Tackling Obesity & Health Inequalities among BAME groups

Dr Jabeen Shah

Public Health Nutrition Lead

THE ROYAL BOROUGH OF KINGSTON UPON THAMES

Overview

THE ROYAL BOROUGH OF KINGSTON UPON THAMES

- Background
  - Ethnic differences in body composition & associated health risks
  - Guidelines on BMI & waist circumference cut-offs
- RBK plans to tackle obesity & health inequalities
  - Current programs
  - Future plans and call for action
- Q & A

Excess weight prevalence a public health concern

- Excess weight (body fat) affects all population groups but is higher for people aged 55-74 years, people living in deprived areas and in some Black, Asian and Minority Ethnic (BAME) groups compared with the general population.
- The health risk of excess weight for some BAME groups **occur at a lower BMI** than for White populations.

PHE, 2020 Excess_weight_and_COVID-19__FINAL.pdf

fingertips.phe.org.uk

Excess weight prevalence a public health concern

- Excess weight (body fat) is a **risk factor** for a range of chronic diseases, including type 2 diabetes, cardiovascular disease, many cancers, liver and respiratory disease.
- Obesity is also associated with **reduced life expectancy**, and lower quality of life.
- Evidence suggests excess weight is associated with an increased risk of more severe health outcomes (including mortality) from COVID-19
- Some evidence suggests disparities in excess weight may explain some of the observed differences in outcomes linked to COVID-19 for older adults and some BAME groups.

Excess weight and ethnic differences

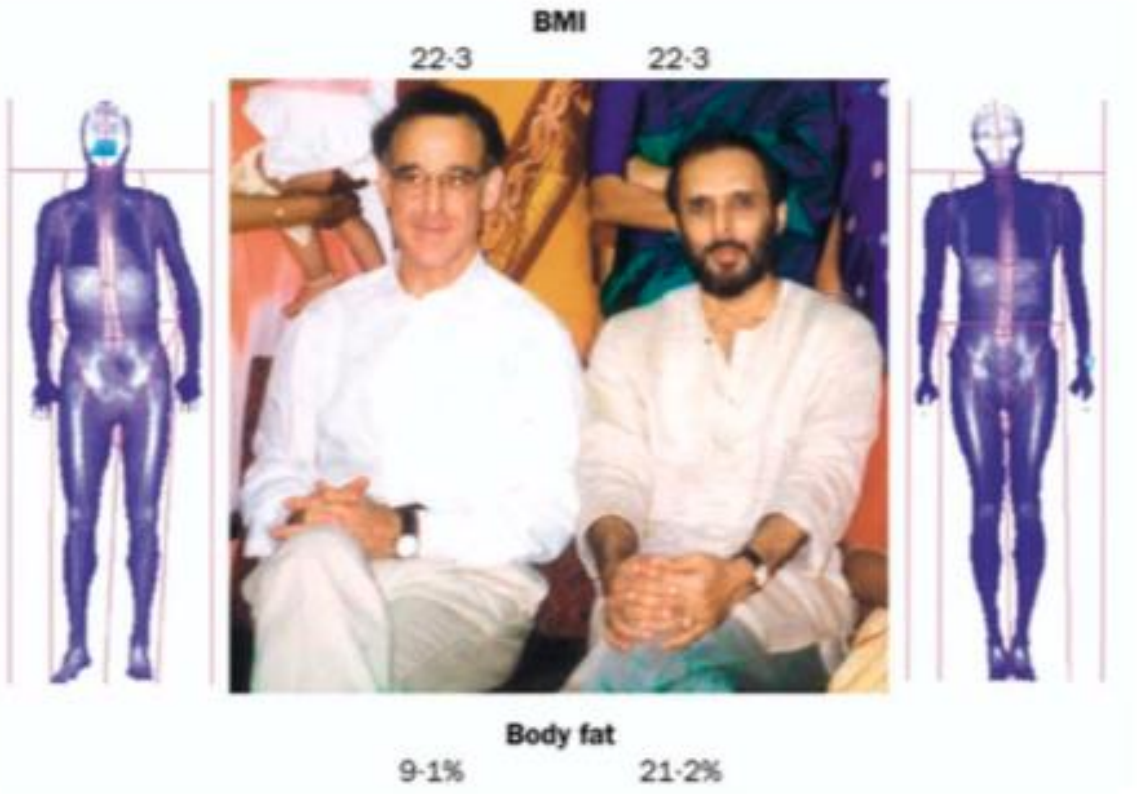
- Rates of myocardial infarctions are higher among people of South Asian origin (from India, Pakistan and Bangladesh) **at an earlier age** – death rates from cardiovascular disease are approximately 50% higher
- The **prevalence of diabetes is up to 6 times higher among South Asians**, it tends to develop at a younger age and disease progression is faster
- In the UK, people of black African and African-Caribbean origin **are 3 times more likely to have type 2 diabetes** than the white population
- Compared to white Europeans, people of South Asian origin tend to have a higher % body fat at a given BMI (higher levels of abdominal fat/visceral fat and lower muscle mass).

