

Tackling Childhood Obesity: Introducing the Healthy Lifestyles Project:

a practical design and technology cooking and nutrition programme for primary schools.

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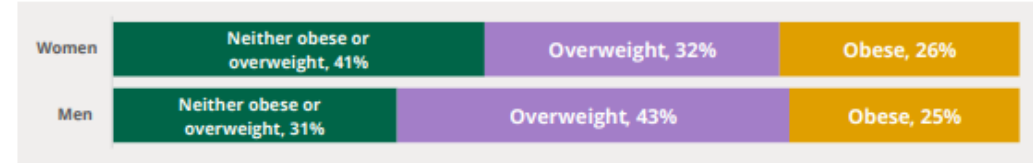




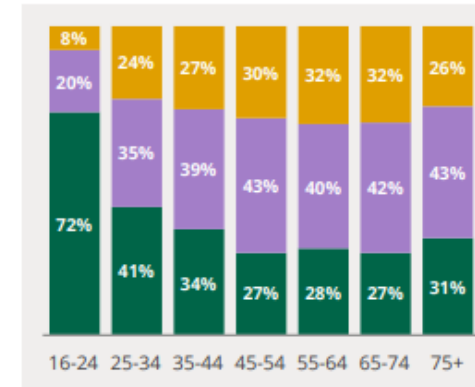
Context

- Childhood obesity has reached epidemic levels in developed countries (Wang and Lim, 2012, WHO, 2018,)
- Those in lower socio-economic groups twice as likely to be obese (Baker, 2023; Davies, 2019)
- Links between childhood and adult obesity and health consequences (5x more likely for children who are obese to become adults who are living with it) (WHO, 2018; NCMP, 2022)

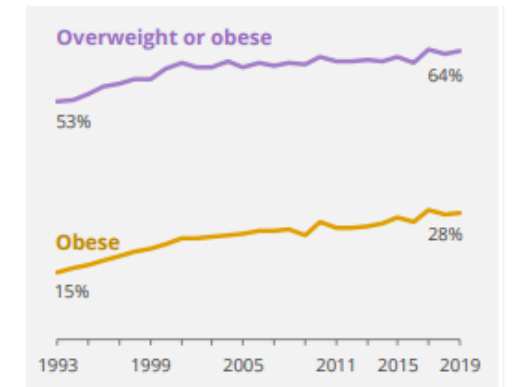
In England, men are more likely to have a body mass index measurement above normal than women.



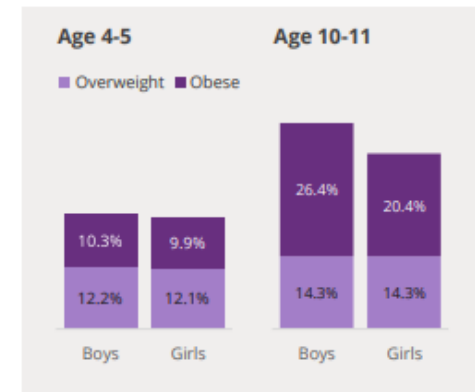
Around three quarters of those aged 45-74 are **overweight** or **obese**



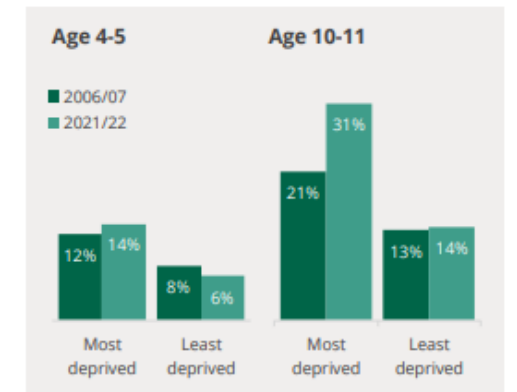
Obesity levels increased from 15% in 1993 to 28% in 2019.



One in ten children is obese by age 5, rising to 23% by age 11.



Deprived children are more likely to be obese, and the gap has widened.



