



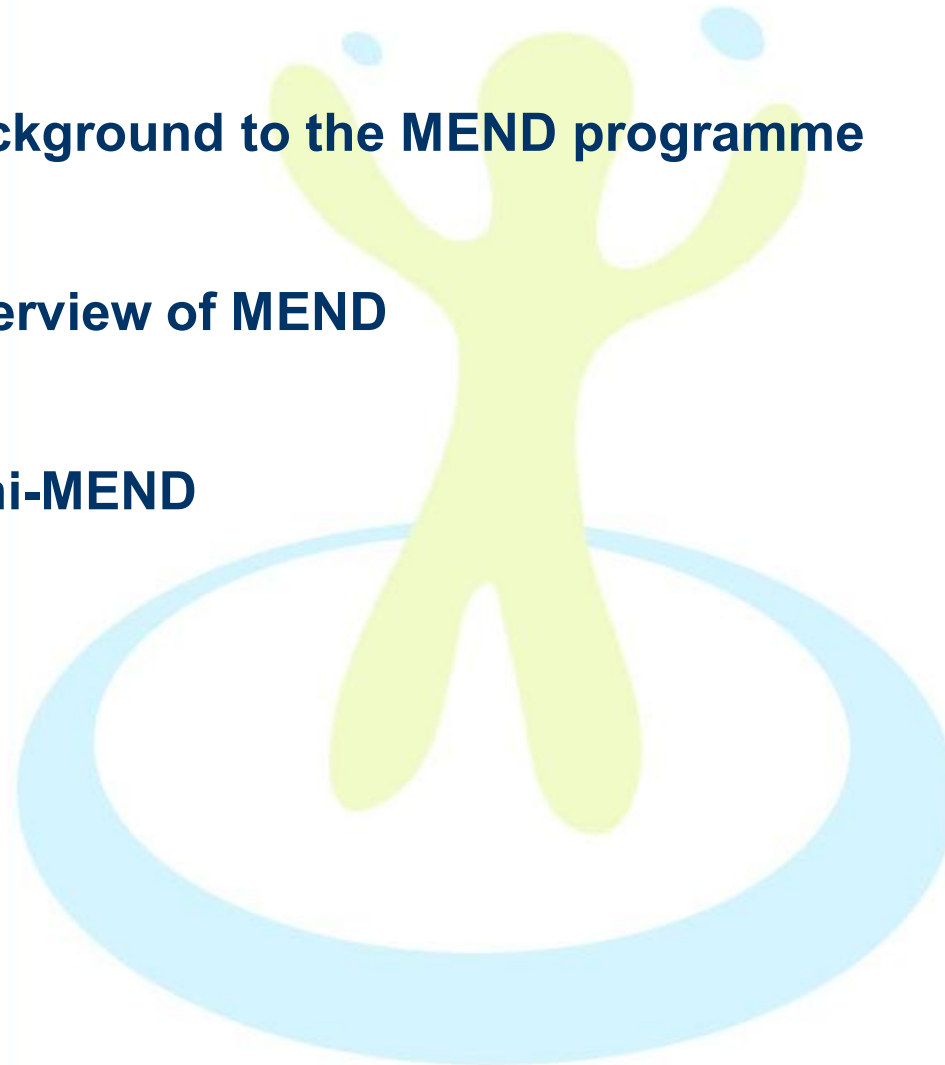
MEND: Healthy Weight Management programme