BMI: preventing ill health and premature death in black, Asian and other minority ethnic groups

Ethnic difference in body composition

The Y-Y paradox

Chittaranjan S Yajnik, John S Yudkin

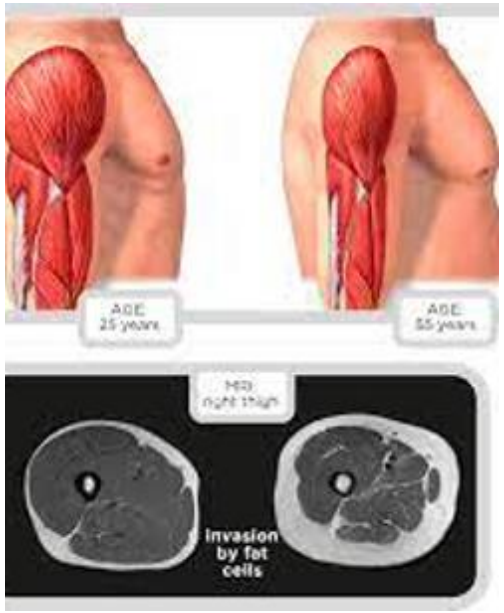


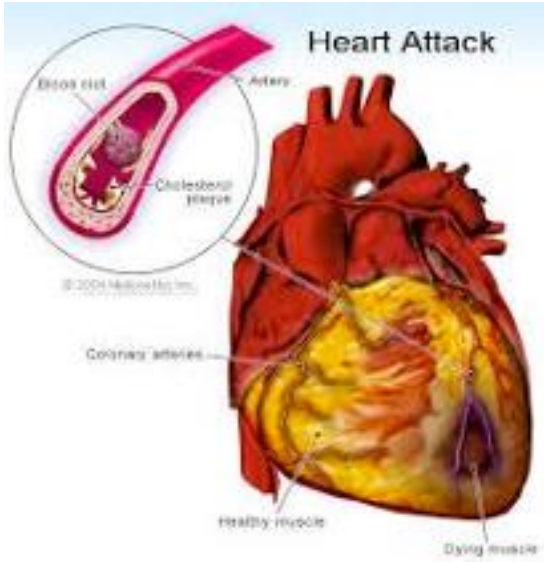
There is no one size fits all!

- Visceral fat – more metabolically active
- Closely related to insulin resistance, pre-diabetes & type 2 diabetes

Thin on the outside fat on the inside (TOFI)

Sarcopenia





'*a syndrome characterised by progressive, and generalised loss of skeletal muscle mass and strength, with a risk of adverse outcomes, such as physical disability, poor quality of life, and death*' (Cruz-Jentoft et al., 2010).

Original article

Waist circumference centiles for UK South Asian children

Mahjabeen Shah, Dimple Radia, Huw David McCarthy

School of Human Sciences, London Metropolitan University, London, UK

Correspondence to
Dr Mahjabeen Shah, School of Life Sciences, Kingston University, London KT1 2EE, UK; mahjabeen.shah@kingston.ac.uk

Received 19 June 2018
Revised 20 June 2019
Accepted 27 June 2019
Published Online First 18 July 2019

ABSTRACT

Objectives To develop waist circumference (WC) centile curves for UK South Asian children, to make comparisons with published centiles for British, indigenous Indian and Pakistani children, as well as to make anthropometric comparisons with their UK white peers.

Design Cross-sectional study.

Setting School-aged children from London boroughs (main measures: 2004–2007).

Participants 1562 (652 boys, 910 girls) UK South Asian and 1120 (588 boys, 532 girls) UK white children aged 4.0–13.9 years.

Interventions WC, height, weight and body mass index (BMI).

Main outcome measures The outcome measures were smoothed WC centile curves, constructed using the LMS (L = skewness, M = median, S = coefficient of variation) method. SD scores (SDS) were generated using UK90 and British (WC) growth references.

Results WC increased with age for both sexes, rising more steeply at the upper centiles after the age of 6 years. Overall, UK South Asian children, similar to indigenous South Asian populations, had higher WC values than the British WC references. However, compared with their UK white peers, UK South Asian children had significantly ($p<0.001$) lower mean WC (UK white SDS=0.74 and SDS=0.64 vs UK South Asian SDS=0.32 and SDS=0.21 for boys and girls, respectively). Obesity prevalence was greater using WC than BMI for both ethnicities. At the 90th centile, for UK South Asian children, prevalence was 21.5% vs 24.4% for boys and 17% vs 24.5% for girls based on BMI and WC, respectively.

Conclusions These curves represent the first WC centiles for UK South Asian children up to the age of 14 years. With a continued rise in childhood obesity, they provide a useful historical control for future comparisons.

What is already known on this topic?

