searches
49.	((government* or federal or welfare or aid* or social security or relief) adj2 (advice or guid* or support* or sponsor* or service* or grant* or scheme* or program* or provide* or provision* or assist* or gift* or handout* or donat* or voucher* or subsid*)).ti.
50.	((food* or nutrition*) adj2 (aid* or program* or assist* or stamp* or supplement* or bank* or package* or secur*)).ti.
51.	((social* or communit*) adj2 (support* or intervention*)).ti.
52.	or/35-51
53.	34 and 52
54.	letter.pt. or letter/
55.	note.pt.
56.	editorial.pt.
57.	case report/ or case study/
58.	(letter or comment*).ti.
59.	or/54-58
60.	randomized controlled trial/ or random*.ti,ab.
61.	59 not 60
62.	animal/ not human/
63.	nonhuman/
64.	exp Animal Experiment/
65.	exp Experimental Animal/
66.	animal model/
67.	exp Rodent/
68.	(rat or rats or mouse or mice).ti.
69.	or/61-68
70.	53 not 69
71.	limit 70 to English language
72.	conference*.pt,su,so.
73.	71 not 72
74.	systematic review/
75.	meta-analysis/
76.	(meta analy* or metanaly* or metaanaly*).ti,ab.
77.	((systematic or evidence) adj2 (review* or overview*)).ti,ab.
78.	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
79.	(search strategy or search criteria or systematic search or study selection or data extraction).ab.
80.	(search* adj4 literature).ab.
81.	(medline or pubmed or cochrane or embase or psychlit or psyclit or psychinfo or psycinfo or cinahl or science citation index or bids or cancerlit).ab.
82.	((pool* or combined) adj2 (data or trials or studies or results)).ab.
83.	cochrane.jw.
84.	or/74-83
85.	random*.ti,ab.
86.	factorial*.ti,ab.
87.	(crossover* or cross over*).ti,ab.
88.	((doubl* or singl*) adj blind*).ti,ab.
89.	(assign* or allocat* or volunteer* or placebo*).ti,ab.
90.	crossover procedure/
91.	single blind procedure/
92.	randomized controlled trial/
93.	double blind procedure/
94.	or/85-93
95.	73 and (84 or 94)

#	Searches
96.	Clinical study/
97.	Case control study/
98.	Family study/
99.	Longitudinal study/
100.	Retrospective study/
101.	comparative study/
102.	Prospective study/
103.	Randomized controlled trials/
104.	102 not 103
105.	Cohort analysis/
106.	cohort analy\$.tw.
107.	(Cohort adj (study or studies)).tw.
108.	(Case control\$ adj (study or studies)).tw.
109.	(follow up adj (study or studies)).tw.
110.	(observational adj (study or studies)).tw.
111.	(epidemiologic\$ adj (study or studies)).tw.
112.	(cross sectional adj (study or studies)).tw.
113.	case series.tw.
114.	prospective.tw.
115.	retrospective.tw.
116.	or/96-101,104-115
117.	73 and 116
118.	117 not 95
119.	afghanistan/ or africa/ or "africa south of the sahara"/ or albania/ or algeria/ or andorra/ or angola/ or argentina/ or "antigua and barbuda"/ or armenia/ or exp azerbaijan/ or bahamas/ or bahrain/ or bangladesh/ or barbados/ or belarus/ or belize/ or benin/ or bhutan/ or bolivia/ or borneo/ or exp "bosnia and herzegovina"/ or botswana/ or exp brazil/ or brunei darussalam/ or bulgaria/ or burkina faso/ or burundi/ or cambodia/ or cameroon/ or cape verde/ or central africa/ or central african republic/ or chad/ or exp china/ or comoros/ or congo/ or cook islands/ or cote d'ivoire/ or croatia/ or cuba/ or cyprus/ or democratic republic congo/ or djibouti/ or dominica/ or dominican republic/ or ecuador/ or el salvador/ or egypt/ or equatorial guinea/ or eritrea/ or eswatini/ or ethiopia/ or exp "federated states of micronesia"/ or fiji/ or gabon/ or gambia/ or exp "georgia (republic)"/ or ghana/ or grenada/ or guatemala/ or guinea/ or guinea-bissau/ or guyana/ or haiti/ or honduras/ or exp india/ or exp indonesia/ or iran/ or exp iraq/ or jamaica/ or jordan/ or kazakhstan/ or kenya/ or kiribati/ or kosovo/ or kuwait/ or kyrgyzstan/ or laos/ or lebanon/ or liechtenstein/ or lesotho/ or liberia/ or libyan arab jamahiriya/ or madagascar/ or malawi/ or exp malaysia/ or maldives/ or mali/ or malta/ or mauritania/ or mauritius/ or melanesia/ or moldova/ or monaco/ or mongolia/ or "montenegro (republic)"/ or morocco/ or mozambique/ or myanmar/ or namibia/ or nauru/ or nepal/ or nicaragua/ or niger/ or nigeria/ or niue/ or north africa/ or oman/ or exp pakistan/ or palau/ or palestine/ or panama/ or papua new guinea/ or paraguay/ or peru/ or philippines/ or polynesia/ or qatar/ or "republic of north macedonia"/ or romania/ or exp russian federation/ or rwanda/ or sahel/ or "saint kitts and nevis"/ or "saint lucia"/ or "saint vincent and the grenadines"/ or saudi arabia/ or senegal/ or exp serbia/ or seychelles/ or sierra leone/ or singapore/ or "sao tome and principe"/ or solomon islands/ or exp somalia/ or south africa/ or south asia/ or south sudan/ or exp southeast asia/ or sri lanka/ or sudan/ or suriname/ or syrian arab republic/ or taiwan/ or tajikistan/ or tanzania/ or thailand/ or timor-leste/ or togo/ or tonga/ or "trinidad and tobago"/ or tunisia/ or turkmenistan/ or tuvalu/ or uganda/ or exp ukraine/ or exp united arab emirates/ or uruguay/ or exp uzbekistan/ or vanuatu/ or venezuela/ or viet nam/ or western sahara/ or yemen/ or zambia/ or zimbabwe/
120.	exp "organisation for economic co-operation and development"/
121.	exp australia/ or "australia and new zealand"/ or austria/ or baltic states/ or exp belgium/ or exp canada/ or chile/ or colombia/ or costa rica/ or czech republic/ or denmark/ or estonia/ or europe/ or exp finland/ or exp france/ or exp germany/ or greece/ or hungary/ or iceland/ or ireland/ or israel/ or exp italy/ or japan/ or korea/ or latvia/ or lithuania/ or luxembourg/ or exp mexico/ or netherlands/ or new zealand/ or north america/ or exp norway/ or poland/ or exp portugal/ or scandinavia/ or sweden/ or slovakia/ or slovenia/ or south korea/ or exp spain/ or switzerland/ or "Turkey (republic)"/ or exp united kingdom/ or exp united states/ or western europe/
122.	european union/
123.	developed country/
124.	or/120-123
125.	119 not 124
126.	95 not 125

#	Searches
127.	118 not 125

Database: Cochrane Database of Systematic Reviews Issue 11 of 12, November and Cochrane Central Register of Controlled Trials Issue 11 of 12, November

Date of last search: 21/11/2022

#	Searches
#1	MeSH descriptor: [Parents] explode all trees
#2	MeSH descriptor: [Family Relations] this term only
#3	MeSH descriptor: [Maternal Behavior] explode all trees
#4	MeSH descriptor: [Parent-Child Relations] explode all trees
#5	MeSH descriptor: [Parenting] this term only
#6	MeSH descriptor: [Paternal Behavior] this term only
#7	MeSH descriptor: [Infant Care] this term only
#8	(famil* or father* or husband* or mother* or partner* or spous* or maternal* or parent* or paternal* or grandparent* or care giver* or caregiver* or guardian*):ti,ab
#9	MeSH descriptor: [Child] explode all trees
#10	MeSH descriptor: [Infant] explode all trees
#11	MeSH descriptor: [Minors] this term only
#12	MeSH descriptor: [Pediatrics] explode all trees
#13	MeSH descriptor: [Pediatric Nursing] explode all trees
#14	(child* or baby or babies or boy? or girl? or infan* or juvenile? or kid? or kindergar* or minors or p?ediatric* or preschool* or schoolchild* or (school NEXT age?) or toddler*):ti,ab
#15	(child* or baby or babies or infan* or juvenile? or kindergar* or p?ediatric* or schoolchild* or (school NEXT age?)):so
#16	{or #1-#15}
#17	MeSH descriptor: [Weaning] this term only
#18	MeSH descriptor: [Infant Food] this term only
#19	MeSH descriptor: [Child Nutritional Physiological Phenomena] this term only
#20	MeSH descriptor: [Maternal Nutritional Physiological Phenomena] this term only
#21	MeSH descriptor: [Infant Nutritional Physiological Phenomena] this term only
#22	((complementary or supplement* or introduc*) near/2 (feed* or food*)):ti,ab
#23	((solid or baby or soft or finger or mash* or puree* or infant*) near/2 (food* or fruit* or veg*)) or solids or babyfood*):ti,ab
#24	wean*:ti,ab
#25	{or #17-#24}
#26	MeSH descriptor: [Diet] this term only
#27	MeSH descriptor: [Diet, Healthy] this term only
#28	MeSH descriptor: [Feeding Behavior] this term only
#29	MeSH descriptor: [Nutritive Value] this term only
#30	MeSH descriptor: [Nutritional Requirements] this term only
#31	MeSH descriptor: [Energy Intake] this term only
#32	MeSH descriptor: [Fruit] this term only
#33	MeSH descriptor: [Vegetables] this term only
#34	((food* or feed* or diet* or nutrition* or nutritive or feed* or eating) near/4 (habit* or behavio* or attitude* or belief* or practice*)):ti,ab
#35	((nutrition* or nutrient* or micronutrient* or micro-nutrient* or alimentary or diet* or energy or calorie* or fruit? or vegetable?) near/4 (intake or consum* or requirement* or value*)):ti,ab
#36	((health* or balance* or nutrition*) near/4 (food* or eat* or diet*)):ti,ab
#37	(family NEXT food*):ti,ab
#38	MeSH descriptor: [Sodium, Dietary] this term only

#	Searches
#39	MeSH descriptor: [Sodium Chloride, Dietary] this term only
#40	MeSH descriptor: [Artificially Sweetened Beverages] this term only
#41	MeSH descriptor: [Sugar-Sweetened Beverages] this term only
#42	MeSH descriptor: [Carbonated Beverages] this term only
#43	((salt* or sugar* or sodium) near/2 (intake or consum*)) or soda* or candy or chocolate* or sweet* or confection*):ti,ab
#44	((soft or fizzy or sugar*) near/1 (drink* or beverage*)):ti,ab
#45	{or #26-#44}
#46	#25 or #45
#47	#16 and #46
#48	MeSH descriptor: [Access to Information] this term only
#49	MeSH descriptor: [Information Centers] this term only
#50	MeSH descriptor: [Information Services] this term only
#51	MeSH descriptor: [Information Dissemination] this term only
#52	MeSH descriptor: [Information Seeking Behavior] this term only
#53	MeSH descriptor: [Communication] this term only
#54	MeSH descriptor: [Communications Media] this term only
#55	MeSH descriptor: [Consumer Health Information] this term only
#56	MeSH descriptor: [Health Information Management] explode all trees
#57	MeSH descriptor: [Health Communication] this term only
#58	MeSH descriptor: [Health Promotion] this term only
#59	MeSH descriptor: [Health Education] this term only
#60	MeSH descriptor: [Patient Education as Topic] explode all trees
#61	MeSH descriptor: [Patient Education Handout] this term only
#62	MeSH descriptor: [Pamphlets] this term only
#63	MeSH descriptor: [Posters as Topic] this term only
#64	MeSH descriptor: [Audiovisual Aids] this term only
#65	MeSH descriptor: [Books, Illustrated] this term only
#66	MeSH descriptor: [Medical Illustration] this term only
#67	MeSH descriptor: [Computers, Handheld] explode all trees
#68	MeSH descriptor: [Decision Support Systems, Clinical] this term only
#69	MeSH descriptor: [Internet] this term only
#70	MeSH descriptor: [Internet-Based Intervention] this term only
#71	MeSH descriptor: [Social Media] this term only
#72	MeSH descriptor: [Social Networking] this term only
#73	MeSH descriptor: [Mobile Applications] this term only
#74	MeSH descriptor: [Blogging] explode all trees
#75	MeSH descriptor: [Electronic Mail] this term only
#76	MeSH descriptor: [Cell Phone] explode all trees
#77	MeSH descriptor: [Hotlines] this term only
#78	MeSH descriptor: [Telephone] this term only
#79	MeSH descriptor: [Teaching Materials] this term only
#80	((inform* or educat* or advice or support* or guid*) near/4 (access* or dissem* or model* or need* or program* or provid* or provision or requir* or shar* or service* or seek* or network* or centre* or center*)):ti
#81	((medical or health or electronic or virtual) near/4 (inform* or educat* or support* or learn* or guid*)):ti
#82	(app or apps or blog* or booklet* or brochure* or dvd* or ehealth* or e-health* or elearn* or e-learn* or email* or e-mail* or facebook or facetime or "face time" or forum* or handout* or hand-out* or helpline* or hotline* or internet* or ipad* or iphone* or leaflet* or mspace or online or magazine* or (mobile NEXT phone*) or newsletter* or online or pamphlet* or (palm NEXT pilot*) or (personal NEXT digital NEXT assistant*) or (pocket NEXT pc*) or podcast* or poster? or skype* or smartphone* or (smart NEXT phone*) or "social media" or (social NEXT network*) or sms or (text NEXT messag*) or twitter or tweet* or video* or web* or wiki* or written or youtube*):ti

#	Searches
#83	(mobile* near/2 app*):ti
#84	MeSH descriptor: [Therapy, Computer-Assisted] this term only
#85	MeSH descriptor: [Telemedicine] this term only
#86	MeSH descriptor: [Diet Therapy] this term only
#87	MeSH descriptor: [Behavior Therapy] this term only
#88	MeSH descriptor: [Empowerment] this term only
#89	MeSH descriptor: [Health Behavior] this term only
#90	MeSH descriptor: [Health Knowledge, Attitudes, Practice] this term only
#91	((behavio* or diet* or nutrition*) near/2 (therap* or intervention* or modif* or change* or treat* or train* or support* or strateg* or program* or educat*)):ti
#92	((health*) near/2 (behavio* or belief*)):ti
#93	(role NEXT model*):ti
#94	MeSH descriptor: [Access to Healthy Foods] this term only
#95	MeSH descriptor: [Food Assistance] this term only
#96	MeSH descriptor: [Dietary Services] this term only
#97	MeSH descriptor: [Food Security] this term only
#98	MeSH descriptor: [Social Support] explode all trees
#99	MeSH descriptor: [Social Welfare] this term only
#100	MeSH descriptor: [Child Welfare] this term only
#101	MeSH descriptor: [Infant Welfare] this term only
#102	((government* or federal or welfare or aid* or "social security" or relief) near/2 (advice or guid* or support* or sponsor* or service* or grant* or scheme* or program* or provide* or provision* or assist* or gift* or handout* or donat* or voucher* or subsid*)):ti
#103	((food* or nutrition*) near/2 (aid* or program* or assist* or stamp* or supplement* or bank* or package* or secur*)):ti
#104	((social* or communit*) near/2 (support* or intervention*)):ti
#105	{or #48-#104}
#106	#47 and #105
#107	"conference":pt or (clinicaltrials or trialsearch):so
#108	#106 NOT #107
#109	#108 in Cochrane Reviews
#110	#108 in Trials

Database: CINAHL

Date of last search: 21/11/2022

#	Searches
1	(MH "Parents+")
2	(MH "Family Relations")
3	(MH "Maternal Behavior")
4	(MH "Parent-Child Relations+")
5	(MH "Parenting")
6	(MH "Paternal Behavior")
7	(MH "Infant Care")
8	TI ((famil* or father* or husband* or mother* or partner* or spous* or maternal* or parent* or paternal* or grandparent* or care giver* or caregiver* or guardian*)) OR AB ((famil* or father* or husband* or mother* or partner* or spous* or maternal* or parent* or paternal* or grandparent* or care giver* or caregiver* or guardian*))
9	(MH "Child+")
10	(MH "Infant+")
11	(MH "Minors (Legal)")
12	(MH "Pediatrics+")

#	Searches
13	(MH "Pediatric Nursing")
14	TI ((child* or baby or babies or boy? or girl? or infant* or juvenile? or kid? or kindergar* or minors or p?ediatric* or preschool* or schoolchild* or school age? or toddler*)) OR AB ((child* or baby or babies or boy? or girl? or infant* or juvenile? or kid? or kindergar* or minors or p?ediatric* or preschool* or schoolchild* or school age? or toddler*))
15	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14
16	(MH "Infant Weaning")
17	(MH "Infant Food")
18	(MH "Child Nutritional Physiology")
19	(MH "Maternal Nutritional Physiology")
20	(MH "Infant Nutritional Physiology")
21	TI (((complementary or supplement* or introduc*) N2 (feed* or food*))) OR AB (((complementary or supplement* or introduc*) N2 (feed* or food*)))
22	TI ((((solid or baby or soft or finger or mash* or puree* or infant*) N2 (food* or fruit* or veg*)) or solids or babyfood*)) OR AB ((((solid or baby or soft or finger or mash* or puree* or infant*) N2 (food* or fruit* or veg*)) or solids or babyfood*))
23	TI wean* OR AB wean*
24	S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23
25	(MH "Diet")
26	(MH "Eating Behavior")
27	(MH "Nutritive Value")
28	(MH "Nutritional Requirements")
29	(MH "Energy Intake")
30	(MH "Fruit")
31	(MH "Vegetables")
32	TI (((food* or feed* or diet* or nutrition* or nutritive or feed* or eating) N4 (habit* or behavior* or attitude* or belief* or practice*))) OR AB (((food* or feed* or diet* or nutrition* or nutritive or feed* or eating) N4 (habit* or behavior* or attitude* or belief* or practice*)))
33	TI (((nutrition* or nutrient* or micronutrient* or micro-nutrient* or alimentary or diet* or energy or calorie* or fruit? or vegetable?) N4 (intake or consum* or requirement* or value*))) OR AB (((nutrition* or nutrient* or micronutrient* or micro-nutrient* or alimentary or diet* or energy or calorie* or fruit? or vegetable?) N4 (intake or consum* or requirement* or value*)))
34	TI (((health* or balance* or nutrition*) N4 (food* or eat* or diet*))) OR AB (((health* or balance* or nutrition*) N4 (food* or eat* or diet*)))
35	TI family food* OR AB family food*
36	(MH "Sodium, Dietary")
37	(MH "Sodium Chloride, Dietary")
38	(MH "Sweetened Beverages")
39	(MH "Carbonated Beverages")
40	TI ((((salt* or sugar* or sodium) N2 (intake or consum*)) or soda* or candy or chocolate* or sweet* or confection*)) OR AB ((((salt* or sugar* or sodium) N2 (intake or consum*)) or soda* or candy or chocolate* or sweet* or confection*))
41	TI (((soft or fizzy or sugar*) N1 (drink* or beverage*))) OR AB (((soft or fizzy or sugar*) N1 (drink* or beverage*)))
42	S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31 OR S32 OR S33 OR S34 OR S35 OR S36 OR S37 OR S38 OR S39 OR S40 OR S41
43	S24 OR S42
44	S15 AND S43
45	(MM "Access to Information")
46	(MM "Information Centers")
47	(MM "Information Services")
48	(MM "Information Seeking Behavior")
49	(MM "Communication")
50	(MM "Communications Media")
51	(MM "Consumer Health Information")