By: Carol Morgan

Agenda



1. **Background to the MEND programme**
2. **Overview of MEND**
3. **Mini-MEND**



MEND history

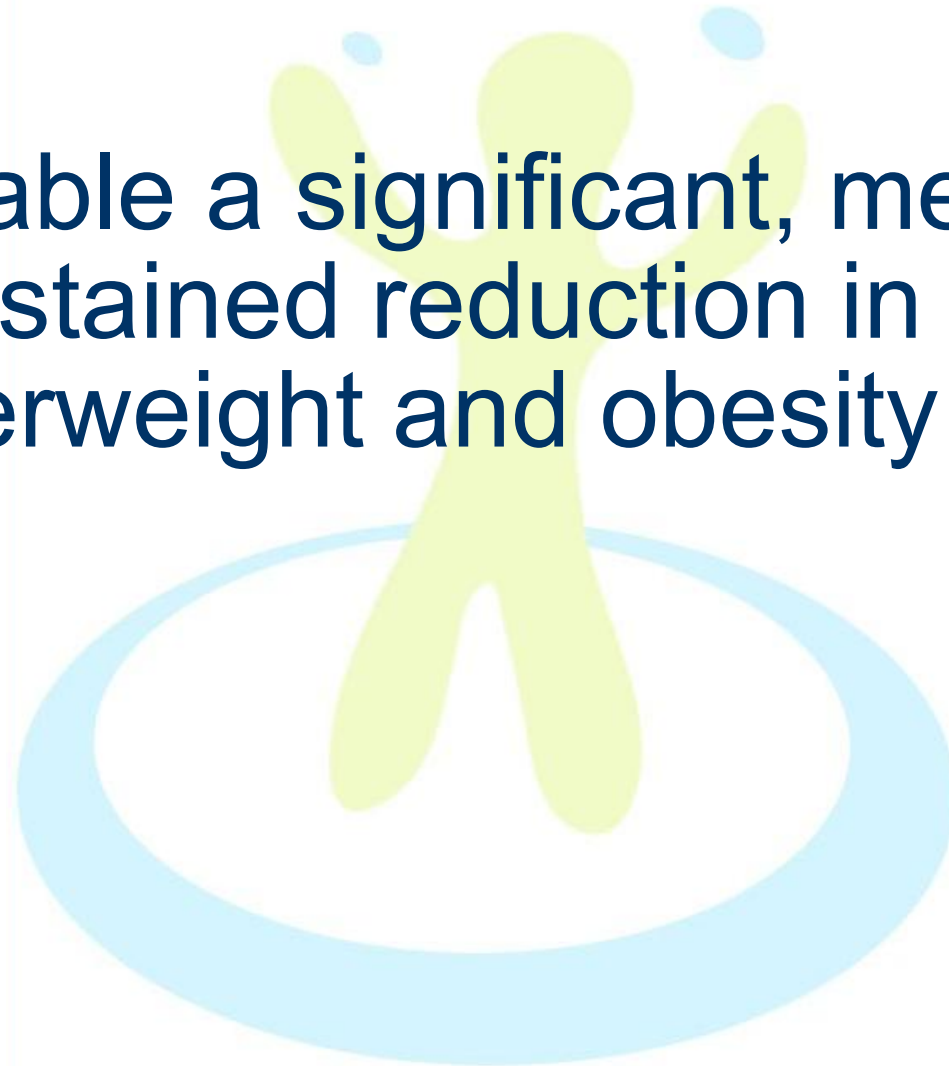


- 2001-3: MEND Programme developed, feasibility trial, evaluation and refinement
- 2004: Start of DH, JS & locally funded RCT at ICH/GOSH, MEND Central launch
- 2007: ICH/GOS 20 year partnership, Mini-MEND pilot, other NPD
- Status: 26 employees, £15 million funding secured to 2010, 110 lead partners, 2,200 MEND Programmes, 310 sites, 27,000 families, ¼ million Healthy Living Communications, 5,000 HCP trained, 8 Best Practice Conferences, Graduates

MEND's mission



To enable a significant, measurable and sustained reduction in childhood overweight and obesity levels



Mission elaborated

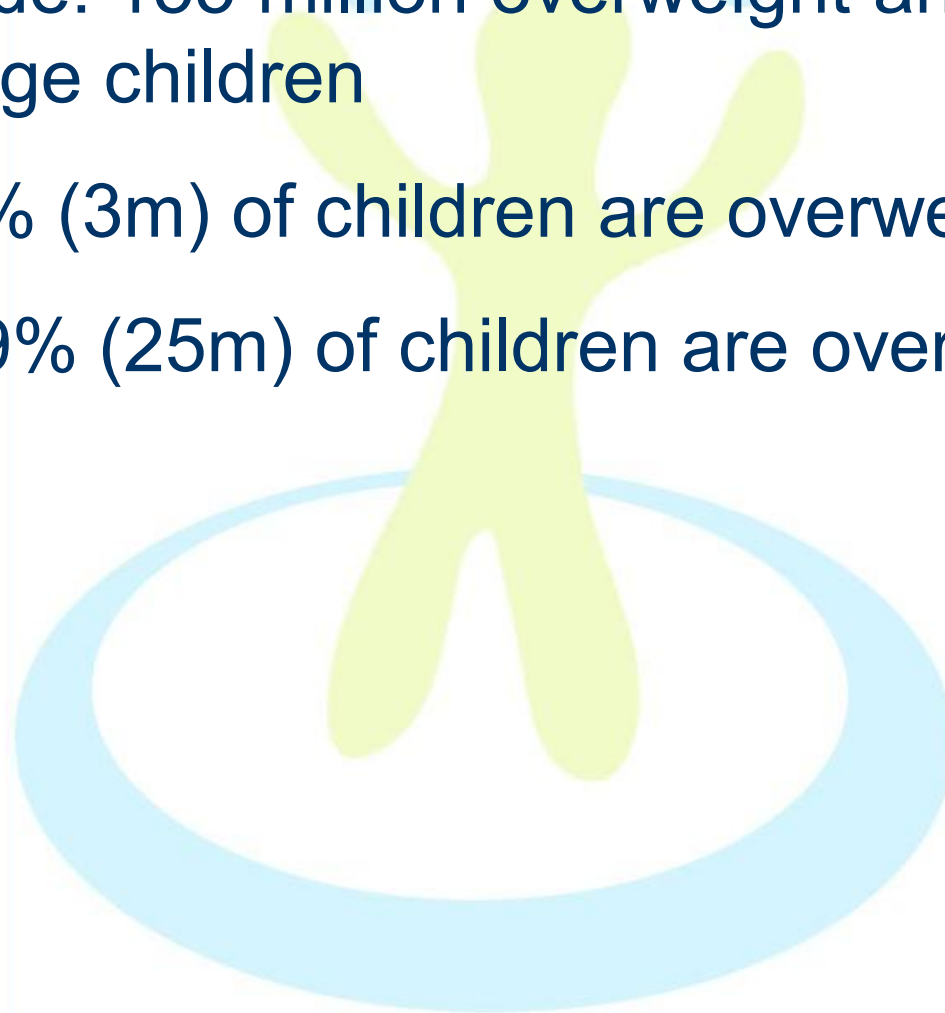


- Enable:
 - We want to train others to deliver our research-based Programmes
 - not develop a huge infrastructure. We also provide general child obesity training to frontline staff
- Significant:
 - More than 5%. The UK has more than 3 million overweight and obese children. MEND has funding for 28,000 to date – less than 1% in the UK over four years
- Measurable:
 - The impact must be measurable, at least before and after the core Programme, and preferably ongoing
- Sustained:
 - The impact of the intervention must be maintained

Childhood obesity: A global epidemic



- Worldwide: 155 million overweight and obese school age children
- UK: 31% (3m) of children are overweight or obese
- US: 31.9% (25m) of children are overweight or obese