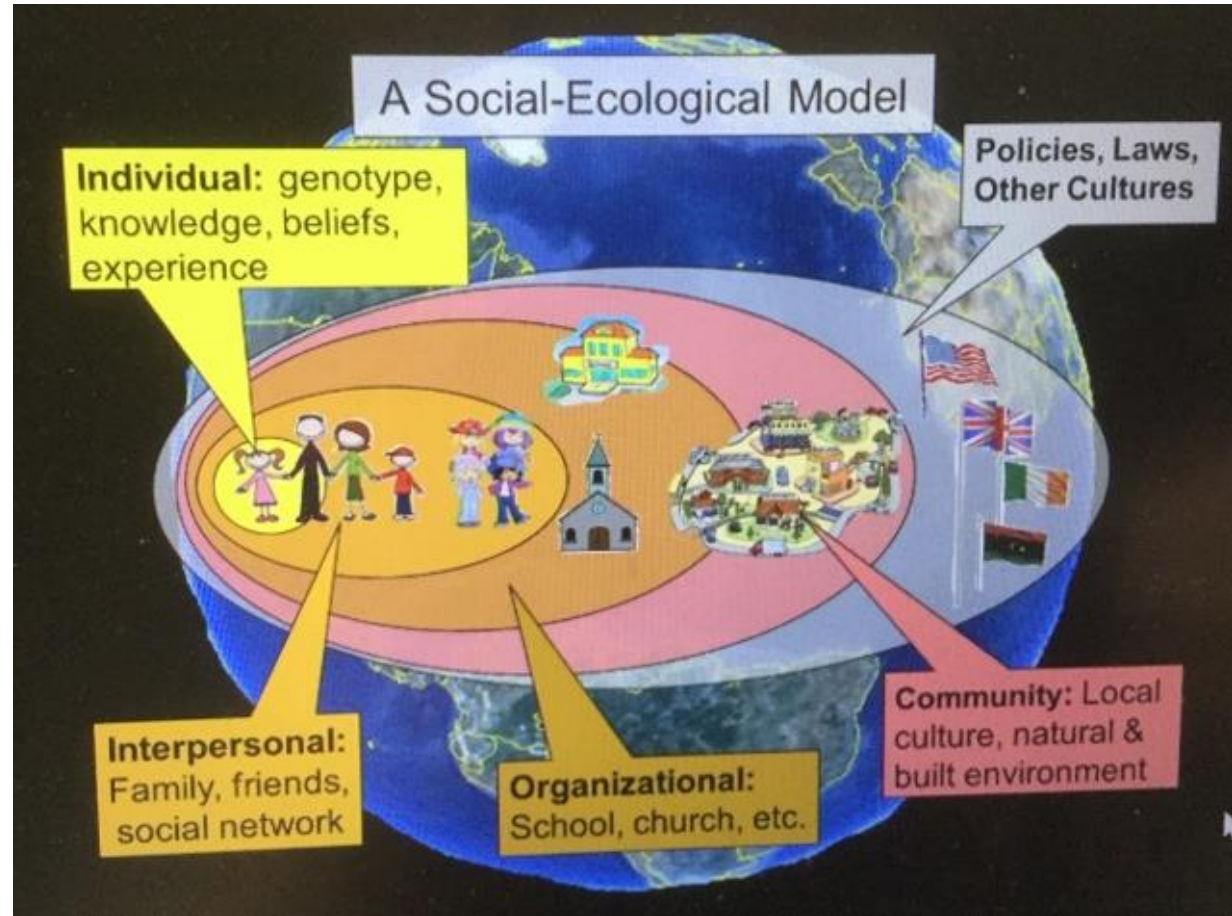
This briefing also contains information on: adult and child obesity rates in Scotland, Wales, and Northern Ireland; bariatric surgery for obesity; and international comparisons.

Graphic: @commonslibrary
Data: NHS Digital

Fig 1: Baker, C. (2023). Obesity Statistics

Methodology: Two Theoretical Frameworks

- Figure 3: *Image of the Social-Ecological Model (from: Sammons, P. and Bowler, M. (2020) Introducing a new pedagogical model from health-based PE) based on Bronfenbrenner's ecological model (1979)*





Self-Determination Theory

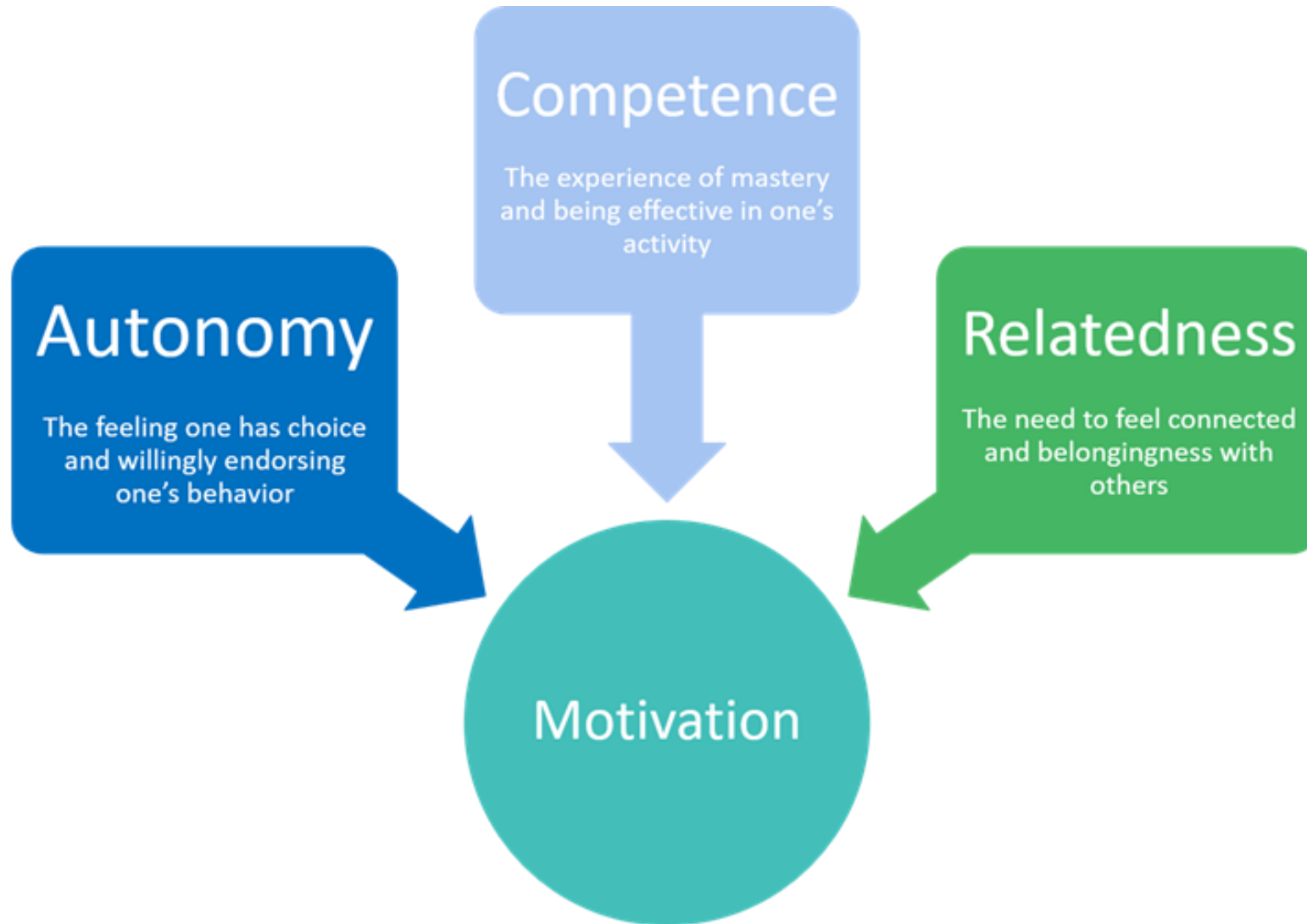


Figure 4: Self-Determination Theory (SDT) Ryan and Deci, (2017) Diagram from: University of Rochester Medical Centre website