#	Searches
52	(MM "Health Information Management")
53	(MM "Health Promotion")
54	(MM "Health Education")
55	(MM "Patient Education")
56	(MM "Pamphlets")
57	(MM "Posters")
58	(MM "Audiovisuals")
59	(MM "Medical Illustration")
60	(MM "Computers, Hand-Held+")
61	(MM "Decision Support Systems, Clinical")
62	(MM "Internet")
63	(MM "Internet-Based Intervention")
64	(MM "Social Media")
65	(MM "Social Networking")
66	(MM "Mobile Applications")
67	(MM "Blogs")
68	(MM "Email")
69	(MM "Cellular Phone+")
70	(MM "Telephone Information Services")
71	(MM "Telephone")
72	(MM "Teaching Materials")
73	TI ((inform* or educat* or advice or support* or guid*) N4 (access* or dissem* or model* or need* or program* or provid* or provision or requir* or shar* or service* or seek* or network* or centre* or center*))
74	TI ((medical or health or electronic or virtual) N4 (inform* or educat* or support* or learn* or guid*))
75	TI (app or apps or blog* or booklet* or brochure* or dvd* or ehealth* or e-health* or elearn* or e-learn* or email* or e-mail* or facebook or facetime or face time or forum* or handout* or hand-out* or helpline* or hotline* or internet* or ipad* or iphone* or leaflet* or myspace or online or magazine* or mobile phone* or newsletter* or online or pamphlet* or palm pilot* or personal digital assistant* or pocket pc* or podcast* or poster? or skype* or smartphone* or smart phone* or social media or social network* or sms or text messag* or twitter or tweet* or video* or web* or wiki* or written or youtube*)
76	TI (mobile* N2 app*)
77	(MM "Therapy, Computer Assisted")
78	(MM "Telemedicine")
79	(MM "Diet Therapy")
80	(MM "Behavior Therapy")
81	(MM "Empowerment")
82	(MM "Health Behavior")
83	(MM "Attitude to Health+")
84	TI ((behavio* or diet* or nutrition*) N2 (therap* or intervention* or modif* or change* or treat* or train* or support* or strateg* or program* or educat*))
85	TI (health* N2 (behavio* or belief*))
86	TI role model*
87	(MM "Access to Healthy Foods")
88	(MM "Food Assistance")
89	(MM "Nutrition Services")
90	(MM "Food Security")
91	(MM "Support, Social+")
92	(MM "Social Welfare")
93	(MM "Child Welfare")

#	Searches
94	TI ((government* or federal or welfare or aid* or social security or relief) N2 (advice or guid* or support* or sponsor* or service* or grant* or scheme* or program* or provide* or provision* or assist* or gift* or handout* or donat* or voucher* or subsid*))
95	TI ((food* or nutrition*) N2 (aid* or program* or assist* or stamp* or supplement* or bank* or package* or secur*))
96	TI ((social* or communit*) N2 (support* or intervention*))
97	S45 OR S46 OR S47 OR S48 OR S49 OR S50 OR S51 OR S52 OR S53 OR S54 OR S55 OR S56 OR S57 OR S58 OR S59 OR S60 OR S61 OR S62 OR S63 OR S64 OR S65 OR S66 OR S67 OR S68 OR S69 OR S70 OR S71 OR S72 OR S73 OR S74 OR S75 OR S76 OR S77 OR S78 OR S79 OR S80 OR S81 OR S82 OR S83 OR S84 OR S85 OR S86 OR S87 OR S88 OR S89 OR S90 OR S91 OR S92 OR S93 OR S94 OR S95 OR S96
98	S42 AND S97 Limiters - English Language; Exclude MEDLINE records; Human; Geographic Subset: Australia & New Zealand, Canada, Continental Europe, Europe, UK & Ireland, USA
99	PT (anecdote or audiovisual or bibliography or biography or book or book review or brief item or cartoon or commentary or computer program or editorial or games or glossary or historical material or interview or letter or listservs or masters thesis or obituary or pamphlet or pamphlet chapter or pictorial or poetry or proceedings or "questions and answers" or response or software or teaching materials or website)
100	S98 NOT S99
101	S100 Limiters - Publication Type: Randomized Controlled Trial, Systematic Review
102	(MH "Nonexperimental Studies+") OR (MH "Observational methods") OR (MH "Epidemiological Research") OR (MH "Case Control Studies+") OR (MH "Prospective Studies+") OR (MH "Cross Sectional Studies") OR (MH "Controlled Before-After Studies") OR (MH "Historically Controlled Study") OR (MH "Interrupted Time Series Analysis")
103	TI case control* OR AB case control*
104	TI case series OR AB case series
105	TI ((cohort N1 (study or studies))) OR AB ((cohort N1 (study or studies)))
106	TI cohort analy* OR AB cohort analy*
107	TI ((follow up N1 (study or studies))) OR AB ((follow up N1 (study or studies)))
108	TI ((observational N1 (study or studies))) OR AB ((observational N1 (study or studies)))
109	TI longitudinal OR AB longitudinal
110	TI prospective OR AB prospective
111	TI retrospective OR AB retrospective
112	TI cross sectional OR AB cross sectional
113	S102 OR S103 OR S104 OR S105 OR S106 OR S107 OR S108 OR S109 OR S110 OR S111 OR S112
114	S100 AND S113
115	S114 NOT S101

Database: Epistemonikos

Date of last search: 21/11/2022

Search 1:

#	Searches
1	Title/Abstract: (famil* OR father* OR husband* OR mother* OR partner* OR spous* OR maternal* OR parent* OR paternal* OR grandparent* OR "care giver" OR "care givers" OR caregiver* OR guardian* OR child* OR baby OR babies OR boy* OR girl* OR infan* OR juvenile* OR kid* OR kindergar* OR minors OR pediatric* OR paediatric* OR preschool* OR schoolchild* OR "school age" OR "school aged" OR toddler*)
2	Title/Abstract: (((complementary OR supplement* OR introduc*) AND (feed* or food*)) OR "solid food" OR solids OR wean*)
3	Title: (inform* OR educat* OR support* OR learn* OR guid* OR advice OR government* OR behavio* OR therap* OR intervention* OR modif* OR change* OR treat* OR train* OR support* OR strateg* OR program* OR support* OR communicat* OR aid* OR assist* OR "food stamp" OR "food supplement" OR "food bank" OR "food package" OR "food security")
4	1 AND 2 AND 3

#	Searches
5	Filter - Publication Type - Systematic Review

Search 2:

#	Searches
1	Title/Abstract: (famil* OR father* OR husband* OR mother* OR partner* OR spous* OR maternal* OR parent* OR paternal* OR grandparent* OR "care giver" OR "care givers" OR caregiver* OR guardian* OR child* OR baby OR babies OR boy* OR girl* OR infan* OR juvenile* OR kid* OR kindergar* OR minors OR pediatric* OR paediatric* OR preschool* OR schoolchild* OR "school age" OR "school aged" OR toddler*)
2	Title: (((food* OR feed* OR diet* OR nutrition* OR nutritive OR feed* OR eating) AND (habit* OR behavio* OR attitude* OR belief* OR practice*)) OR ((nutrition* OR nutrient* OR micronutrient* OR "micro-nutrient" OR "micro-nutrients" OR alimentary OR diet* OR energy OR calorie* OR fruit* OR vegetable*) AND (intake OR consum* OR requirement* OR value*)) OR ((health* OR balance* OR nutrition*) AND (food* OR eat* OR diet*)) OR salt* OR sugar* OR sodium OR soda* OR candy OR chocolate* OR sweet* OR confection* OR ((soft OR Fizzy) AND (drink* OR beverage*)))
3	Title: (inform* OR educat* OR support* OR learn* OR guid* OR advice OR government* OR behavio* OR therap* OR intervention* OR modif* OR change* OR treat* OR train* OR support* OR strateg* OR program* OR support* OR communicat* OR aid* OR assist* OR "food stamp" OR "food supplement" OR "food bank" OR "food package" OR "food security")
4	1 AND 2 AND 3
5	Filter - Publication Type - Systematic Review

Economic Searches**Database: MEDLINE****Date of last search: 21/11/2022**

#	Searches
1	exp Parents/
2	family relations/ or exp maternal behavior/ or exp parent-child relations/ or parenting/ or paternal behavior/ or Infant Care/
3	(famil* or father* or husband* or mother* or partner* or spous* or maternal* or parent* or paternal* or grandparent* or care giver* or caregiver* or guardian*).ti,ab.
4	exp Child/ or exp Infant/ or Minors/ or exp Pediatrics/ or pediatric nursing/
5	(child* or baby or babies or boy? or girl? or infan* or juvenile? or kid? or kindergar* or minors or p?ediatric* or preschool* or schoolchild* or school age? or toddler*).ti,ab.
6	(child* or baby or babies or infan* or juvenile? or kindergar* or p?ediatric* or schoolchild* or school age?).jw,nw.
7	or/1-6
8	Weaning/ or Infant Food/
9	Child Nutritional Physiological Phenomena/ or Maternal Nutritional Physiological Phenomena/ or Infant Nutritional Physiological Phenomena/
10	((complementary or supplement* or introduc*) adj2 (feed* or food*)).ti,ab.
11	((solid or baby or soft or finger or mash* or puree* or infant*) adj2 (food* or fruit* or veg*)) or solids or babyfood*).ti,ab.
12	wean*.ti,ab.
13	or/8-12
14	Diet/ or Diet, Healthy/
15	Feeding Behavior/
16	Nutritive Value/ or Nutritional Requirements/ or Energy Intake/
17	fruit/ or vegetables/
18	((food* or feed* or diet* or nutrition* or nutritive or feed* or eating) adj4 (habit* or behavio* or attitude* or belief* or practice*)).ti,ab.

#	Searches
19	((nutrition* or nutrient* or micronutrient* or micro-nutrient* or alimentary or diet* or energy or calorie* or fruit? or vegetable?) adj4 (intake or consum* or requirement* or value*)).ti,ab.
20	((health* or balance* or nutrition*) adj4 (food* or eat* or diet*)).ti,ab.
21	family food*.ti,ab.
22	sodium, dietary/ or sodium chloride, dietary/
23	artificially sweetened beverages/ or sugar-sweetened beverages/ or carbonated beverages/
24	((salt* or sugar* or sodium) adj2 (intake or consum*)) or soda* or candy or chocolate* or sweet* or confection*).ti,ab.
25	((soft or fizzy or sugar*) adj1 (drink* or beverage*)).ti,ab.
26	or/14-25
27	13 or 26
28	7 and 27
29	*Access to Information/ or *Information Centers/ or *Information Services/ or *Information Dissemination/ or *Information Seeking Behavior/ or *Communication/ or *Communications Media/ or *Consumer Health Information/ or exp *Health Information Management/ or *Health Communication/ or *Health Promotion/ or *Health Education/ or exp *Patient Education as Topic/ or *Patient Education Handout/ or *Pamphlets/ or *Posters as topic/ or *Audiovisual aids/ or *Books, illustrated/ or *Medical illustration/ or *Computers, Handheld/ or *Decision Support Systems, Clinical/ or *Internet/ or *Internet-Based Intervention/ or *Social Media/ or *Social Networking/ or *Mobile Applications/ or *Blogging/ or *Electronic Mail/ or exp *Cell phone/ or *Hotlines/ or *Telephone/ or *Teaching materials/
30	((inform* or educat* or advice or support* or guid*) adj4 (access* or dissem* or model* or need* or program* or provid* or provision or requir* or shar* or service* or seek* or network* or centre* or center*)).ti.
31	((medical or health or electronic or virtual) adj4 (inform* or educat* or support* or learn* or guid*)).ti.
32	(app or apps or blog* or booklet* or brochure* or dvd* or ehealth* or e-health* or elearn* or e-learn* or email* or e-mail* or facebook or facetime or face time or forum* or handout* or hand-out* or helpline* or hotline* or internet* or ipad* or iphone* or leaflet* or myspace or online or magazine* or mobile phone* or newsletter* or online or pamphlet* or palm pilot* or personal digital assistant* or pocket pc* or podcast* or poster? or skype* or smartphone* or smart phone* or social media or social network* or sms or text messag* or twitter or tweet* or video* or web* or wiki* or written or youtube*).ti.
33	(mobile* adj2 app*).ti.
34	*Therapy, Computer-Assisted/ or *Telemedicine/
35	*Diet Therapy/ or *Behavior Therapy/ or *Empowerment/
36	*health behavior/ or *health knowledge, attitudes, practice/
37	((behavio* or diet* or nutrition*) adj2 (therap* or intervention* or modif* or change* or treat* or train* or support* or strateg* or program* or educat*)).ti.
38	(health* adj2 (behavio* or belief*)).ti.
39	role model*.ti.
40	*Access to Healthy Foods/ or *Food Assistance/ or *Dietary Services/ or *Food Security/
41	exp *Social Support/
42	*social welfare/ or *child welfare/ or *infant welfare/
43	((government* or federal or welfare or aid* or social security or relief) adj2 (advice or guid* or support* or sponsor* or service* or grant* or scheme* or program* or provide* or provision* or assist* or gift* or handout* or donat* or voucher* or subsid*)).ti.
44	((food* or nutrition*) adj2 (aid* or program* or assist* or stamp* or supplement* or bank* or package* or secur*)).ti.
45	((social* or communit*) adj2 (support* or intervention*)).ti.
46	or/29-45
47	28 and 46
48	letter/
49	editorial/
50	news/
51	exp historical article/
52	Anecdotes as topic/
53	comment/
54	case reports/
55	(letter or comment*).ti.

#	Searches
56	or/48-55
57	randomized controlled trial/ or random*.ti,ab.
58	56 not 57
59	animals/ not humans/
60	exp Animals, Laboratory/
61	exp Animal Experimentation/
62	exp Models, Animal/
63	exp Rodentia/
64	(rat or rats or rodent* or mouse or mice).ti.
65	or/58-64
66	47 not 65
67	limit 66 to English language
68	Economics/
69	Value of life/
70	exp "Costs and Cost Analysis"/
71	exp Economics, Hospital/
72	exp Economics, Medical/
73	exp Resource Allocation/
74	Economics, Nursing/
75	Economics, Pharmaceutical/
76	exp "Fees and Charges"/
77	exp Budgets/
78	budget*.ti,ab.
79	cost*.ti,ab.
80	(economic* or pharmaco?economic*).ti,ab.
81	(price* or pricing*).ti,ab.
82	(financ* or fee or fees or expenditure* or saving*).ti,ab.
83	(value adj2 (money or monetary)).ti,ab.
84	resourc* allocat*.ti,ab.
85	(fund or funds or funding* or funded).ti,ab.
86	(ration or rations or rationing* or rationed).ti,ab.
87	ec.fs.
88	or/68-87
89	exp models, economic/
90	*Models, Theoretical/
91	*Models, Organizational/
92	markov chains/
93	monte carlo method/
94	exp Decision Theory/
95	(markov* or monte carlo).ti,ab.
96	econom* model*.ti,ab.
97	(decision* adj2 (tree* or analy* or model*)).ti,ab.
98	or/89-97
99	quality-adjusted life years/
100	sickness impact profile/
101	(quality adj2 (wellbeing or well being)).ti,ab.
102	sickness impact profile.ti,ab.
103	disability adjusted life.ti,ab.
104	(qal* or qtime* or qwb* or daly*).ti,ab.

#	Searches
105	(euroqol* or eq5d* or eq 5*).ti,ab.
106	(qol* or hql* or hqol* or h qol* or hrqol* or hr qol*).ti,ab.
107	(health utility* or utility score* or disutilit* or utility value*).ti,ab.
108	(hui or hui1 or hui2 or hui3).ti,ab.
109	(health* year* equivalent* or hye or hyes).ti,ab.
110	discrete choice*.ti,ab.
111	rosseter.ti,ab.
112	(willingness to pay or time tradeoff or time trade off or tto or standard gamble*).ti,ab.
113	(sf36* or sf 36* or short form 36* or shortform 36* or shortform36*).ti,ab.
114	(sf20 or sf 20 or short form 20 or shortform 20 or shortform20).ti,ab.
115	(sf12* or sf 12* or short form 12* or shortform 12* or shortform12*).ti,ab.
116	(sf8* or sf 8* or short form 8* or shortform 8* or shortform8*).ti,ab.
117	(sf6* or sf 6* or short form 6* or shortform 6* or shortform6*).ti,ab.
118	or/99-117
119	67 and (88 or 98 or 118)

Database: Embase

Date of last search: 21/11/2022

#	Searches
1	exp parent/
2	family relation/ or exp child parent relation/ or infant care/
3	(famil* or father* or husband* or mother* or partner* or spous* or maternal* or parent* or paternal* or grandparent* or care giver* or caregiver* or guardian*).ti,ab.
4	child/ or exp infant/ or preschool child/ or school child/ or toddler/ or "minor (person)"/
5	pediatrics/ or child psychiatry/ or pediatric emergency medicine/ or pediatric nursing/
6	(child* or baby or babies or boy? or girl? or infan* or juvenile? or kid? or kindergar* or minors or p?ediatric* or preschool* or schoolchild* or school age? or toddler*).ti,ab.
7	(child* or baby or babies or infan* or juvenile? or kindergar* or p?ediatric* or schoolchild* or school age?).jw.
8	or/1-7
9	weaning/ or infant feeding/ or baby food/
10	complementary feeding/
11	child nutrition/ or maternal nutrition/ or infant nutrition/
12	((complementary or supplement* or introduc*) adj2 (feed* or food*)).ti,ab.
13	((solid or baby or soft or finger or mash* or puree* or infant*) adj2 (food* or fruit* or veg*)) or solids or babyfood*).ti,ab.
14	wean*.ti,ab.
15	or/9-14
16	diet/ or healthy diet/
17	feeding behavior/ or eating habit/ or dietary pattern/
18	nutritional value/
19	nutritional requirement/
20	food intake/ or energy consumption/
21	dietary intake/ or caloric intake/ or exp nutrient intake/
22	fruit/ or vegetable/
23	vegetable consumption/
24	((food* or feed* or diet* or nutrition* or nutritive or feed* or eating) adj4 (habit* or behavior* or attitude* or belief* or practice*)).ti,ab.
25	((nutrition* or nutrient* or micronutrient* or micro-nutrient* or alimentary or diet* or energy or calorie* or fruit? or vegetable?) adj4 (intake or consum* or requirement* or value*)).ti,ab.