The problem in the UK



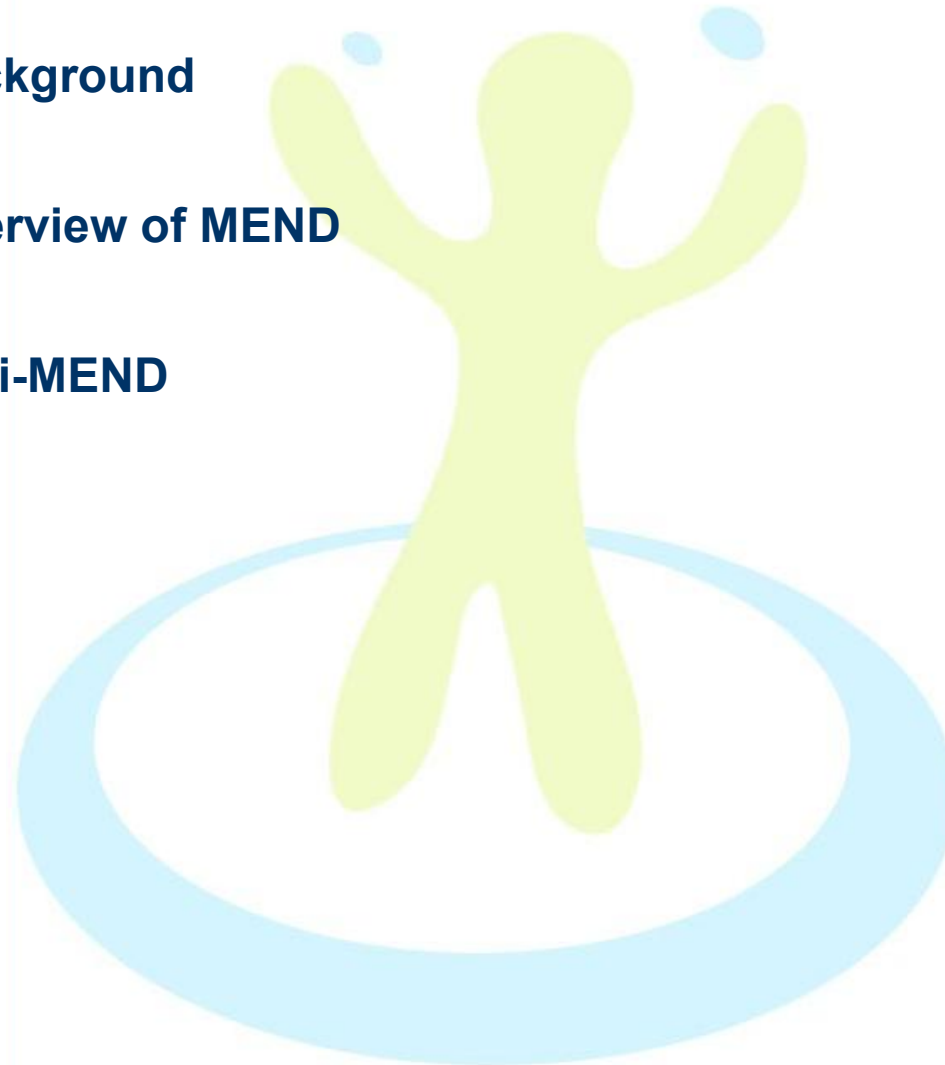
- **50%+***
 - U.K. children overweight or obese by 2050
- **40-70%**
 - Obese kids become obese adults
- **\$100 billion per year**
 - Cost of obesity-related healthcare in US adults
- **£50billion* per year**
 - Cost of unchecked obesity to UK by 2050

* Foresight Report – Published 2007, United Kingdom

Agenda



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What does MEND do?



MEND is a child obesity organisation that provides:

- Evidence-based, family-oriented programmes to prevent and treat child obesity
- Training to frontline staff to build local capacity and skills
- Improves child and family behaviour, not a focus on rapid weight loss

MEND's multi-component interventions



- **Design:** Child obesity experts
- **Delivery:** Health, education, fitness and childcare professionals
- **Setting:** Community-based
- **In line with:**
 - NICE Guidance (UK)
 - ADA Report (USA)
 - Canadian Clinical Practice Guidelines
 - NHMRC (Australia)



What Does MEND stand for?

M. IND

E. XERCISE

N. UTRITION

D. O IT!





Content – Mind

Applying social learning theory & behaviour modification techniques:

- Goal & rewards
- Role modeling
- Stimulus control - hunger vs. craving
- Problem solving
- Positive parenting e.g. bullying, sleep etc
- Self-esteem & confidence

(5 / 8 sessions – parents only)

Content - Exercise



- Land & water based
- Group play
- Non-competitive
- Graded activities
- ↑ self-esteem (dance, voice & drama)
- FUN!!!

Content - Nutrition



- Customised healthy eating
- Not a diet!
- Educating & empowering families
- No forbidden foods
- Many convenience and ready-meals promoted
- Organic products not promoted

(All sessions - parents & children)



Land-based games

Multi-pronged approach to obesity: Range of existing products and services



MEND Programme comprises



20 x 2-hour group sessions (10 weeks)

- Introduction and farewell
- 8 Mind
- 8 Nutrition
- 18 Exercise
- 2 Measurement Sessions (Pre & Post)



Water-based games



Supermarket tour

Differentiation



MEND is differentiated from other obesity interventions, including other healthy lifestyle programmes:

- Strong evidence base (with commitment to conducting ongoing research)
- Designed from the outset to be replicable, scalable and cost-effective
- Focus on ongoing sustainability for families and programmes

MEND Programme: The evidence base (Research)



- Feasibility study 2002-3

(Sacher et al, 2005)

- Pilot 2004-5

(Sacher et al, 2006)