Design and Technology Pedagogy

D&T Teaching and Learning Activities

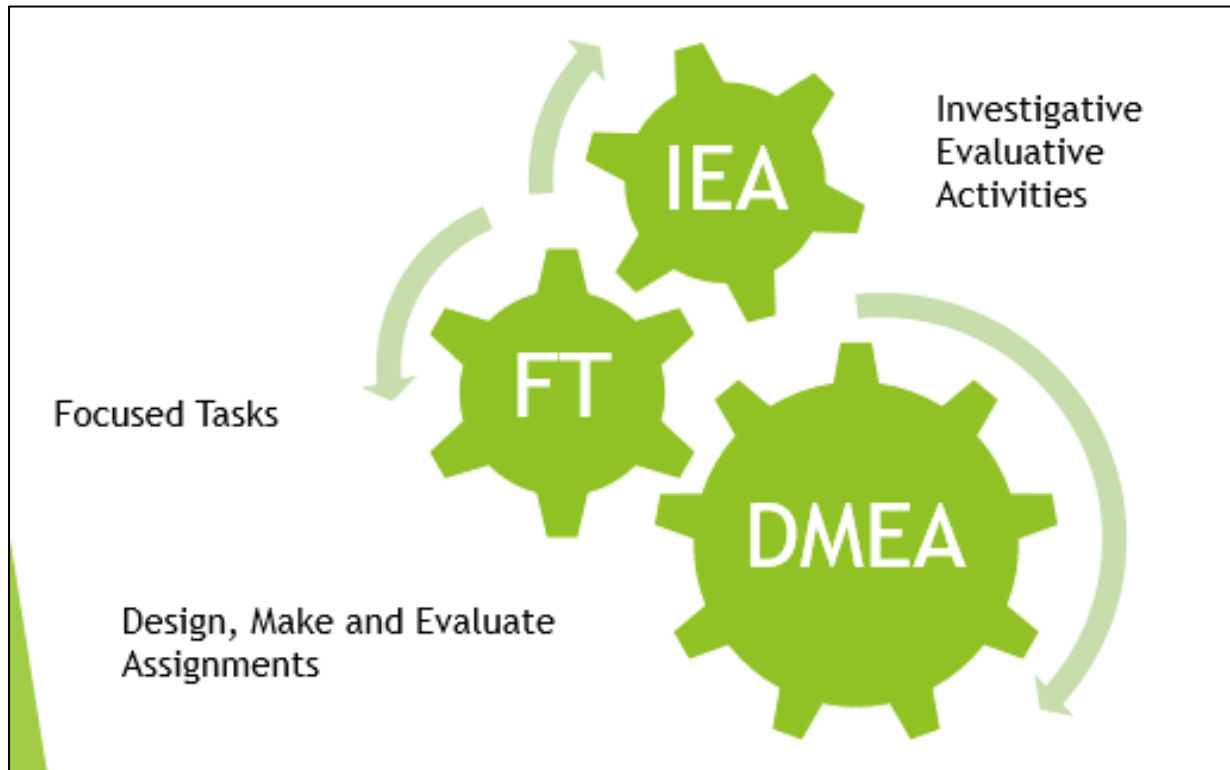


Fig 5: DATA (2016)