- South Asians are a high-risk population for cardiometabolic disease, which tracks from childhood into adulthood, attributed in part to the South Asian thin-fat phenotype.
- Lower body mass index (BMI) and waist circumference (WC) cut-offs for overweight and obesity are recommended for South Asian adults in recognition of this risk.
- WC is accepted as an indicator of abdominal obesity, and ethnic-specific WC centiles have been developed for children in many countries worldwide.

What this study adds?

- These are the first WC centile charts for UK South Asian children aged 4 to 13.9 years.
- This is a confirmation that more children are identified as obese when based on WC than BMI.
- These charts can be used as a marker of abdominal adiposity in UK South Asian children, and in lifestyle interventions for preventing adiposity-related diseases.

elevated blood pressure[6] and non-alcoholic fatty liver disease.[7]

South Asians have a greater risk of type 2 diabetes mellitus and cardiovascular disease than white Europeans.[8] This increased risk is linked, in part, to South Asians having a genetic propensity to insulin resistance, attributed to greater total body fatness, increased abdominal obesity[9] and less skel-

DIABETES STATISTICS

More people than ever have diabetes. More people than ever are at risk of type 2 diabetes. If nothing changes, more than five million people will have diabetes in the UK by 2025.

Around 90% of people with diabetes have **type 2 diabetes**. Around 8% of people with diabetes have **type 1 diabetes**. About 2% of people with diabetes have **rarer types of diabetes**.

diabetes.org.uk/position-statements-statistics

TYPE 2 DIABETES IN CHILDREN AND YOUNG PEOPLE

The number of children and young people with Type 2 diabetes is rising. Interventions need to be in place to prevent children and young people from developing Type 2 diabetes and a significant part of this is reducing the prevalence of overweight and obesity in children.

Type 2 diabetes in children and young people is a more aggressive form of the condition than Type 2 diabetes in adults. There are challenges around the diagnosis, management and monitoring of Type 2 diabetes in children and young people.

diabetes.org.uk/position-statements-type-2-children

Excess weight & health risks - ethnic differences

Body mass index (BMI) definition: BMI is an estimate of body mass and is calculated by dividing a person's weight by the square of their height.

Table 1: BMI classification

BMI Range	BMI Category
Less than 18.5kg/m^2	Underweight
18.5 to <25kg/m^2	Healthy weight
25 to <30kg/m^2	Overweight
30 to <40kg/m^2	Obesity
40kg/m^2 or more	Severe obesity

PHE, 2020 Excess_weight_and_COVID-19__FINAL.pdf

NICE Recommendation 1 Preventing type 2 diabetes

- BMI cut-off for treatment services are **lower for Black, Asian and Minority Ethnic (BAME) groups than White groups[2]**; 23kg/m^2 indicate increased risk and 27.5kg/m^2 indicate high risk, respectively.

BMI: preventing ill health and premature death in black, Asian and other minority ethnic groups

Health risk categories
Health Survey for England/NICE

BMI	Waist circumference: Low Men: <94cm Women: <80cm	High Men: 94-102cm Women: 80-88cm	Very high Men: >102cm Women: >88cm
Underweight (<18.5kg/m^2)	Underweight (Not Applicable)	Underweight (Not Applicable)	Underweight (Not Applicable)
Healthy weight (18.5-24.9kg/m^2)	No increased risk	No increased risk	Increased risk
Overweight (25-29.9kg/m^2)	No increased risk	Increased risk	High risk
Obese (30-34.9kg/m^2)	Increased risk	High risk	Very high risk
Very obese (≥40kg/m^2)	Very high risk	Very high risk	Very high risk

Table 2: Ethnic specific values for waist circumference

Country/Ethnic group		Waist circumference
Europids* In the USA, the ATP III values (102 cm male; 88 cm female) are likely to continue to be used for clinical purposes	Male	≥ 94 cm
	Female	> 80 cm
South Asians Based on a Chinese, Malay and Asian-Indian population	Male	> 90 cm
	Female	≥ 80 cm
Chinese	Male	> 90 cm
	Female	≥ 80 cm
Japanese**	Male	> 90 cm
	Female	≥ 80 cm
Ethnic South and Central Americans	Use South Asian recommendations until more specific data are available	
Sub-Saharan Africans	Use European data until more specific data are available	
Eastern Mediterranean and Middle East (Arab) populations	Use European data until more specific data are available	

International Diabetes Federation, 2006

Potential benefits of healthier weight

- Intentional weight loss of between 5kg–10kg in women living with obesity-related illness is associated with lowered risk of death, cardiovascular death, cancer and diabetes-related death.
- In men, those who lost weight intentionally appeared to have a reduced risk of diabetes-related death[77].
- Health benefits of weight loss relate to improved cardiovascular risk, and reduced osteoarthritis-related disability[79].
- In individuals with pre-diabetes, every kilogram of weight lost there was a 16% reduction in risk for progression to diabetes[80].
- The NICE guidance on behavioural weight management recognises that even modest amounts of weight loss of 5% can benefit health[78].