#	Searches
26	((health* or balance* or nutrition*) adj4 (food* or eat* or diet*)).ti,ab.
27	family food*.ti,ab.
28	sodium intake/ or salt intake/ or sodium restriction/ or high sodium intake/
29	artificially sweetened beverage/ or sweetened beverage/ or sugar-sweetened beverage/ or sweetening agent/
30	((salt* or sugar* or sodium) adj2 (intake or consum*)) or soda* or candy or chocolate* or sweet* or confection*).ti,ab.
31	((soft or fizzy or sugar*) adj1 (drink* or beverage*)).ti,ab.
32	or/16-31
33	15 or 32
34	8 and 33
35	*access to information/ or *information/ or *information center/ or *information service/ or *information dissemination/ or *information seeking/ or *help seeking behavior/ or *interpersonal communication/ or *communication/ or *consumer health information/ or *medical information system/ or *health promotion/ or *health education/ or *education program/ or *patient education/ or *patient information/ or *medical information/ or *publication/ or *visual information/ or *personal digital assistant/ or exp *decision support system/ or *patient decision making/ or *internet/ or *web-based intervention/ or *web browser/ or *social media/ or *blogging/ or *social network/ or *mobile application/ or *e-mail/ or *email support/ or *text messaging/ or *text messaging support/ or *hotline/ or *telephone/ or *telephone support/ or exp *mobile phone/ or *teleconsultation/ or exp *teaching/
36	((inform* or educat* or advice or support* or guid*) adj4 (access* or dissem* or model* or need* or program* or provid* or provision or requir* or shar* or service* or seek* or network* or centre* or center*)).ti.
37	((medical or health or electronic or virtual) adj4 (inform* or educat* or support* or learn* or guid*)).ti.
38	(app or apps or blog* or booklet* or brochure* or dvd* or ehealth* or e-health* or elearn* or e-learn* or email* or e-mail* or facebook or facetime or face time or forum* or handout* or hand-out* or helpline* or hotline* or internet* or ipad* or iphone* or leaflet* or myspace or online or magazine* or mobile phone* or newsletter* or online or pamphlet* or palm pilot* or personal digital assistant* or pocket pc* or podcast* or poster? or skype* or smartphone* or smart phone* or social media or social network* or sms or text messag* or twitter or tweet* or video* or web* or wiki* or written or youtube*).ti.
39	(mobile* adj2 app*).ti.
40	*computer assisted therapy/ or *telehealth/ or *telemedicine/
41	*diet therapy/ or *behavior therapy/ or *empowerment/ or *lifestyle modification/
42	*health behavior/ or *attitude to health/
43	((behavio* or diet* or nutrition*) adj2 (therap* or intervention* or modif* or change* or treat* or train* or support* or strateg* or program* or educat*)).ti.
44	(health* adj2 (behavio* or belief*)).ti.
45	role model*.ti.
46	*healthy food access/ or *food assistance/ or *dietary service/ or *food security/
47	exp *social support/
48	*social welfare/ or *child welfare/ or *infant welfare/
49	((government* or federal or welfare or aid* or social security or relief) adj2 (advice or guid* or support* or sponsor* or service* or grant* or scheme* or program* or provide* or provision* or assist* or gift* or handout* or donat* or voucher* or subsid*)).ti.
50	((food* or nutrition*) adj2 (aid* or program* or assist* or stamp* or supplement* or bank* or package* or secur*)).ti.
51	((social* or communit*) adj2 (support* or intervention*)).ti.
52	or/35-51
53	34 and 52
54	letter.pt. or letter/
55	note.pt.
56	editorial.pt.
57	case report/ or case study/
58	(letter or comment*).ti.
59	or/54-58
60	randomized controlled trial/ or random*.ti,ab.
61	59 not 60
62	animal/ not human/

#	Searches
63	nonhuman/
64	exp Animal Experiment/
65	exp Experimental Animal/
66	animal model/
67	exp Rodent/
68	(rat or rats or rodent* or mouse or mice).ti.
69	or/61-68
70	53 not 69
71	limit 70 to English language
72	(conference abstract* or conference review or conference paper or conference proceeding).db,pt,su.
73	71 not 72
74	health economics/
75	exp economic evaluation/
76	exp health care cost/
77	exp fee/
78	budget/
79	funding/
80	resource allocation/
81	budget*.ti,ab.
82	cost*.ti,ab.
83	(economic* or pharmaco?economic*).ti,ab.
84	(price* or pricing*).ti,ab.
85	(financ* or fee or fees or expenditure* or saving*).ti,ab.
86	(value adj2 (money or monetary)).ti,ab.
87	resourc* allocat*.ti,ab.
88	(fund or funds or funding* or funded).ti,ab.
89	(ration or rations or rationing* or rationed).ti,ab.
90	or/74-89
91	statistical model/
92	exp economic aspect/
93	91 and 92
94	*theoretical model/
95	*nonbiological model/
96	stochastic model/
97	decision theory/
98	decision tree/
99	monte carlo method/
100	(markov* or monte carlo).ti,ab.
101	econom* model*.ti,ab.
102	(decision* adj2 (tree* or analy* or model*)).ti,ab.
103	or/93-102
104	quality adjusted life year/
105	"quality of life index"/
106	short form 12/ or short form 20/ or short form 36/ or short form 8/
107	sickness impact profile/
108	(quality adj2 (wellbeing or well being)).ti,ab.
109	sickness impact profile.ti,ab.
110	disability adjusted life.ti,ab.
111	(qal* or qtime* or qwb* or daly*).ti,ab.

#	Searches
112	(euroqol* or eq5d* or eq 5*).ti,ab.
113	(qol* or hql* or hqol* or h qol* or hrqol* or hr qol*).ti,ab.
114	(health utility* or utility score* or disutilit* or utility value*).ti,ab.
115	(hui or hui1 or hui2 or hui3).ti,ab.
116	(health* year* equivalent* or hye or hyes).ti,ab.
117	discrete choice*.ti,ab.
118	rosser.ti,ab.
119	(willingness to pay or time tradeoff or time trade off or tto or standard gamble*).ti,ab.
120	(sf36* or sf 36* or short form 36* or shortform 36* or shortform36*).ti,ab.
121	(sf20 or sf 20 or short form 20 or shortform 20 or shortform20).ti,ab.
122	(sf12* or sf 12* or short form 12* or shortform 12* or shortform12*).ti,ab.
123	(sf8* or sf 8* or short form 8* or shortform 8* or shortform8*).ti,ab.
124	(sf6* or sf 6* or short form 6* or shortform 6* or shortform6*).ti,ab.
125	or/104-124
126	73 and (90 or 103 or 125)

Database: INAHTA International HTA Database

Date of last search: 21/11/222

1	"Parents"[mhe]
2	"family relations"[mh]
3	"Maternal Behavior"[mhe]
4	"Parent-Child Relations"[mhe]
5	"Parenting"[mh]
6	"Paternal Behavior"[mh]
7	"Infant Care"[mh]
8	(famil* or father* or husband* or mother* or partner* or spous* or maternal* or parent* or paternal* or grandparent* or care giver* or caregiver* or guardian*) [Title] OR (famil* or father* or husband* or mother* or partner* or spous* or maternal* or parent* or paternal* or grandparent* or care giver* or caregiver* or guardian*) [Abs]
9	"Child"[mhe]
10	"Infant"[mhe]
11	"Minors"[mh]
12	"Pediatrics"[mhe]
13	"Pediatric Nursing"[mh]
14	(child* or baby or babies or boy or boys or girl or girls or infan* or juvenile* or kid or kids or kindergar* or minors or paediatric* or pediatric* or preschool* or schoolchild* or school age* or toddler*) [Title] OR (child* or baby or babies or boy or boys or girl or girls or infan* or juvenile* or kid or kids or kindergar* or minors or paediatric* or pediatric* or preschool* or schoolchild* or school age* or toddler*) [Abs]
15	#14 OR #13 OR #12 OR #11 OR #10 OR #9 OR #8 OR #7 OR #6 OR #5 OR #4 OR #3 OR #2 OR #1
16	"Weaning"[mh]
17	"Infant Food"[mh]
18	"Child Nutritional Physiological Phenomena"[mh]
19	"Maternal Nutritional Physiological Phenomena"[mh]
20	"Infant Nutritional Physiological Phenomena"[mh]
21	((complementary or supplement* or introduc*) AND (feed* or food*)) [Title] OR ((complementary or supplement* or introduc*) AND (feed* or food*)) [Abs]
22	((((solid or baby or soft or finger or mash* or puree* or infant*) AND (food* or fruit* or veg*)) or solids or babyfood*) [Title] OR (((solid or baby or soft or finger or mash* or puree* or infant*) AND (food* or fruit* or veg*)) or solids or babyfood*) [Abs]
23	wean* [Title] OR wean* [Abs]

24	#23 OR #22 OR #21 OR #20 OR #19 OR #18 OR #17 OR #16
25	"Diet"[mh]
26	"Diet, Healthy"[mh]
27	"Feeding Behavior"[mh]
28	"Nutritive Value"[mh]
29	"Nutritional Requirements"[mh]
30	"Energy Intake"[mh]
31	"Fruit"[mh]
32	"Vegetables"[mh]
33	((food* or feed* or diet* or nutrition* or nutritive or feed* or eating) AND (habit* or behavior* or attitude* or belief* or practice*)) [Title] OR ((food* or feed* or diet* or nutrition* or nutritive or feed* or eating) AND (habit* or behavior* or attitude* or belief* or practice*)) [Abs]
34	((nutrition* or nutrient* or micronutrient* or "micro-nutrient" or "micro-nutrients" or micro nutrient* or alimentary or diet* or energy or calorie* or fruit* or vegetable*) AND (intake or consum* or requirement* or value*)) [Title] OR ((nutrition* or nutrient* or micronutrient* or "micro-nutrient" or "micro-nutrients" or micro nutrient* or alimentary or diet* or energy or calorie* or fruit* or vegetable*) AND (intake or consum* or requirement* or value*)) [Abs]
35	((health* or balance* or nutrition*) AND (food* or eat* or diet*)) [Title] OR ((health* or balance* or nutrition*) AND (food* or eat* or diet*)) [Abs]
36	(family food*) [Title] OR (family food*) [Abs]
37	"sodium, dietary"[mh]
38	"sodium chloride, dietary"[mh]
39	"artificially sweetened beverages"[mh]
40	"sugar-sweetened beverages"[mh]
41	"Carbonated beverages"[mh]
42	((salt* or sugar* or sodium) AND (intake or consum*)) or soda* or candy or chocolate* or sweet* or confection*) [Title] OR ((salt* or sugar* or sodium) AND (intake or consum*)) or soda* or candy or chocolate* or sweet* or confection*) [Abs]
43	((soft or fizzy or sugar*) AND (drink* or beverage*)) [Title] OR ((soft or fizzy or sugar*) AND (drink* or beverage*)) [Abs]
44	#43 OR #42 OR #41 OR #40 OR #39 OR #38 OR #37 OR #36 OR #35 OR #34 OR #33 OR #32 OR #31 OR #30 OR #29 OR #28 OR #27 OR #26 OR #25
45	#44 OR #24
46	#45 AND #15
47	Limit to English Language

Database: CRD HTA (last updated 31st March 2018)

Date of last search: 21/11/2022

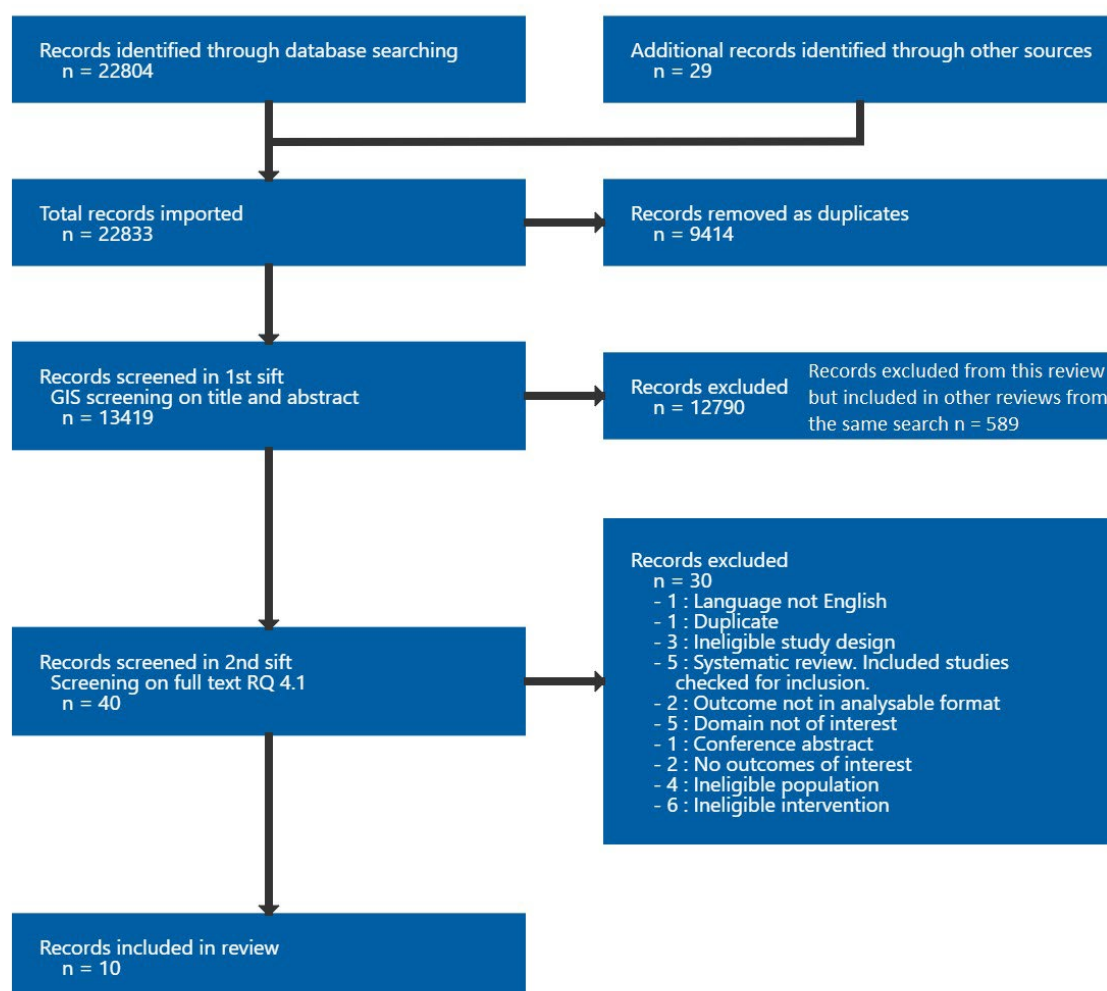
#	Searches
1	MeSH DESCRIPTOR Parents EXPLODE ALL TREES
2	MeSH DESCRIPTOR family relations
3	MeSH DESCRIPTOR maternal behavior EXPLODE ALL TREES
4	MeSH DESCRIPTOR Parent-Child Relations EXPLODE ALL TREES
5	MeSH DESCRIPTOR parenting
6	MeSH DESCRIPTOR paternal behavior
7	MeSH DESCRIPTOR infant care
8	(famil* or father* or husband* or mother* or partner* or spous* or maternal* or parent* or paternal* or grandparent* or care giver* or caregiver* or guardian*)
9	MeSH DESCRIPTOR Child EXPLODE ALL TREES
10	MeSH DESCRIPTOR Infant EXPLODE ALL TREES
11	MeSH DESCRIPTOR Minors
12	MeSH DESCRIPTOR Pediatrics EXPLODE ALL TREES

#	Searches
13	MeSH DESCRIPTOR Pediatric nursing
14	(child* or baby or babies or boy or boys or girl or girls or infan* or juvenile* or kid or kids or kindergar* or minors or paediatric* or pediatric* or preschool* or schoolchild* or school age* or toddler*)
15	#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14
16	MeSH DESCRIPTOR Weaning
17	MeSH DESCRIPTOR Infant food
18	MeSH DESCRIPTOR Child Nutritional Physiological Phenomena
19	MeSH DESCRIPTOR Maternal Nutritional Physiological Phenomena
20	MeSH DESCRIPTOR Infant Nutritional Physiological Phenomena
21	((complementary or supplement* or introduc*) NEAR2 (feed* or food*))
22	((solid or baby or soft or finger or mash* or puree* or infant*) NEAR2 (food* or fruit* or veg*)) or solids or babyfood*)
23	(wean*)
24	#16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23
25	MeSH DESCRIPTOR Diet
26	MeSH DESCRIPTOR Diet, Healthy
27	MeSH DESCRIPTOR Feeding Behavior
28	MeSH DESCRIPTOR Nutritive Value
29	MeSH DESCRIPTOR Nutritional Requirements
30	MeSH DESCRIPTOR Energy Intake
31	MeSH DESCRIPTOR Fruit
32	MeSH DESCRIPTOR Vegetables
33	((food* or feed* or diet* or nutrition* or nutritive or feed* or eating) NEAR4 (habit* or behavior* or attitude* or belief* or practice*))
34	((nutrition* or nutrient* or micronutrient* or micro-nutrient* or alimentary or diet* or energy or calorie* or fruit or fruits or vegetable or vegetables) NEAR4 (intake or consum* or requirement* or value*))
35	((health* or balance* or nutrition*) NEAR4 (food* or eat* or diet*))
36	(family food*)
37	(MeSH DESCRIPTOR Sodium, Dietary)
38	(MeSH DESCRIPTOR Sodium Chloride, Dietary)
39	(MeSH DESCRIPTOR Artificially Sweetened Beverages)
40	(MeSH DESCRIPTOR Sugar-Sweetened Beverages)
41	(MeSH DESCRIPTOR Carbonated Beverages)
42	((((salt* or sugar* or sodium) NEAR2 (intake or consum*)) or soda* or candy or chocolate* or sweet* or confection*))
43	((soft or fizzy or sugar*) NEAR1 (drink* or beverage*))
44	#25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39 OR #40 OR #41 OR #42 OR #43
45	#24 OR #44
46	(#15 AND #45) IN HTA

Appendix C Effectiveness evidence study selection

Study selection for: What interventions are effective to promote appropriate and timely introduction to solids (complementary feeding) for babies from 6 to 12 months (in line with government advice)?

