

## Medical input for patients undertaking weight management with Counterweight-Plus

Few patients need any medical input – only for specific existing medical conditions, listed below.

**Support and encouragement from doctors, for sustained, substantial weight loss, is very valuable**

### Aims:

- 1) **Weight loss** >15kg, using nutritionally complete formula Total Diet Replacement (TDR) providing ~850kcal/day, for 8-12 weeks (sometimes longer, for specific needs). Weight loss >15kg brings sustained remission of type 2 diabetes for over 8/10 patients, as in the DiRECT trial<sup>1</sup>
- 2) **Weight loss maintenance** support for 12-24 months, using structured behavioural change methods, with protocols for Food Reintroduction (FR) and Weight Loss Maintenance (WLM)

Before a patient commences Counterweight-Plus, their care team needs to check the following:

### **STEP 1: Eligibility: these are general criteria, which can be varied for patients with specific needs, at the discretion of doctors**

- Age 18-75 years
- Body Mass Index (BMI): **Caucasian:** BMI  $\geq 30\text{kg/m}^2$  or  $\geq 27\text{kg/m}^2$  with type 2 diabetes (T2D)  
**Asian:** BMI  $\geq 28\text{kg/m}^2$  or  $\geq 25\text{kg/m}^2$  with T2D
- The patient is assessed as 'Ready to Change' by the Counterweight Practitioner

*Note, entry criteria were slightly different in the DiRECT trial<sup>1</sup>, in order to optimise conditions for remission of type 2 diabetes<sup>2</sup> and to carry out research investigations. These criteria are not necessary for Counterweight-Plus in routine practice, but results may be slightly different for patients outside these ranges:*

- Age 20-65 (to ensure long-term follow-up for most)
- T2D of duration 0–6 years (diagnosed on 2 recorded diagnostic-level tests, HbA1c and/or OGTT)
- On diet alone: HbA1c  $\geq 48\text{mmol/mol}$
- On anti-diabetes drug treatment: HbA1c  $\geq 43\text{mmol/mol}$
- Body Mass Index (BMI)  $< 45\text{kg/m}^2$  (to be able to fit in the MRI scanner for research)

### **STEP 2: Exclusions:**

**These are general exclusions, and not an exhaustive list. The potential benefit, and likelihood of success of patients with these or other medical and social conditions should be considered on an individual basis.**

- Unstable domestic or occupational situation
- Learning or language difficulties which impair ability to understand or adhere to programme
- Severe depression: unstable/incompletely treated depression (at doctors' discretion)
- Psychosis (and taking antipsychotic drugs)
- Eating disorder accompanied by purging (laxative abuse) or induced vomiting
- Substance abuse e.g., drugs, alcohol
- Myocardial infarction or stroke within the previous 3 months
- Severe or unstable Heart Failure e.g., New York Heart Association grade IV
- Porphyria
- Pregnant/Considering pregnancy until >4 months post-partum; breastfeeding
- Severe renal failure: eGFR  $< 30\text{mls/min/1.73}$  within the previous 3 months

\*There will always be exceptions to these relative exclusions, but it is advisable to avoid these difficult patients until the service is well established, and local results are known

For free specialist medical advice about clinical concerns over patient suitability for Counterweight Plus, please contact [anna.bell-higgs@counterweight.org](mailto:anna.bell-higgs@counterweight.org) with a completed medical query form (Appendix C).

### **STEP 3: Monitoring\*\* and medication adjustments**

**It is not essential, from a safety perspective, to do any medical screening or assessment, except for patients with the following conditions:**

**Diabetes receiving anti-diabetic medications** (see Appendix A for management guidance)

**Hypertension requiring medications** (see Appendix B for management guidance)

**\*\* in many cases Counterweight practitioners will be monitoring BG and BP levels weekly/fortnightly/monthly depending on stage of the programme**

**Drug prescriptions which cause weight gain and/or oppose weight loss** - withdraw, replace, or reduce dosage if possible. The list includes most antidepressants, antipsychotics, steroids, sulphonylureas, beta-blockers, gabapentin/pregabalin, opiates.

**Gallstones** - patients should be advised about the risk of developing symptoms from gallstones for about 10-12%, during any effective weight loss programme. To reduce risks, the Counterweight-Plus diet contains some fat (to allow normal gall-bladder function). If gallstones are already present, a stepped energy restriction is recommended, and ursodeoxycholic acid may be considered as a preventative measure.

**Gout** – weight loss can precipitate gout in susceptible people, particularly if taking diuretic drugs. Continue or initiate uric acid lowering therapy where appropriate.

**Heart Failure** - a stepped energy restriction approach might be preferred to avoid sudden changes

**Retinopathy** - there is always a chance of a short-term flare up of diabetic retinopathy when glycaemic control is improved rapidly, but that seems to be a temporary effect, which resolves over a few months. A Stepped Energy Restriction might be preferred.

**Drug therapies, which might need dose adjustments with major weight loss**

**Warfarin** - measure INR weekly after weight change and adjust warfarin dose. Continue until weight and INR have stabilised.

**Antidepressants** – many impede weight loss. Mood may improve with weight loss, reducing need for antidepressants

**Contraception** – fertility may increase with weight loss, with new need for contraception

**Drugs for arthritis** – Opiate drugs impede weight loss. With weight loss, some patients may be able to reduce or stop medications.

**Corticosteroids** – the effect of weight loss, suppressing pro-inflammatory signals may allow dose reduction.

**Anticonvulsants** – weight loss may reduce requirements: blood levels can be measured, and clinical response assessed by seizure diary.

**Body weight/BMI monitoring** will be provided by the Counterweight Practitioner delivering the weight management intervention (usually registered dietitians) and reported to the patient's General Practitioner as required.

### **References**

1. *Lean MEJ et al. Durability of a primary care-led weight-management intervention for remission of type 2 diabetes: 2-year results of the DiRECT open-label, cluster-randomised trial Lancet Diabetes Endocrinol 2019 pii: S2213-8587(19)30068-3*
2. *McCombie et al. Beating Type 2 diabetes into Remission; BMJ 2017;358:j4030 doi: 10.1136/bmj.j4030 (Published 2017 September 13)*