

The Planet Munch healthy lifestyle programme for preschool children

20
YEARS OF
NICE
1999-2019

Planet Munch, a fun, interactive programme, aims to encourage a healthy lifestyle and prevent and treat obesity in preschool children. Parents learn how small sustainable behavioural changes can improve diet and physical activity in the whole family.

“The only preschool obesity intervention in the UK that meets NICE guideline (CG43), with randomised controlled trial evidence to show it is effective at reducing obesity risk.”

Julie Lanigan, Principal Research Fellow, UCL Great Ormond Street Institute of Child Health



What we did and why

Obesity is a serious disease that has its origins in early childhood. Most obesity is established during the preschool years. In England over a fifth of 4-5 year olds start school already overweight. This is a concern as obesity tracks through childhood and into adult life, where it is associated with increased risk of adverse health outcomes in the short and long-term.

Once established, obesity is difficult to reverse. Interventions to treat obesity in school-aged children have been largely unsuccessful, whereas interventions targeting younger children report reductions in obesity risk. Yet there have been very few lifestyle interventions targeted at preschool children. To address this, we developed Planet Munch, a multicomponent healthy lifestyle programme for the prevention and treatment of obesity in preschool children.

Families attending children’s centres and community venues in Hertfordshire were invited to participate in the 24-week programme. Families were randomised either to start the intervention immediately or to join a waiting list control group and commence the programme six months later. Planet Munch was evaluated in two randomised controlled trials (RCT).

Outcomes and impact

Trial 1 targeted children at increased risk of developing obesity: **trial 2** recruited children irrespective of weight status. The primary outcome we measured was BMI z-score, calculated relative to the UK 1990 reference, at the end of the intervention (6 months from baseline). Weight and height were measured using standard protocols and equipment.

88 children were randomised in trial 1, targeting those at higher risk of obesity, and 85 took part in trial 2 where all preschool children were eligible. 73% and 75% of children completed trial 1 and 2 respectively.

In trial 1, BMI was lower in the intervention group than in the control group following participation. 48% of children were followed-up 2 years later and the BMI z-score was lower than at baseline.

In trial 2, BMI z-score was lower but did not differ significantly between groups after participation. 46% of children were measured at 1-year follow-up and BMI z-score was lower than at baseline too.

What we learnt

The Planet Munch intervention led to a significant reduction in obesity risk and was acceptable to families, children and children’s centre staff. Longer term follow-up found the effect on BMI to be sustained. These findings suggest that Planet Munch is a feasible and effective intervention for prevention of obesity in preschool children.

Families reported high enjoyment of Planet Munch and this was reflected in a high attendance rate: 75% of families completed the programme. Attendance was higher at children’s centres compared with community venues (mean attendance 66% versus 78%). This suggests children’s centres are preferable venues for parents.

On completion of the RCTs reported here, a community interest company (CIC) was set up with the 2 major aims:

1. To make Planet Munch more widely available to families and help stem the rise in childhood obesity.
2. To conduct a larger cluster RCT to evaluate efficacy and applicability to a wider population.

These objectives have yet to be achieved and are severely hampered by the absence of funding that includes intervention costs.