

Weight control: Should we support “you” or the whole population?

If the whole population maintained today’s weight, the current obesity statistics and associated comorbidity epidemic should, in theory, get no worse. But would an ongoing spend of at least 9% of the UK’s current annual NHS budget on diabetes management legitimise a mainstay aim of “population obesity standstill”? Population measures include the social stuff – cycle paths, “whole school activities”, social marketing education programmes such as Change4Life (available at: <http://bit.ly/2iLhi2B>) and the One You campaign (available at: www.nhs.uk/oneyou), and nudge theory: those subliminal drivers that aim to make healthy choices that little bit easier (Local Government Association, 2013). They also include industry measures to encourage food reformulation, consistent food labelling and steps to limit aggressive marketing, particularly to vulnerable groups such as children.

A recent study by Feldman et al (2017) has shown a strong association between primary weight maintenance or moderate weight loss and reduced diabetes risk. This lends support to NHS England’s Diabetes Prevention Programme, which is gradually being rolled out across the UK. This targets people with non-diabetic hyperglycaemia to provide them with comprehensive diet and physical activity support, in the hope of stemming the relentless increase in diabetes incidence (Public Health England, 2014).

But how might that leave you feeling as an individual? What if you fall into the high-risk group of people with established obesity, with or without pre-existing diabetes, in whom the evidence states that only a long-term, multicomponent intervention will help? Does your locality provide a Tier 3 weight management service or access to bariatric surgery according to NICE (2014) criteria? Many areas do not, as reports from the obesity charity HOOP (Helping Overcome Obesity Problems, 2016) demonstrate.

Might targeting people with “pre-diabetes” in fact be a cop-out, cherry-picking those who are easiest to help whilst sidestepping the challenges of established obesity? Reasons supporting universal, societally based prevention for all include:

- Theoretical benefits of avoiding further weight gain, regardless of current weight.
- Accessibility of benefits regardless of socioeconomic status and deprivation.

A targeted “pre-disease” approach such as the Diabetes Prevention Programme, however, is unlikely to help the people at greatest risk – those with type 2 diabetes already. As deprivation, ethnicity and obesity are interlinked (Figure 1; Public Health England, 2016a), there is a risk of widening deprivation and demographic differences; not only may those at highest risk find it hardest to access and make use of support, but evidence suggests they may also be more susceptible to genetic factors and influences stemming from the obesogenic environment (O’Rahilly, 2016). Support is needed throughout the spectrum of obesity and disordered eating. Focusing on one disease silo, diabetes, is too narrow for the array of obesity-related comorbidities, which range from



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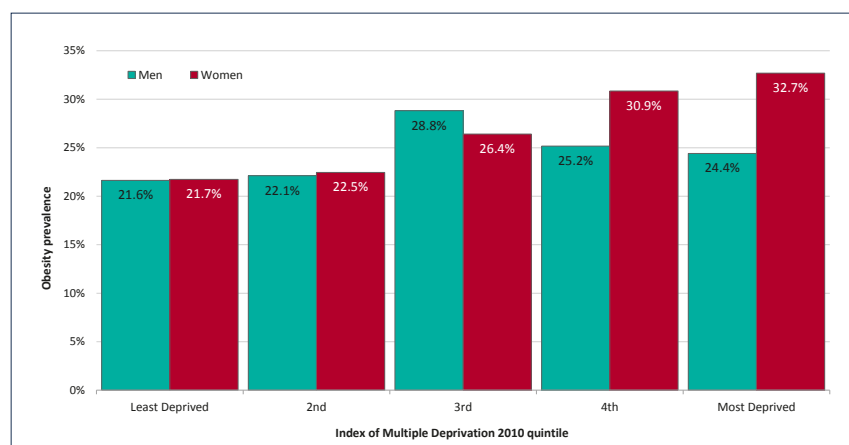


Figure 1. The link between socioeconomic deprivation and obesity (Public Health England, 2016a).

Box 1. Brief intervention messages for patients and families.

Steps that support weight **constancy** include:

- Regular weighing.
- Keep moving – every little helps.
- Limit screen time.
- Eat breakfast.
- Reduce sugary drink intake (cola, alcoholic drinks, juice “drinks”).
- Encourage healthy food swaps (lower in fat and sugar).
- Rescue strategies after minor blips (e.g. holidays).

Steps that support weight **loss** include:

- Reduce portion sizes.
- Low-fat eating.
- Any calorie-restricting dieting regimen – **if** followed over the long term.
- Combined physical activity with calorie restriction.

Outline clear expectations:

- Reducing portion sizes will help to **support** weight loss.
- Increasing exercise will help to **maintain** weight loss and boost health.
- **BUT:** To achieve weight loss, increasing exercise will need calorie restriction too – otherwise the body “makes up” for the energy expended.

non-alcoholic fatty liver disease, cardiovascular disease and cancer to obstructive sleep apnoea, low self-esteem and depression (World Health Organization, 2016).

