



The Newcastle Diet Booklet

A Very Low Calorie Diet to Reverse Type 2 Diabetes

HOW TO DO IT

The weight loss diet is an eight week very low calorie diet (VLCD, less than 800 calories per day) that has been shown to reverse the underlying cause of type 2 diabetes in many people. It is important to bear in mind the diet is only a few weeks long. It is followed by a return to normal Eating but with reduced calorie intake than previously. You will not be missing out on the things you enjoy for too long!

WHAT WILL I EAT & DRINK?

During each weight loss phase you will have the following each day:

- ✓ Meal replacement products (soups or shakes, 3 sachets) – this provides a total of 600 calories. You must have all 3 sachets to ensure you get adequate protein (vital to maintain muscle mass during weight loss) and essential vitamins and minerals. Make up according to the instructions on the packet*.
- ✓ Eat 3 portions of vegetables (not fruit), for fibre content and additional nutrients. This will provide up to 200 calories.
- ✓ Drink 2 litres (4 pints) of water or calorie-free beverages each day in addition to the fluids from the meal replacement products.
- ✓ You can use up to 100ml allowance of skimmed or semi-skimmed milk for tea and coffee throughout the day (optional).
- ✗ No alcohol while following a VLCD (it is very high in Calories – not optional!)

* Nothing else is eaten during the 8 week weight loss phase. The above meal plan replaces all of your usual foods (meals, snacks and calorie containing drinks).

The diet does require careful planning (e.g. when to do it) and certainly discuss your plans with friends and family so they can help you remove temptations from your home, social and work environments to give you the best chance of success



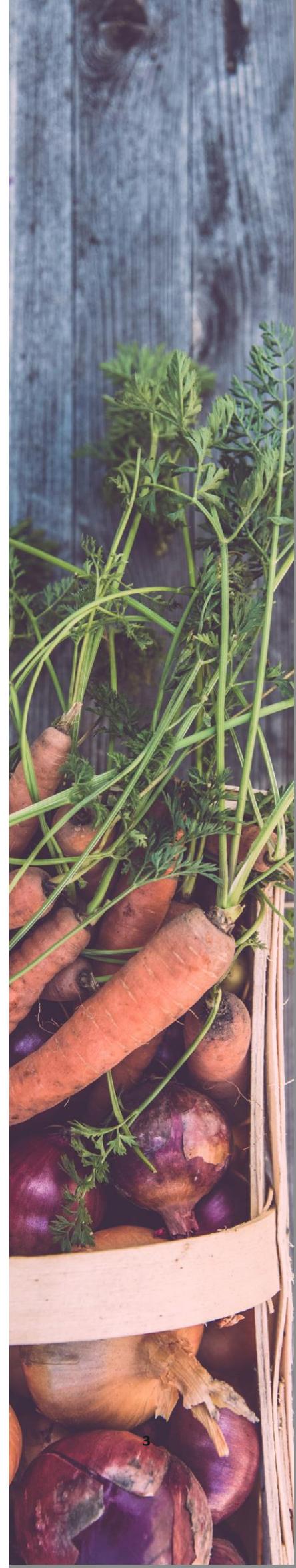
WHY LIQUID REPLACEMENTS AND NOT 'REAL' FOOD?

It isn't essential to follow a VLCD to achieve results. Many people have followed food-based diets and lost weight gradually over a longer period of time. The key is taking in fewer calories than you burn. This allows enough weight loss to strip the fat out of the liver and pancreas. We have chosen meal replacements for the Newcastle diet as they have the following advantages:

- They are filling and hunger is not a major problem for most people
- They are simple to use provide a break from making decisions about what and how much to eat
- The complete change gives an opportunity to break unhelpful eating habits
- They provide complete nutrition in a small amount of calories
- They are quick and easy to prepare
- They allow rapid weight loss – you see and feel the results quickly. We know that losing weight more quickly does not cause faster weight regain than losing weight more slowly. In fact, the more weight people lose in the first 6 months of a diet the more weight they tend to keep off over the longer term
- Times when you are tempted to eat or snack stand out more, helping you work out your triggers for eating and to plan more helpful ways to manage them
- At the end of the 8 weeks you have a 'blank slate' to start your new eating habits for life

WHAT CAN I EXPECT?

Your body will begin to use up fat stores. It still needs the same amount of energy but draws this from its' stores. Importantly, the first stores to be used are those in the wrong places – inside the organs. It may take a few days to adapt.