Figure 1: Study selection flow chart



Appendix D Evidence tables

Evidence tables for review question: What interventions are effective to promote appropriate and timely introduction to solids (complementary feeding) for babies from 6 to 12 months (in line with government advice)?

Table 4: Evidence tables

Cameron, 2015

Bibliographic Reference Cameron, SL; Heath, AL; Gray, AR; Churcher, B; Davies, RS; Newlands, A; Galland, BC; Sayers, RM; Lawrence, JA; Taylor, BJ; et, al.; Lactation Consultant Support from Late Pregnancy with an Educational Intervention at 4 Months of Age Delays the Introduction of Complementary Foods in a Randomized Controlled Trial; Journal of nutrition; 2015; vol. 145 (no. 7); 1481-1490

Study details

Country/ies where study was carried out	New Zealand
Study type	Randomised controlled trial (RCT)
Study dates	May 2009 to November 2010
Inclusion criteria	Mothers who between May 2009 and November 2010: <ul style="list-style-type: none"> • had booked into the maternity hospital serving the city of Dunedin, New Zealand or planned to give birth at home • did not opt out of the study
Exclusion criteria	Exclusion criteria applied before birth were: <ul style="list-style-type: none"> • home address outside the greater Dunedin area, • planning to move away from Dunedin in the next 2 y, • booked into the maternity centre after 34-wk gestation, • unable to communicate in English or Te Reo Maori

	<p>Exclusion criteria applied after birth were:</p> <ul style="list-style-type: none">• identification of a congenital abnormality that was likely to affect feeding or growth,• the infant being born before 36.5-wk gestation.
Patient characteristics	<p>Maternal age (mean ± SD)</p> <p>Total = 31.6 ± 5.2</p> <p>Intervention (FAB) = 32.1 ± 5.3</p> <p>Control = 31.5 ± 5.0</p> <p>Gestational age at recruitment</p> <p>28 to 30 weeks</p> <p>Maternal level of education, n(%)</p> <p><i>Year 11 or below</i></p> <p>Total = 2 62 (7.8)</p> <p>Intervention = 17 (8.4)</p> <p>Control = 14 (6.8)</p> <p><i>Year 12 or 13</i></p>

Total = 131 (16.5)

Intervention = 23 (11.3)

Control = 41 (19.9)

Postsecondary qualification

Total = 116 (14.6)

Intervention = 27 (13.3)

Control = 29 (14.1)

University degree or higher

Total = 485 (61.1)

Intervention = 136 (67.0)

Control = 122 (59.2)

Missing, n

Total = 8

Intervention = 2

Control = 3

Maternal ethnicity***New Zealand European***

Total = 682 (85.0)

Intervention = 176 (85.9)

Control = 177 (84.7)

Maori

Total = 46 (5.7)

Intervention = 9 (4.4)

Control = 15 (7.2)

Pacific Island

Total = 13 (1.6)

Intervention = 3 (1.5)

Control = 2 (1.0)

Asian

Total = 39 (4.9)

Intervention = 9 (4.4)

Control = 9 (4.3)

MELAA (Middle Eastern, Latin American and African)

Total = 8 (1.0)

Intervention = 2 (1.0)

Control = 2 (1.0)

NZDep (New Zealand Deprivation) 2006 score

Least deprived: 1–3

Total = 276 (34.8)

Intervention = 70 (34.5)

Control = 74 (35.9)

Neutral: 4–7

Total = 350 (44.1)

Intervention = 86 (42.4)

Control = 93 (45.2)

Most deprived: 8–10

	<p>Total = 168 (21.2)</p> <p>Intervention = 47 (23.2)</p> <p>Control = 39 (18.9)</p> <p>Missing, n</p> <p>Total = 8</p> <p>Intervention = 2</p> <p>Control = 3</p>
Intervention(s)/control	<p>Intervention: Food, Activity and Breastfeeding (FAB) received standard maternity care and well-child care from a maternity care professional and a well-child provider of their choice in addition to:</p> <ul style="list-style-type: none"> • 3 contacts from a certified lactation consultant; 1 at an antenatal group meeting, and 2 individual visits at 1-wk and 4-mo postpartum • additional contacts if requested by the participant • Information focussed on <ul style="list-style-type: none"> ○ the promotion of breastfeeding (or advice and support if the mother was feeding other milk), although the antenatal group meeting mentioned that “around” 6 months was the best age to introduce complementary foods ○ delaying the introduction of complementary foods at the 4 months visit, including educating parents to recognize signs that their infant was ready to start complementary foods. • 2 educational resources at the 4-month contact, a “traffic light” resource (the primary focus of the session) and the booklet “Babies, Feeding, and Introducing Solid Food,” which outlined how to introduce complementary foods. • standard maternity care and well-child care from a maternity care professional and a well-child provider of their choice

	Control: usual care received standard maternity care and well-child care from a maternity care professional and a well-child provider of their choice only.
Duration of follow-up	27 weeks
	Mothers were asked in the monthly questionnaire that was administered at 3-, 7-, 11-, 15-, 19-, 23-, and 27-week postpartum what the infant had been fed since birth.
Sources of funding	Not industry funded
Sample size	N = 802
	Intervention group (FAB) n = 205
	Control group (Usual care) n = 209
Other information	Additional intervention groups were reported in the study: Intervention group (Sleep) n = 192 focused on the prevention of sleep problems and Intervention group (Combo) n = 196 which received the interventions for both the FAB and the sleep intervention groups but were not considered relevant to this review and have not been extracted/reported.

FAB: food, activity, and breastfeeding; MELAA: Middle Eastern, Latin American and African; NZDep: New Zealand Deprivation; RCT: randomised controlled trial; SD: standard deviation;

Study arms

Food, activity and breastfeeding (FAB) (N = 205)

Control: usual care (N = 209)

Outcomes

Infant feeding outcomes

Outcome	Food, activity and breastfeeding (FAB) vs Control: usual care , , N2 = 201, N1 = 207
Introducing solids at 5 months Odds of waiting until the child was 5 months of age before introducing complementary foods aOR (95% CI) Adjusted for maternal age, parity, education, and ethnicity	1.53 (1.03, 2.29)
Introducing solids at 6 months Odds of waiting until the child was 6 months of age before introducing complementary foods aOR (95% CI) Adjusted for maternal age, parity, education, and ethnicity	1.05 (0.58, 1.93)

aOR: adjusted odds ratio; CI: confidence interval; FAB: food activity, and breastfeeding

Infant feeding outcomes

Outcome	Food, activity and breastfeeding (FAB), , N = 205	Control: usual care , , N = 209
Complementary foods introduced before 5 months (yes) No of events	n = 85 ; % = 42.3	n = 111 ; % = 53.6
Complementary foods introduced before 6 months (yes) No of events	n = 175 ; % = 87.1	n = 181 ; % = 87.4

Critical appraisal

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable
Overall bias and Directness	Risk of bias variation across outcomes	N/A

Fildes, 2015

Bibliographic Reference	Fildes, Alison; Lopes, Carla; Moreira, Pedro; Moschonis, George; Oliveira, Andreia; Mavrogianni, Christina; Manios, Yannis; Beeken, Rebecca; Wardle, Jane; Cooke, Lucy; An exploratory trial of parental advice for increasing vegetable acceptance in infancy; British Journal of Nutrition; 2015; vol. 114 (no. 2); 328-336
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Study details

Country/ies where study was carried out	UK, Greece, and Portugal
Study type	Randomised controlled trial (RCT)
Study dates	February 2011 to July 2012
Inclusion criteria	<ul style="list-style-type: none"> • women in the final trimester of their pregnancy or mothers of infants aged less than 6 months • over 18 years old at recruitment • sufficiently proficient in each country's respective native language to understand the study materials • infant was born after 37 weeks' gestation, without diagnosed feeding problems
Exclusion criteria	Not reported
Patient characteristics	<p>Maternal age (mean \pm SD), years</p> <p>Total = 33.0 \pm 4.7</p> <p>Intervention = 33.2 \pm 4.5</p> <p>Control = 32.7 \pm 4.8</p> <p>Maternal education, n(%)</p> <p><i>Below university</i></p> <p>Total = 37 (26.6)</p> <p>Intervention = 17 (23.9)</p> <p>Control = 20 (29.4)</p>

	<p><i>Undergraduate or above</i></p> <p>Total = 102 (73.4)</p> <p>Intervention = 54 (76.1)</p> <p>Control = 48 (70.6)</p> <p>Geographical variation, n</p> <p>UK = 25</p> <p>Greece = 15</p> <p>Portugal = 28</p>
Intervention(s)/control	<p>Intervention – delivered up to 4 weeks before the introduction of solids consisting:</p> <ol style="list-style-type: none"> Information provided by researcher or health professional relating to: <ul style="list-style-type: none"> the importance of introducing vegetables early in the weaning process the beneficial effects of offering different single vegetables each day the techniques of exposure feeding interpreting infants' facial reactions to food the need for persistence when an infant initially rejects a food. A leaflet reinforcing these messages (standardised across countries) A selection of 5 vegetables to be used as first foods (a small number of commercially available vegetable purees were provided to the mothers with the option to prepare their own) Participants were asked to complete a short questionnaire about their infant's early milk-feeding experiences

	Control consisting usual care (varied between countries) <ol style="list-style-type: none"> 1. No specific guidance or information on weaning with vegetables 2. Participants were asked to complete a short questionnaire about their infant's early milk-feeding experiences
Duration of follow-up	1 month after the introduction of solids (Intervention was up to 4 weeks before the introduction of solids)
Sources of funding	Not industry funded
Sample size	N = 146 Intervention n = 75 Control n = 71

RCT: randomised controlled trial; SD: standard deviation

Study arms

Intervention: Information provision (N = 71)

Control: usual care (N = 68)

Outcomes

Feeding practices – 1 month after introducing solids

Outcome	Intervention: Information provision, , N = 71	Control: usual care, , N = 68
Isolated vegetable as first foods Also reports separately for UK, Greece and Portugal	n = 60 ; % = 84.5	n = 10 ; % = 14.7
No of events		

Outcome	Intervention: Information provision, , N = 71	Control: usual care, , N = 68
Isolated fruits as first foods Also reports separately for UK, Greece and Portugal	n = 0 ; % = 0	n = 7 ; % = 10.3
No of events		
Intake (g) of unfamiliar vegetable puree (grams)	38.91 (33.65)	29.84 (30.12)
Mean (SD)		
Intake of unfamiliar fruit puree (grams)	51.18 (51.76)	64.23 (65.56)
Mean (SD)		

SD: standard deviation

Critical appraisal

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns (Some concerns that intention to treat analysis was not adopted but low risk of a substantial impact to results)
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low

Section	Question	Answer
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns <i>(Researchers who delivered the intervention were the outcome assessors and so were not blinded. Also, mothers self-reported outcomes relevant to this review. However, mothers were unaware of the presence of a second arm to the study so there is no reason to believe that knowledge of the intervention influenced their reporting of outcomes)</i>
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns <i>(Some concerns around the measurement of outcomes and deviations from intended intervention as it relates to assignment of interventions)</i>
Overall bias and Directness	Overall Directness	Directly applicable
Overall bias and Directness	Risk of bias variation across outcomes	N/A

Franco, 2008**Bibliographic Reference**

Franco, S; Theriot, J; Greenwell, A; The influence of early counselling on weaning from a bottle; Community dental health; 2008; vol. 25 (no. 2); 115-118

Study details

Country/ies where study was carried out	USA
Study type	Randomised controlled trial (RCT)
Study dates	September 1999 to June 2000
Inclusion criteria	<ul style="list-style-type: none"> • parents of four-month-old infants attending the clinic for well-child visits between September 1999 and June 2000
Exclusion criteria	None reported
Patient characteristics	Not reported
Intervention(s)/control	<p>Intervention: scripted standardised counselling at 4, 6, 9 and 12 months which included:</p> <ol style="list-style-type: none"> 1. the use of feeding cups by 9 months 2. photographs of early childhood caries 3. the use of a dental model to point out the lingual aspect of upper incisors as early and easily missed sites of ECC <p>Control: brief counselling on:</p> <ol style="list-style-type: none"> 1. the use of a feeding cup at 6 month and bottle weaning at 9 and 12 months 2. No photographs of early childhood caries or dental model shown
Duration of follow-up	Outcome measured between 12 and 24 months of infant's age
Sources of funding	Not industry funded
Sample size	N = 185 (randomised)

	N = 132 (analysed)
	Intervention n = 67
	Control n = 65

RCT: randomised controlled trial

Study arms

Intervention arm: scripted standardized counselling (N = 67)

Control arm: brief counselling (N = 65)

Outcomes

Infant feeding practice at 12 months

Outcome	Intervention arm: scripted standardized counselling , N = 67	Control arm: brief counselling , N = 65
Totally weaned from the bottle at 12 months of age	n = 18 ; % = 27	n = 11 ; % = 17
No of events		

Critical appraisal

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns (No information on randomisation and concealment but no substantial difference in baseline characteristics between groups)
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	High (Intention to treat analysis was not used and number of participants lost to follow-up was substantial which could over/under estimate the results)
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns (Some concerns regarding measurement of outcomes. No information on how outcomes were assessed but likely that parents were required to report on their bottle use practice)
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Some concerns (Analysis does not appear to have followed pre-defined analysis plan to include odds ration for differences observed)
Overall bias and Directness	Risk of bias judgement	High (Serious concerns relating to assignment to intervention and some concerns relating to the randomisation process, measurement of outcome and analysis method)
Overall bias and Directness	Overall Directness	Partially applicable (Outcome (weaning from the bottle) presented in this study is not a direct outcome as listed in the protocol)

Section	Question	Answer
Overall bias and Directness	Risk of bias variation across outcomes	N/A

Johnson, 1993

Bibliographic Reference Johnson, Z.; Howell, F.; Molloy, B. (1993) Community mothers' programme: Randomised controlled trial of non-professional intervention in parenting. British Medical Journal 306(6890): 1449-1452

Study details

Country/ies where study was carried out	Ireland
Study type	Randomised controlled trial (RCT)
Study dates	6 months in 1989
Inclusion criteria	Mothers who were: <ul style="list-style-type: none"> • first time mothers • lived in a defined deprived area
Exclusion criteria	Not reported
Patient characteristics	Mothers age, (mean \pm SD), years Intervention group = 24.1 \pm 4.4 Control group = 23.1 \pm 3.7

	Education
	Age mothers left school, (mean ± SD), years
	Intervention = 15.9 ± 1.4
	Control = 15.7 ± 1.7
	Mothers' employment (n)
	Employed
	Intervention = 37
	Control = 18
	Unemployed
	Intervention = 90
	Control = 87
	Geographical variation- lived in deprived area: (n)
	Intervention = 141

	Control = 121
	Social class: I, II, IIINM (higher class) (n)
	Intervention = 16
	Control = 8
	Social class IIIM, IV, V (lower class) (n)
	Intervention = 110
	Control = 93
	Social class unknown (N)
	Intervention = 1
	Control 4
	Religion and cultural considerations - NR
	Babies or children with disabilities and other physical and mental health conditions - NR
	Babies and children with developmental problems - NR
	Race - NR
Intervention(s)/control	Intervention - a community mother was scheduled to visit once per month until the infant's first birthday. The community mothers were volunteer experienced mothers from the same community as the participants. Educational development,

	<p>language development and cognitive development were included in the intervention via a cartoon (which had been used for a child development programme previously). 24-hour dietary recall was used for measuring outcomes.</p> <p>Control – women received standard support from a public health nurse, as did the Intervention group. The public health nurse visited the mothers at birth, six weeks and at other times as required. Mothers were invited for their infant's primary immunisations and a development assessment. 24-hour dietary recall was used for measuring outcomes.</p> <p>[This fall into category intervention 1 in the protocol].</p> <p>Components of intervention:</p> <ul style="list-style-type: none"> • Component 1: Mode of delivery <ul style="list-style-type: none"> ○ Face-to-face (in person) • Component 2: Intervention aimed at individuals or groups <ul style="list-style-type: none"> ○ Individual based • Component 3: Individualised /tailored interventions or general <ul style="list-style-type: none"> ○ On demand, tailored interventions based on needs • Component 4: Who delivers the intervention <ul style="list-style-type: none"> ○ Community mother – volunteer experienced mothers from the same community • Component 5: Where is the intervention delivered <ul style="list-style-type: none"> ○ During home visits • Component 6: Behaviour change models, techniques and theories <ul style="list-style-type: none"> ○ No theory mentioned
Duration of follow-up	Up to 1 year
Sources of funding	Not industry funded

Sample size	Randomised: N = 262 mother and infant pairs
	Intervention n = 141
	Control n = 121

M: manual; NM: non-manual; NR: not reported; RCT: randomised controlled trial; SD: standard deviation

Study arms

Intervention: (N = 141)

Control: (N = 121)

Outcomes

Infant feeding practices (via 24-hour dietary recall)

Outcome	Intervention: , , N = 141	Control: , , N = 121
Appropriate vegetables intake at 12 months	n = 112 ; % = 79	n = 65 ; % = 54
No of events		
Appropriate fruit intake at 12 months	n = 98 ; % = 70	n = 41 ; % = 34
No of events		
Appropriate milk intake at 12 months	n = 119 ; % = 84	n = 76 ; % = 62
No of events		

Outcome	Intervention: , , N = 141	Control: , , N = 121
Length of time kept on formula feeds	38.1 (13.5)	28.0 (15.2)
Mean (SD)		
Gave child cow's milk before 26 weeks	n = 24 ; % = 17	n = 49 ; % = 40
No of events		

SD: standard deviation

Critical appraisal

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns (A random sequence was generated via a random numbers table and allocation concealment by sealed envelopes. Baseline characteristics were similar between groups except for employment.)
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns (This study was not blinded. This may impact results as patients may act differently between groups. There were no deviations from the intended intervention and an appropriate analysis was used.)
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Some concerns (A per-protocol analysis was done. 14/141 in the Intervention group and 16/121 in the Control group were lost to follow-up.)
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns (Nutrition was based on self-reported outcomes. Also, it is unclear if nutritionists were blinded and this may have impacted their categorising mothers' responses into appropriate and not appropriate.)

