Weight Loss Injections in Paediatrics: Navigating the Evidence, Ethics and Practicalities

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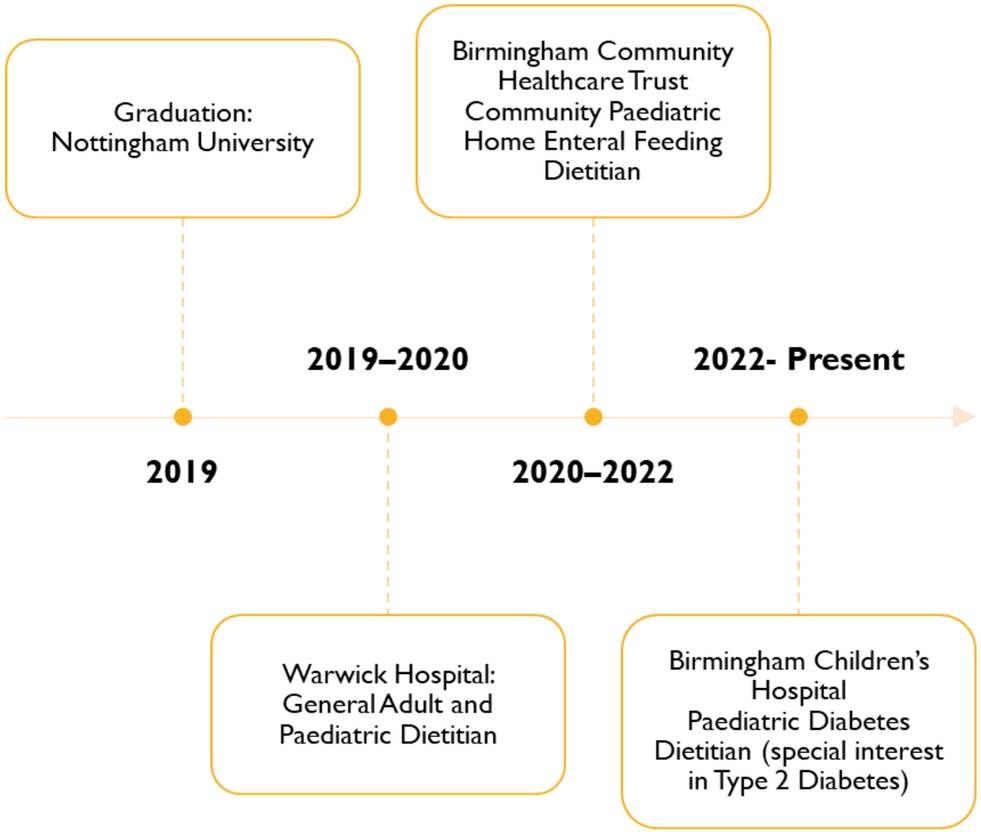
Birmingham Children's Hospital

Who am I?

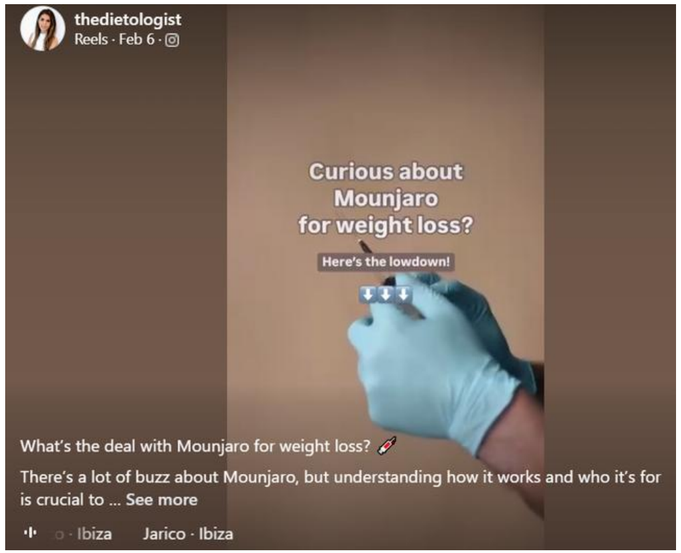


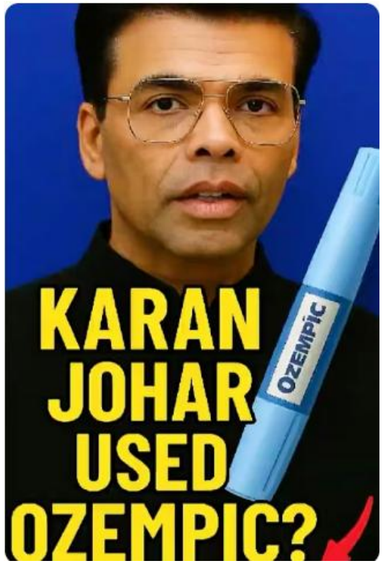
Outside of the NHS:

- **Try and spread the word on the importance of diversity (#CulturalDiets + Diverse Diets Tutorial)**
- **Volunteer at community health screening events (mostly within the South Asian community)**
- **Freelance healthwriting**
- **Recipe development**
- **Try and be present on social media!**