POSSIBLE SIDE EFFECTS

During the first few days	Throughout the 8 weeks
<p>Headache: Ensure fluid requirements are met; use over the counter painkillers if required</p>	<p>Hunger: Drink a pint of water, sparkling water can be helpful. Try moving the timing of your meal replacements and vegetables to avoid long gaps. Hunger is not dangerous and not something that has to be avoided – learning to sit with it until your next shake can also be helpful</p>
<p>Dizziness: Ensure plenty fluid; take your time when standing up. Add a little salt or soy sauce to your vegetables or try a drink of Bovril or vegetable bouillon (stock) twice a day. See your GP or practice nurse for review if taking medication to lower blood pressure</p>	<p>Constipation: This is largely preventable with adequate fluid and vegetable intake. Ensure you are eating your vegetable allowance each day; drink adequate fluid; undertake some gentle activity. Try over the counter laxatives if constipation persists. If still troublesome do consult your GP</p>
<p>Tiredness: This is unusual but it is reasonable to start the diet when you don't have any strenuous activities planned. Most people report an increase in wellbeing and energy levels after around 2 weeks</p>	<p>Increased sensitivity to cold: A result of reduced body fat which provides extra insulation. Wrap up warmly, have warming drinks such as tea/coffee, or try meal replacement soups instead of shakes</p>
<p>Hunger: This usually wears off after the first few days. Keep busy to take your mind off food – go for a walk or do some jobs around the house that you keep putting off</p>	<p>Hair loss: Some people may experience hair loss/thinning, usually around 2-3 months after starting the VLCD. This is a result of more hairs being in the 'falling out' stage (rather than the growing stage) at the same time. It is temporary and your hair will grow back normally in time</p>

DIETARY REPLACEMENT PRODUCTS

The shakes/soups chosen should ideally:

- Be individually packaged (sachets not a tub)
- Contain between 180 and 220kcal per meal

The list below shows some products which, along with the vegetables, will meet the daily nutritional requirements of most people. If choosing an alternative to those suggested below, check the label or ask your healthcare team for advice.

3 products per day plus veg:

- Exante diet soups/shakes (make up with water)
- Optifast soups/shakes (UK prescription, make up with water)
- ASDA Great Shape (make up with semi-skimmed milk)
- TESCO Ultralim (make up with semi skimmed milk)
- Keediet shakes/soups (make up with unsweetened soy milk)

4 products per day plus veg:

- Slim and Save soups/shakes (make up with water)
- Keediet shakes/soups (made up with water)



Vegetables

You should eat a total of 3-4 portions of vegetables per day. This can be as 2 vegetable meals e.g. homemade soup or salad at lunchtime and stir fry or roasted Mediterranean vegetables in the evening. Alternatively you may prefer to have 1 vegetable meal and 2 vegetable snacks per day. Try to have at least 1 portion of green leafy veg per day. Avoid boiling veg if possible as nutrients will be lost in the cooking water – steam, microwave or roast instead. A portion of vegetables is around 80g (a good handful for most veg, more for leaves).

GREEN LEAFY VEG (at least 1 portion per day):

Cabbage	Spinach	Kale	Broccoli
Pak Choi	Kohlrabi	Lettuce and other salad leaves	Collard Greens

OTHER VEGETABLES (2-3 portions per day):

Onions / Shallots	Bean Sprouts	Carrots & squash	Lettuce
Peppers	Artichoke	Radish	Water Chetnuts
A ubergine	Spring Onion	Celeriac	Fresh/Tin Tomatos
Okra	Sugar/snap Peas	Cauliflower	Asparagus
Green Beans	Courgette	Brussel Sprouts	Leeks
Mushrooms	Turnip / Swede	Peas	Fennel

Avoid during this stage:

Potato, sweet potato, yam, parsnip, avocado, olives, sweetcorn, nuts, seeds, pulses, fruit, coleslaw, potato salad etc.

Herbs, spices and flavourings:

Eating vegetables provides texture, taste and of course fibre while following the diet. Use a variety of veg to avoid boredom, and add even more taste and flavour using herbs, spices and low calorie sauces:

Basil	Lemon/Lime Juice	Parsley	Oregano
Chilli powder	Cinnamon	Rosemary	Curry Powder
Coriander	Ginger	Turmeric	Garlic
Sage	Harissa paste	Soy Sauce	Malt Vinegar
Balsamic Vinegar	Thyme	Cumin	Peri Peri Seasoning
Tarragon	Dried Chillies	Black Pepper	Chinese Five-spice

Dressings, fats & oils (max 1 portion per day):

A small amount of fat adds flavour and helps the absorption of fat soluble vitamins. As they are high in calories, be careful with portion sizes during this stage.