PHE, 2020 Excess_weight_and_COVID-19__FINAL.pdf

Tackling obesity & health inequalities

- Age & ethnicity cannot be changed
- Levels of deprivation – complex to address
- **Robust evidence** - interventions supporting people who are overweight/obese to lose weight will reduce Covid-related ill health and wider health benefits to individuals & reduce pressures on the NHS
- No single solution to tackling obesity (driven by multiple factors)
- Actions required (national & local) to both prevent excess weight gain and support people who are living with overweight or obesity to move towards a healthier weight

Tackling obesity & health inequalities

- Improving and increasing access to weight management options for the large numbers of people who could benefit, and which are tailored to individual needs and preferences would also help address levels of obesity.
- The case for action at scale and over the long term to prevent excess weight and support people living with obesity is strong.
- **Doing more for those groups most affected can help improve health overall and help address some of the inequalities in health**.

NICE National Institute for Health and Care Excellence

NICE guideline

BMI: preventing ill health and premature death in black, Asian and other minority ethnic groups

Public health guideline
Published: 3 July 2013
www.nice.org.uk/guidance/ph46

‘Local commissioners and providers of healthcare have a responsibility to enable the guideline to be applied when individual professionals and people using services wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with complying with those duties.’

NICE Recommendation 3 General awareness raising

- Ensure practitioners are aware that members of black, Asian and other minority ethnic groups are at an increased risk of chronic health conditions at a lower BMI than the white population (below BMI 25 kg/m^2).
- Ensure members of black, Asian and other minority ethnic groups are aware that they face an increased risk of chronic health conditions at a lower BMI than the white population (below BMI 25 kg/m^2).
- **Use existing local black and other minority ethnic information networks to disseminate information on the increased risks these groups face at a lower BMI.**

Public Health Profiles

Data view
Inequalities •••

Geography
Kingston upon Thames •••
Counties & UAs (4/20-3/21) in London region

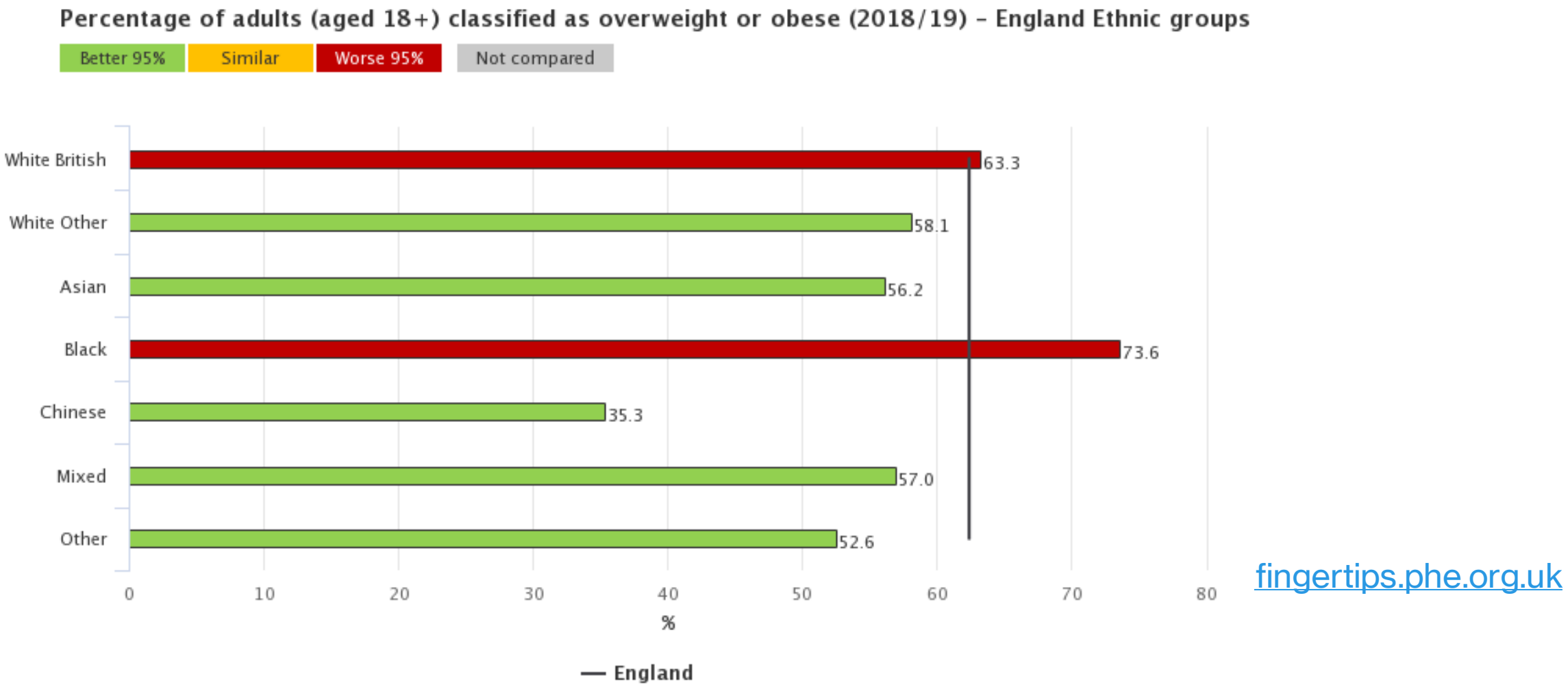
Indicator
Percentage of adults (aged 18+) classified as overweight or obese