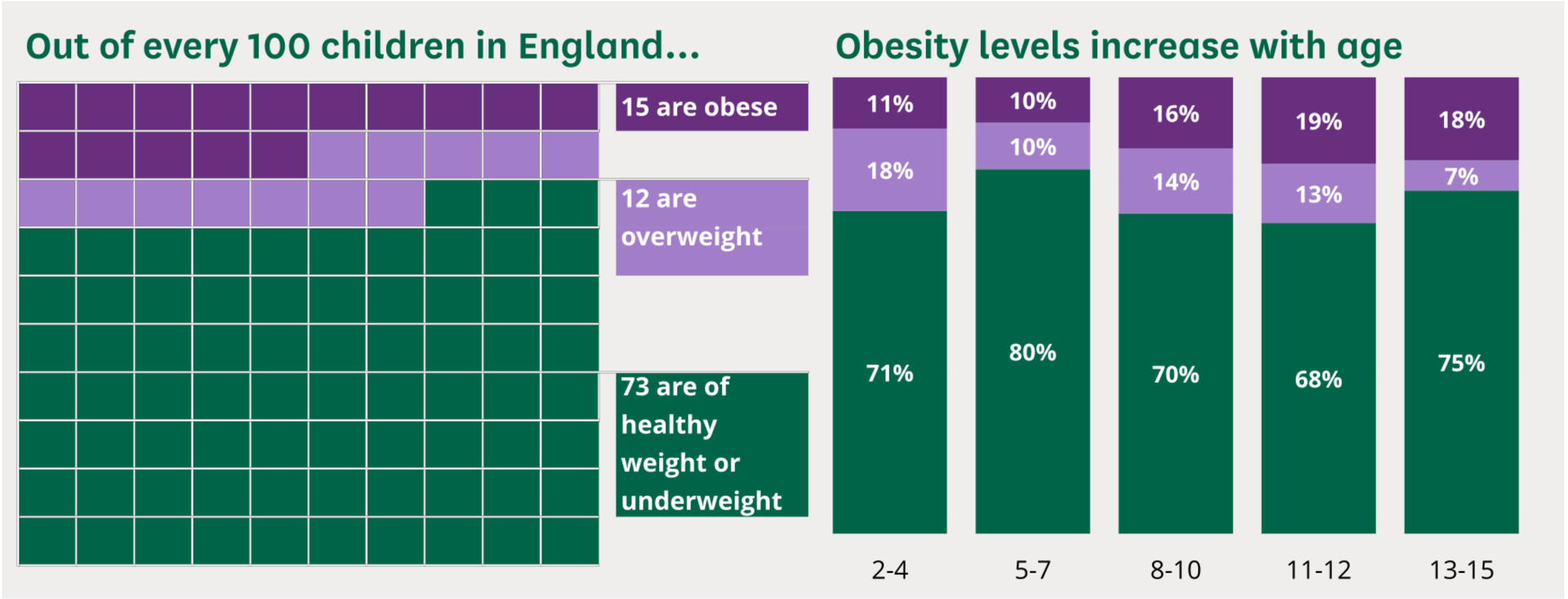
@anjanee.dietitian

Why are weight loss drugs used so widely?



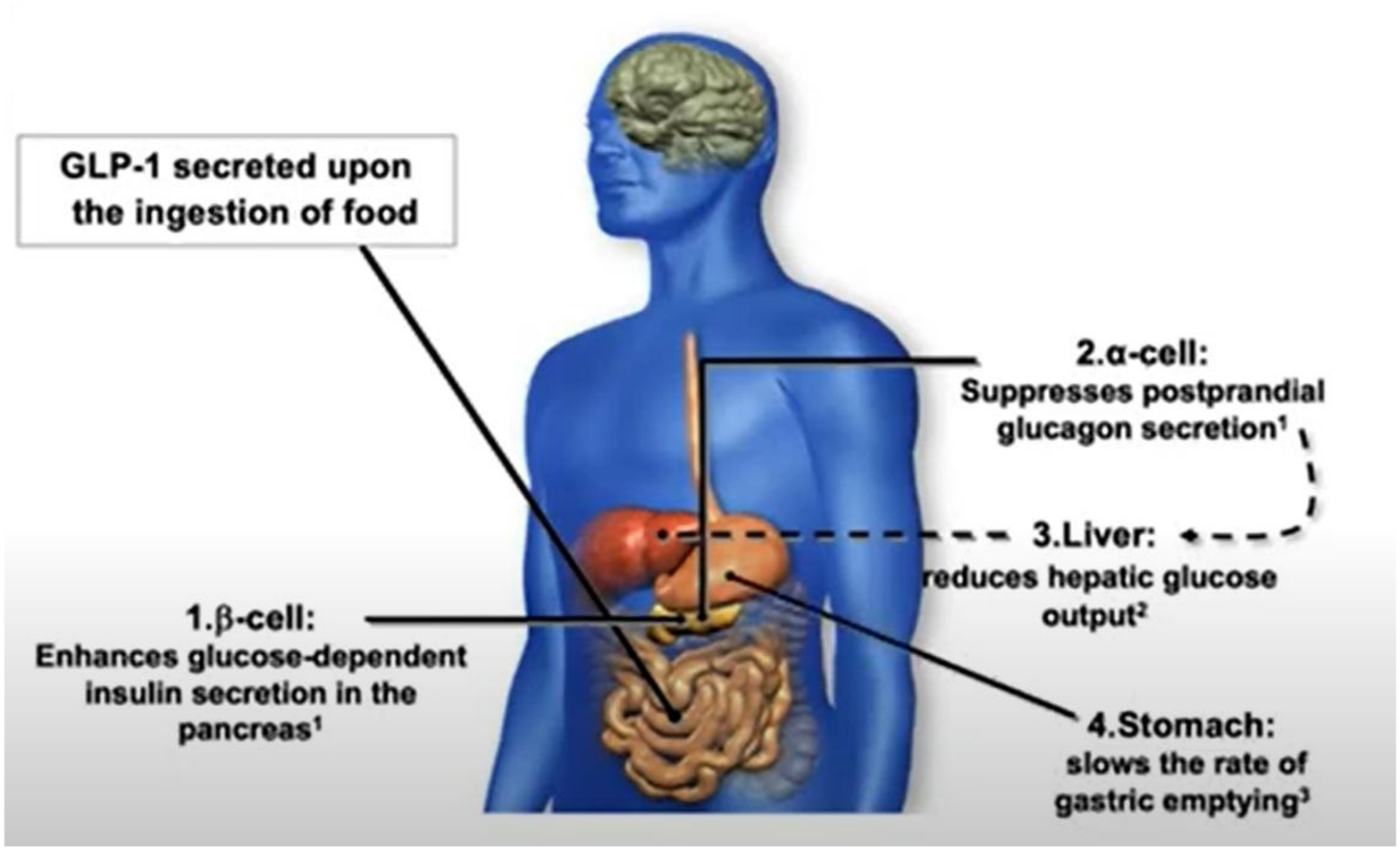


Some context...