Unfortunately, maintaining the same weight is NOT our default setting in today’s obesogenic environment – as shown in *Figure 2* (Public Health England, 2016a). Promoting weight constancy is important for individuals wherever they are on their weight continuum: that varying cycle of weight gain and loss experienced by many “dieters”, as motivation and engagement waxes and wanes. Without attention, we all risk getting heavier. Taking active steps to avoid further weight gain may feel more achievable than weight loss and is a valuable recommendation for people who are not currently in the right mindset to contemplate weight reduction. Regular weight monitoring, regular meal routines and regular physical activity all help weight constancy.

Healthcare professionals can helpfully debunk myths around regular weighing. Does your patient have access to weighing scales? Stepping on the scales means “giving it some thought”, not an impending eating disorder; anorexia nervosa rates have remained static in recent decades (Micali et al, 2013). In addition, physical activity supports weight constancy and better health – but flag up that achieving weight reduction requires calorie restriction too (*Box 1*).

From a population perspective, initiatives promoting weight constancy in adults have an evidence base and are probably cost-effective depending on the outcome criteria used to measure impact (Bazian Ltd, 2014). However, public health must balance the needs of individuals too and, with adult overweight and obesity rates averaging 62%, prevention will not be enough. Multidisciplinary obesity services, including bariatric provision, are needed for people with BMI >50 kg/m² and those whose obesity heralds an underlying disordered relationship with food and, sometimes, deep-seated psychological distress or damage. The NICE (2014) guideline on obesity, CG189, sets out clear, evidence-based treatment recommendations for those in obese BMI categories as well as those with recent-onset type 2 diabetes (*Box 2*).



Figure 2. Prevalence of excess weight and obesity by age (Public Health England, 2016a).

Box 2. NICE (2014) referral criteria for bariatric surgery.

Bariatric surgery is a treatment option for people with obesity if all of the following criteria are fulfilled:

- BMI of ≥ 40 kg/m², or 35–40 kg/m² with other significant disease (obstructive sleep apnoea, type 2 diabetes, hypertension).
- Non-surgical options tried first.
- Consider surgery if BMI is >30 kg/m² with recent-onset type 2 diabetes.
- Surgery is the first-line option if BMI is >50 kg/m².
- Intensive support in Tier 3 services is required.
- Recipients must sign up to long-term follow-up.
- Use lower BMI thresholds for people of Asian ethnicity with type 2 diabetes.

Comprehensive child obesity services are as yet embryonic, with no clear outline of what a “standard child obesity treatment service” looks like or how it should rank in prioritisation when bidding for scant local funding. The roll-out of the prevention-targeted Change4Life initiative, launched in 2009, has not been sufficient to reverse our woeful child obesity statistics, although some plateauing has occurred (Figure 3; Public Health England, 2016b).

To avoid unrealistic shifting of blame to individuals, we also need strong policies on the food and drinks industry to combat the toxic food environment of a market economy, in which industrial wealth and economic growth outrank the health needs of individuals or communities. Unfortunately, population health means eating less, drinking less, spending less... and enjoying less. None of these will induce any political or popular appetite at all.

As NICE (2007) outlines in the PH6 behaviour change guidance, effective behaviour change interventions require individual tailoring that reflects the starting point of the individual and the best available evidence. By all means pluck the low-hanging fruit that population-level prevention approaches might deliver, but we must also invest in comprehensive treatment facilities, seeking stronger evidence and building expertise within our workforce to ensure equitable access

for hard-to-reach patients, regardless of BMI or socioeconomic status. ■

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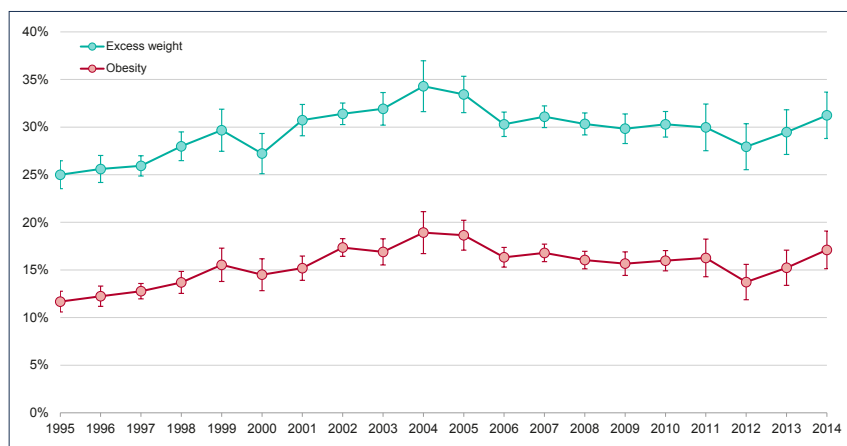


Figure 3. Trends in prevalence of excess weight (BMI $\geq 85^{\text{th}}$ centile of the UK90 growth reference) and obesity ($\geq 95^{\text{th}}$ centile) in children (Public Health England, 2016b).