Section	Question	Answer
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low <i>(It is unlikely results were selected from multiple outcome measures or analyses. This is because the outcomes were measured at baseline as well as follow-up.)</i>
Overall bias and Directness	Risk of bias judgement	High <i>(Some concerns around blinding, measurement bias and attrition bias.)</i>
Overall bias and Directness	Overall Directness	Directly applicable
Overall bias and Directness	Risk of bias variation across outcomes	N/A

O'Sullivan, 2017**Bibliographic Reference**

O'Sullivan, A.; Fitzpatrick, N.; Doyle, O. (2017) Effects of early intervention on dietary intake and its mediating role on cognitive functioning: a randomised controlled trial. Public health nutrition 20(1): 154-164

Study details

Country/ies where study was carried out	Ireland
Study type	Randomised controlled trial (RCT)
Study dates	2008-2010
Inclusion criteria	Pregnant women who were:

	<ul style="list-style-type: none">• living in the catchment area
Exclusion criteria	Not reported
Patient characteristics	<p>Mothers age, (mean ± SD), years</p> <p>Intervention group =25.46 ± 5.85</p> <p>Control group = 25.30 ± 5.99</p> <p>Education, %</p> <p><i>Low education (participants who left school after they completed a statewide examination at age 15–16 years)</i></p> <p>Intervention = 33.7</p> <p>Control = 39.6</p> <p>Socioeconomic deprivation, %</p> <p><i>Resides in social housing</i></p> <p>Intervention = 55.3</p> <p>Control = 55.4</p> <p><i>Employed, %</i></p>

	<p>Intervention = 36.5</p> <p>Control = 39.6</p> <p>Geographical variation- NR</p> <p>Religion and cultural considerations -NR</p> <p>Babies or children with disabilities and other physical and mental health conditions -NR</p> <p>Babies and children with developmental problems -NR</p> <p>Race - NR</p>
Intervention(s)/control	<p>Intervention: a community-based home visiting programme (HVP) and an additional parenting course. The home visiting programme involved 2 one-hour home visits per month, where parents were given information, emotional support, access to community services and instruction on parenting practices. Mentors who were college graduates in social care, education and youth studies delivered the sessions and the objective was to educate and support the parents on identifying developmental milestones and how to parent appropriately to promote children's health and development. Before the programme commenced, mentors received extensive training and were supervised monthly thereafter. Attempts were made to keep the same mentor with a family throughout the trial. Sessions were delivered using demonstration, role modelling, coaching, encouragement, discussion and feedback, and visits were guided by tip sheets which were customised based on the needs of the family and age of the child. Topics covered included child nutrition and dietary recommendations such as iron and calcium, breast-feeding, food groups the food pyramid. These were provided alongside child development materials and book packs. Intervention also included Positive Parenting Program between 2 and 3 years of infant's age.</p>

Control – received child developmental materials and book packs, including recommendations to attend public health workshops on stress management and healthy eating. Parents were also given access to a support worker to help them access and benefit from community services.

[This fall into category intervention 1 in the protocol].

Components of intervention:

- **Component 1: Mode of delivery**
 - face-to-face (in person)
- **Component 2: Intervention aimed at individuals or groups**
 - individual based
- **Component 3: Individualised /tailored interventions or general**
 - on demand, tailored interventions based on needs
- **Component 4: Who delivers the intervention**
 - home visiting programme by mentors who had studied education, social care and youth studies
- **Component 5: Where is the intervention delivered**
 - during home visits
- **Component 6: Behaviour change models, techniques and theories**
 - theories mentioned: demonstration, role modelling, coaching, encouragement, discussion and feedback

At 12 month interviews, mothers were asked for the frequency their child ate dairy, fruit and vegetables or fatty/sugary food. The responses were categorised on a 9-point scale ranging from 'never' to 'more than 6 times per day'. Whether the child consumed the recommended daily number of servings was turned into a binary outcome as defined by the Food and Nutrition Guidelines for Pre-school Services. A child consuming 2-3 or more servings of dairy daily, 4 or more total portions of fruit and vegetables daily or fatty/sugary foods less than once daily, were categorised as meeting the recommendations.

Duration of follow-up	None (immediately post-intervention)
Sources of funding	Not industry funded
Sample size	N = 233 pregnant women Intervention n = 115 Control n = 118
Other information	Participants were given a €20 shopping voucher per interview.

NR: not reported; RCT: randomised controlled trial; SD: standard deviation

Study arms

Intervention: (N = 115)

Control: (N = 118)

Outcomes

Infant feeding practices (unweighted)

Outcome	Intervention: home visiting programme, , N = 115	Control, N = 118
Proportion of infants meeting fruit and vegetable recommendation at 12 months Mean (SD)	0.20 (0.40)	0.27 (0.44)

Critical appraisal

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns <i>(Only data collectors were blinded. The lack of blinding of participants could have impacted results if they acted differently to the Control group. An appropriate analysis was used and there were no deviations from the intended intervention.)</i>
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Some concerns <i>(33/115 in the Intervention group and 35/118 in the Control group were lost of follow-up.)</i>
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns <i>(Self-reported outcomes.)</i>
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Some concerns <i>(The weighted analysis was done after the results were found and done to account for attrition.)</i>
Overall bias and Directness	Risk of bias judgement	High <i>(Some concerns around blinding, attrition bias, measurement bias and bias in selection of the reported result.)</i>
Overall bias and Directness	Overall Directness	Directly applicable
Overall bias and Directness	Risk of bias variation across outcomes	N/A

Palacios, 2018

Bibliographic Reference Palacios, C.; Campos, M.; Gibby, C.; Melendez, M.; Lee, J.E.; Banna, J.; Effect of a Multi-Site Trial using Short Message Service (SMS) on Infant Feeding Practices and Weight Gain in Low-Income Minorities; Journal of the American College of Nutrition; 2018; vol. 37 (no. 7); 605-613

Study details

Country/ies where study was carried out	Puerto Rico and Hawaii
Study type	Randomised controlled trial (RCT)
Study dates	2017
Inclusion criteria	<ul style="list-style-type: none"> • Caregivers of infants 0-2 months old participating in the WIC program • must be 18 years or older • owner of a mobile phone with unrestricted SMS capability • responsible for infant care • willing to participate for the full study duration
Exclusion criteria	<ul style="list-style-type: none"> • infants with special diets • infants with limited mobility • pre-term birth (<37 weeks) • small or large for gestational age (birthweight <10th or >90th percentile) • inability to consent to participate • unwillingness to be randomized • not being able to read
Patient characteristics	Caregiver age, (mean ± SD), years

	Intervention = 26.9 ± 5.27
	Control = 27.0 ± 5.02
	Gestational age, (mean ± SD), weeks
	Intervention = 39.0 ± 1.12
	Control = 38.9 ± 1.00
	Education, n (%),
	<i>Less than college</i>
	Intervention = 49 (49.5)
	Control = 42 (42.0)
	<i>Some college</i>
	Intervention = 22 (22.2)
	Control = 22 (22.0)
	<i>College or higher</i>
	Intervention = 28 (28.3)

Control = 36 (36.0)

Ethnicity and race, n (%)

Asian

Intervention = 22 (21.6)

Control = 20 (20)

American Indian

Intervention = 5 (4.9)

Control = 4 (4)

Black

Intervention = 15 (14.7)

Control = 12 (12)

Hispanic

Intervention = 62 (62)

Control = 60 (61.2)

Native Hawaiian

Intervention = 15 (14.7)

Control = 12 (12)

Pacific Islander

Intervention = 10 (9.8)

Control = 7 (7)

White

Intervention = 34 (33.3)

Control = 45 (45)

Type of Infant health centre, n (%)

Health centre

Intervention = 53 (54)

Control = 49 (51)

Private office

Intervention = 45 (45.7)

Control = 47 (49)

Intervention(s)/control	<p>Intervention: Information on improving feeding practices based on the Transtheoretical Model of health behaviour change involving:</p> <ol style="list-style-type: none"> 1. SMS reinforcing WIC messages on breastfeeding, preventing overfeeding, delaying introduction of solid foods, and delaying and reducing baby juice consumption 2. WIC standard of care which includes: <ul style="list-style-type: none"> ○ a certification visit when infants first start the program (usually around 0-2 months) ○ a re-certification visits at 6 months and 12 months <p>Control: Information on general infant's health involving:</p> <ol style="list-style-type: none"> 1. SMS about issues relating to sleeping, bathing, teething, traveling in a car, medications, handling baby, and smoking, and information related to immunization, and care of common illnesses
Duration of follow-up	None
Sources of funding	Not industry funded
Sample size	<p>N = 202</p> <p>Intervention n = 102</p> <p>Control n = 100</p>

RCT: randomised controlled trial; SD: standard deviation

Study arms**Intervention: information on improving feeding practices (N = 102)****Control: information on general infant's health issues (N = 100)****Outcomes****Infant feeding practices at 4 to 6 months**

Outcome	Intervention: information on improving feeding practices, , N = 84	Control: information on general infant's health issues, , N = 86
Introduction of solids at 4-6 months	n = 35 ; % = 41.7	n = 25 ; % = 29.1
No of events		
Has not started solids at 4-6 months	n = 45 ; % = 52.9	n = 59 ; % = 68.6
No of events		
Any breastfeeding at 4-6 months (includes partial and exclusive)	n = 44 ; % = 52.4	n = 46 ; % = 53.5
No of events		
Formula feeding at 4-6 months	n = 40 ; % = 47.6	n = 40 ; % = 46.5
No of events		
Introduction of cow's milk at 4-6 months	n = 0 ; % = 0	n = 0 ; % = 0
No of events		

Outcome	Intervention: information on improving feeding practices, , N = 84	Control: information on general infant's health issues, , N = 86
Introduction of water at 4-6 months	n = 38 ; % = 44.7	n = 29 ; % = 34.1
No of events		
Introduction of juice at 4-6 months	n = 10 ; % = 11.8	n = 13 ; % = 15.1
No of events		

Critical appraisal

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns (Some concerns around attrition and no information to establish if an intention-to-treat analysis was used)
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns (Self-reported outcomes)
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	High (Serious concerns around selection of reported outcomes as outcomes have been reported in 2 studies with different units of analysis (median in one and n(%) in the other).)

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	High (<i>Serious concerns around a selected reporting of results</i>)
Overall bias and Directness	Overall Directness	Directly applicable
Overall bias and Directness	Risk of bias variation across outcomes	N/A

Savage, 2018

Bibliographic Reference	Savage, Jennifer S.; Hohman, Emily E.; Marini, Michele E.; Shelly, Amy; Paul, Ian M.; Birch, Leann L.; INSIGHT responsive parenting intervention and infant feeding practices: randomized clinical trial.; International Journal of Behavioral Nutrition & Physical Activity; 2018; vol. 15 (no. 1); npag-npag
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Study details

Country/ies where study was carried out	USA
Study type	Randomised controlled trial (RCT)
Study dates	January 2012 to March 2014
Inclusion criteria	Mothers who were: <ul style="list-style-type: none"> • primiparous, • English-speaking • ≥ 20 years of age • had newborns who were full-term (≥ 37 weeks gestation), singleton, and weighed ≥ 2500 g at birth
Exclusion criteria	Not reported

Patient characteristics	Mothers age, (mean ± SD), years
	Intervention group = 28.7 ± 4.6
	Control group = 28.7 ± 4.9
	Gestational age, (mean ± SD), weeks
	Intervention group = 39.6 ± 1.2
	Control group = 39.5 ± 1.1
	Education, n (%)
	<i>High School graduate or less</i>
	Intervention = 16 (11.4)
	Control = 16 (11.5)
	<i>Some college</i>
	Intervention = 37 (26.4)
	Control = 36 (25.9)
	<i>College graduate</i>

Intervention = 48 (34.3)

Control = 52 (37.4)

Graduate degree +

Intervention = 39 (27.9)

Control = 35 (25.2)

Race, n(%)

Black

Intervention group = 10 (7.1)

Control group = 7 (5.0)

White

Intervention group = 122 (87.1)

Control group = 127 (91.4)

Native Hawaiian or Pacific Islander

Intervention group = 1 (0.7)

Control group = 0 (0)

	<p>Asian</p> <p>Intervention group = 5 (3.6)</p> <p>Control group = 4 (2.9)</p> <p>Other</p> <p>Intervention group = 2 (1.4)</p> <p>Control group = 1 (0.7)</p> <p>Ethnicity, n(%)</p> <p>Hispanic/Latino</p> <p>Intervention group = 12 (8.6)</p> <p>Control group = 7 (5.0)</p>
Intervention(s)/control	<p>Intervention focused on responsive parenting (RP) in four domains of infant behaviour: drowsy, sleeping, fussy, and alert and calm and involved:</p> <ol style="list-style-type: none"> 1. Research nurses delivering feeding guidance information to participants during home visits which included: <ul style="list-style-type: none"> ○ recognising and responding appropriately to infant hunger and satiety cues ○ age-appropriate, bottle-feeding practices (i.e., bottle size, nipple flow, transition off bottle) ○ delaying introduction to solids until 4–6 months ○ promoting acceptance, liking, and intake of developmentally appropriate foods such as vegetables through repeated exposure ○ serving age appropriate portions of healthy foods

	<ul style="list-style-type: none"> using structure-based, non-controlling feeding practices that allow the infant to affect intake through shared control of the initiation and termination of feedings <p>2. Mailing intervention materials to participants which included information on</p>
Duration of follow-up	None
Sources of funding	Not industry funded
Sample size	<p>N = 279</p> <p>Intervention n = 140</p> <p>Control n = 139</p>

NR: not reported; RCT: randomised controlled trial; RP: responsive parenting; SD: standard deviation

Study arms

Intervention: INSIGHT intervention – responsive parenting (N = 140)

Control: home safety (N = 139)

Outcomes

Infant feeding practices

Outcome	Intervention: responsive parenting, , N = 124	Control: home safety, , N = 124
Introduced solids between 4-6 months Denominator is RP=140, control =139	n = 113 ; % = 80.7	n = 117 ; % = 84.2
No of events		

Maternal and child nutrition: evidence reviews for Interventions to promote appropriate and timely introduction to solids (complementary feeding) for babies from 6 to 12 months
(January 2025)

Outcome	Intervention: responsive parenting, , N = 124	Control: home safety, , N = 124
Vegetable as first food	n = 50 ; % = 40.3	n = 31 ; % = 25
No of events		
Consumed vegetables daily at 1 year Denominator RP n=122, control n = 118	n = 117 ; % = 95.9	n = 105 ; % = 89
No of events		
Using bottle at 52 weeks Denominator is RP=125, control =123	n = 78 ; % = 62.4	n = 97 ; % = 78.9
No of events		
Consumed salty snacks (chips, crackers, pretzels etc) daily at 1 year Denominator RP n=122, control n = 118	n = 12 ; % = 9.8	n = 24 ; % = 20.3
No of events		
Consumed SSB at 1 year Denominator RP n=120, control n = 119	n = 6 ; % = 5	n = 21 ; % = 17.7
No of events		
Consumed fruit juice at 1 year Denominator RP n=122, control n = 124	n = 46 ; % = 37.7	n = 74 ; % = 59.7
No of events		

RP: responsive parenting; SSB: sugar sweetened beverage

Critical appraisal

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns (No information about concealment)
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns (No information on deviations from intended intervention including whether participants and those delivering intervention were aware of assigned intervention during trial)
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns (Self-reported outcomes)
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns (Some concerns around concealment and blinding of participants and those delivering the intervention, and measurement of outcomes)
Overall bias and Directness	Overall Directness	Directly applicable
Overall bias and Directness	Risk of bias variation across outcomes	N/A

Watt, 2009**Bibliographic Reference**

Watt, R.G.; Tull, K.I.; Hardy, R.; Wiggins, M.; Kelly, Y.; Molloy, B.; Dowler, E.; Apps, J.; McGlone, P.; Effectiveness of a social support intervention on infant feeding practices: Randomised controlled trial; Journal of Epidemiology and Community Health; 2009; vol. 63 (no. 2); 156-162

Maternal and child nutrition: evidence reviews for Interventions to promote appropriate and timely introduction to solids (complementary feeding) for babies from 6 to 12 months
(January 2025)

Study details

Country/ies where study was carried out	UK
Study type	Randomised controlled trial (RCT)
Study dates	December 2002 to February 2004
Inclusion criteria	<ul style="list-style-type: none"> • women from Registrar General occupational classes II–V (non-professional) • babies born >37 weeks • babies' birth weight above 2500 g • singletons • women able to understand written and spoken English • resident in the study area
Exclusion criteria	<ul style="list-style-type: none"> • women were under 17 years old • infants who were diagnosed with a serious medical condition or were on special diets • infants were aged over 12 weeks • women or their partners who were from social class I (professional)
Patient characteristics	<p>Mother's age at birth of index child, (mean \pm SD), years</p> <p>Intervention = 29.3 \pm 6</p> <p>Control = 31 \pm 6.2</p> <p>Infant's age, (mean \pm SD), weeks</p> <p>Intervention = 10 \pm 2</p>

	Control = 10.2 ± 2.3
	Mother left full time education <16 years, n(%)
	Intervention = 39 (25)
	Control = 33 (21)
	Ethnicity n (%)
	<i>White</i>
	Intervention = 79 (50)
	Control = 77 (50)
	<i>Minority ethnic group</i>
	Total = 50%
	Household receives income support/jobseekers allowance, n(%)
	Intervention = 52 (33)
	Control = 51 (33)

	<p>Social housing, n(%)</p> <p>Intervention = 95 (60)</p> <p>Control = 83 (54)</p> <p>Lone parent, n(%)</p> <p>Intervention = 47 (30)</p> <p>Control = 39 (25)</p>
Intervention(s)/control	<p>Intervention was based on a social support theoretical model and consisted of</p> <ol style="list-style-type: none"> 1. the offer of practical and non-judgemental support and advice on infant feeding practices, in particular complementary feeding, provided by trained volunteers, which adopted a holistic approach to infant nutrition, designed to empower the women to follow current guidance on the later stages of infant feeding practices, in particular: <ul style="list-style-type: none"> ○ when to introduce solids ○ the types of foods and drinks to give a child with emphasis on the importance of fruit and vegetables ○ when to stop using a feeding bottle 2. Advice and support offered by health professionals <p>Control: standard professional support from health visitors and GPs.</p>
Duration of follow-up	None
Sources of funding	Not industry funded

Sample size	N = 312 Intervention n = 157 Control n = 155
Other information	Sixty-two per cent of the sample were first-time mothers and 50% described themselves as being from an ethnic minority group. The mean age of mothers at the birth of the index child was 30 years. The infants' mean age was 10 weeks. Overall, the sample was relatively disadvantaged with 28% being lone parents, 57% living in social housing and 33% receiving income support/jobseekers allowance.