NHS Digital, National Child Measurement Programme, 2022/23; NHS Digital, Health Survey for England 2022

What are weight loss injections ?



injectable medication given once daily or once weekly

What is classed as obesity in children?

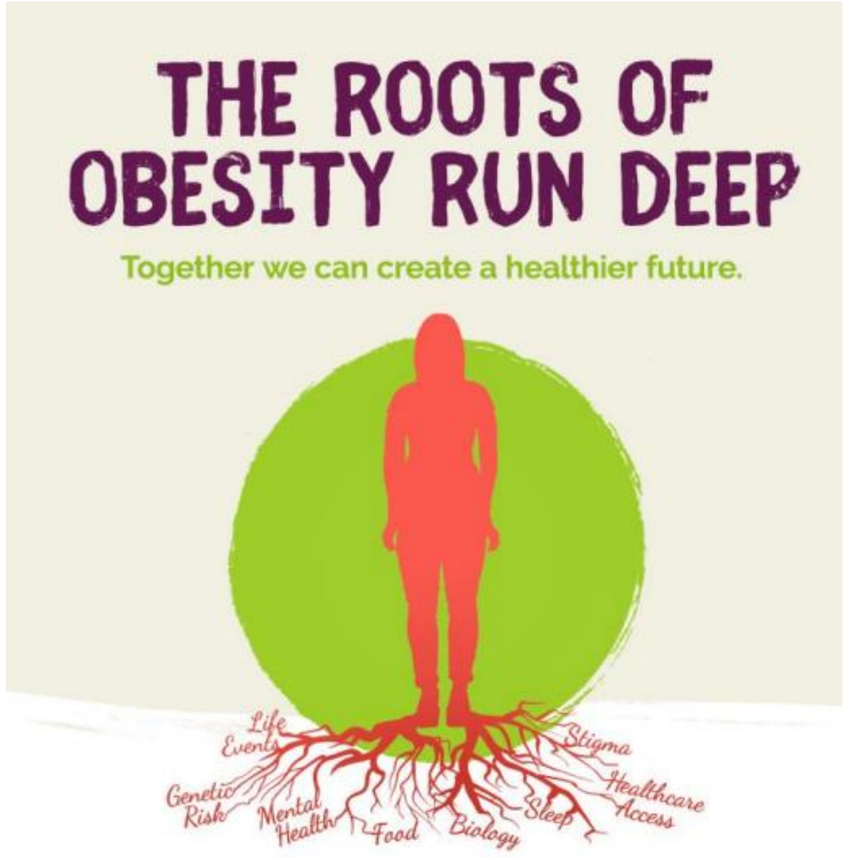
- **Overweight: BMI 91st centile + 1.34 standard deviations (SDs)**
- **Clinical obesity: BMI 98th centile + 2.05 SDs**
- **Severe obesity: BMI 99.6th centile + 2.68 SDs.**

> **Ask permission from children, young people, and their families and carers, before talking about the degree of overweight, obesity and central adiposity, and discuss it in a sensitive and age-appropriate manner.**

NG246 Overweight and obesity management, 2025

How should we talk about obesity with children?

- Use people first language
- Adopt positive language about obesity and people with obesity
- Avoid the use of language that is derogatory or pejorative
- Use easy to understand language to illustrate that obesity is a health condition
- Recognise the wider causes of obesity where relevant
- Avoid the use of language that implies individual blame

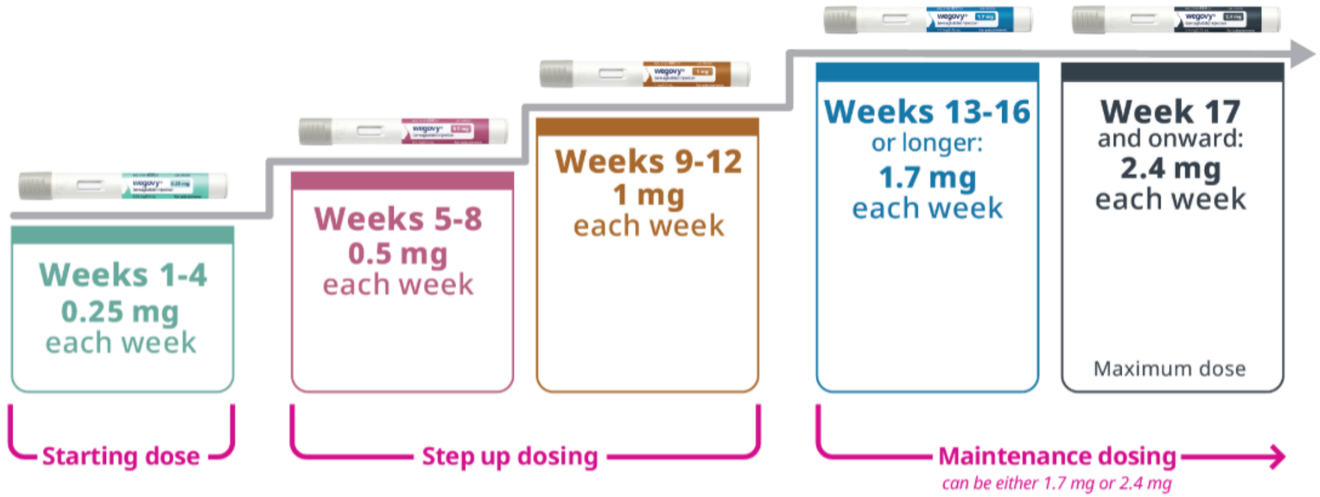


World Obesity Federation, 2023

Who can get them?