- RCT 2005-7

(Sacher et al, 2007)

Research team

Paul Sacher

Dr Paul Chadwick

Prof. Tim Cole

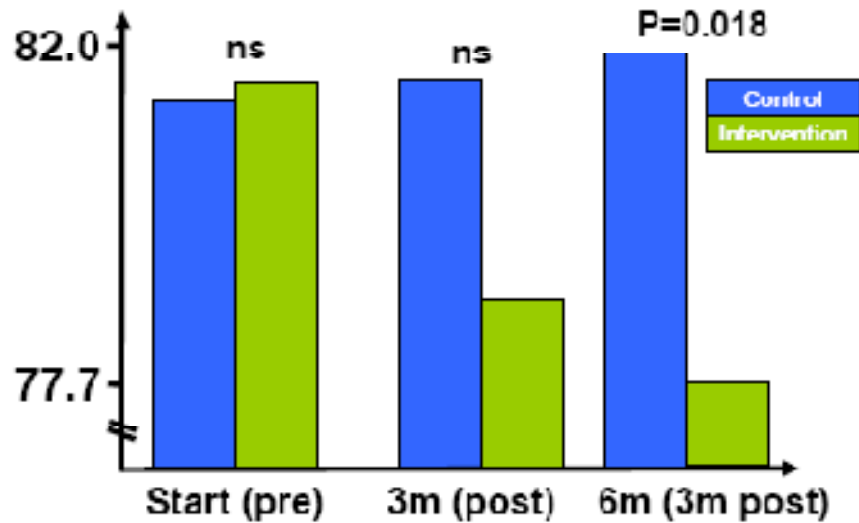
Maria Kolotourou

Dr Margaret Lawson

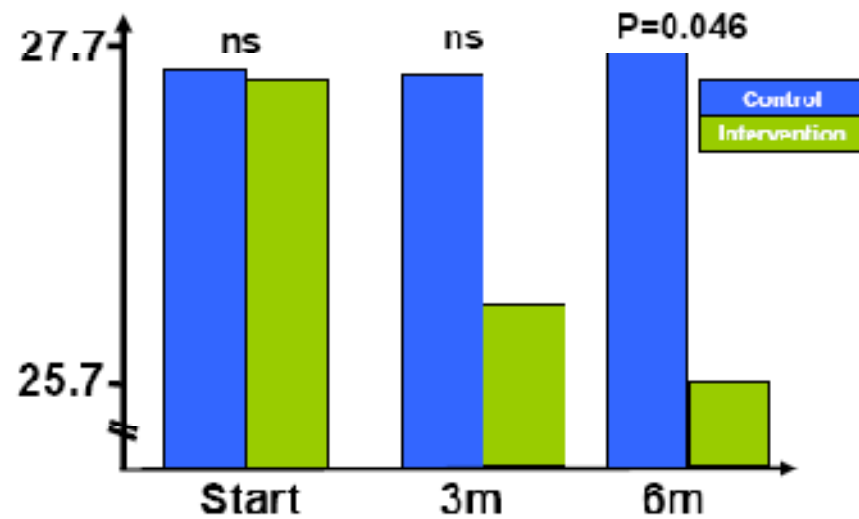
Prof. Alan Lucas

Dr Atul Singhal

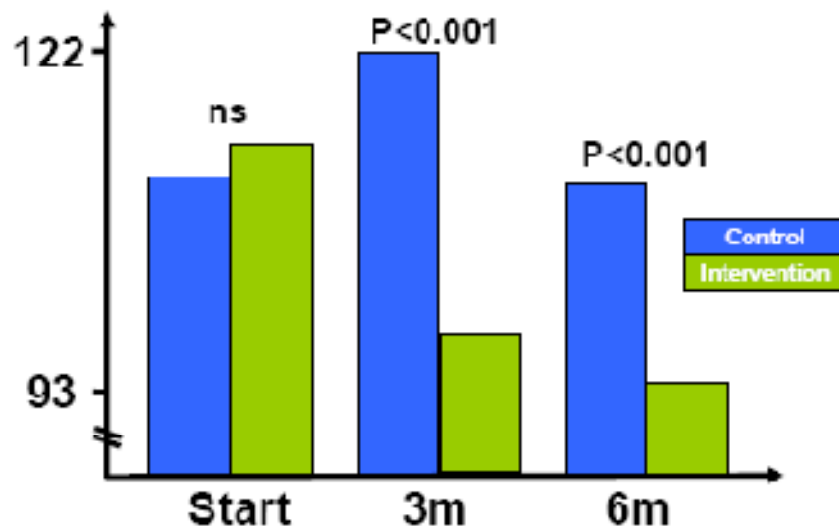
Waist circumference (cm)



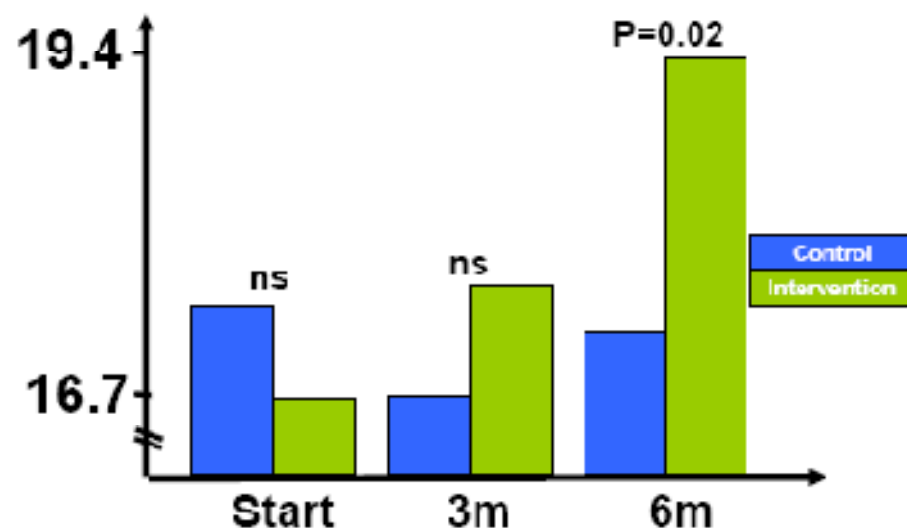
BMI (kg/m²)