The Six Principles

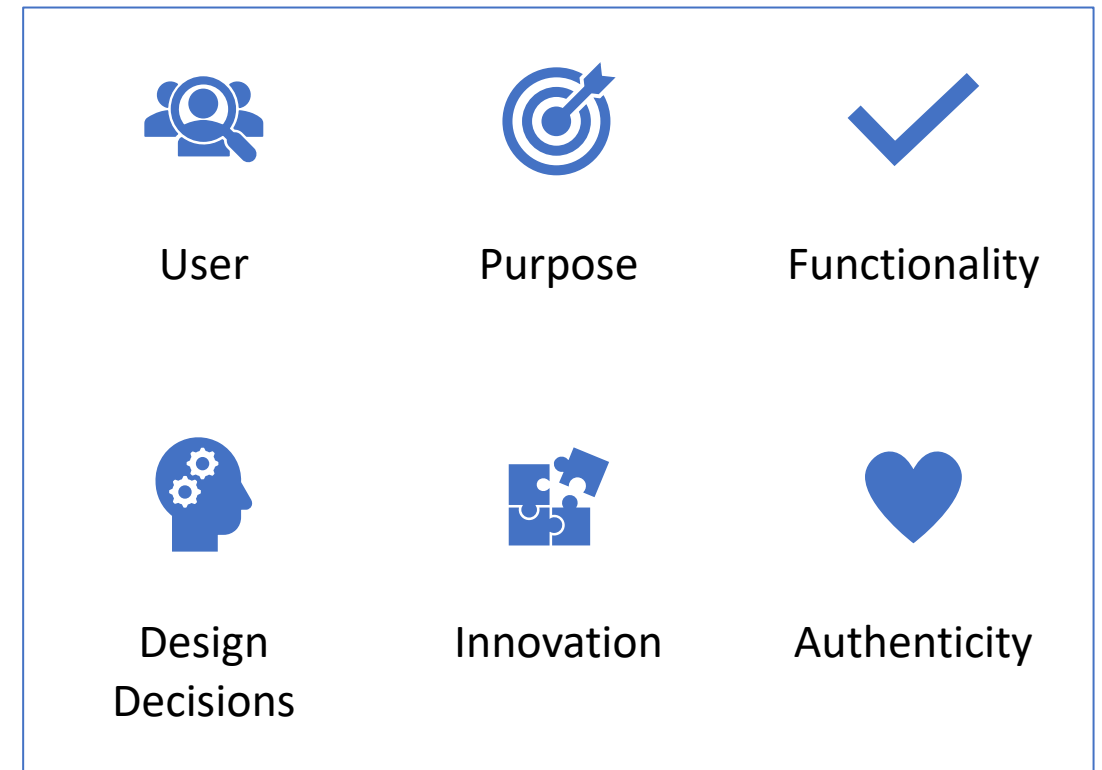


Fig.6 : National Curriculum Expert Group for D&T (2013).

The Healthy Lifestyle Project

Aims

- 1) To provide children with the** sufficient practical skills to choose, prepare and cook healthy ingredients to make healthy dishes to feed themselves and their families by the age of 11
- 2) To develop children's** knowledge and understanding to enable them to choose a healthier lifestyle and to act as a conduit to share this knowledge at home
- 3) To develop the parents' own** knowledge, skills and understanding sufficiently to begin to change their attitudes and perceptions towards choosing to lead a healthier lifestyle
- 4) To develop the teachers'** understanding sufficiently to deliver high quality D&T cooking and nutrition by embedding the HLSP across the school



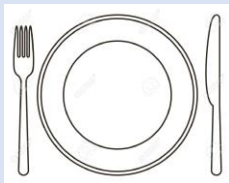
Children



Termly practical cooking sessions



Opportunity to plant, harvest and cook own produce



Cheaper, healthy school dinners in Y3



Priority places at school activity clubs



Fig 7: Project design *Gomersall, S (2023)*

Teachers



Termly CPD through practical cooking sessions and whole school CPD

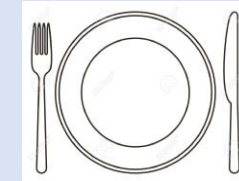


Teaching resources for before, during and after practical sessions

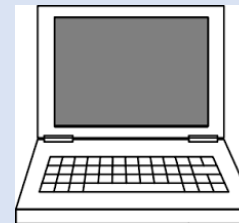
Parents



Opportunities to join practical cooking sessions



Cheaper, healthy school dinners in Y3



Online activities, recipes, support



Termly 'Top Tips' leaflets

A Case Study: Y3

	Autumn	Spring	Summer
Taught D&T sessions	DMEA "To design and make a pizza that uses the Eatwell Guide to create a balanced meal."	IEA: (Geography focus) Map work looking at contrasting locations. Tasting and evaluating food from around the world or a specific location.	FT – introduce a sharp knife and a heat source - practise the bridge/claw cutting techniques, with adult supervision, to make vegetable soup.
Top tip leaflets	<p>Year 3 Top Tips 3 - Healthy Body, Healthy Mind</p> <p>MILFORD DATA FACT:</p> <ul style="list-style-type: none"> Currently Sunday lunch is when most children have vegetables. Aim to add vegetables to your child's plate as often as possible. Some children are still eating sweets, crisps, biscuits and a chocolate bar every day. Aim to help your child see these foods as 'treats' for now and again. <p>The Eatwell Guide is a brilliant way to make sure your children understand what a healthy, balanced diet looks like. The Eatwell Guide shows the different amounts and types of food we need to eat. Some food groups we need to eat lots of every meal (fruit and veg - GREEN), some we need to eat a little (dairy - BLUE) and some we don't need at all (high fat/sugar foods such as sweets and crisps we don't need at all to follow a healthy, balanced diet).</p> <p>Healthy Through Play!</p> <p>Think carefully about what is on your plates at each mealtime - make healthy decisions about the foods you eat - lots more salad, fruit and vegetables!</p>	<p>Yr 3 Top Tips 2 - Mental Wellbeing</p> <p>MILFORD DATA FACT:</p> <p>95% of the children who are on the HLPF said they enjoyed cooking. Doing activities we enjoy help with our mental wellbeing so encourage your children to get busy in the kitchen!</p> <p>Coronavirus has led to an increase in mental health issues for young children. Some children have enjoyed time off from school, while others will have really struggled with missing their school friends and teachers, as well as a daily routine. On top of this, there may be other struggles of home they have had to cope with, such as family illness, loss or changes to their living situation. Although there is a respite on the horizon, there is still a feeling of uncertainty, with regular changes to lockdown, the chance of an outbreak in school, missing more time out of school or how worried about getting or passing on the virus. For most children, these feelings will improve, but there are always steps you can take to support them emotionally and help them cope with problems they face to give them the best chance to stay mentally healthy.</p> <p>Top Tips to support children and young people:</p> <ul style="list-style-type: none"> Be there to listen Regularly ask how they're doing so they get used to talking about their feelings and know there's always someone to listen if they want to talk. Support them through difficulties Pay attention to their emotions and behaviour and try and help them work through their difficulties. It's not always easy when faced with challenging behaviour but try to help them understand what they are feeling and why. Stay involved in their life Show interest in their life and the things that are important to them. It not only helps them value who they are but also makes it easier for you to spot problems and support them. Encourage their interests Being active or creative, learning new things and being a part of a team help connect us with others and are important ways we can all help our mental health. Support and encourage them to explore their interests, whatever they are - like cooking! Take what they say seriously Listening to and valuing what they say, without judging their feelings, in turn makes them feel valued. Consider how to help them process and work through their emotions in a more constructive way. 	<p>Yr 3 Top Tips 3 - Grow your Own & Seasonality</p> <p>MILFORD DATA FACT:</p> <p>84% of the families who are on the HLPF said they grow some of their own produce - you don't need a large garden or allotment - you can grow your own on a window sill!</p> <p>Let's Get Growing!</p> <p>Research suggests that gardening can increase a child's food knowledge, as it shows them where food comes from, how to cook it and the effect it has on their bodies (Green and Dahn, 2017). Children who grow their own vegetables are more likely to eat them so there is never a better time to start growing your own!</p> <p>Milford Academy is extremely lucky to have its own gardeners, Anna Farn. As part of the HLPF, the children have been planting, growing and harvesting plants that can be used in the dishes we prepare.</p> <p>Update from Anna: "During lockdown we grew tomatoes, bean and cucumber plants that were delivered into the community. There were 50 households in total and the feedback that I got was really positive. This year we will be growing enough tomato plants for every single child to take home their own plant!"</p> <p>In the school grounds we grow tomatoes, cucumber, peas, beans, pumpkins, cabbage, leeks, potatoes, herbs and carrots. Along with lots of flowers. Tasting was completely restricted due to Covid though some bits went to the kitchen for their salad pots."</p> <p>Anna's Tips for Getting Started:</p> <ol style="list-style-type: none"> Growing your own doesn't need to cost much - buy Lidl or Wilko seeds as they are cheap and easy to access. Don't spend lots of money on compost - multipurpose is fine. Reuse plastic containers for plant pots (e.g. yog bottles, yog pots) - just remember to add drainage holes as plants can't breathe under water!
Gardening	Harvest and cook with tomatoes planted in the summer of year 2 (Pizza)	Plant herbs	Harvest and cook with <u>herbs</u> (Soup)
Get active	Dance club Active travel	Active travel	Athletics Active travel



