

Systematic reviews to be conducted in preparation for WHO guidelines on the feeding of infants and young children 6-23 months of age

1. Unhealthy foods and beverages

Among children <24 months of age (P), does greater consumption of certain types of foods and beverages (E) compared to less or no consumption of these foods (C) increase the risk of adverse outcomes (O)?

Population:	Children <10 years of age - Stratify by age group (<24 months, 24-59 months, 5-9 years)*
Exposure:	Consumption of: a) foods and beverages containing more sugar (stratified by added sugars and naturally occurring sugars) b) foods or beverages with non-caloric sweeteners c) foods containing more fat (consider the quality of fat) d) foods high in salt e) ultra-processed foods (when possible using the NOVA classification)
Comparator:	Consumption of: a) foods and beverages containing less sugar b) foods and beverages without non-caloric sweeteners c) foods containing less fat d) foods containing less salt e) less or no ultra-processed foods
Outcomes:	Critical: a) Growth and body composition (e.g. stunting, wasting, overweight/obesity) b) Displacement of healthy foods/breast milk intake c) Long term outcomes (obesity, NCDs) d) Dietary quality and diversity Important: e) Food/taste preferences later in life (also include food refusal) f) Oral health (dental caries) g) Nutrient deficiencies h) Child development

*Although the guideline will pertain only to children <24 months of age, evidence on the risks of these foods and beverages in children up to 10 years of age would also be relevant for this guideline.

2. Age of introduction of complementary feeding

For infants (P), is the introduction of complementary feeding at 6 months of age (E) compared to earlier or later introduction (C) associated with beneficial or adverse nutrition, health and development outcomes (O)?

Population:	<p>Infants</p> <ul style="list-style-type: none"> - Stratify by types of milk feeding prior to introduction of CF (exclusively breastfed, formula-fed, mixed breastfed & formula fed) - Stratify by context (exposure to infectious diseases)
Exposure:	Introduction of complementary foods at ~6 months
Comparator:	<p>a) Earlier introduction of complementary foods</p> <p>b) Later introduction of complementary foods</p>
Outcomes:	<p>Critical:</p> <ul style="list-style-type: none"> a) Growth and body composition (e.g. stunting, wasting, overweight/obesity) b) Mortality c) Morbidity and infections (e.g. ear infections, gastrointestinal infections) d) Nutrient status (e.g. iron, fatty acids) e) Anaemia f) Child development <p>Important:</p> <ul style="list-style-type: none"> g) Gut health and the microbiome h) Longer term health outcomes (NCDs) i) Food preferences/dietary patterns/dietary diversity j) Food allergies k) Maternal birth spacing

3. Fruit & vegetable consumption

For infants and young children 6-23 months of age (P), is more frequent or more varied consumption of fruits or vegetables (E) compared to less frequent or less varied consumption (C) associated with beneficial dietary and health outcomes (O)?

Population:	Infants and young children <24 months of age - Stratify by age group (6-8 months, 9-11 months, 12-23 months)
Exposure:	a) More frequent consumption of fruits b) More varied consumption of fruits* c) More frequent consumption of vegetables d) More varied consumption of vegetables
Comparator:	a) Less frequent consumption of fruits b) Less varied consumption of fruits c) Less frequent consumption of vegetables d) Less varied consumption of vegetables
Outcomes:	Critical: a) Subsequent consumption of fruits or vegetables b) Nutrient status Important: c) Growth and body composition (e.g. stunting, wasting, overweight/obesity) d) Gut health e) Inflammation f) Dietary quality and diversity g) Food/taste preferences later in life (including food refusal)

*For each study, the definition of how variety was defined should be described.

4. Milks other than breast milk

For non-breastfed or mixed-fed (breastmilk and other milk) infants 6-11 months of age (P), is consumption of animal milk (E) compared to infant formula (C) associated with beneficial or adverse outcomes for health and development (O)?

Population:	Infant 6-11 months of age - Stratify by age group (6-8 months, 9-11 months)
Exposure:	Consumption of liquid animal milk
Comparator:	Consumption of infant formula
Outcomes:	<p>Critical:</p> <ul style="list-style-type: none"> a) Nutrient status (especially iron); including fatty acids b) Anaemia c) Growth and body composition (e.g. stunting, wasting, overweight/obesity) d) Intestinal blood loss e) Morbidity <p>Important:</p> <ul style="list-style-type: none"> f) Allergy g) Gut health h) Child development

5. Continued breastfeeding

For young children who were breastfed in the 1st year of life (P), is breastfeeding in the 2nd year of life (E) compared to no breastfeeding after 12 months (C) associated with beneficial or adverse health and development outcomes (O)?

Population:	Young children 12-23 months of age - Stratify by context (SES)
Exposure:	Continued breastfeed in the 2 nd year of life (beyond 12 months of age)
Comparator:	No breastfeeding after 12 months of age
Outcomes:	<p><i>Infant</i></p> <p>Critical:</p> <ul style="list-style-type: none"> a) Child development b) Growth and body composition (e.g. stunting, wasting, overweight/obesity) c) Morbidity and infections (including leukaemia, diabetes) d) Nutritional status (e.g. micronutrients) e) Mortality <p>Important:</p> <ul style="list-style-type: none"> f) Gut health and microbiome g) Bone health h) Oral health (dental caries) i) Allergy, asthma <p><i>Maternal</i></p> <p>Critical:</p> <ul style="list-style-type: none"> a) Breast, ovarian, endometrial cancer risk b) Risk of type 2 diabetes c) Hypertension, stroke, CVD d) Bone health <p>Important:</p> <ul style="list-style-type: none"> e) Mental health f) Birth spacing/maternal fertility

6. Milks other than breast milk

For young children 12-23 months of age (P), is full-fat animal milk (E) compared to follow-on formula, low-fat milk, or plant-based milk (C) associated with beneficial or harmful outcomes (O)?

Population:	Young children 12-23 months of age
Exposure:	Full-fat animal milk
Comparator:	a) follow-on formula b) low-fat animal milk c) plant-based “milk” drinks
Outcomes:	<p>Critical:</p> <ul style="list-style-type: none"> a) Growth and body composition (e.g. stunting, wasting, overweight/obesity) b) Long-term food preferences/dietary patterns c) Longer-term outcomes (NCDs) d) Nutrient status (including fatty acids, triglycerides and lipoproteins, and micronutrients) e) Child development f) Anaemia <p>Important:</p> <ul style="list-style-type: none"> g) Nutrient intakes (sufficient, excessive) h) Feeding practices – graduating to cup i) Oral health (dental caries) j) Morbidity k) Dietary diversity l) Gut health m) Allergy n) Phyto-oestrogen related outcomes

*For each study, report and stratify, when possible, by the volume of milk consumed.