Recovery Heart Rate (bpm)



Self-esteem score (out of 24)



Attendance and retention



- 86% mean MEND Programme attendance
- 68% of children attended $\geq 16 / 18$ sessions
- 97% MEND Programme retention rate
- 79% study retention rate (12 months)

Comprehensive Graduates Programme

Delivery partner responsibilities:

- Follow up measurements strongly encouraged. (Data entered in OMMS for monitoring of long term impact of MEND)
- Weekly Graduate exercise classes after MEND
- Graduates actively signposted to local activities, clubs and courses (e.g. kick boxing classes; cookery clubs; local football clubs)
- Regional steering committees established to coordinate regional events and graduate activities

Evolving Sustainability Programme



Goal

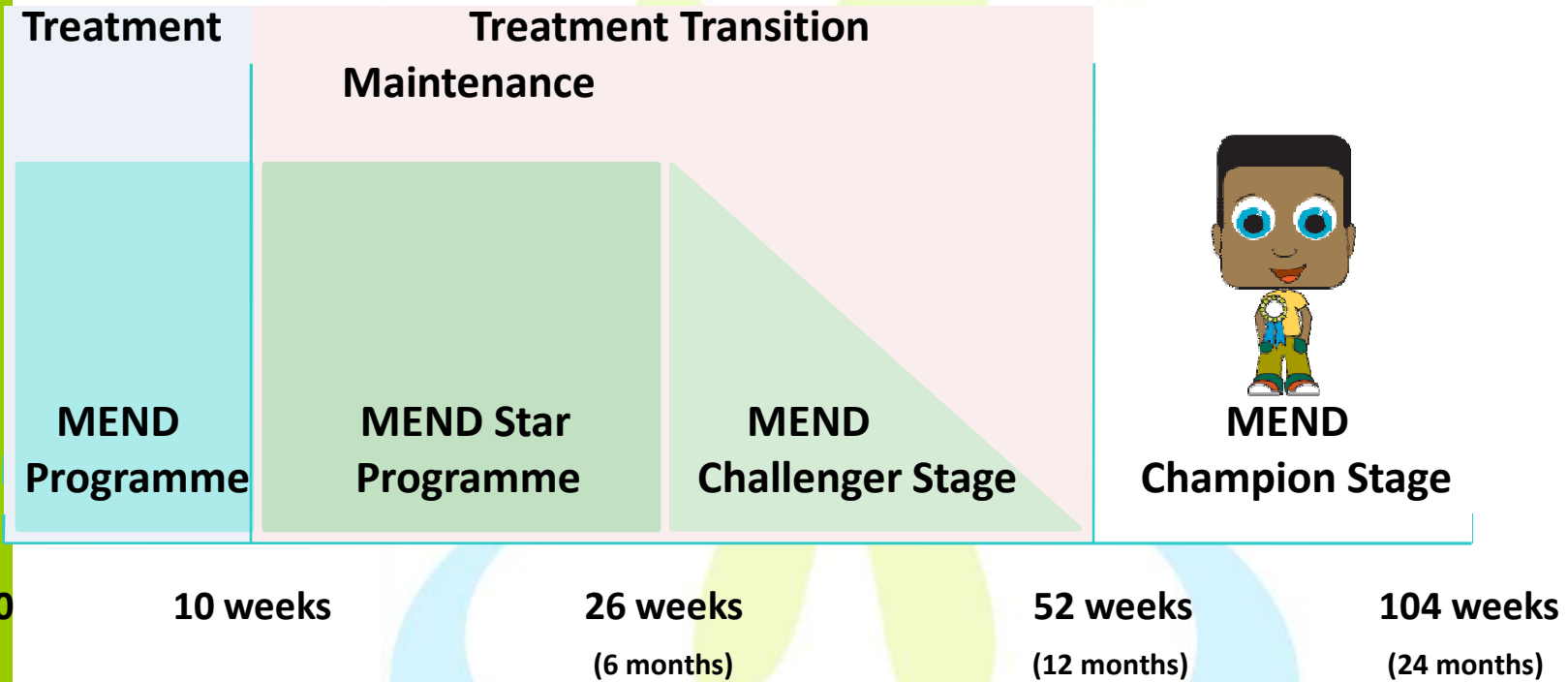
- To help overweight and obese children achieve a healthier weight for life.

Aim

- To help MEND families make and sustain healthy lifestyle changes



Structure of the 2 year family support strategy



Jack's Story



The thought of getting changed for PE used to fill 13-year-old Jack with dread.

Every week he would fight back the tears as classmates pointed and giggled while he desperately tried to cover up his body.

Jack was 4st overweight and a target for bullies.

Jack Now...



Jack's self esteem has grown since the Programme (having gone from a 38" to a 30" waist) and he loves going shopping for new clothes which he now has the confidence to wear.

An inspiration to many, Jack is now mentoring some of the younger children, inspiring them to become fitter, healthier and happier.