Results and Discussion

- Individual/interpersonal – **CHILDREN**
- Interpersonal/ Community – **PARENTS**
- Organisational/Community/Policy - **TEACHERS**



Personal/Interpersonal – CHILDREN

It has helped me try different foods

It showed me that it is easy to eat healthy and I'll use this information later in life.

If you eat stuff that's unhealthy it's not good for your body

If we eat too much food with lots of sugar and fat in when we get older, we will die a little bit earlier but if you're healthy you will die a little bit later.

I've been checking (with my mum) how much stuff are (on the wrappers) and I've been eating more healthy stuff. If it's green it's good, if it's amber it's not as good and if its red it's not good for you."



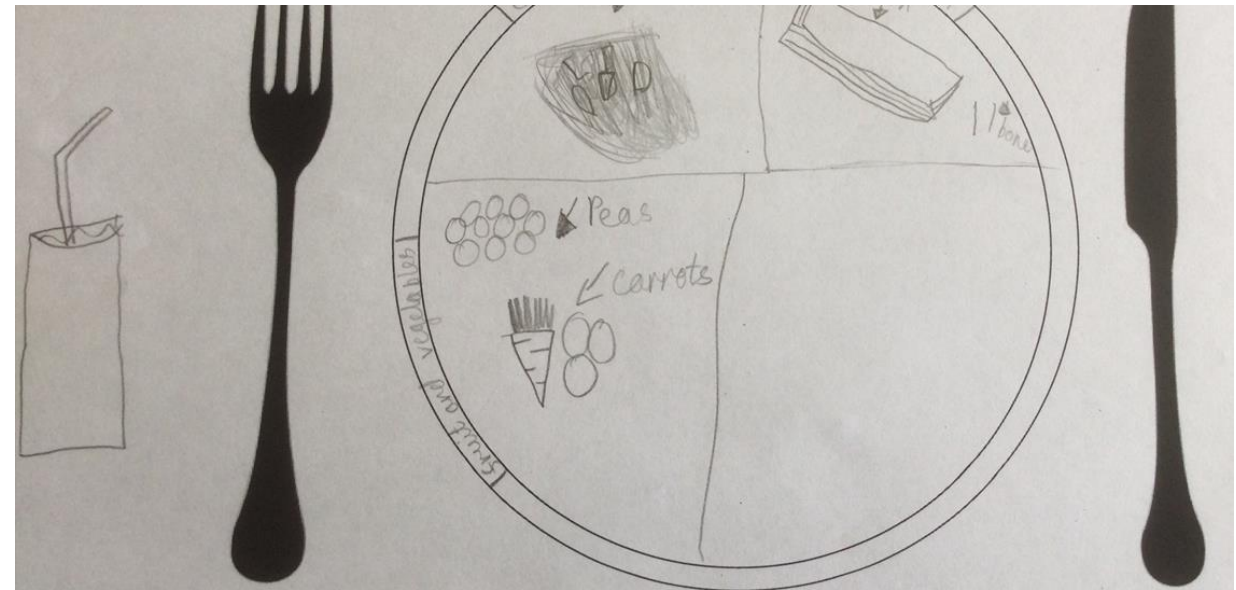
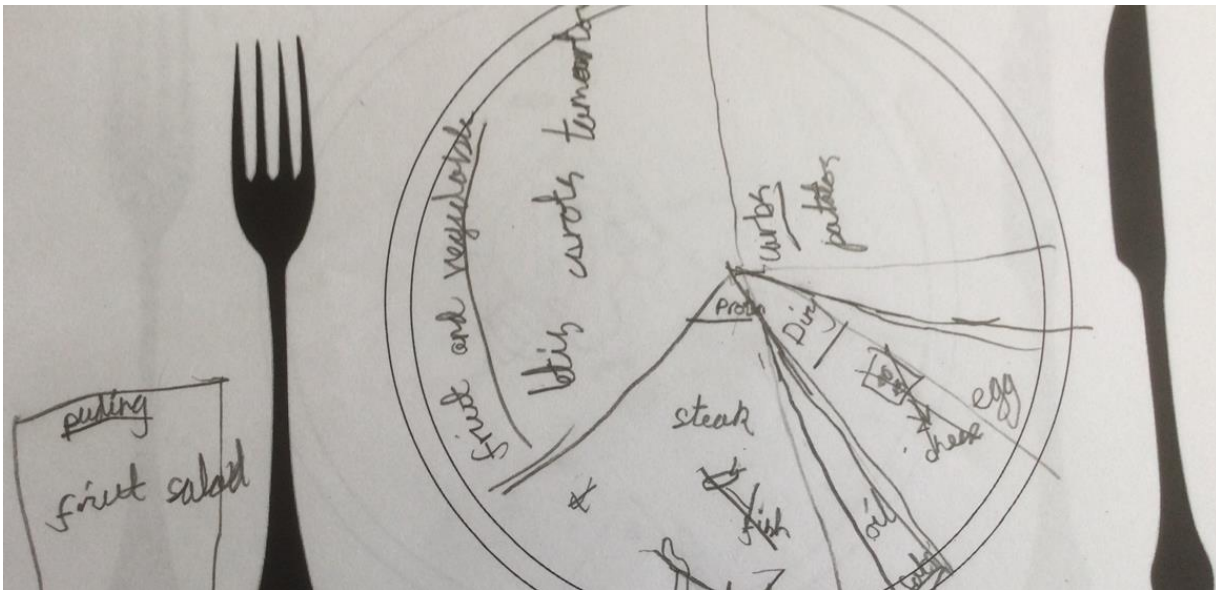
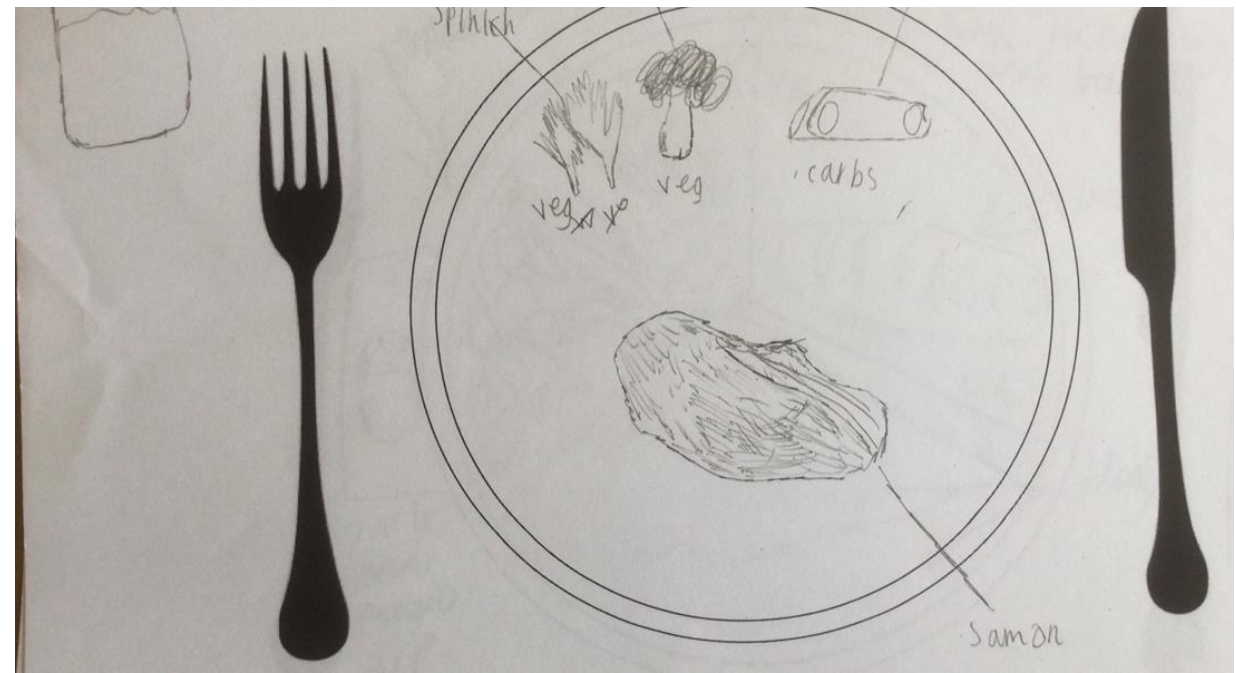
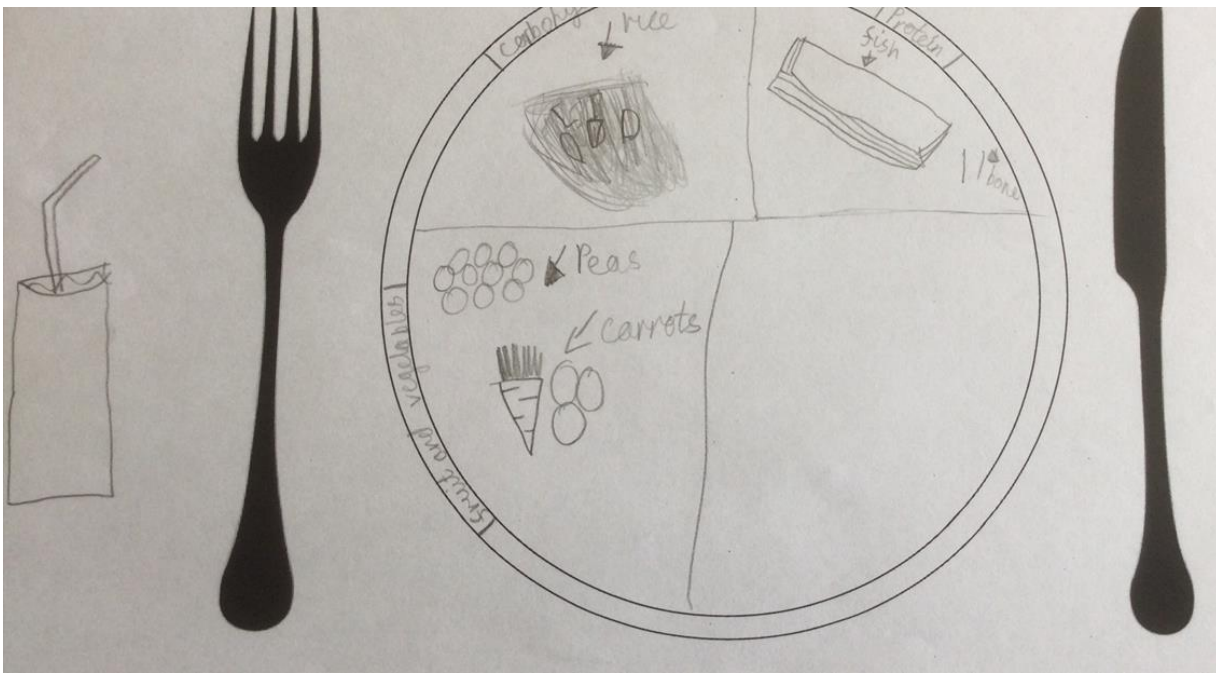