Compared with England

Display: **Single time period** | Trends

Inequalities for: **England** | Kingston upon Thames

2015/16 | 2016/17 | 2017/18 | **2018/19**



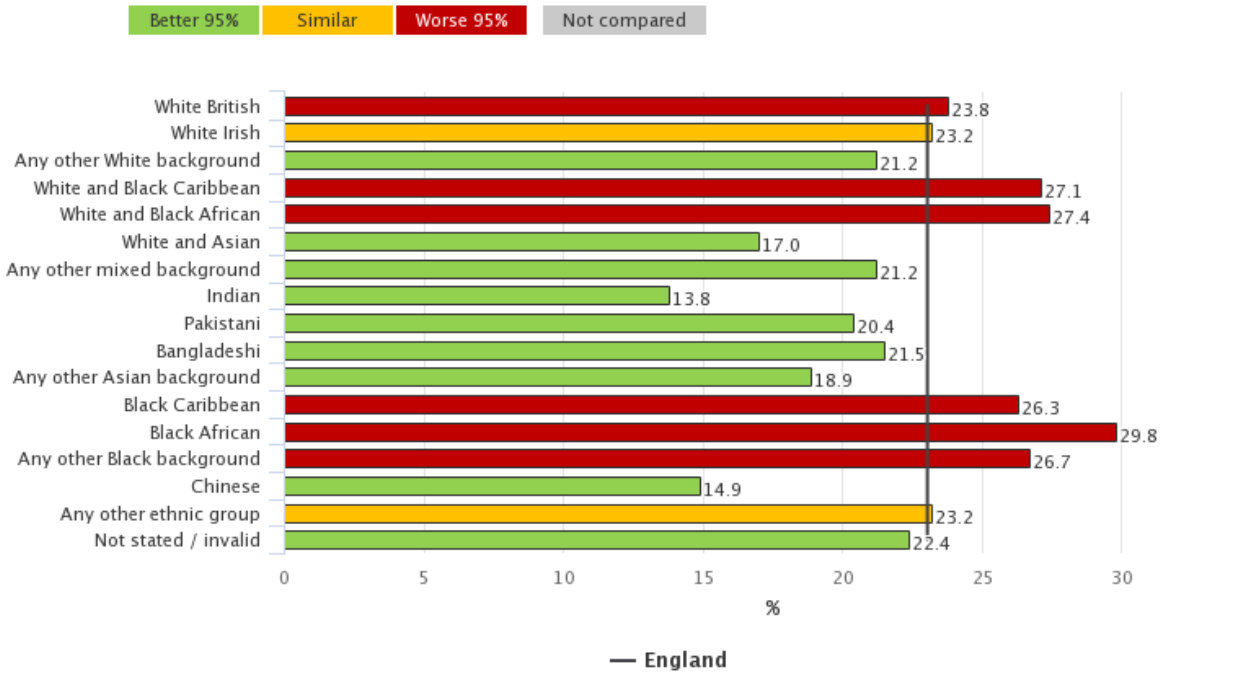
fingertips.phe.org.uk

Data view
Inequalities

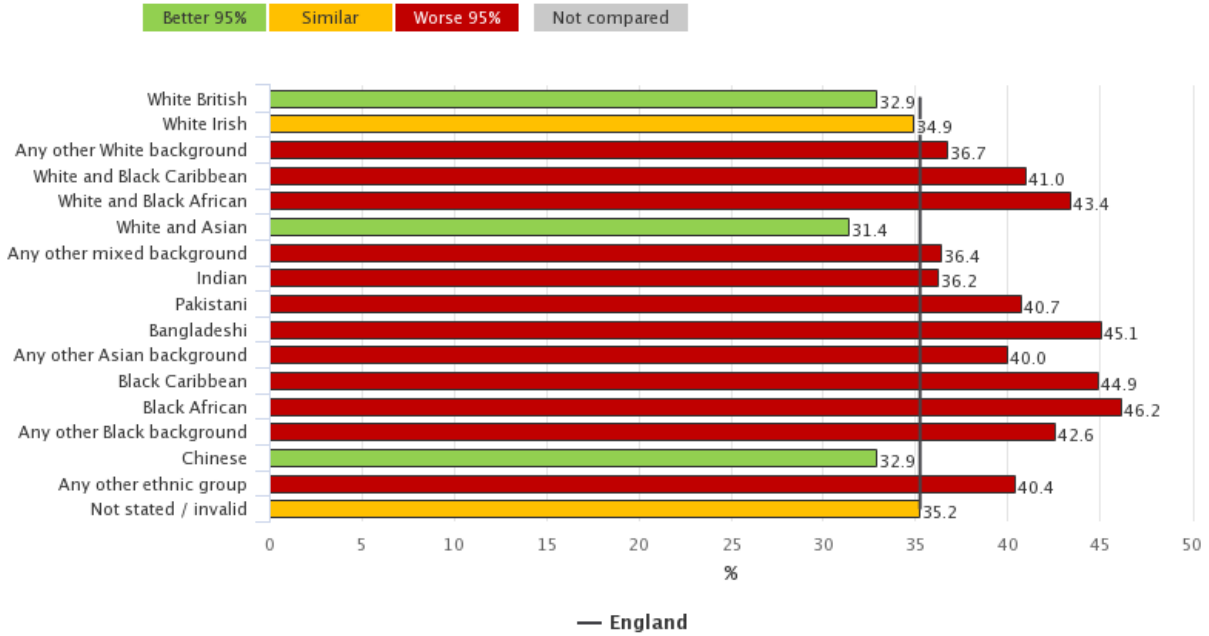
Geography
Kingston upon Thames
Counties & UAs (4/20-3/21) in London region

Indicator
Reception: Prevalence of overweight (including obesity) Proportion - %

Reception: Prevalence of overweight (including obesity) (2019/20) - England Ethnic groups