- Wegovy (active ingredient: Semaglutide)
- Taken once weekly
- Used **together with diet and physical activity** for weight management in adolescents aged **12 years and above**, who have:
  - Obesity
  - Body weight >60kg

BNF



Wegovy, 2024

Do they work in children?

ORIGINAL ARTICLE

Once-Weekly Semaglutide in Adolescents with Obesity

Authors: Daniel Weghuber, M.D., Timothy Barrett, Ph.D., Margarita Barrientos-Pérez, M.D., Inge Gies, Ph.D., Dan Hesse, Ph.D., Ole K. Jeppesen, M.Sc., Aaron S. Kelly, Ph.D., Lucy D. Mastrandrea, M.D., Rasmus Sørrig, Ph.D., and Silva Arslanian, M.D. , for the STEP TEENS Investigators* Author Info & Affiliations

Published November 2, 2022 | N Engl J Med 2022;387:2245-2257 | DOI: 10.1056/NEJMoa2208601
VOL. 387 NO. 24 | Copyright © 2022

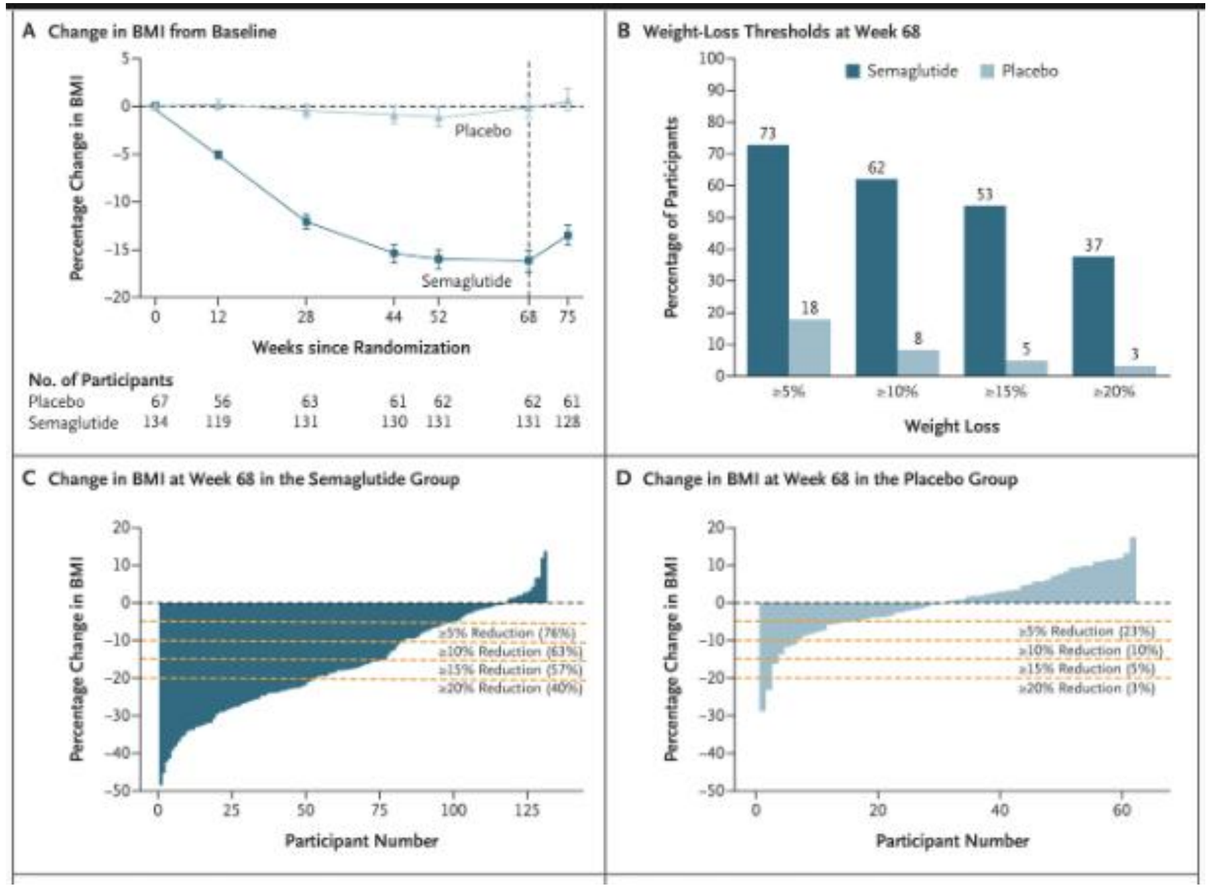
Phase 3 randomized study in teens with obesity receiving once-weekly subcutaneous semaglutide 2.4 mg versus placebo, plus lifestyle support over 68 weeks

Results:

73.7 % of semaglutide users improved by at least one BMI category, compared with 19.0 % for placebo.