Fig 8 : Results from the children's independent activity

Interpersonal/ Community – PARENTS

Schools and home working as a team is the best way. It's a good initiative for children to learn about healthy eating.

It has given him a new interest in food and choosing healthy choices. He is also keen to help with cooking now which he really enjoys

It has been very beneficial for my child as she has learnt so much about what different foods can help her eat a healthy diet and has encouraged her to do more cooking at home.



Healthy Lifestyles is definitely important to us however it means giving up lots of things e.g. junk food... it's a challenge but more exciting is receiving guidance from your child of what's better, due to school practice, gives us a better grounds to carry on.

I like that Iqbal has learnt about the traffic light system on food packaging. It's something that I look at a lot myself now.



Organisational/Community/Policy – TEACHERS



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Measurement Data – BMI

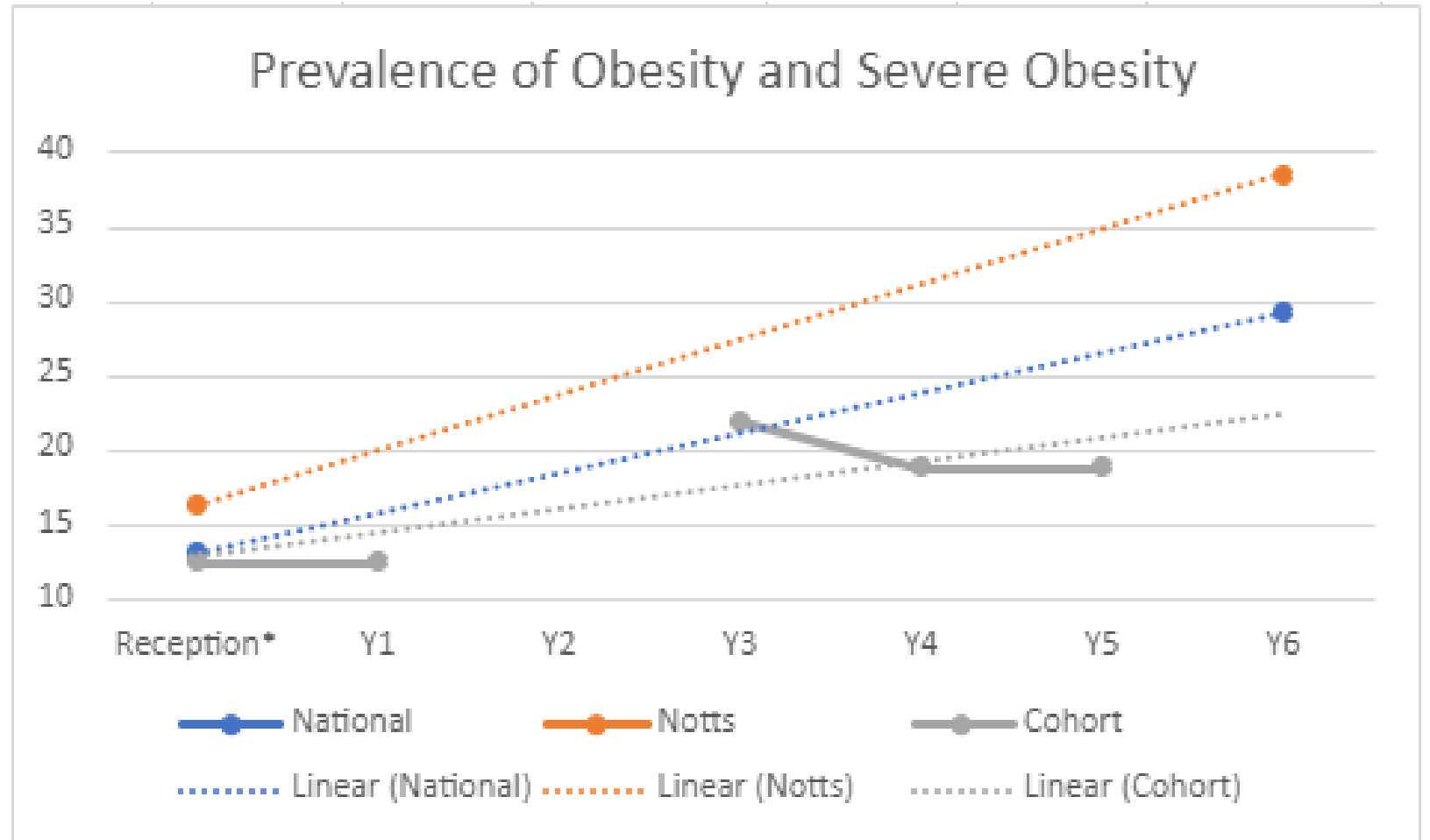