Year 6: Prevalence of overweight (including obesity) (2019/20) - England Ethnic groups



Current Healthy Weight Initiatives:

Adults

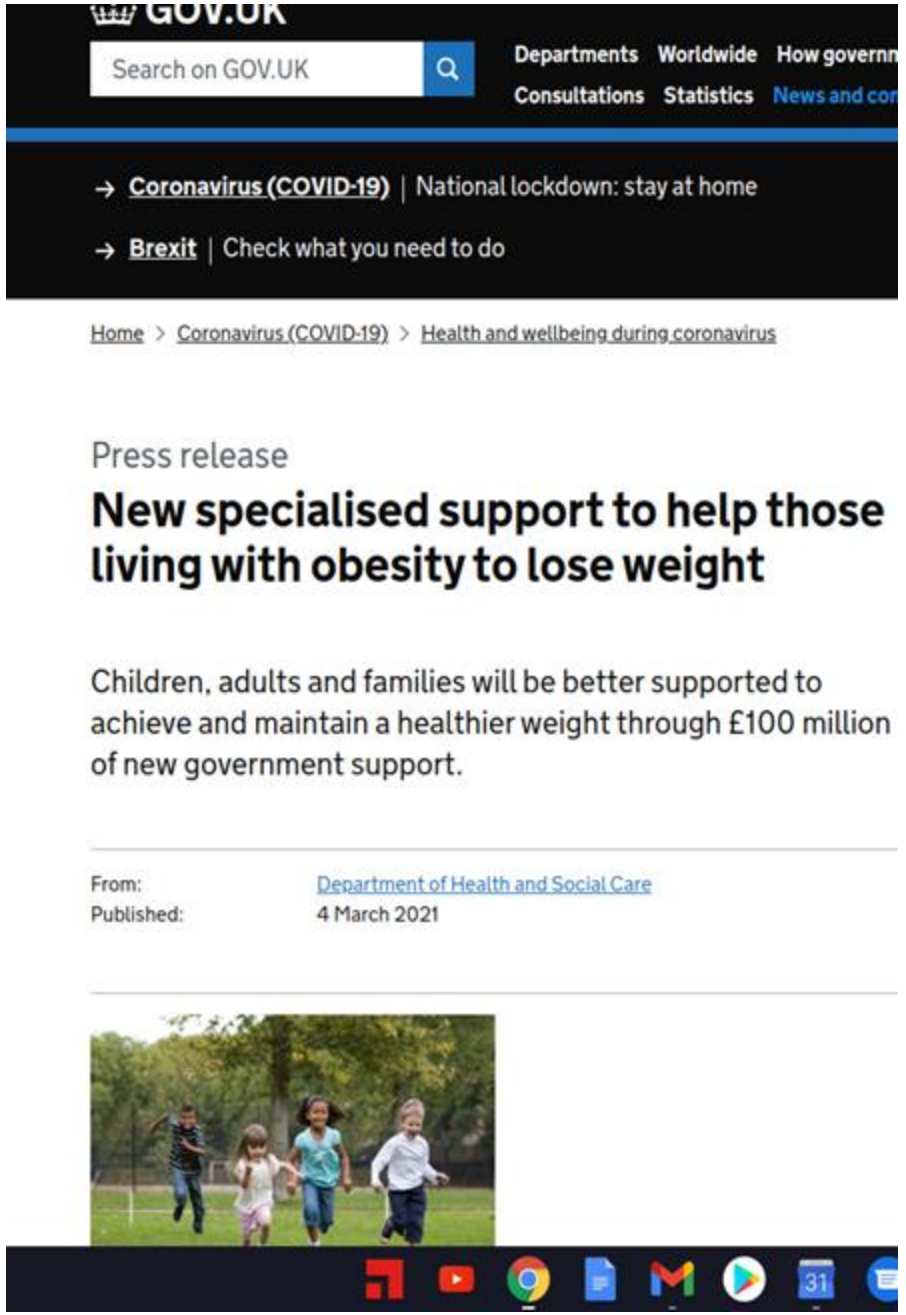
- Slimming World
- WW Reimagined (previously Weight Watchers)
- Get Active Exercise Referral Service
- Community Development Team – reaching vulnerable groups
- Healthy Walks - promoting physical activity
- Making Every Contact Count (MECC) - trained 322 Connected Kingston Champions in 'healthy conversations' and promoted community healthy weight initiatives