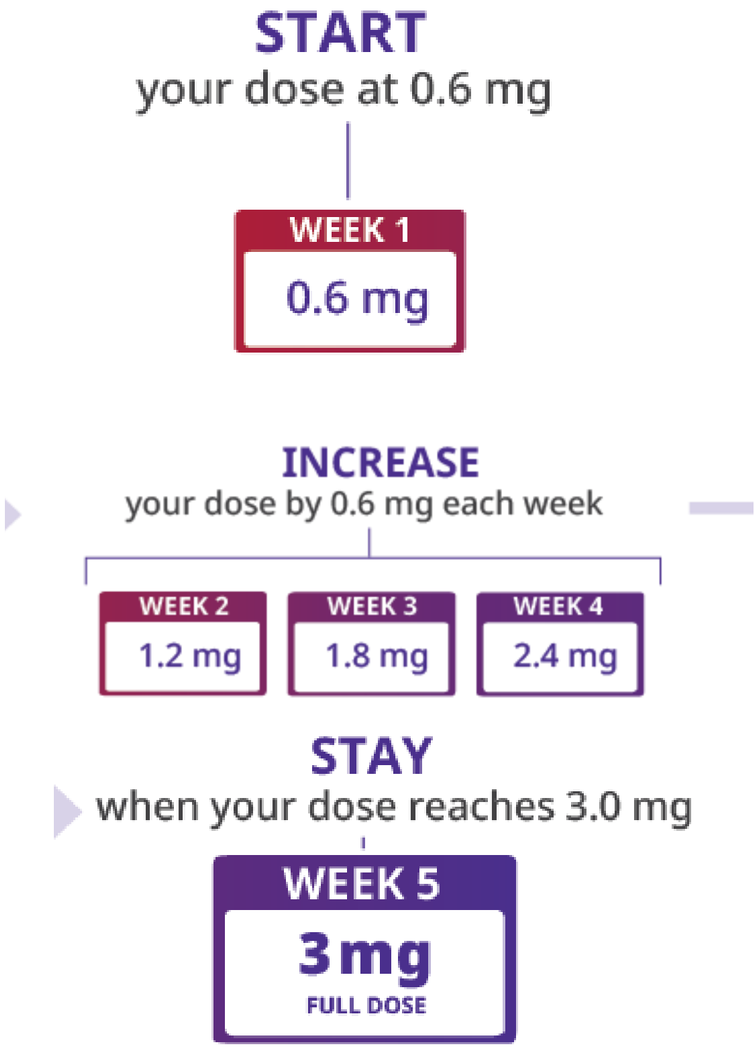
44.9 % reached normal-weight or overweight BMI by week 68 vs 12.1 % with placebo

Improvement in metabolic markers: reductions in waist circumference, HbA1c, lipid levels, and ALT were observed; systolic blood pressure also decreased modestly



Who can get them?

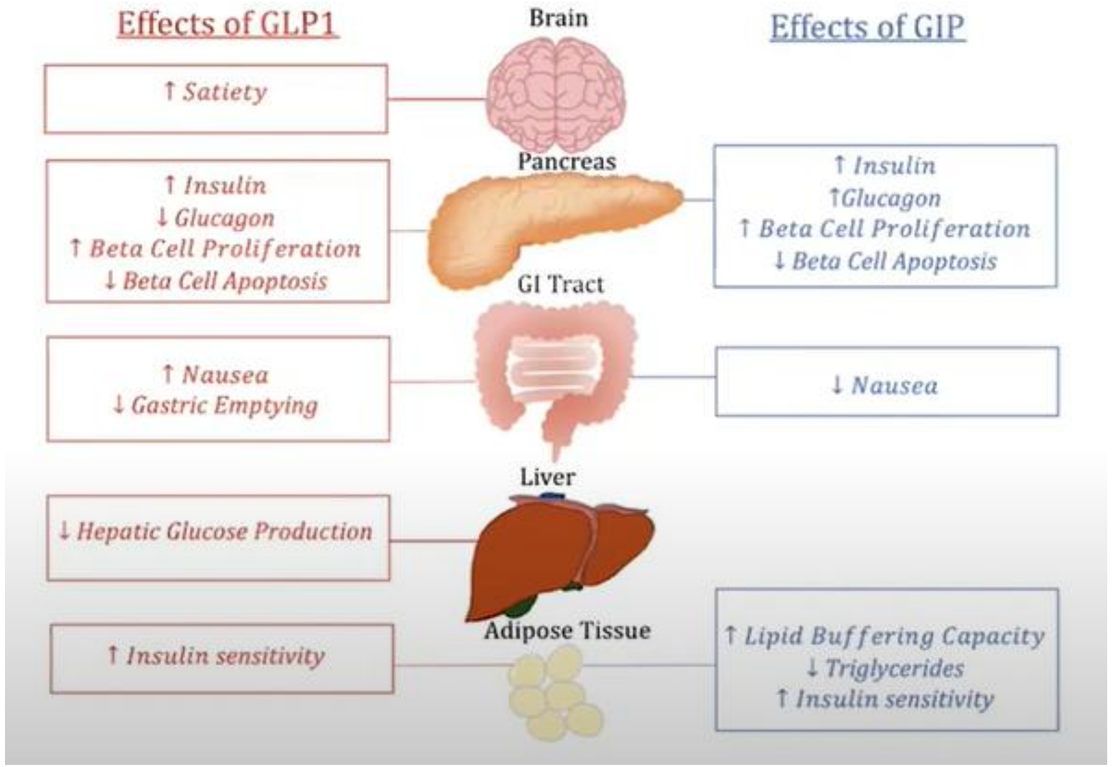
- Saxenda (active ingredient: Liraglutide)
- Taken daily
- Used **together with diet and physical activity** for weight management in adolescents aged **12 years and above**, who have:
  - Obesity
  - Body weight >60kg



Saxenda, 2024

… What about Mounjaro?