Major regional and national funding partners



LOTTERY FUNDED



Delivery partners (1)



ACTIVE LIFE LTD



ALM

Active Leisure
Management Ltd



Bolton **NHS**
Primary Care Trust

Barking and Dagenham **NHS**
Primary Care Trust



bronxley
mytime



Brighton and Hove City **NHS**
Teaching Primary Care Trust



Chester-le-Street
District Council



Delivery partners (2)



Devon **NHS**
Primary Care Trust

Dudley **NHS**
Primary Care Trust

Eastern and Coastal Kent **NHS**
Primary Care Trust



Great Yarmouth and Waveney **NHS**
Primary Care Trust

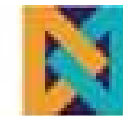
Greenwich **NHS**
Teaching Primary Care Trust

Handsworth Grange School
A Specialist College for PE and Sports with ICT

Harrow **NHS**
Primary Care Trust

Havering **NHS**
Primary Care Trust

Hillingdon **NHS**
Primary Care Trust

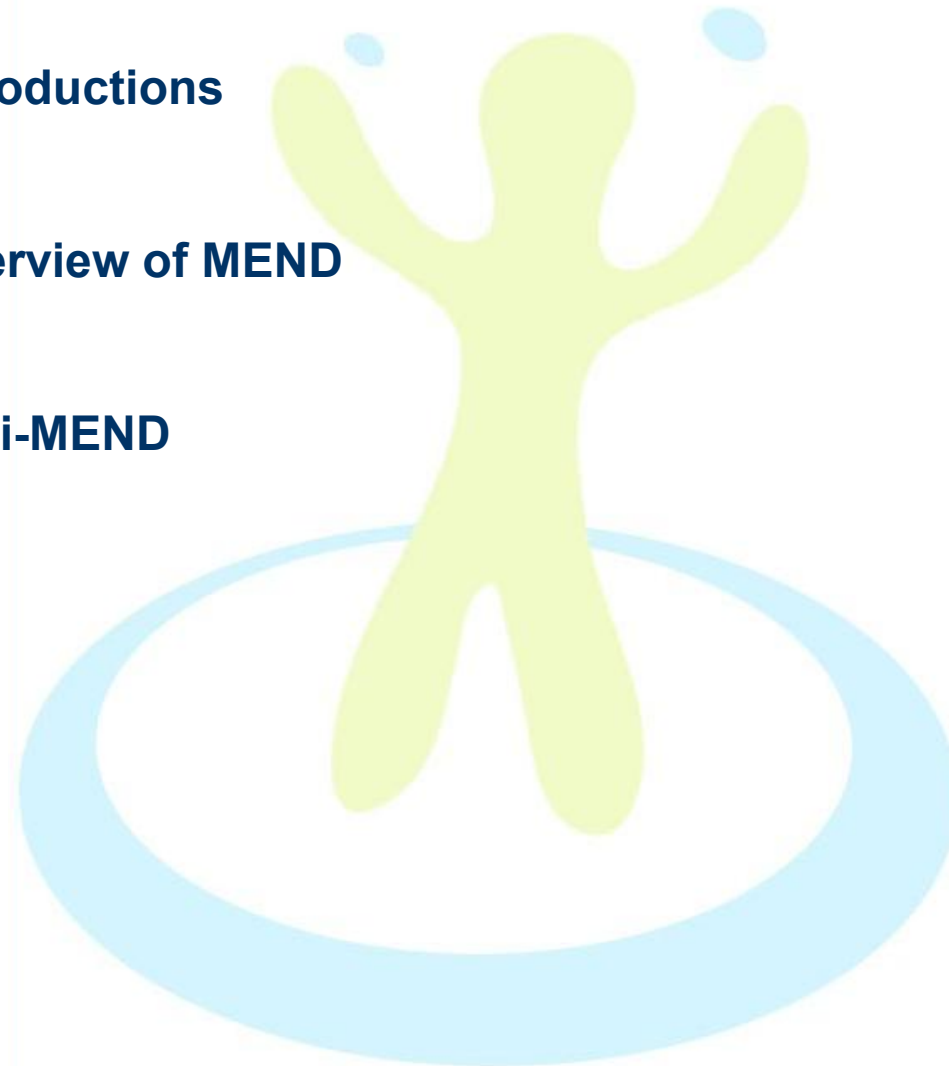


JUBILEE HALL CLUBS
Kensington and Chelsea **NHS**
Primary Care Trust

Agenda



1. **Introductions**
2. **Overview of MEND**
3. **Mini-MEND**



Mini-MEND: preventative health for all toddlers



What is Mini-MEND?



- It's a comprehensive, family based healthy lifestyle programme
- For all families with children between 2-4 years
- Primary target group is at risk toddlers e.g. Those will obese/overweight parents/siblings
- Designed to prevent future overweight and obesity in children

What is Mini-MEND?



3 Essential Elements:

- Physical Activity
- Good Nutrition
- Behaviour Change



What is Mini-MEND?