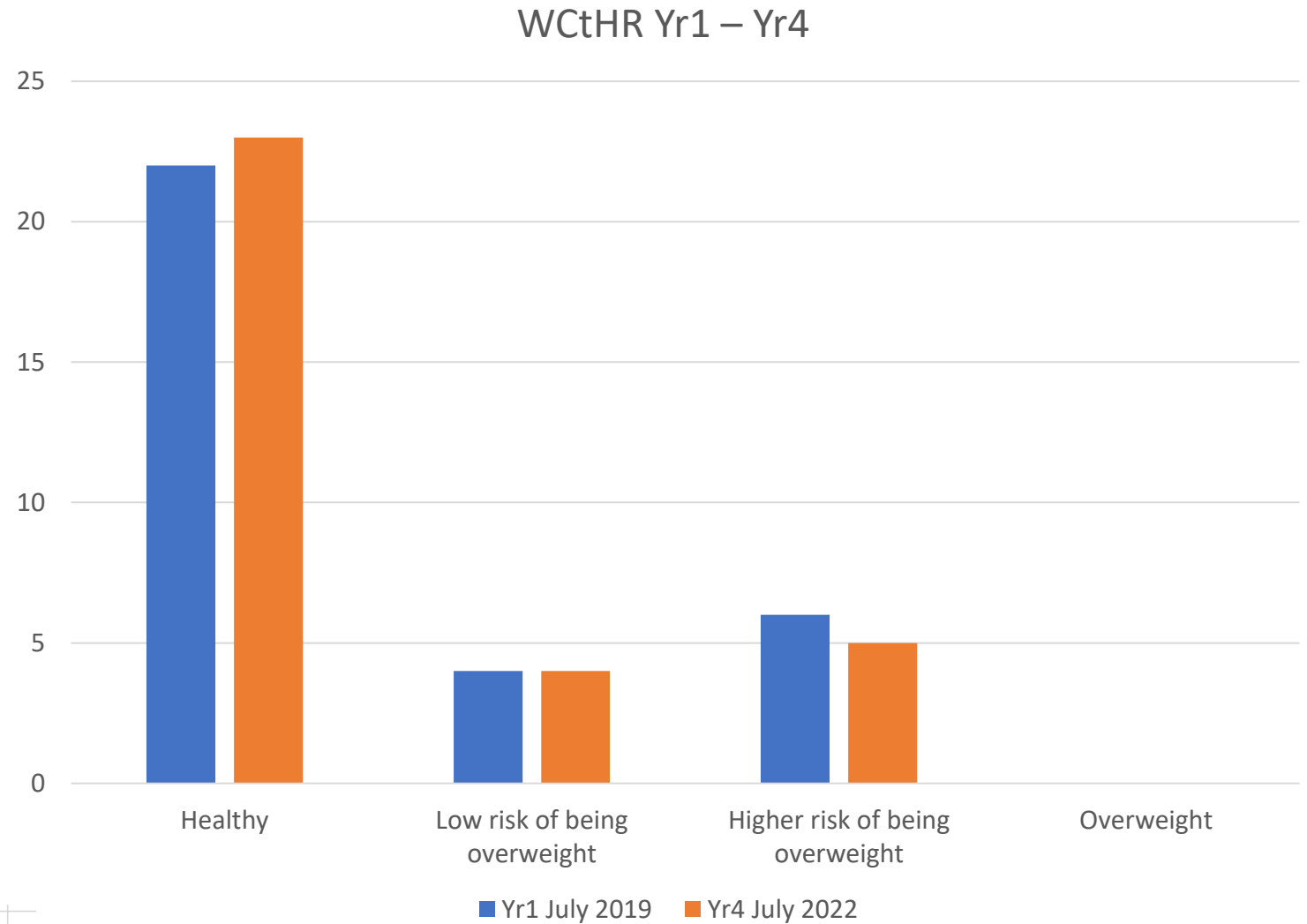


Fig 9 : Results of BMI of the HLSP tracked against predicted local and nation data

Measurement Data -Waist Circumference to Height Ratio (WCtHR)



WCtHR for children 6-18years	
healthy	<0.46 for girls, <0.47 for boys
at risk of being overweight	0.461-0.5 for girls, 0.471 - 0.5 for boys
at risk of being overweight	0.5-0.599
unhealthy	>0.6

Fig 10: Results from the WCtHR measurements

Future action

- To share at the APPG: School Food meeting
- To make the Healthy Lifestyles Programme available to schools through NTU – offering bronze, silver, gold packages
- To roll out across several schools as a pilot scheme
- For policy makers and established organisations, such as the ASPE, to promote/recommend it
- To lobby the DfE to allow the ring-fenced School-Sports Premium Fund to be rebadged as ‘Healthy School Fund’, to allow money to be split between school food/food education and school sport



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**THANK YOU
FOR
LISTENING AND
WATCHING MY
PRESENTATION**

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