Approved for type 2 diabetes and weight management for adults in the UK; not approved for use in children (yet)



Reviews in Endocrine and Metabolic Disorders 24(6):1-13 (2023)

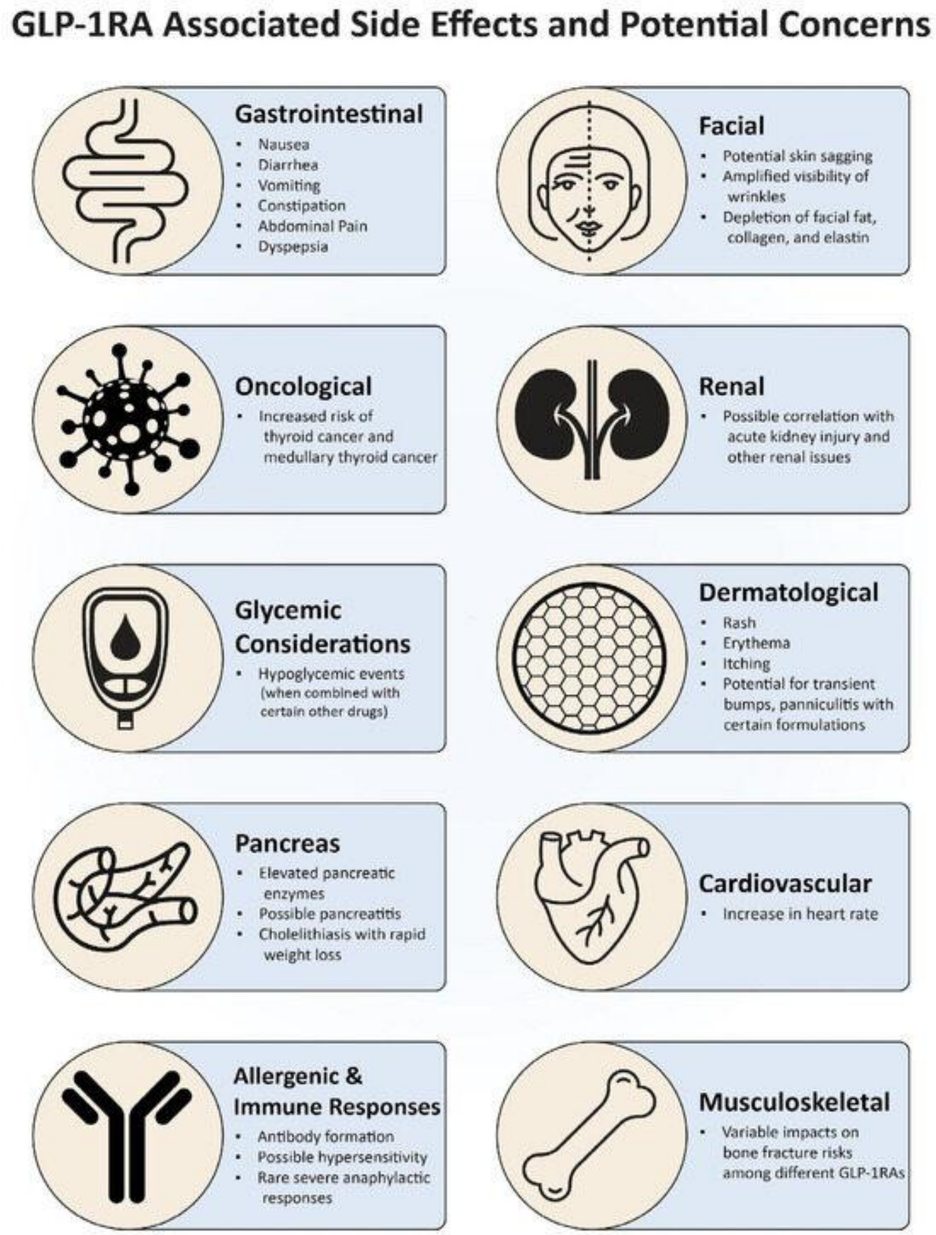
What about the Ethics?

Yes, they work in children, but...