GP: general practitioner; RCT: randomised controlled trial; SD: standard deviation

Study arms

Intervention: home visits (N = 157)

Control: usual care (N = 155)

Outcomes

Infant feeding practices at 12 months

Outcome	Intervention: home visits , , N = 115	Control: usual care , , N = 124
Introduction of solids at 4–6 months	n = 69 ; % = 60	n = 76 ; % = 61

Outcome	Intervention: home visits , , N = 115	Control: usual care , , N = 124
No of events		
Fruit and vegetable consumption more than 1/week – Banana Intervention n=105; control n=114	n = 88 ; % = 84	n = 101 ; % = 89
No of events		
Fruit and vegetable consumption more than 1/week – Apples Intervention n=106; control n=115	n = 95 ; % = 90	n = 91 ; % = 79
No of events		
Fruit and vegetable consumption more than 1/week – Pears Intervention n=107; control n=115	n = 76 ; % = 71	n = 58 ; % = 50
No of events		
Fruit and vegetable consumption more than 1/week – Carrots Intervention n=107; control n=116	n = 101 ; % = 94	n = 99 ; % = 85
No of events		
Fruit and vegetable consumption more than 1/week – leafy green vegetables Intervention n=107; control n=116	n = 100 ; % = 94	n = 105 ; % = 91
No of events		
Exclusive breastmilk duration for <4 months	n = 34 ; % = 48	n = 40 ; % = 53
No of events		
Cows' milk (any type) as main drink	n = 48 ; % = 42	n = 45 ; % = 36

Outcome	Intervention: home visits , , N = 115	Control: usual care , , N = 124
No of events		
Having three solid meals per day	n = 113 ; % = 98	n = 114 ; % = 92
No of events		

Critical appraisal

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns (<i>Telephone intervention was offered in some instances where home visits were not possible but unlikely to affect the outcome as study states that each woman received on the average 5 home visits (range= 1 to 10)</i>)
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns (<i>Relevant outcomes were self-reported by the mothers</i>)
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns (Some concerns around deviation from intended intervention (effect of assignment to intervention) and reporting of outcomes.)
Overall bias and Directness	Overall Directness	Directly applicable
Overall bias and Directness	Risk of bias variation across outcomes	N/A

Wen, 2020**Bibliographic Reference**

Wen, L; Rissel, C; Xu, H; Taki, S; Buchanan, L; Bedford, K; Phongsavan, P; Baur, L. A.; Erratum: Effects of telephone and shortmessage service support on infant feeding practices, “tummy time,” and screen time at 6 and 12 months of child age: a 3-group randomized clinical trial (JAMA Pediatr (2020) DOI: 10.1001/jamapediatrics.2020.0215); JAMA Pediatrics; 2020; vol. 174 (no. 8); 807

Study details

Country/ies where study was carried out	Australia
Study type	Randomised controlled trial (RCT)
Study dates	February 2017 to November 2018
Inclusion criteria	Women <ul style="list-style-type: none"> aged 16 years or older between weeks 24 and 34 of pregnancy able to communicate in English had a mobile telephone

	<ul style="list-style-type: none"> lived in the recruitment areas
Exclusion criteria	Not reported
Patient characteristics	<p>Mothers age, n(%), years</p> <p>16-24</p> <p>Total = 97 (8)</p> <p>Telephone support = 33 (9)</p> <p>SMS support = 33 (9)</p> <p>Control = 31 (8)</p> <p>25-29</p> <p>Total = 272 (24)</p> <p>Telephone support = 92 (24)</p> <p>SMS support = 81 (21)</p> <p>Control = 99 (26)</p> <p>30-34</p> <p>Total = 442 (38)</p> <p>Telephone support = 135 (35)</p> <p>SMS support = 162 (42)</p>

Control = 145 (38)

35-39

Total = 270 (23)

Telephone support = 102 (26)

SMS support = 87 (23)

Control = 81 (21)

40-49

Total = 74 (7)

Telephone support = 24 (6)

SMS support = 21 (5)

Control = 29 (8)

Maternal education, n(%)

Up to HSC to TAFE or diploma

Total = 392 (34)

Telephone support = 126 (33)

SMS support = 125 (33)

Control = 141 (37)

University

Total = 761 (66)

Telephone support = 260 (67)

SMS support = 258 (67)

Control = 243 (63)

Unknown

Total = 2 (0.2)

Telephone support = 0

SMS support = 1 (0.3)

Control = 1 (0.3)

Father's educational level, n(%)

Up to HSC to TAFE or diploma

Total = 451 (39)

	Telephone support = 150 (39)
	SMS support = 144 (37)
	Control = 157 (41)
	University
	Total = 653 (57)
	Telephone support = 211 (55)
	SMS support = 229 (60)
	Control = 213 (55)
	Unknown
	Total = 51 (4)
	Telephone support = 25 (6)
	SMS support = 11 (3)
	Control = 15 (4)
	Language spoken at home, n(%)
	English

	<p>Total = 622 (54)</p> <p>Telephone support = 207 (54)</p> <p>SMS support = 204 (53)</p> <p>Control = 211 (55)</p> <p>Other</p> <p>Total = 533 (46)</p> <p>Telephone support = 179 (46)</p> <p>SMS support = 180 (47)</p> <p>Control = 174 (45)</p>
Intervention(s)/control	<p>Interventions:</p> <p>Intervention group 1: Telephone intervention, which involved :</p> <ol style="list-style-type: none"> 1. A child and family health nurse calling participants for approximately 30 to 60 minutes to offer support including talking about the intervention information provided in the booklets and discussing issues raised by the mother 2. An intervention booklet mailed out to participants <p>Intervention group 2: SMS intervention, which involved:</p> <ol style="list-style-type: none"> 1. A set of SMS messages sent to the participant twice a week for 4 weeks via a 2-way automated SMS system at a predetermined time (10 AM to 1 PM), used to reinforce the intervention information and key messages in the booklets 2. An intervention booklet mailed out to participants

	Control: usual care involving: 1. Home safety promotion materials and a newsletter on “Kids’ Safety” sent to participants 2. Usual care from the child and family health nurses in the local health districts
Duration of follow-up	2 months
Sources of funding	Not industry funded
Sample size	N = 1155 Intervention group 1 (telephone) n= 386 Intervention group 2 (SMS) n=384 Control = 385
Other information	Study adjusted for recruitment sites

HSC: higher school certificate; RCT: randomised controlled trial; SMS: short messaging service; TAFE: technical and further education

Study arms**Telephone support (N = 386)****SMS support (N = 384)****Control (N = 385)****Outcomes****Infant feeding practices at 6 and 12 months**

Outcome	Telephone support vs Control, , N2 = 386, N1 = 385	SMS support vs Control, , N2 = 384, N1 = 385
Introduction of solid foods at 6 months	1.68 (1.22-2.32)	1.19 (1.01-1.39)
Adjusted OR (95% CI) Adjusted for recruitment sites		
Exclusive breastfeeding at 6 months	1.80 (0.83-1.13)	1.27 (0.88-1.82)
Adjusted OR (95% CI) Adjusted for recruitment sites		
Breastfeeding at 6 months	1.14 (0.80-1.64)	1.08 (0.91-1.27)
Adjusted OR (95% CI) Adjusted for recruitment sites		
Breastfeeding at 12 months	1.25 (0.91-1.72)	1.11 (0.95-1.30)

Outcome	Telephone support vs Control, , N2 = 386, N1 = 385	SMS support vs Control, , N2 = 384, N1 = 385
Adjusted OR (95% CI) Adjusted for recruitment sites		
Drinking from cup at 6 months	1.54 (1.12-2.13)	1.15 (0.98-1.35)
Adjusted OR (95% CI) Adjusted for recruitment sites		
Drinking from cup at 12 months	1.53 (1.02-2.29)	1.13 (0.92-1.39)
Adjusted OR (95% CI) Adjusted for recruitment sites		

SMS: short messaging service

Critical appraisal

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns (Self-reported outcomes but unlikely that outcome assessment was influenced by knowledge of intervention because study participants were not given full details of study hypothesis)

Section	Question	Answer
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns <i>(Some concerns relating to the self reporting of outcomes)</i>
Overall bias and Directness	Overall Directness	Directly applicable
Overall bias and Directness	Risk of bias variation across outcomes	N/A

Wen, 2011**Bibliographic Reference**

Wen, LM; Baur, LA; Simpson, JM; Rissel, C; Flood, VM; Effectiveness of an early intervention on infant feeding practices and “tummy time”: a randomized controlled trial; Archives of pediatrics & adolescent medicine; 2011; vol. 165 (no. 8); 701-707

Study details

Country/ies where study was carried out	Australia
Study type	Randomised controlled trial (RCT)
Study dates	July 2007 to June 2008
Inclusion criteria	Pregnant women: <ul style="list-style-type: none"> • aged 16 years or older • expecting their first child • between 24 and 34 weeks of pregnancy • able to communicate in English

	<ul style="list-style-type: none"> lived in the local area
Exclusion criteria	Women who had a severe medical condition as evaluated by their physicians
Patient characteristics	<p>Mother's age, n(%), years</p> <p>≤24</p> <p>Intervention = 144 (42.7)</p> <p>Control = 135 (41.0)</p> <p>25-29</p> <p>Intervention = 112 (33.2)</p> <p>Control = 114 (34.5)</p> <p>≥30</p> <p>Intervention = 81 (24.1)</p> <p>Control = 81 (24.5)</p> <p>Maternal education, n (%)</p> <p><i>Completed primary school to school certificate</i></p> <p>Intervention = 66 (19.6)</p> <p>Control = 71 (21.6)</p>

	<p>HSC to TAFE certificate or diploma</p> <p>Intervention = 180 (53.6)</p> <p>Control = 184 (56.1)</p> <p>University</p> <p>Intervention = 90 (26.8)</p> <p>Control = 73 (22.3)</p> <p>Language spoken at home, n(%)</p> <p>English</p> <p>Intervention = 303 (90.2)</p> <p>Control = 289 (88.1)</p> <p>Other</p> <p>Intervention = 33 (9.8)</p> <p>Control = 39 (11.9)</p>
Intervention(s)/control	<p>Intervention: Staged intervention comprising 1 home visit at 30 to 36 weeks' gestation and 5 home visits at 1, 3, 5, 9, and 12 months after birth in the first year delivered by community nurses involving:</p> <ol style="list-style-type: none"> 1 to 2 hours providing standard information with key discussion points for each of 4 key areas: <ul style="list-style-type: none"> infant feeding practices infant nutrition and active play

	<ul style="list-style-type: none"> ○ family physical activity and nutrition ○ social support <p>2. Resources to reinforce the information, which promote breastfeeding, appropriate timing of introduction of solids, tummy time and active play, as well as family nutrition and physical activity</p> <p>Control: Usual childhood nursing service involving:</p> <ul style="list-style-type: none"> 1. 1 home visit within a month of birth if needed 2. Additional visits at baseline and 12 months by a research assistant for the purpose of data collection only
Duration of follow-up	None
Sources of funding	Not industry funded
Sample size	<p>N = 667</p> <p>Intervention n=337</p> <p>Control n = 330</p>
Other information	Most of the mothers (87.3%) were either married or living with their de facto partner. Twenty-four percent had completed tertiary education, 10.8% spoke a language other than English at home, 20.7% were unemployed, and 31.2% had a household income before tax of less than A\$40 000 per year (equivalent to US\$).

HSC: higher school certificate; TAFE: technical and further education; RCT: randomised controlled trial

Study arms**Staged intervention (N = 337)****Usual care (N = 330)****Outcomes****Infant feeding practices**

Outcome	Staged intervention, , N = 337	Usual care, , N = 330
Introduction of solid foods regularly \leq 4 months	n = 49 ; % = 17.7	n = 74 ; % = 26.1
No of events		
Introduction of solid foods regularly at 5 months	n = 121 ; % = 43.7	n = 135 ; % = 47.8
No of events		
Introduction of solid foods regularly at 6 months	n = 107 ; % = 38.6	n = 74 ; % = 26.1
No of events		
Exclusive breastfeeding at 6 months (yes) n=561; intervention = 278, control = 283	n = 12 ; % = 4.3	n = 6 ; % = 2.1
No of events		
Breastfeeding rate at 6 months	% = 42.2	% = 32.1

Outcome	Staged intervention, , N = 337	Usual care, , N = 330
No of events		
Breastfeeding rate at 12 months	% = 21	% = 14.9
No of events		

Critical appraisal

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low <i>(Randomisation did not occur before birth for all participants but unlikely that this will impact on the outcomes)</i>
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable
Overall bias and Directness	Risk of bias variation across outcomes	N/A

Appendix E Forest plots

Forest plots for review question: What interventions are effective to promote appropriate and timely introduction to solids (complementary feeding) for babies from 6 to 12 months (in line with government advice)?

No meta-analysis was conducted for this review question and so there are no forest plots.

Appendix F GRADE tables

GRADE tables for review question: What interventions are effective to promote appropriate and timely introduction to solids (complementary feeding) for babies from 6 to 12 months (in line with government advice)?

Table 5: Evidence profile for comparison 1: Interventions using information provision versus status quo (including no treatment) – Overall estimate (Mixed strata for level of socioeconomic deprivation, parental education and parental age)

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Interventions using information provision	Status quo/treatment as usual (including no treatment)	Relative (95% CI)	Absolute		
Introduction of solid foods regularly at ≤ 4 months – components of intervention (face-to-face intervention, aimed at individuals, general information, delivered by healthcare practitioner (community research nurse), during home visits and no theory mentioned)												
1 (Wen 2011)	randomised trials	no serious risk of bias	no serious inconsistency	no serious indirectness	serious ¹	none	49/337 (14.5%)	74/330 (22.4%)	RR 0.65 (0.47 to 0.9)	78 fewer per 1000 (from 22 fewer to 119 fewer)	MODERATE	CRITICAL IMP. BENEFIT
Introduction of solids at 4 to 6 months – components of intervention (face-to-face, aimed at individuals, general information, delivered by healthy eating ‘champions’ (trained local mothers), during home visits and other theory (social support theoretical model))												
1 (Watt 2009)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	no serious imprecision	none	69/115 (60%)	76/124 (61.3%)	RR 0.98 (0.8 to 1.2)	12 fewer per 1000 (from 123 fewer to 123 more)	MODERATE	CRITICAL NO EV. OF IMP. DIFF.
Introduction solid foods regularly at 5 months – components of intervention (face-to-face, aimed at individuals, general information, delivered by community research nurse, during home visits and no theory mentioned)												
1 (Wen 2011)	randomised trials	no serious risk of bias	no serious inconsistency	no serious indirectness	serious ¹	none	121/337 (35.9%)	135/330 (40.9%)	RR 0.88 (0.72 to 1.06)	49 fewer per 1000 (from 115 fewer to 25 more)	MODERATE	CRITICAL NO IMP. DIFF.
Complementary foods introduced before 5 months (yes) – components of intervention (face-to-face and printed interventions, aimed at groups and individuals, general and tailored intervention, delivered by lactation consultant, during antenatal group meetings and individual visits, no theory mentioned)												

1 (Cameron 2015)	randomised trials	no serious risk of bias	no serious inconsistency	no serious indirectness	serious ¹	none	85/205 (41.5%)	111/209 (53.1%)	RR 0.78 (0.63 to 0.96)	117 fewer per 1000 (from 21 fewer to 197 fewer)	MODERATE	CRITICAL NO EV. OF IMP. DIFF.
Introduction of solid foods regularly at 6 months – components of intervention (face-to-face, aimed at individuals, general information, delivered by community research nurse, during home visits and no theory mentioned)												
1 (Wen 2011)	randomised trials	no serious risk of bias	no serious inconsistency	no serious indirectness	serious ¹	none	107/337 (31.8%)	74/330 (22.4%)	RR 1.42 (1.1 to 1.83)	94 more per 1000 (from 22 more to 186 more)	MODERATE	CRITICAL IMP. BENEFIT
Complementary foods introduced before 6 months (yes) – components of intervention (face-to-face and printed interventions, aimed at groups and individuals, general and tailored intervention, delivered by lactation consultant, during antenatal group meetings and individual visits, no theory mentioned)												
1 (Cameron 2015)	randomised trials	no serious risk of bias	no serious inconsistency	no serious indirectness	no serious imprecision	none	175/205 (85.4%)	181/209 (86.6%)	RR 0.99 (0.91 to 1.07)	9 fewer per 1000 (from 78 fewer to 61 more)	HIGH	CRITICAL NO IMP. DIFF.
Introduction of solid foods at 6 months (aOR) telephone versus control – components of intervention (printed and electronic (phone) or textual, aimed at individuals, general information, delivered by healthcare practitioner (child and family health nurse), delivered over the phone, and other theory (Health belief model))												
1 (Wen 2020)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	serious ¹	none	184/386 (47.7%)	135/385 (35.1%)	OR 1.68 (1.22 to 2.32) ⁷	-	LOW	CRITICAL IMP. BENEFIT
Introduction of solid foods at 6 months (aOR) SMS versus control – components of intervention (printed and electronic (phone) or textual, aimed at individuals, general information, delivered by healthcare practitioner (child and family health nurse), delivered over the phone, and other theory (Health belief model))												
1 (Wen 2020)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	serious ¹	none	165/384 (43%)	135/385 (35.1%)	OR 1.19 (1.01 to 1.4) ⁷	-	LOW	CRITICAL NO IMP. DIFF.
Isolated fruit as first foods offered to infant measured 1 month after introducing solids – components of intervention (face-to-face and printed, aimed at individuals, general information, delivered by healthcare practitioner or researcher, delivered in healthcare setting (paediatrician's office) or during home visit, and no theory mentioned)												
1 (Fildes 2015)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	no serious imprecision	none	0/71 (0%)	7/68 (10.3%)	POR 0.12 (0.03 to 0.54)	89 fewer per 1000 (from 45 fewer to 100 fewer)	MODERATE	CRITICAL NO IMP. BENEFIT
Intake of unfamiliar fruit puree (grams) measured 1 month after introducing solids (Better indicated by higher values) – components of intervention (face-to-face and printed, aimed at individuals, general information, delivered by healthcare practitioner or researcher, delivered in healthcare setting (paediatrician's office) or during home visit, and no theory mentioned)												