Children & young people

- Healthy Early Years programme & HENRY
- Healthy Family Programme (NCMP)
- Healthy School Awards
  - Promotion of the daily mile

Promoting adult healthy weight 2021/22 initiatives

- Promote specialised support for weight management across the life course
- Promote NHS diabetes prevention programme (NDPP) and diabetes intervention courses
- Connected Kingston promotion via social media more community offers for physical activity and weight management courses
- Get Active – Eat Well (combining exercise referral with nutrition course offer)
- Promote nutrition for Mental Health and Wellbeing courses
- Second Nature (pilot)– online, 6-month digital course targeting men
- 6wk Cook and Eat course (pilot) – with Kingston Adult Education



Connected Kingston

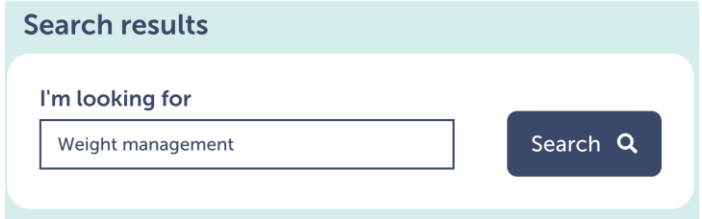
Making links, connecting communities

COVID-19

Find up to date information and support in Kingston to help you take care of yourself and your community.

- Support after a Death
- Housing Support
- Finance and Employment
- Getting Food
- Staying Mentally Well
- Keeping Fit
- Community Support

connectedkingston.uk



WW Reimagined (Weight Watchers)

Royal Borough of Kingston Council

Service • Free

If you're looking for support managing your weight, WW Reimagined (Weight Watchers) by referral offers 12 weeks of free group sessions for eligible individuals.

View More

Second Nature

Second Nature

Service • Free

Second Nature is a digital healthy lifestyle programme that helps you lose weight and make long-lasting lifestyle changes.

View More

Slimming World (16+ year olds)

Royal Borough of Kingston Council

Service • Free

Slimming World by referral offers a generous, free 12 week 'no-hunger' eating plan for eligible individuals.