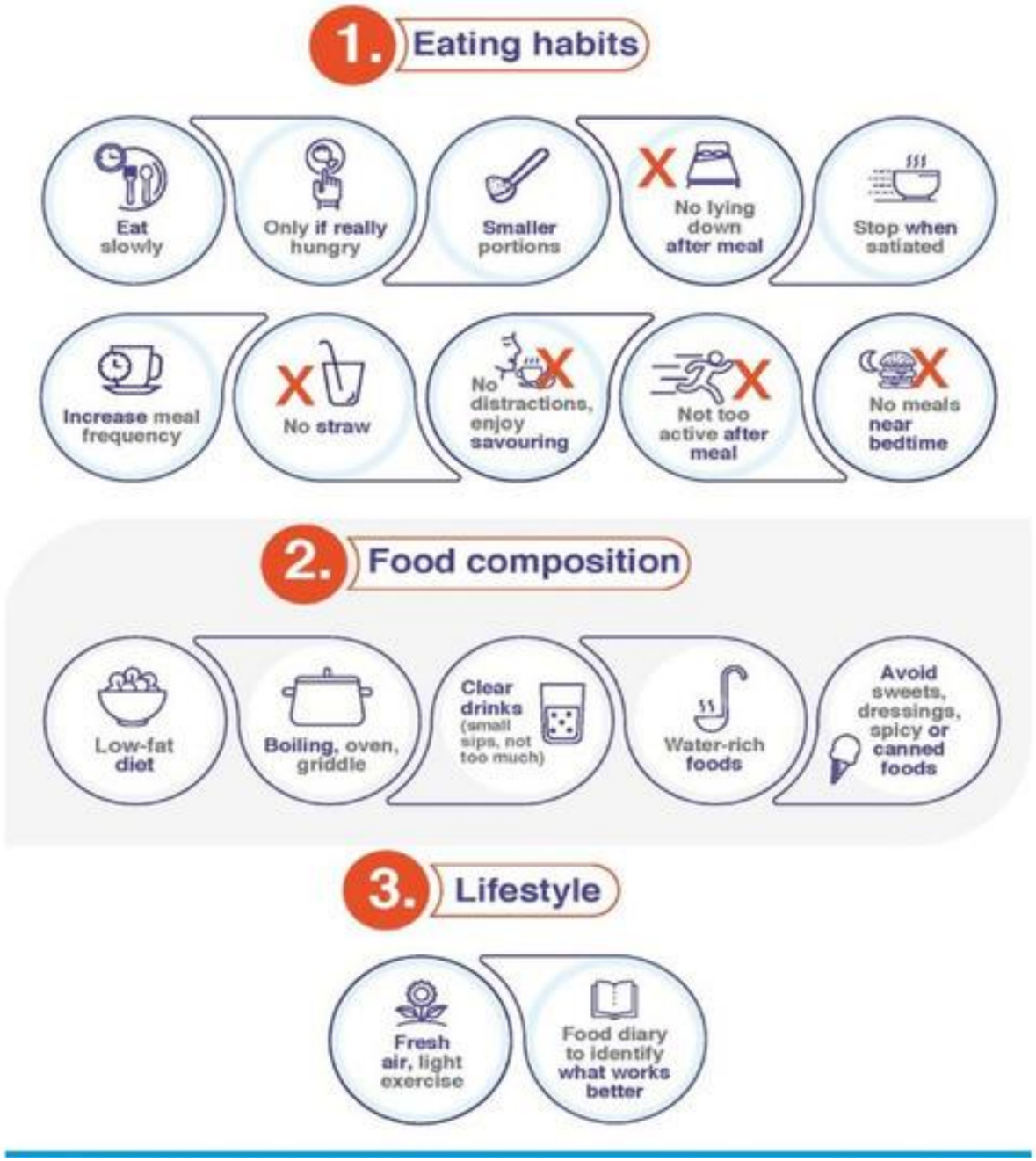
- Psychological impact and body image
- Consent in adolescents
- Equity and access issues (cost, availability, postcode lottery)
- Family and environmental context—importance of MDT approach
- <u>Dependency on medication vs long-term behaviour change</u>

The Practicalities: Side effects of GLP-1s

- Common: Nausea, vomiting, diarrhoea
- Risk of poor nutrient intake if appetite loss isn't supported with nutrition counseling
- Muscle mass and bone density loss
- High discontinuation rates → 50–67% at 1 year, up to 85% at 2 years
    - Why? Side effects, cost, variable efficacy, personal preference



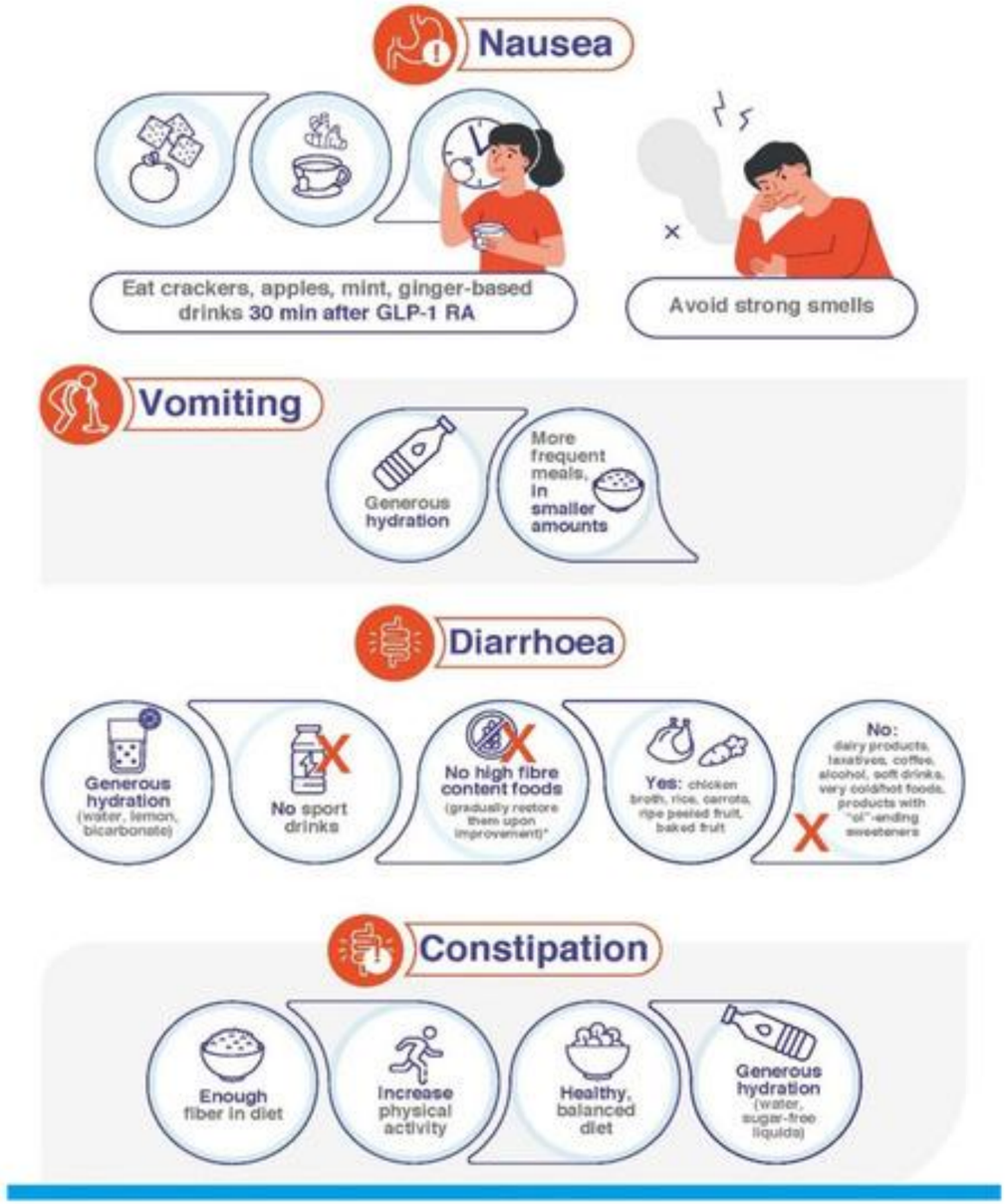
Gastroenterology Insights, 2024



How can we reduce the side effects of weight loss injections?