- **MIND** – address behaviour change
- **Exercise** – ideas on active play which can be replicated at home
- **Nutrition** – Workshops look specifically at healthy eating and nutrition
- **Do IT!** – Empowers families to make positive lifestyle changes

Mini-MEND



- Field Trial Sept – December 2007 at 5 sites
- Delivery partners: Lewisham Council, New Cross Gate NDC, Hillingdon PCT, Plymouth Teaching PCT, South Tyneside PCT
- Venues: Sure Start Children Centres, Schools, Leisure Centres
- Extensive evaluation pre- and post Programme
- 2nd phase pilot trial January 2008 (completed)
- National roll-out, 13+ sites starting September

Data and evaluation: Field trial



- Socio-demographic characteristics
- Parent's / carer's BMI
- Child's BMI
- Birth weight, gestational age
- Infant feeding practices
- Child's eating behaviours
- Child's TV / activity behaviours
- Parent's feeding style

Baseline data



- 41 toddlers
- 53% male
- Mean age: 2.8 (0.8)
- Mean BMI z-score: 0.5 (1.4)
- 93% mothers
- 57% of parents overweight/obese
- 28% single mothers
- 72% minority ethnic groups

Results



- Mean attendance for 37 children = 88%
- Post data obtained for 24 toddlers
- 4 drop-outs
- BMI z-score reduced by 0.2 (NS)
- No significant change in parent's BMI

Summary of parent/carer feedback



Taking part in Mini-MEND has helped me to:

- play more (89%)
- cut down on the amount of time my child spends watching TV (72%)
- give my child a wider range of fruit and vegetables than before (94%)
- manage my child's behaviour more effectively (94%)
- cut down on the amount of milk, juice or sugary drinks I give to my child (83%)
- understand appropriate food portion sizes for my child (83%)
- deal better with fussy eating at mealtimes (72%)
- be more structured/use a routine at meal times (61%)
- read food labels properly (94%)
- change my eating habits to be a better role model for my child (70%)

Parent/carer feedback

mini
mend



After attending Mini-MEND:

- my child's confidence has improved (78%)
- my relationship with my child has improved (78%)
- I feel more confident about being able to bring my child up to be healthy (82%)

Principles behind Mini-MEND

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mend



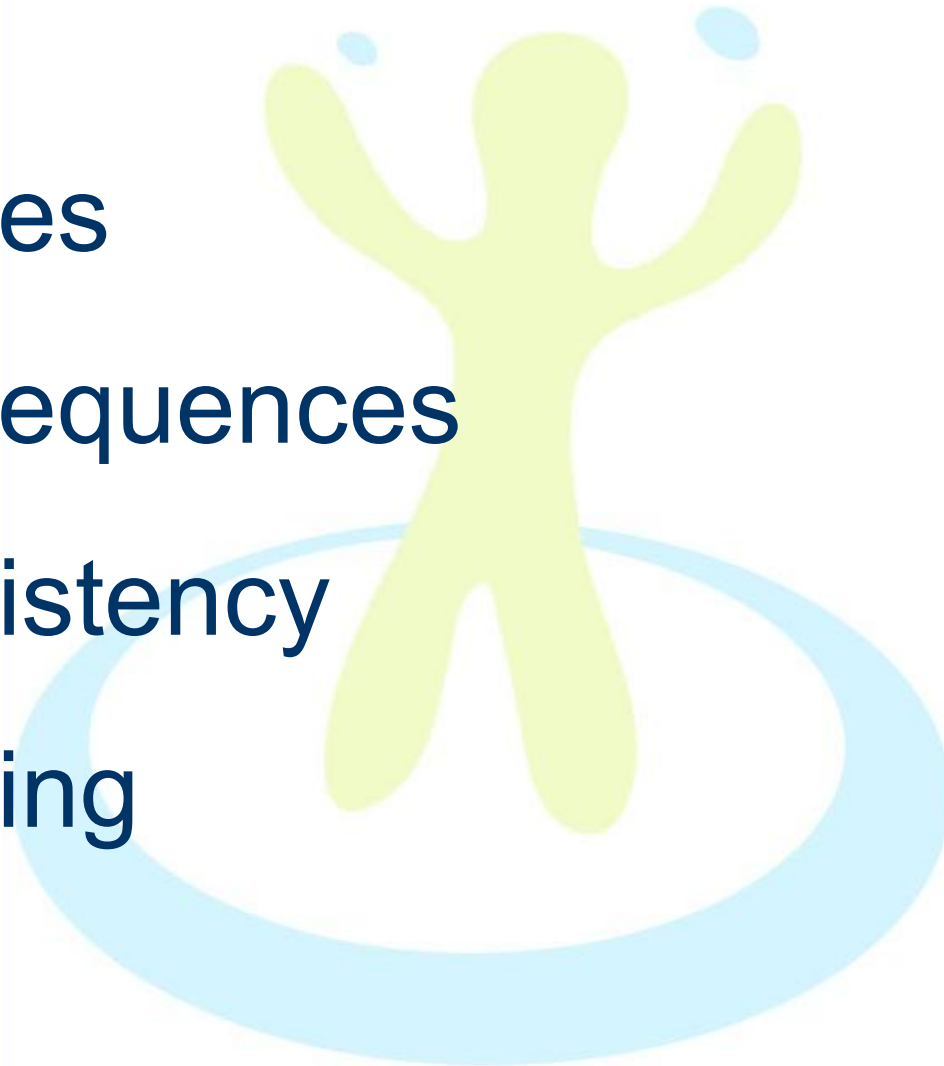
- **Play based learning**
- **Parenting Techniques**
- **Family based**
- **Learning by watching & doing**