1 (Fildes 2015)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	no serious imprecision	none	71	68	-	MD 13.05 lower (32.74 lower to 6.64 higher)	MODERATE	CRITICAL NO IMP. DIFF.
–Fruit and vegetable consumption >1 per week at 12 months – Banana – components of intervention (face-to-face, aimed at individuals, general information, delivered by healthy eating 'champions' (trained local mothers), during home visits and other theory (social support theoretical model))												
1 (Watt 2009)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	no serious imprecision	none	88/105 (83.8%)	101/114 (88.6%)	RR 0.95 (0.85 to 1.05)	44 fewer per 1000 (from 133 fewer to 44 more)	MODERATE	CRITICAL NO IMP. DIFF.
Fruit and vegetable consumption >1 per week at 12 months – Apples – components of intervention (face-to-face, aimed at individuals, general information, delivered by healthy eating 'champions' (trained local mothers), during home visits and other theory (social support theoretical model))												
1 (Watt 2009)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	serious ¹	none	95/106 (89.6%)	91/115 (79.1%)	RR 1.13 (1.01 to 1.27)	103 more per 1000 (from 8 more to 214 more)	LOW	CRITICAL NO IMP. DIFF.
Fruit and vegetable consumption >1 per week at 12 months – Pears – components of intervention (face-to-face, aimed at individuals, general information, delivered by healthy eating 'champions' (trained local mothers), during home visits and other theory (social support theoretical model))												
1 (Watt 2009)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	serious ¹	none	76/107 (71%)	58/115 (50.4%)	RR 1.41 (1.13 to 1.75)	207 more per 1000 (from 66 more to 378 more)	LOW	CRITICAL IMP. BENEFIT
Appropriate fruits intake at 12 months - components of intervention (face-to-face, individual based, tailored intervention, healthy eating 'champions' (volunteer community mother), during home visits, no theory mentioned)												
1 (Johnson 1993)	randomised trials	very serious ³	no serious inconsistency	no serious indirectness	no serious imprecision	none	98/127 (77.2%)	41/105 (39%)	RR 1.98 (1.53 to 2.56)	383 more per 1000 (from 207 more to 609 more)	LOW	CRITICAL IMP. BENEFIT
Isolated vegetable as first foods offered to infant measured 1 month after introducing solids – components of intervention (face-to-face and printed, aimed at individuals, general information, delivered by healthcare practitioner or researcher, delivered in healthcare setting (paediatrician's office) or during home visit, and no theory mentioned)												
1 (Fildes 2015)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	no serious imprecision	none	60/71 (84.5%)	10/68 (14.7%)	RR 5.75 (3.21 to 10.27)	699 more per 1000 (from 325 more to 1000 more)	MODERATE	CRITICAL IMP. BENEFIT

FINAL

Interventions to promote appropriate and timely introduction to solids (complementary feeding) for babies from 6 to 12 months

Intake of unfamiliar vegetable puree (grams) measured 1 month after introducing solids (Better indicated by higher values) – components of intervention (face-to-face and printed, aimed at individuals, general information, delivered by healthcare practitioner or researcher, delivered in healthcare setting (paediatrician's office) or during home visit, and no theory mentioned)												
1 (Fildes 2015)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	serious ⁴	none	71	68	-	MD 9.07 higher (1.54 lower to 19.68 higher)	LOW	CRITICAL NO IMP. DIFF.
Fruit and vegetable consumption >1 per week at 12 months – Carrots – components of intervention (face-to-face, aimed at individuals, general information, delivered by healthy eating 'champions' (trained local mothers), during home visits and other theory (social support theoretical model))												
1 (Watt 2009)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	no serious imprecision	none	101/107 (94.4%)	99/116 (85.3%)	RR 1.11 (1.01 to 1.21)	94 more per 1000 (from 9 more to 179 more)	MODERATE	CRITICAL NO IMP. DIFF.
Fruit and vegetable consumption >1 per week at 12 months - Leafy green vegetables – components of intervention (face-to-face, aimed at individuals, general information, delivered by healthy eating 'champions' (trained local mothers), during home visits and other theory (social support theoretical model))												
1 (Watt 2009)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	no serious imprecision	none	100/107 (93.5%)	105/116 (90.5%)	RR 1.03 (0.96 to 1.12)	27 more per 1000 (from 36 fewer to 109 more)	MODERATE	CRITICAL NO IMP. DIFF.
Appropriate vegetables intake at 12 months - components of intervention (face-to-face, individual based, tailored intervention, healthy eating 'champions' (volunteer community mother), during home visits, no theory mentioned)												
1 (Johnson 1993)	randomised trials	very serious ³	no serious inconsistency	no serious indirectness	serious ¹	none	112/127 (88.2%)	65/105 (61.9%)	RR 1.42 (1.21 to 1.68)	260 more per 1000 (from 130 more to 421 more)	VERY LOW	CRITICAL IMP. BENEFIT
Exclusive breastfeeding at 6 months (yes) – components of intervention (face-to-face, aimed at individuals, general information, delivered by community research nurse, during home visits and no theory mentioned)												
1 (Wen 2011)	randomised trials	no serious risk of bias	no serious inconsistency	no serious indirectness	very serious ⁵	none	12/278 (4.3%)	6/283 (2.1%)	RR 2.04 (0.77 to 5.35)	22 more per 1000 (from 5 fewer to 92 more)	LOW	CRITICAL NO EV, OF IMP. DIFF.
Exclusive breastfeeding at 6 months (aOR) telephone versus control – components of intervention (printed and electronic (phone) or textual, aimed at individuals, general information, delivered by healthcare practitioner (child and family health nurse), delivered over the phone, and other theory (Health belief model))												

1 (Wen 2020)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	serious ¹	none	26/386 (6.7%)	15/385 (3.9%)	OR 1.80 (0.83 to 3.9) ⁷	-	LOW	CRITICAL NO EV, OF IMP. DIFF.
Exclusive breastfeeding at 6 months (aOR) SMS versus control – components of intervention (printed and electronic (phone) or textual, aimed at individuals, general information, delivered by healthcare practitioner (child and family health nurse), delivered over the phone, and other theory (Health belief model))												
1 (Wen 2020)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	serious ¹	none	23/384 (6%)	15/385 (3.9%)	OR 1.27 (0.88 to 1.82) ⁷	-	LOW	CRITICAL NO EV, OF IMP. DIFF.
Exclusive breastfeeding duration < 4 months – components of intervention (face-to-face, aimed at individuals, general information, delivered by healthy eating 'champions' (trained local mothers), during home visits and other theory (social support theoretical model))												
1 (Watt 2009)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	very serious ⁵	none	34/70 (48.6%)	40/76 (52.6%)	RR 0.92 (0.67 to 1.27)	42 fewer per 1000 (from 174 fewer to 142 more)	VERY LOW	CRITICAL NO IMP. DIFF.
Breastfeeding rate at 6 months – components of intervention (face-to-face, aimed at individuals, general information, delivered by community research nurse, during home visits, no theory mentioned)												
1 (Wen 2011)	randomised trials	no serious risk of bias	no serious inconsistency	no serious indirectness	serious ¹	none	142/337 (42.1%)	106/330 (32.1%)	RR 1.31 (1.07 to 1.6)	100 more per 1000 (from 22 more to 193 more)	MODERATE	CRITICAL IMP. BENEFIT
Any breastfeeding at 6 months (aOR) telephone versus control – components of intervention (printed and electronic (phone) or textual, aimed at individuals, general information, delivered by healthcare practitioner (child and family health nurse), delivered over the phone, and other theory (Health belief model))												
1 (Wen 2020)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	very serious ⁵	none	271/386 (70.2%)	260/385 (67.4%)	OR 1.14 (0.79 to 1.64) ⁷	-	VERY LOW	CRITICAL NO IMP. DIFF.
Any breastfeeding at 6 months (aOR) SMS versus control – components of intervention (printed and electronic (phone) or textual, aimed at individuals, general information, delivered by healthcare practitioner (child and family health nurse), delivered over the phone, and other theory (Health belief model))												
1 (Wen 2020)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	very serious ⁵	none	271/384 (70.6%)	260/385 (67.4%)	OR 1.08 (0.91 to 1.27) ⁷	-	VERY LOW	CRITICAL NO IMP. DIFF.
Breastfeeding rate at 12 months – components of intervention (face-to-face, aimed at individuals, general information, delivered by community research nurse, during home visits, no theory mentioned)												

1 (Wen 2011)	randomised trials	no serious risk of bias	no serious inconsistency	no serious indirectness	serious ¹	none	71/337 (21.1%)	49/330 (14.8%)	RR 1.42 (1.02 to 1.98)	62 more per 1000 (from 3 more to 146 more)	MODERATE	CRITICAL IMP. BENEFIT
Any breastfeeding at 12 months (aOR) telephone versus control – components of intervention (printed and electronic (phone) or textual, aimed at individuals, general information, delivered by healthcare practitioner (child and family health nurse), delivered over the phone, and other theory (Health belief model))												
1 (Wen 2020)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	serious ¹	none	190/386 (49.2%)	169/385 (43.9%)	OR 1.25 (0.91 to 1.72) ⁷	-	LOW	CRITICAL NO EV. OF IMP. DIFF.
Any breastfeeding at 12 months (aOR) SMS versus control – components of intervention (printed and electronic (phone) or textual, aimed at individuals, general information, delivered by healthcare practitioner (child and family health nurse), delivered over the phone, and other theory (Health belief model))												
1 (Wen 2020)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	serious ¹	none	188/384 (49%)	169/385 (43.9%)	OR 1.11 (0.95 to 1.30) ⁷	-	LOW	CRITICAL NO IMP. DIFF.
Gave child cow's milk before 26 weeks - components of intervention (face-to-face, individual based, tailored intervention, healthy eating 'champions' (volunteer community mother), during home visits, no theory mentioned)												
1 (Johnson 1993)	randomised trials	very serious ³	no serious inconsistency	no serious indirectness	no serious imprecision	none	24/127 (18.9%)	49/105 (46.7%)	RR 0.4 (0.27 to 0.61)	280 fewer per 1000 (from 182 fewer to 341 fewer)	LOW	CRITICAL NO IMP. DIFF.
Cow's milk (any type) as main drink at 12 months – components of intervention (face-to-face, aimed at individuals, general information, delivered by healthy eating 'champions' (trained local mothers), during home visits and other theory (social support theoretical model))												
1 (Watt 2009)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	serious ¹	none	48/115 (41.7%)	45/124 (36.3%)	RR 1.15 (0.84 to 1.58)	54 more per 1000 (from 58 fewer to 210 more)	LOW	CRITICAL NO IMP. DIFF.
Appropriate milk intake at 12 months - components of intervention (face-to-face, individual based, tailored intervention, healthy eating 'champions' (volunteer community mother), during home visits, no theory mentioned)												
1 (Johnson 1993)	randomised trials	very serious ³	no serious inconsistency	no serious indirectness	serious ¹	none	119/127 (93.7%)	76/105 (72.4%)	RR 1.29 (1.14 to 1.47)	210 more per 1000 (from 101 more to 340 more)	VERY LOW	CRITICAL IMP. BENEFIT

Length of time kept on formula feeds (weeks) (Better indicated by higher values) - components of intervention (face-to-face, individual based, tailored intervention, healthy eating 'champions' (volunteer community mother), during home visits, no theory mentioned)												
1 (Johnson 1993)	randomised trials	very serious ³	no serious inconsistency	no serious indirectness	serious ⁴	none	127	105	-	MD 10.1 higher (6.36 to 13.84 higher)	VERY LOW	CRITICAL IMP. BENEFIT
Drinking from cup at 6 months (aOR) telephone versus control – components of intervention (printed and electronic (phone) or textual, aimed at individuals, general information, delivered by healthcare practitioner (child and family health nurse), delivered over the phone, and other theory (Health belief model))												
1 (Wen 2020)	randomised trials	serious ²	no serious inconsistency	serious ⁶	serious ¹	none	167/386 (43.3%)	127/385 (33%)	OR 1.54 (1.12 to 2.13) ⁷	-	VERY LOW	CRITICAL IMP. BENEFIT
Drinking from cup at 6 months (aOR) SMS versus control – components of intervention (printed and electronic (phone) or textual, aimed at individuals, general information, delivered by healthcare practitioner (child and family health nurse), delivered over the phone, and other theory (Health belief model))												
1 (Wen 2020)	randomised trials	serious ²	no serious inconsistency	serious ⁶	serious ¹	none	154/384 (40.1%)	127/385 (33%)	OR 1.15 (0.98 to 1.35) ⁷	-	VERY LOW	CRITICAL POSS. IMP. BENEFIT.
Drinking from cup at 12 months (aOR) telephone versus control – components of intervention (printed and electronic (phone) or textual, aimed at individuals, general information, delivered by healthcare practitioner (child and family health nurse), delivered over the phone, and other theory (Health belief model))												
1 (Wen 2020)	randomised trials	serious ²	no serious inconsistency	serious ⁶	serious ¹	none	321/386 (83.2%)	294/385 (76.4%)	OR 1.53 (1.02 to 2.29) ⁷	-	VERY LOW	CRITICAL IMP. BENEFIT
Drinking from cup at 12 months (aOR) SMS versus control – components of intervention (printed and electronic (phone) or textual, aimed at individuals, general information, delivered by healthcare practitioner (child and family health nurse), delivered over the phone, and other theory (Health belief model))												
1 (Wen 2020)	randomised trials	serious ²	no serious inconsistency	serious ⁶	serious ¹	none	311/384 (81%)	294/385 (76.4%)	OR 1.13 (0.92 to 1.39) ⁷	-	VERY LOW	CRITICAL NO EV, OF IMP. DIFF.
Having 3 solid meals per day at 12 months – components of intervention (face-to-face, aimed at individuals, general information, delivered by healthy eating 'champions' (trained local mothers), during home visits and other theory (social support theoretical model))												
1 (Watt 2009)	randomised trials	serious ²	no serious inconsistency	no serious indirectness	no serious imprecision	none	113/115 (98.3%)	114/124 (91.9%)	RR 1.07 (1.01 to 1.13)	64 more per 1000 (from 9 more to 120 more)	MODERATE	IMPORTANT NO IMP. DIFF.

aOR: adjusted odds ratio; CI: confidence interval; OR: odds ratio; POR: peto odds ratio (used because there was zero events in one arm); RR: risk ratio

1 95% CI crosses 1 MID (0.8 or 1.25)

2 Serious risk of bias in the evidence contributing to the outcomes as per RoB 2

3 Very serious risk of bias in the evidence contributing to the outcomes as per RoB 2

4 95% CI crosses 1 MID (0.5x control group SD, for 'intake of unfamiliar vegetable puree' = -15.06, +15.06, for 'length of time kept on formula feeds' = -7.6, +7.6)

5 95% CI crosses 2 MIDs (0.8 and 1.25)

6 Outcome is indirect due to being a proxy outcome of 'appropriate milk feeding and avoidance of unmodified cow's milk before age 1'

7 Adjusted for recruitment sites

Table 6: Evidence profile for comparison 2: Interventions using information provision on infant feeding versus general infant's health information provision – Overall estimate including all the components of the intervention (Mixed strata for level of socioeconomic deprivation, parental education and parental age)

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Interventions using information provision on infant feeding	General information provision	Relative (95% CI)	Absolute		
Introduction of solids at 4 to 6 months - components of intervention (textual intervention, aimed at individuals, general information, delivered by researcher, via SMS, using trans-theoretical model)												
1 (Palacios 2018)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	serious ²	none	35/84 (41.7%)	25/86 (29.1%)	RR 1.43 (0.95 to 2.17)	125 more per 1000 (from 15 fewer to 340 more)	VERY LOW	CRITICAL POSS. IMP. BENEFIT
Has not introduced solids at 4 to 6 months - components of intervention (textual intervention, aimed at individuals, general information, delivered by researcher, via SMS, using trans-theoretical model)												
1 (Palacios 2018)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	serious ²	none	45/84 (53.6%)	59/86 (68.6%)	RR 0.78 (0.61 to 1)	151 fewer per 1000 (from 268 fewer to 0 more)	VERY LOW	CRITICAL NO IMP. BENEFIT
Proportion of infants meeting fruits and vegetables recommendation at 12 months (Better indicated by higher values) - components of intervention (face-to-face, individual based, tailored intervention, peer (mentors who had degree in education, social care and youth studies), during home visits, no theory mentioned)												
1 O'Sullivan 2017)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	no serious imprecision	none	115	118	-	MD 0.07 lower (0.18 lower to 0.04 higher)	LOW	CRITICAL NO EV. OF IMP. DIFF.

Any breastfeeding at 4 - 6 months - components of intervention (textual intervention, aimed at individuals, general information, delivered by researcher, via SMS, using trans-theoretical model)												
1 (Palacios 2018)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	very serious ³	none	44/84 (52.4%)	46/86 (53.5%)	RR 0.98 (0.74 to 1.3)	11 fewer per 1000 (from 139 fewer to 160 more)	VERY LOW	CRITICAL NO IMP. DIFF.
Formula feeding at 4 to 6 months - components of intervention (textual intervention, aimed at individuals, general information, delivered by researcher, via SMS, using trans-theoretical model)												
1 (Palacios 2018)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	very serious ³	none	40/84 (47.6%)	40/86 (46.5%)	RR 1.02 (0.74 to 1.41)	9 more per 1000 (from 121 fewer to 191 more)	VERY LOW	CRITICAL NO IMP. DIFF.
Introduction of cow's milk at 4 to 6 months - components of intervention (textual intervention, aimed at individuals, general information, delivered by researcher, via SMS, using trans-theoretical model)												
1 (Palacios 2018)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	very serious ⁴	none	0/84 (0%)	0/86 (0%)	RD 0 (-0.02 to 0.02)	0 fewer per 1000 (from 20 fewer to 20 more)	LOW	CRITICAL NO IMP. DIFF.
Introduction of water at 4 to 6 months - components of intervention (textual intervention, aimed at individuals, general information, delivered by researcher, via SMS, using trans-theoretical model)												
1 (Palacios 2018)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	serious ²	none	38/84 (45.2%)	29/86 (33.7%)	RR 1.34 (0.92 to 1.96)	115 more per 1000 (from 27 fewer to 324 more)	VERY LOW	IMPORTANT NO EV. OF IMP. DIFF.
Introduction of juices at 4 to 6 months - components of intervention (textual intervention, aimed at individuals, general information, delivered by researcher, via SMS, using trans-theoretical model)												
1 (Palacios 2018)	randomised trials	very serious ¹	no serious inconsistency	no serious indirectness	very serious ³	none	10/84 (11.9%)	13/86 (15.1%)	RR 0.79 (0.37 to 1.7)	32 fewer per 1000 (from 95 fewer to 106 more)	VERY LOW	IMPORTANT NO EV. OF IMP. DIFF.

