



## Evidence Summary

### What are the critical features of successful lifestyle weight management programmes for children aged 0-11 years?

- Obesity is one of the greatest public health challenges in the 21st century. In the UK in 2015/16 one in five children aged 4 to 5-years, and one in three children aged 10 to 11-years, were found to be obese or overweight.
- Obese children are more likely to continue being obese as adults, and also risk health problems when they are still children, such as type 2 diabetes and asthma.
- Lifestyle weight management programmes (LWMPs) address diet, physical activity and behaviour change. There is a lot of research which shows that they can be effective in helping children to become less overweight. However, there is a lack of more fine-grained information about the critical features of successful programmes.
- Research evidence identified three important features of LWMPs:
  - Showing families how to change, rather than just telling them what to change
  - Ensuring all the family are on board with the LWMP
  - Enabling social support for both parents and children

The Department of Health and Social Care Reviews Facility is a collaboration between the following centres of excellence

This summary is based on a systematic review of lifestyle weight management programmes (LWMP) for children aged 0-11 years. Our main aim is to highlight what a 'good' programme looks like.

- From UK based studies we examined the views of children, parents and providers who had been involved in LWMPs. From this evidence we identified the features of child LWMPs that are perceived to be key to successful weight management
- From an analysis of LWMP evaluations, we tested whether features perceived to be important are actually associated with improved weight management. We compared the features of the five 'most effective' interventions with the

### Background

The UK has one of the highest rates of obesity in the developed world. In 2013 more than one in four children aged 2-10 years in England were overweight or obese (Craig Mindell 2014). The proportion of children who are obese in the UK doubles (from 9% to 19%) between the point when children start school (age 4-5) and when they leave primary school (age 10-11) (Copely Bray 2015).

Research evidence has shown that LWMPs which address diet, physical activity and behaviour change can be effective in helping children to lose weight. However, there is a lack of detail in previous research evidence about the critical features of successful programmes. More information is also needed about the nature of current provision within local authorities in the UK.

The aim of this review is to identify what a good LWMP for children 'looks like' and the different kinds of services that might fit particular situations.

- features of the 15 'least effective' interventions
- To ensure the evidence can be used in practice, we explored current child weight management provision with local authorities and considered how the review findings could be incorporated into future service provision

### Evidence Sources

Studies of child, parent and provider views: 11

LWMP evaluations: 20

Interviews with local authorities: 2

Details of the project are presented in the full report at <http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=3729>

### Findings

*Which features of LWMPs are perceived as important for successful weight management?*

There were three key LWMP features that were felt to support successful weight management.

1. Practical experiences, which showed families how to change, rather than just telling them what to change

*"It wasn't just like, 'you need to do more exercise and you need to eat better' – it actually taught us like how to"* child p181 (Watson 2012)

2. Family involvement, developing a shared understanding and a healthy home environment.

*"They've got to have the support of the others in the family otherwise it's almost impossible"* p238 (Staniford et al. 2011)

3. Social support from peers, providing a safe space with similar others in which to gain confidence and skills

*"finding out you weren't alone in this [...] having an open forum to say my kid does that too, 'cause you feel so guilty"* parent p177 (Pittson 2013)

*Are the features perceived to be important associated with weight loss?*

To answer this question we examined whether the 'most effective' programmes differed from the 'least effective' programmes. All five of the most effective interventions were characterised by each of the three features identified by children, parents and providers. In contrast, all 15 least effective interventions did NOT have these features.

1. Showing families how to change through practical sessions was associated with higher effectiveness. All most effective interventions:

- provided physical activity sessions for children
- delivered more than two practical behaviour change strategy sessions
- offered advice on calorie intake

All least effective lacked at least one of these.

2. Ensuring all the family are on board was also associated with increased effectiveness. All most effective interventions aimed to engage the whole family through:

- delivering more than two discussion/education sessions for both children and parents
- delivering child-friendly sessions
- aiming to change behaviours across the whole family, rather than just the participating child.

All least effective lacked at least one of these.

3. Enabling social support for both parents and children by delivering group interventions was a feature of all most effective LWMPs. These all had:

- group sessions specifically for children
- more than two group sessions specifically for parents.

All least effective lacked at least one of these

*Local authority experiences with LWMPs*

Providers and commissioners in local authorities had similar experiences for 'showing families how to change' and 'getting all family members on board', but one authority felt delivery of group programmes may be a challenge in rural areas. They suggested that creative approaches to enable social support may be needed.

Implications for practice

- LWMPs should seek to develop families' skills and confidence through the use of practical programme components that show them how to change, including through
  - a) group physical activity sessions or, where not feasible, other means of enabling experience of physical activity;
  - b) delivering practical behaviour change strategies, such as goal-setting and parenting skills; and
  - c) providing calorie guidance so families have a broad understanding of the need to balance energy intake with energy expenditure.
- LWMPs should seek to engage the whole family in order to ensure a shared understanding and encourage a healthy home environment. LWMPs should therefore seek to:
  - a) change the health behaviours of the whole family;
  - b) ensure there are enough sessions for both parents and children; and
  - c) ensure the programme is engaging for children.
- LWMPs should include group-based sessions, or where group sessions are not feasible seek other options to ensure participants are able experience the beneficial effects of peer support

### Research priorities

Further research is needed to:

- Explore whether LWMPs for children under five years are more likely to be effective than those for older children
- Identify why and how advice about calorie intake works
- Assess how best to create peer support
- Explore how interventions are delivered and experienced

### Further resources

Public Health England has translated the review into practical guides to support commissioners and providers provide effective services – <https://www.gov.uk/government/publications/adult-weight-management-services-commission-and-provide>

### References

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