The 4C's Model

mini
mend



- Causes
- Consequences
- Consistency
- Copying



Physical activity sessions

mini
mend



Workshop & crèche

mini
mend



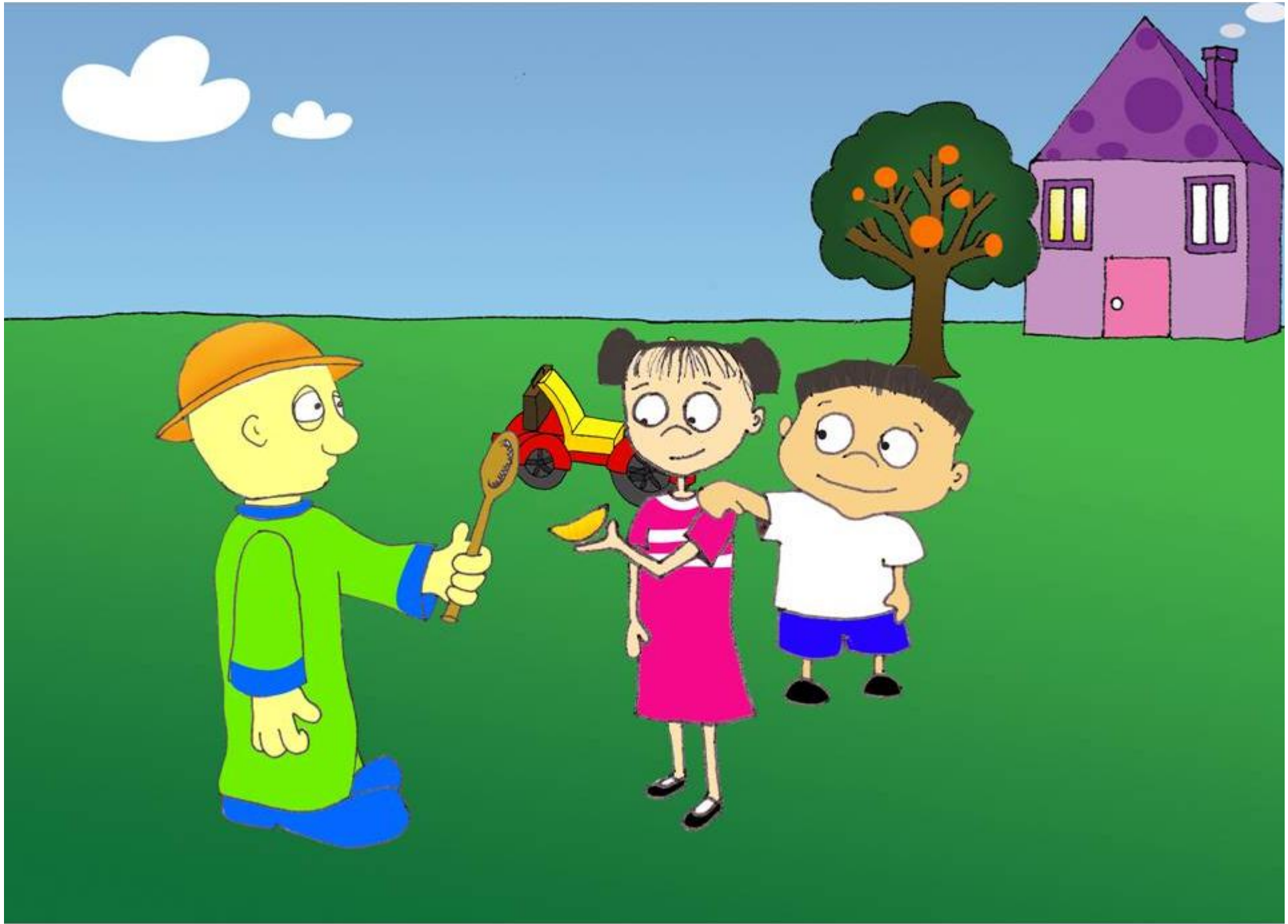
MOON IS

Bespoke stories



- Characters created by experienced TV writer:
 - Mr. Moon
 - Max and Wendy Mend
- Objective is to encourage toddlers to:
 - Drink water
 - Eat fruit and vegetables
 - Improve social behaviour around eating
 - Increase physical activity levels
- Each week toddlers discover a new food and a new exercise and a good behaviour around food consumption e.g. always wash hands





Content



- Week 1: Welcome, introduction and measurements
- Week 2: Be healthy, get active
- Week 3: Encouraging healthy habits
- Week 4: Eating well for toddlers
- Week 5: Food without fuss
- Week 6: What's in your child's food?
- Week 7: Modeling
- Week 8: Fun with food
- Week 9: Problem solving
- Week 10: Farewell and graduation (including post-Programme measurements)

Comparison: Mini-MEND and MEND Programme



Similarities

- Philosophy
- Infrastructure
- Delivered by HCPs
- Partners
- Structured programme
- Evidence-based
- Standardised
- Replicable
- Community-based
- OMMS
- 10 weeks
- Family-based

Differences

- Age (2-4)
- Focus: Primary prevention
- Inclusion not dependent on weight
- 1 session per week
- Physical activity for parents and children together
- Snack-time at each session
- Customised creche activities incl. stories to reinforce messaging, growing vegetables etc
- May be delivered by childcare practitioners

Mini-MEND: Service development



- **Healthy Living Communications**
 - Simple format, key messages
- **One Day Healthy Toddler Training**
 - Target: health professionals and front-line staff working with toddlers
 - Practical overview of issues involved raising healthy toddlers
- **Best Practice Conference**
 - Specifically for Mini-MEND practitioners
 - To gather feedback efficiently from stakeholders on process, content and direction of Mini-MEND
 - To share best practice – with the central team and each other
 - To network and catalyse regional group-working, especially sustainability

Mini-MEND in Relation to Healthy Weight, Healthy Lives – A Cross Government Strategy



Of the 5 areas for tackling excess weight (as suggested by Foresight) where Government action is likely to succeed: Mini-MEND achieves 3 of these

1. Children: Healthy growth and healthy weight – early prevention of weight problems to avoid the ‘conveyor-belt’ effect into adulthood (only 3% of obese children have parents who are neither overweight nor obese)

2. Promoting healthier food choices – reducing the consumption of foods that are high in fat, & sugar and increasing the consumption of fruit and vegetables

3. Building physical activity into our lives – getting people moving as a normal part of their day
(Healthy Weight, Healthy Lives: A Cross-Government Strategy For England)



Thank you!

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