Excess weight gain in infants: an exploration of the beliefs and behaviours of socioeconomically disadvantaged mothers

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How can we design effective interventions in this group?

a. Identify important behaviours.

b. Identify what is needed in order for those behaviours to occur in the target population.

c. Map these to appropriate Behaviour Change Techniques.
Which infant feeding practices?

Feeding practices associated with poor diets/excess weight gain include:

- **Formula feeding** instead of **breastfeeding**
- **Sub-optimal** instead of **best-practice formula preparation**
- **Earlier** instead of **later** (~ 6 months) introduction of solid foods
- **Poor quality** first foods instead of **nutritious** first foods
- **Non-responsive** feeding instead of **responsive** feeding (e.g. feeding according to the infant’s hunger cues)
Methods

Interview guide developed around Michie’s COM-B framework.

Qualitative, one-on-one semi-structured interviews.

5 infant feeding practices.
Participants

29 mothers living in NSW/ACT

Had not completed a University degree

13 girl infants, aged 2-11 months
Results

Psychological Capability (skills & knowledge)
Social Opportunity (interpersonal influences)
Reflective Motivation (plans, evaluations)

…were important determinants of the behaviours.
Earlier/later introduction of solids

C: some awareness of 6 month recommendations
O: received inconsistent advice
M: motivated to introduce solids earlier

Best practice/suboptimal formula feeding

C: few skills & poor knowledge in the beginning
O: good advice is unavailable
M: motivated to feed well

Motivation is important
Opportunity is important
Earlier/later introduction of solids

Best practice/suboptimal formula feeding

No, I don’t think it’s [waiting until 6 months] realistic at all. Every baby’s different and if we had of waited for her to be six months, she wouldn’t have been very happy at all. Formula feeding mother 2

Motivation is important

Opportunity is important
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Opportunity is important
Motivation is important

I mean, when you first have a bub you’re thrown into, I suppose, breastfeeding and you’re given so much advice and so much support based on that, but if you have to change to formula or something like that, it’s very negatively viewed upon, even by health practitioners
Prolonging breastfeeding/introduce formula

C: high skills & knowledge
O: little advice/support
M: plans, goals & beliefs about consequences

Responsive/non-responsive feeding

C: low skills in settling without food/milk
O: little advice on consequences of feeding to settle
M: motivated to feed to settle

Motivation is important

Capability, Opportunity and Motivation are important
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Well I never really considered giving up but then there’s additional advantages like it’s a money saving. So you have to pay for formula. It’s so much more convenient. If she wakes up, I can put her straight on. I don’t have to look for bottles. I don’t have to sterilise. It’s all right there. It’s easy

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Motivation is important

Capability, Opportunity and Motivation are important
He will just follow me around, like he crawls, just crying at me until I give him a biscuit or a bottle. Then he's fine, as long as he's like been given something he's happy.
Behaviour Change Techniques (BCTs) can be mapped to the determinants of target behaviours

To affect mothers’ **Capability** (knowledge/skills) use BCTs of *Education* or *Training* (e.g. demonstrate how to settle without using milk).

To affect mothers’ **Motivation** use BCTs of *Persuasion* or *Education* (e.g. educate mothers about possible health consequences of introducing solids earlier).

To affect **Social Opportunity** use *Enablement* (e.g. behavioural support from health professionals about formula feeding well).
Key messages

It is important to understand where behaviour change interventions should be targeted: motivation, capability or opportunity?

Different strategies may be needed for different infant feeding practices.

Behaviour change techniques can be mapped to the unique determinants of each of the infant feeding practices to improve the success of interventions.
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