

NHS Low Calorie Diet Programme Overview

The NHS Low Calorie Diet Programme is an evidence-based intervention using Total Diet Replacement (TDR) to support people recently diagnosed with Type 2 diabetes to achieve significant weight loss and potentially attain diabetes remission (non-diabetic HbA1c results, at least 6 months apart, off all glucose-lowering medicines). There is no cost to participants with all TDR (usually shakes) funded by the NHS.

In [SITE NAME], this service is provided by [Provider]. [Insert details of Provider's LCD programme]

Individuals who satisfy all the following eligibility criteria may be referred to the Service:

- Aged 18 to 65 years (inclusive)
- Diagnosed with Type 2 diabetes within the last 6 years
- Is not a current insulin user
- BMI $\geq 27\text{kg/m}^2$ (adjusted to $\geq 25\text{kg/m}^2$ or higher in people of black, Asian and minority ethnic origin)
 - BMI obtained from self-measured weight is acceptable for referral. If this cannot be obtained, a clinic-measured value within the last 12 months may be used, provided there is no concern that weight may have reduced since last measured such that the individual would not be eligible for the LCD programme at present
- HbA1c measurement taken within the last 12 months, in line with the following:
 - If on diabetes medication, HbA1c 43-87 mmol/mol
 - If not on diabetes medication, HbA1c 48-87 mmol/mol
 - If there is any concern that HbA1c may have changed since last measured, such that repeat testing may indicate that the individual would not be eligible for the LCD programme at present, HbA1c should be rechecked before referral is considered
- Must have attended for monitoring and diabetes review when last offered, including retinal screening, and commit to continue attending annual reviews, even if remission is achieved
- Is not currently pregnant or planning to become pregnant within the next 6 months
- Is not currently breastfeeding
- Does not have any of the following significant co-morbidities:
 - active cancer
 - heart attack or stroke in last 6 months
 - severe heart failure (defined as New York Heart Association grade 3 or 4)
 - severe renal impairment (most recent eGFR $< 30\text{mls/min/1.73m}^2$)
 - active liver disease (not including NAFLD)
 - active substance use disorder
 - active eating disorder
 - porphyria
 - known proliferative retinopathy that has not been treated
- Had not recently lost greater than 5% body weight
- Is not currently on a weight management programme
- Has not undergone / is not awaiting bariatric surgery (unless willing to come off waiting list)
- Health professional assessment that the person is able to understand and meet the demands and monitoring requirements of the NHS LCD Programme

Responsibilities of the referring GP practice:

- Identify eligible patients and offer referral as appropriate
- Provide information on concept of remission of Type 2 Diabetes, the LCD service and potential risks and benefits to obtain informed consent
- Discuss medication changes to take place on first day of TDR and provide written confirmation of these change to the patient and Provider
- Respond to any clinical need to further adjust medications according to capillary blood glucose and blood pressure monitoring by the Provider
- Respond to adverse events if patient contacts practice directly with an urgent clinical need or is directed to the GP practice by the Provider
- Arrange review of patient at 6 months and 12 months after starting LCD programme with repeat HbA1c –with further medication adjustment as necessary

Responsibilities of [Provider]:

- Attempt contact with patients referred within 5 working days to provide further information about the LCD service and book Individual Assessment
- Confirm medication changes with patient and written instructions from referrer
- Perform / arrange for monitoring of capillary blood glucose and blood pressure (in people taking BP-lowering medications at time of referral)
- Identify where capillary blood glucose and blood pressure fall outside of specified parameters and communicate appropriately with GP practice for further action
- Act as initial contact for patients experiencing a concurrent or adverse event which is not considered an emergency
- Appropriately triage and respond to adverse events –including signposting the patient to the GP practice or to other services
- Provide a starter pack of fibre supplements and ongoing supply as necessary
- Optimise uptake and retention on the programme

REQUIRED MEDICATION ADJUSTMENTS – PLEASE READ

Blood glucose-lowering medication adjustments:

- It is essential that sulfonylureas, meglitinides, and SGLT2 inhibitors are stopped on the first day of TDR as these medicines are not safe with TDR
- People on 1-2 glucose-lowering medications should stop these medications on the first day of TDR
- People on ≥ 3 medications should stay on metformin only (or, if not taking metformin as it is contraindicated / not tolerated, stay on an oral medication which is safe with TDR, e.g. DPP4 inhibitor or pioglitazone) and stop the remaining glucose-lowering medications on the first day of TDR
- Counsel the patient about the osmotic symptoms of diabetes and advise them of when and how to seek appropriate support

Blood pressure-lowering medication adjustments:

- Note that BP-lowering medications include those used for other indications (e.g. tamsulosin for benign prostatic hypertrophy, furosemide for oedema) as well as those used specifically for managing BP
- If blood pressure is considered uncontrolled at time of referral (systolic ≥ 140 mmHg or diastolic ≥ 90 mmHg), make no changes to BP-lowering medications
- If blood pressure is considered controlled at time of referral (both systolic < 140 mmHg and diastolic < 90 mmHg), one BP-lowering medications should be adjusted on the first day of TDR
- If reviewing the patient remotely, it is reasonable to use self-reported blood pressure. If not available, the last clinic-recorded blood pressure may be used, provided there is no concern of white coat hypertension or that blood pressure may have changed significantly since last measured
- Medications being used specifically and solely for managing blood pressure, in a particular patient, are the priority for adjustment. Suggested process:
 - Identify the medications used by the patient solely for managing blood pressure (i.e. not also being used for nephropathy, angina, heart failure, BPH, migraines etc)
 - Stop the medication which would have been added last according to current NICE guidance - unless other clinical factors affect decision making
 - If not being used for other indications, this would be (in order of stopping first):
 - Spironolactone or alpha-blocker or beta-blocker
 - Thiazide diuretic (or calcium-channel blocker)
 - Calcium-channel blocker (or thiazide diuretic)
 - ACE-inhibitor or Angiotensin receptor blocker
- If the patient is taking medications which affect blood pressure but all are being used for other indications (none are being used solely to manage blood pressure):
 - use clinical judgement and shared decision making and take into account the BP reading
 - cautiously reduce the dose of this medication rather than stopping it
 - consider arranging early review, in relation to the specific indication for the medication
 - in some circumstances, it may be reasonable not to adjust these medications initially but to carefully monitor and respond accordingly
- Counsel the patient about symptoms of postural hypotension and when and how to seek support