View More

Healthier You: NHS Diabetes Prevention Programme

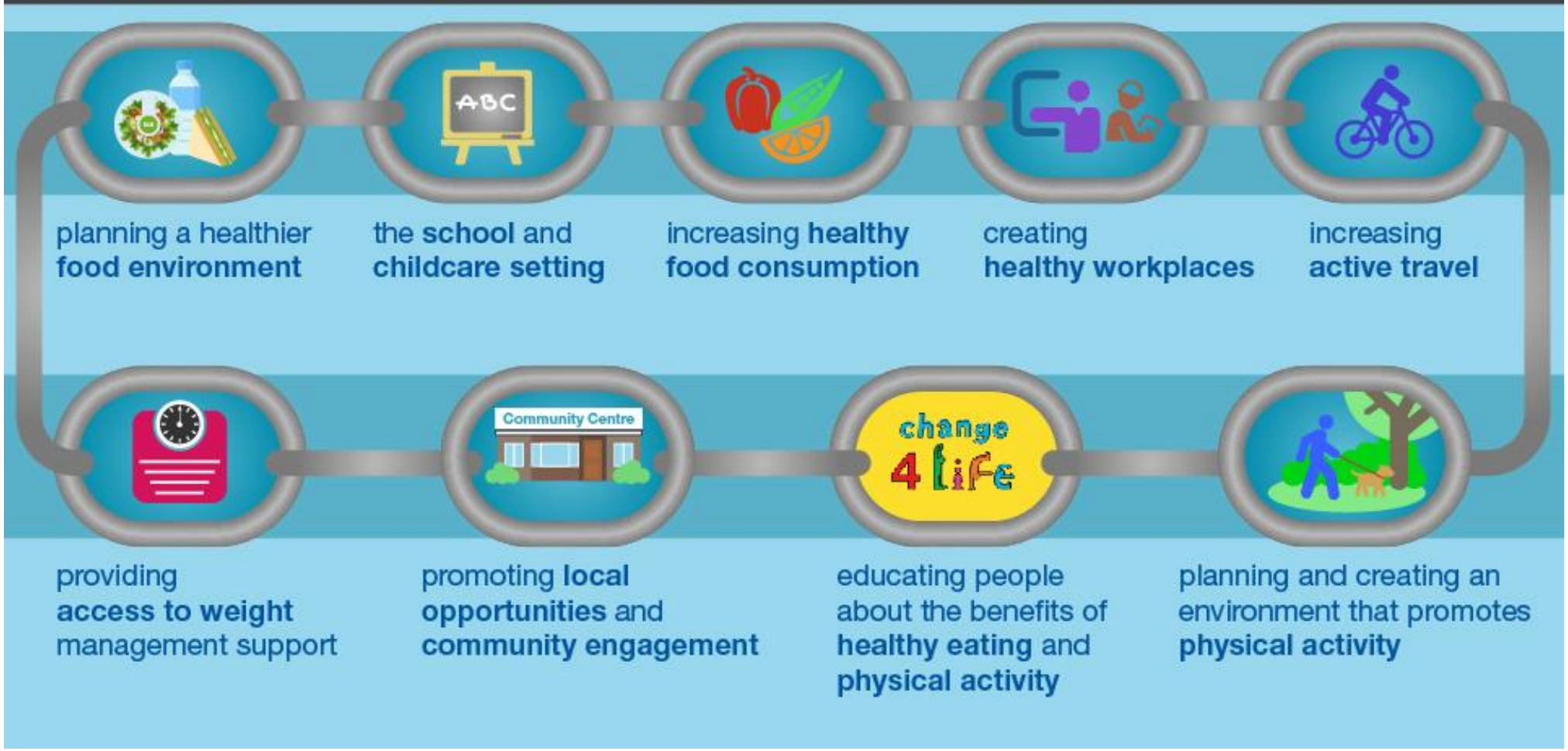
Royal Borough of Kingston Council

Service • Free

The Healthier You: NHS Diabetes Prevention Programme aims to reduce people's risk of developing Type 2 diabetes across England and is available to people in Kingston.

View More

Common areas of obesity activity identified as part of a whole systems approach to obesity



Future plans & call to action

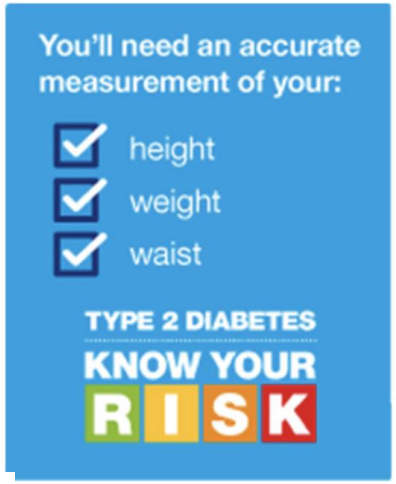
- **RBK Health & Care Plan 2021-2023**
  - Kingston becoming a Marmot Borough (Sir Michal Marmot Fair Society Healthy Lives 2010 and Marmot Review 2020),
  - Tackling inequalities – have widened rather than narrowed (exacerbated by Covid-19)
- To develop a robust obesity strategy – share actions with relevant stakeholders to help reduce inequalities, tackle obesity and promote mental wellbeing
- Run local focus groups to develop more targeted services for BAME groups
- Review current WMS and uptake
- Make Every Contact Count

Making every contact count (MECC)

- Many long-term diseases in our population are closely linked to known behavioural risk factors. Around 40% of the UK's disability adjusted life years lost are attributable to tobacco, hypertension, alcohol, being overweight or being physically inactive
- Making changes such as stopping smoking, improving diet, increasing physical activity, losing weight and reducing alcohol consumption can help people to reduce their risk of poor health significantly. Making every contact count (MECC) is an approach to behaviour change that utilises the millions of day-to-day interactions that organisations and people have with other people to encourage changes in behaviour that have a positive effect on the health and wellbeing of individuals, communities and populations
- Using every appropriate opportunity to have a health conversation, to help and encourage people to make healthier choices, so they can achieve positive long term behaviour change to improve their health and wellbeing

Useful sources/contacts

- The NHS Health Check is a health check-up for adults in England aged 40 to 74.
  nhs-health-check/



TYPE 2 DIABETES
KNOW YOUR RISK

Find out your risk of Type 2 diabetes

- By completing this tool, in England you may be eligible for the Healthier You NHS Diabetes Prevention Programme.

Connected Kingston
Making links, connecting communities

Telephone
02085476815

Email
healthy.lifestyles@kingston.gov.uk

THE ROYAL BOROUGH OF KINGSTON UPON THAMES

Thanks for listening
Any questions?

Contact: Jabeen.shah@Kingston.gov.uk