Journal of Clinical Medicine, 2023

How can we reduce the side effects (... continued)?



Journal of Clinical Medicine, 2023

What should the aims of our interventions be?

To reduce muscle loss and bone weakness:

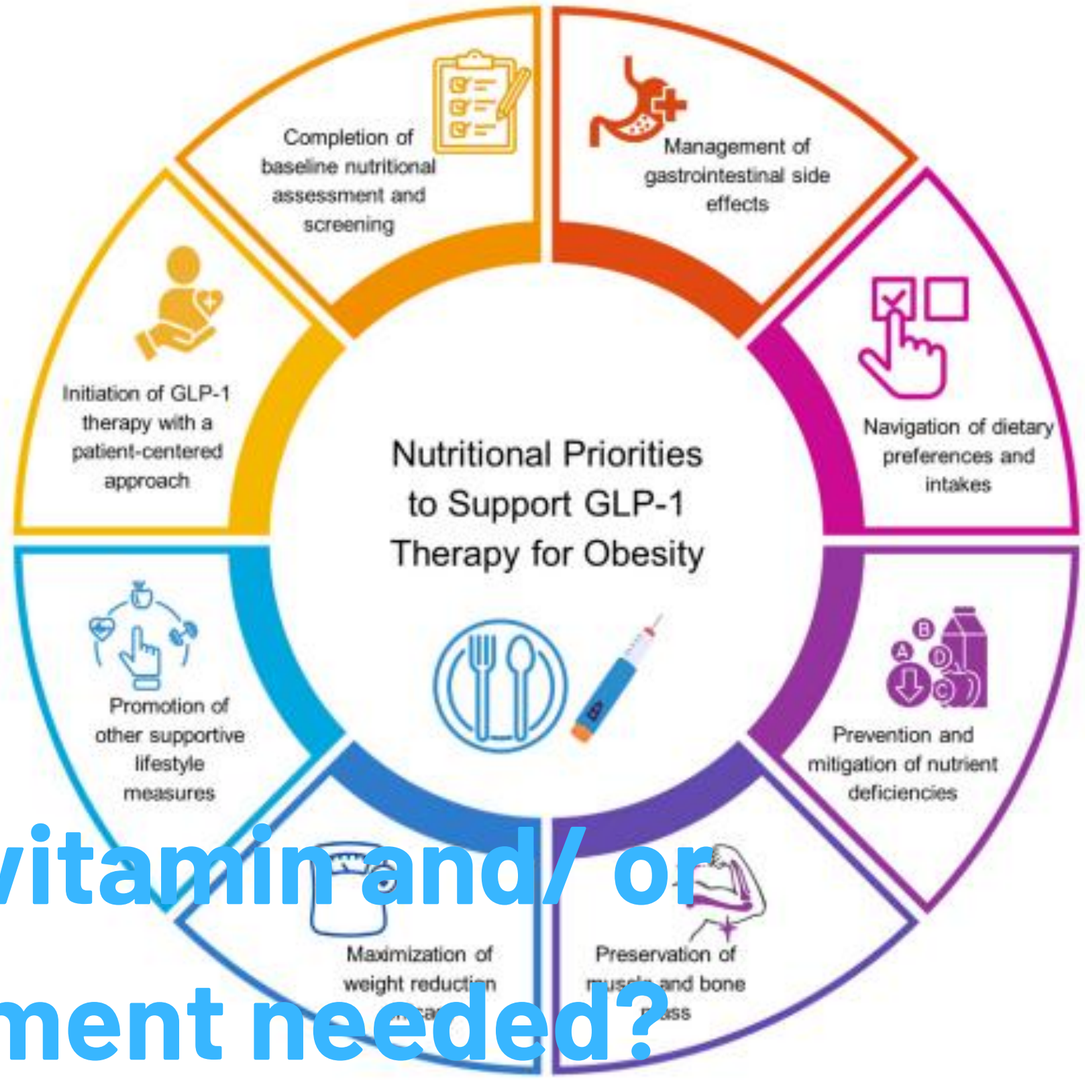
- **Ensure the patient has sufficient protein intake (concensus varies from 0.8g/kg- 1.6g/kg in adults)- practically 20-30g protein at each meal and eat protein first**
- **Calcium intake (2-3 servings per day)**
- **Encourage the patient to partake in exercise, particularly weight bearing and resistance training**

To reduce fatigue:

- **Meet iron requirements**
- **Overall calorie intake**

To reduce constipation:

- **Sufficient fibre intake**
- **Hydration**
- **Keeping active**



THEN, is a multivitamin and/ or mineral supplement needed?

The American Journal of Clinical Nutrition, 2025

What we do at BCH

Doctor

Nurse

Social Worker

Psychology

Clinical support worker

Youth worker

Family Support worker

Dietitian

Transition...?

What else can we do to support our patients taking these medications

Take a non-judgemental approach

Look at the bigger picture

Acknowledge there are things we cannot change- help where we can

Any Questions?

References

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