CI: confidence interval; RD: risk difference; RR: risk ratio

1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB 2

2 95% CI crosses 1 MID (0.8 or 1.25)

3 95% CI crosses 2 MIDs (0.8 and 1.25)

4 Sample size <200

Table 7: Evidence profile for comparison 3: Interventions using information provision on infant feeding versus home safety information provision – Overall estimate including all the components of the intervention (Mixed strata for level of socioeconomic deprivation, parental education and parental age)

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Interventions using information provision on infant feeding	Information provision on home safety	Relative (95% CI)	Absolute		
Introduced solids between 4 to 6 months - components of intervention (face-to-face and printed interventions, individual based, general information, delivered by research nurse, during home visits, no theory mentioned)												
1 (Savage 2018)	randomised trials	serious ¹	no serious inconsistency	no serious indirectness	no serious imprecision	none	113/140 (80.7%)	117/139 (84.2%)	RR 0.96 (0.86 to 1.07)	34 fewer per 1000 (from 118 fewer to 59 more)	MODERATE	CRITICAL NO IMP. DIFF.
Vegetable as first food - components of intervention (face-to-face and printed interventions, individual based, general information, delivered by research nurse, during home visits, no theory mentioned)												
1 (Savage 2018)	randomised trials	serious ¹	no serious inconsistency	no serious indirectness	serious ²	none	50/124 (40.3%)	31/124 (25%)	RR 1.61 (1.11 to 2.34)	153 more per 1000 (from 28 more to 335 more)	LOW	CRITICAL IMP. BENEFIT
Consumed vegetables daily at 1 year - components of intervention (face-to-face and printed interventions, individual based, general information, delivered by research nurse, during home visits, no theory mentioned)												
1 (Savage 2018)	randomised trials	serious ¹	no serious inconsistency	no serious indirectness	no serious imprecision	none	117/122 (95.9%)	105/118 (89%)	RR 1.08 (1 to 1.16)	71 more per 1000 (from 0 more to 142 more)	MODERATE	CRITICAL NO IMP. DIFF.
Using bottle at 52 weeks - components of intervention (face-to-face and printed interventions, individual based, general information, delivered by research nurse, during home visits, no theory mentioned)												
1 (Savage 2018)	randomised trials	serious ¹	no serious inconsistency	serious ³	serious ²	none	78/125 (62.4%)	97/123 (78.9%)	RR 0.79 (0.67 to 0.93)	166 fewer per 1000 (from 55 fewer to 260 fewer)	VERY LOW	CRITICAL IMP. BENEFIT
Consumed salty snacks daily at 1 year - components of intervention (face-to-face and printed interventions, individual based, general information, delivered by research nurse, during home visits, no theory mentioned)												

1 (Savage 2018)	randomised trials	serious ¹	no serious inconsistency	no serious indirectness	serious ²	none	12/122 (9.8%)	24/118 (20.3%)	RR 0.48 (0.25 to 0.92)	106 fewer per 1000 (from 16 fewer to 153 fewer)	LOW	CRITICAL IMP. BENEFIT
Consumed any sugar-sweetened beverage at 1 year - components of intervention (face-to-face and printed interventions, individual based, general information, delivered by research nurse, during home visits, no theory mentioned)												
1 (Savage 2018)	randomised trials	serious ¹	no serious inconsistency	no serious indirectness	no serious imprecision	none	6/120 (5%)	21/119 (17.6%)	RR 0.28 (0.12 to 0.68)	127 fewer per 1000 (from 56 fewer to 155 fewer)	MODERATE	IMPORTANT IMP. BENEFIT
Consumed any fruit juice at 1 year – components of intervention (face-to-face and printed interventions, individual based, general information, delivered by research nurse, during home visits, no theory mentioned)												
1 (Savage 2018)	randomised trials	serious ¹	no serious inconsistency	no serious indirectness	serious ²	none	46/122 (37.7%)	74/124 (59.7%)	RR 0.63 (0.48 to 0.83)	221 fewer per 1000 (from 101 fewer to 310 fewer)	LOW	IMPORTANT IMP. BENEFIT

CI: confidence interval; RR: risk ratio

1 Serious risk of bias in the evidence contributing to the outcomes as per RoB 2

2 95% CI crosses 1 MID (0.8 or 1.25)

3 Outcome is indirect due to being a proxy outcome of 'appropriate milk feeding and avoidance of unmodified cow's milk before age 1'

Table 8: Evidence profile for comparison 4: Interventions using scripted and standardized information provision on infant feeding versus brief counselling – Overall estimate including all the components of the intervention (Mixed strata for level of socioeconomic deprivation, parental education and parental age)

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Interventions using scripted and standardized information provision on infant feeding	Brief counselling	Relative (95% CI)	Absolute		
–Totally weaned from the bottle by 12 months – components of intervention (face-to-face and visual (photos) interventions, aimed at individuals, general information, delivered by paediatricians, at well-baby clinics, no theory mentioned)												

1 (Franco 2008)	randomised trials	very serious ¹	no serious inconsistency	serious ²	serious ³	none	18/67 (26.9%)	11/65 (16.9%)	RR 1.59 (0.81 to 3.1)	100 more per 1000 (from 32 fewer to 355 more)	VERY LOW	CRITICAL NO EV. OF IMP. DIFF.
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CI: confidence interval; RR: risk ratio

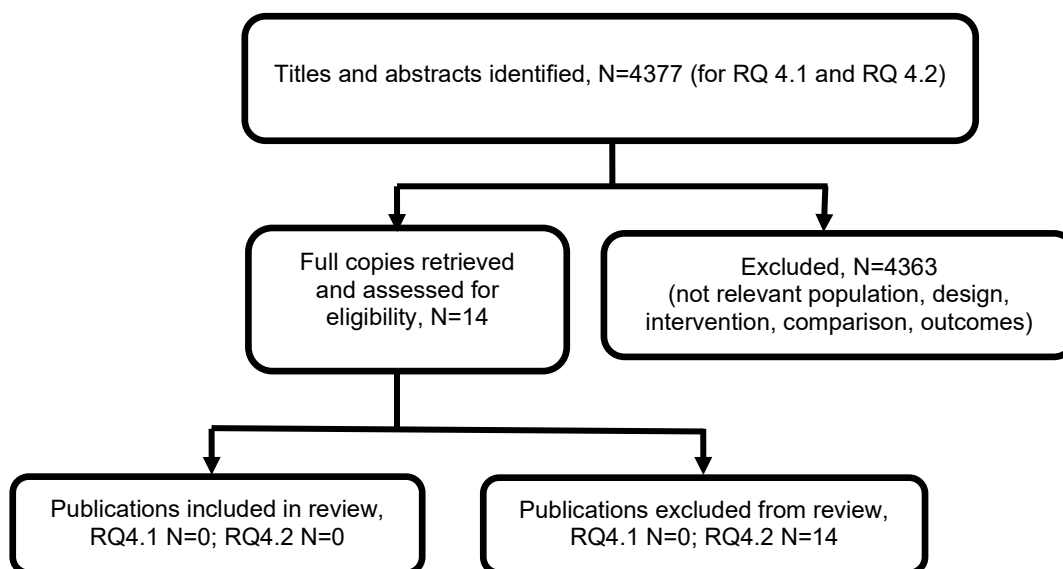
1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB 2

2 Outcome is indirect due to being a proxy outcome of 'appropriate milk feeding and avoidance of unmodified cow's milk before age 1'

3 95% CI crosses 1 MID (0.8 or 1.25)

Appendix G Economic evidence study selection

Study selection for: What interventions are effective to promote appropriate and timely introduction to solids (complementary feeding) for babies from 6 to 12 months (in line with government advice)?



Appendix H Economic evidence tables

Economic evidence tables for review question: What interventions are effective to promote appropriate and timely introduction to solids (complementary feeding) for babies from 6 to 12 months (in line with government advice)?

No economic evidence was identified which was applicable to this review question.

Appendix I Economic model

Economic model for review question: What interventions are effective to promote appropriate and timely introduction to solids (complementary feeding) for babies from 6 to 12 months (in line with government advice)?

No economic analysis was conducted for this review question.

Appendix J Excluded studies

Excluded studies for review question: What interventions are effective to promote appropriate and timely introduction to solids (complementary feeding) for babies from 6 to 12 months (in line with government advice)?

Excluded effectiveness studies

The excluded studies table only lists the studies that were considered and then excluded at the full-text stage for this review (N=30) and not studies (N=589) that were considered and excluded from the search before the full-text stage for the other review question (evidence review O) in the same search, as per the PRISMA diagram in Appendix C.

Table 9: Excluded studies and reasons for their exclusion

Study	Code [Reason]
Arikpo, Dachi, Edet, Ededet Sewanu, Chibuzor, Moriam T et al. (2018) Educational interventions for improving primary caregiver complementary feeding practices for children aged 24 months and under. Cochrane Database of Systematic Reviews 5: cd011768	- Systematic review. Included studies checked for inclusion. <i>No eligible study identified for inclusion.</i>
Banna, J, Campos, M, Gibby, C et al. (2017) Multi-site trial using short mobile messages (SMS) to improve infant weight in low-income minorities: development, implementation, lessons learned and future applications. Contemporary clinical trials 62: 56-60	- No outcomes of interest <i>Study describes the development and implementation of the intervention</i>
Bender, W.; Levine, L.; Durnwald, C. (2022) Text Message-Based Breastfeeding Support Compared With Usual Care: A Randomized Controlled Trial. Obstetrics and Gynecology 140(5): 853-860	- Domain not of interest <i>Study focused on breastfeeding and was included in evidence review J</i>
Black, M.M., Siegel, E.H., Abel, Y. et al. (2001) Home and videotape intervention delays early complementary feeding among adolescent mothers. Pediatrics 107(5): e67	- Conference abstract
Cauble, JS, Herman, A, Wick, J et al. (2021) A prenatal group based phone counseling intervention to improve breastfeeding rates and complementary feeding: a randomized, controlled pilot and feasibility trial. BMC pregnancy and childbirth 21(1): 521	- Ineligible intervention <i>Intervention was delivered in the antenatal period</i>

Study	Code [Reason]
Cloutier, MM, Wiley, JF, Kuo, CL et al. (2018) Outcomes of an early childhood obesity prevention program in a low-income community: a pilot, randomized trial. <i>Pediatric obesity</i> 13(11): 677-685	- Domain not of interest <i>Study focused on obesity prevention which is outside the remit of this guideline</i>
Coulthard, Helen; Harris, Gillian; Fogel, Anna (2014) Exposure to vegetable variety in infants weaned at different ages. <i>Appetite</i> 78: 89-94	- Ineligible study design <i>Some quasi experimental elements included in study design</i>
Edwards RC, Thullen MJ, Korfmacher J et al. (2013) Breastfeeding and complementary food: randomized trial of community doula home visiting. <i>Pediatrics</i> 132(Supl 2): S160–S166	- No outcomes of interest <i>Outcomes measured at 4 months and focused on breastfeeding</i>
Elfzani, Z, Kwok, TC, Ojha, S et al. (2019) Education of family members to support weaning to solids and nutrition in infants born preterm. <i>The Cochrane database of systematic reviews</i> 2: cd012240	- Systematic review. Included studies checked for inclusion. <i>This was an empty review (no individual studies included).</i>
Fitzgibbon, M.L., Stolley, M.R., Avellone, M.E. et al. (1996) Involving parents in cancer risk reduction: a program for Hispanic American families. <i>Health psychology : official journal of the Division of Health Psychology, American Psychological Association</i> 15(6): 413-422	- Ineligible population <i>Children aged 7-12 years</i>
Forestell CA and Mennella JA. (2007) Early determinants of fruit and vegetable acceptance. <i>Pediatrics</i> 120: 1247-54.	- Ineligible intervention <i>Study compared introducing single vegetable with introducing single vegetable alternated with single fruit</i>
French, G.M., Nicholson, L., Skybo, T. et al. (2012) An evaluation of mother-centered anticipatory guidance to reduce obesogenic infant feeding behaviors. <i>Pediatrics</i> 130(3): e507-e517	- Domain not of interest <i>Study focused on obesity prevention which is not within the remit of this guideline</i>

Study	Code [Reason]
Gerrish CJ and Mennella JA. (2001) Flavor variety enhances food acceptance in formula-fed infants. American Journal of Clinical Nutrition 6(73): 1080-5	- Ineligible intervention <i>Study focused on assessing the impact of a variety of food flavours on acceptance of vegetables, and included single fruits or vegetables as intervention</i>
Gross, SM, Caulfield, LE, Bentley, ME et al. (1998) Counseling and motivational videotapes increase duration of breast-feeding in African-American WIC participants who initiate breast-feeding. Journal of the American Dietetic Association 98(2): 143-148	- Ineligible intervention <i>A motivational video package intervention and/or a peer-counselling intervention to improve duration of breast feeding.</i>
Hetherington MM, Schwartz C, Madrelle J et al. (2015) A step-by-step introduction to vegetables at the beginning of complementary feeding. The effects of early and repeated exposure. Appetite: 280-90	- Outcome not in analysable format
Kahn, R; Bonuck, K; Trombley, M (2007) Randomized controlled trial of bottle weaning intervention: a pilot study. Clinical pediatrics 46(2): 163-174	- Ineligible population <i>Population included children aged 18 -30 months</i>
Macchi, A.K., Banna, J., Moreira, S. et al. (2022) Effect of a Short Messaging Service (SMS) intervention delivered to caregivers on energy, nutrients, and food groups intake in infant participants of the WIC program. Frontiers in public health 10: 986330	- Ineligible population <i>Population in this study is the same population reported in Palacios 2018 and the data reported in this study does not add any additional information</i>
Matvienko-Sikar, K, Toomey, E, Delaney, L et al. (2018) Effects of healthcare professional delivered early feeding interventions on feeding practices and dietary intake: A systematic review. Appetite 123: 56-71	- Systematic review. Included studies checked for inclusion. <i>No eligible study identified for inclusion</i>
Morandi, A., Tommasi, M., Soffiati, F. et al. (2019) Prevention of obesity in toddlers (PROBIT): a randomised clinical trial of responsive feeding promotion from birth to 24 months. International Journal of Obesity 43(10): 1961-1966	- Domain not of interest <i>Study focused on obesity prevention which is outside the remit of this guideline</i>

Study	Code [Reason]
Morgan, EH, Schoonees, A, Sriram, U et al. (2020) Caregiver involvement in interventions for improving children's dietary intake and physical activity behaviors. Cochrane Database of Systematic Reviews	- Ineligible intervention <i>Intervention does not meet protocol criteria -not aimed to promote introduction to solids. Study aimed to evaluate the effects of interventions to improve children's dietary intake or physical activity behaviour in children aged 2 to 18 years</i>
Netting, M.J., Gold, M.S., Quinn, P. et al. (2022) Does SMS text messaging promote the early introduction of food allergens? A randomized controlled trial. Pediatric Allergy and Immunology 33(2): e13720	- Ineligible study design <i>Letter to the editor</i>
Ojha, S, Elfzzani, Z, Kwok, TC et al. (2020) Education of family members to support weaning to solids and nutrition in later infancy in term-born infants. The Cochrane database of systematic reviews 7(7): cd012241	- Systematic review. Included studies checked for inclusion. <i>Of the 21 studies included, 4 potentially relevant studies were identified and assessed for eligibility. Eligible studies identified (Palacios 2019, Watt 2009, Fildes 2015) have been included as individual studies. Koehler 2007 could not be included as there is no analysable data reported</i>
Paul, IM, Savage, JS, Anzman, SL et al. (2011) Preventing obesity during infancy: a pilot study. Obesity (Silver Spring, Md.) 19(2): 353-361	- Outcome not in analysable format <i>Outcome presented in graphs</i>
Scheinmann, Roberta, Chiasson, Mary Ann, Hartel, Diana et al. (2010) Evaluating a bilingual video to improve infant feeding knowledge and behavior among immigrant Latina mothers. Journal of community health 35(5): 464-70	- Ineligible study design <i>Quasi randomised trial</i>
Schroeder, N, Rushovich, B, Bartlett, E et al. (2015) Early Obesity Prevention: a Randomized Trial of a Practice-Based Intervention in 0-24-Month Infants. Journal of obesity 2015: 795859	- Domain not of interest <i>Study focused on obesity prevention which is outside the remit of this guideline</i>
Skouteris, Helen, Bailey, Cate, Nagle, Cate et al. (2017) Interventions Designed to Promote Exclusive Breastfeeding in High-Income Countries: A Systematic Review Update. Breastfeeding medicine : the official journal of	- Systematic review. Included studies checked for inclusion. <i>3 relevant studies (Watt 2009, Fildes 2015, Palacios 2019) identified for inclusion and have been included as individual studies. Other</i>

FINAL

Interventions to promote appropriate and timely introduction to solids (complementary feeding) for babies from 6 to 12 months

Study	Code [Reason]
the Academy of Breastfeeding Medicine 12(10): 604-614	<i>studies were excluded because they were conducted in LMIC, focused on obesity prevention or did not present data in analysable format</i>
Spiegelblatt, L, Lainé-Ammara, G, Arsenault, L et al. (1991) Influence of follow-up education of mothers about too early introduction of solid food to infants. Pediatrice 46(5): 475-479	- Language not English
Thorisdottir, Asa Vala; Gunnarsdottir, Ingibjorg; Thorsdottir, Inga (2013) Revised infant dietary recommendations: the impact of maternal education and other parental factors on adherence rates in Iceland. Acta paediatrica (Oslo, Norway : 1992) 102(2): 143-8	- Ineligible study design <i>Not an intervention study</i>
Wen, L.M., Rissel, C., Xu, H. et al. (2020) Effects of Telephone and Short Message Service Support on Infant Feeding Practices, "tummy Time," and Screen Time at 6 and 12 Months of Child Age: A 3-Group Randomized Clinical Trial. JAMA Pediatrics 174(7): 657-664	- Duplicate

Excluded economic studies

No economic study was reviewed at full text and excluded from this review.

Appendix K Research recommendations – full details

Research recommendations for review question: What interventions are effective to promote appropriate and timely introduction to solids (complementary feeding) for babies from 6 to 12 months (in line with government advice)?

No research recommendations were made for this review question.