1teaspoon olive oil	1teaspoon salad dressing	1teaspoon mayonnaise
1 teaspoon coconut oil	1 teaspoon butter	1 teaspoon rapeseed oil

VEGETABLE RECIPES

Aubergine Salad

Serves 2 (3 portions veg per serve)

Ingredients

1 medium aubergine (240g)
40g spring onions
40g cherry tomatoes, cut into quarters
80g small red pepper finely diced
80g small green pepper finely diced
1 tbsp chopped fresh mint

Dressing

½ fresh lemon juice
½ small red chilli (optional)
1 small garlic clove, crushed
1 tbsp extra virgin olive oil

Method

1. Heat oven to 200C/180C fan/gas 6 and line a baking tray with foil. Prick the aubergine with a sharp knife to prevent it from exploding, then put it on the prepared tray and roast for 45-55 mins until the skin is wrinkled and it is very soft.
2. While the aubergine is roasting, make the dressing. Mix together the lemon juice, chilli, if using, garlic and olive oil in a bowl. Season and set aside.
3. When the aubergine is cool enough to handle, peel and place it in a colander. Press down on it very gently over a bowl to allow the juices to run out, then transfer the aubergine to a serving plate and cut into large pieces. Dress quickly with half of the dressing, then add the spring onions, cherry tomatoes and peppers to the plate. Pour over the remaining dressing and mix with your hands or a spoon to coat. Serve warm, scattered with mint.

Pea and Spinach Soup – or substitute any other veg from the list

Serves 1 (3 portions veg per serve)

Ingredients

1 tsp olive oil
½ onion, finely chopped
1 garlic clove, chopped
80g fresh peas, podded
80g baby spinach
300ml hot vegetable stock
salt and freshly ground black pepper
1 tbsp chopped fresh chives

Method

1. Heat the olive oil in a saucepan, add the onion and fry gently until softened but not coloured. Add the garlic and fry for one minute.
2. Add the peas, spinach and hot stock and bring to the boil. Reduce the heat and simmer for eight minutes, or until the peas are tender. Season with salt and freshly ground black pepper and blend with a hand-blender until smooth.
3. To serve, pour into a bowl and garnish with chopped fresh chives and a drizzle of olive oil.

Indian Spiced Greens

Serves 2 (2 portions veg per serve)

Ingredients

2 tsp vegetable oil
½ tsp cumin seed + ½ tsp mustard seed
0-2 green chillies finely chopped
large piece fresh root ginger
½ tsp turmeric + ½ tsp ground coriander
240g shredded leafy greens
80g peas
Juice 1/2 lemon
small bunch coriander chopped

Method

1. Heat the oil in a large non-stick pan or wok, sizzle the cumin and mustard seeds for 1 min, then add the chilli, ginger and turmeric. Fry until aromatic, then add the greens, a pinch of salt, a splash of water and the peas.
2. Cover the pan and cook for 4-5 mins until the greens have wilted. Add the lemon juice, ground coriander and half the fresh coriander then toss everything together. Pile into a serving dish and scatter with the rest of the coriander.

Cauliflower Rice

80g = 1 portion veg

Ingredients

1 medium cauliflower
good handful coriander, chopped
cumin seeds, toasted (optional)

Method

1. Cut the hard core and stalks from the cauliflower and pulse the rest in a food processor to make grains the size of rice. Tip into a heatproof bowl, cover with cling film, then pierce and microwave for 7 mins on High – there is no need to add any water. Stir in the coriander. For spicier rice, add some toasted cumin seeds.

Vegetable Curry

Serves 4 (2 portions veg per serve)

Ingredients

1 tbsp vegetable oil
1 large onion, thickly sliced
1 large garlic clove, crushed
2 tbsp curry powder
2 large carrots, thickly sliced
200g turnip, cut into chunks
400g can chopped tomato
425ml hot vegetable stock
4 tbsp chopped coriander

Method

1. Heat the oil in a large pan, then add the onion and garlic and cook gently, stirring occasionally, until the onion softens, about 5-8 minutes. Stir in the curry powder.
2. Tip the fresh vegetables into the pan and add the tomatoes and stock. Stir in 3 tbsp of the coriander. Bring to the boil, turn the heat to low, put the lid on and cook for half an hour.
3. Remove the lid and cook for another 20 minutes until the vegetables are soft and the liquid has reduced a little. There should be some liquid remaining, but not too much. Season with salt and pepper.

Stuffed Peppers

Ingredients

1 red pepper cut in half lengthways

Cauliflower rice as per recipe on previous page

1 teaspoon harissa paste

Chopped veg e.g. spring onions, cherry tomatoes

Herbs e.g. shredded basil, chopped parsley

Method

1. **Preheat the oven to 200C/180 fan/ Gas 6**
2. Cut the pepper in half lengthways and remove the seeds.
3. Place the pepper halves on a microwaveable plate and mic for 5 minutes until soft
4. Mix the cauliflower rice with the chopped veg and herbs, and use to fill each half of the pepper
5. Place on a baking tray
6. Roast in the oven for 10 minutes

VEGETABLE SNACKS

- Kale crisps:
 - Mix 2 handfuls kale with 1tsp oil, pinch smoked paprika, salt and pepper
 - Spread on a baking tray and bake at 150oC for 15minutes
 - Sprinkle with lemon juice and zest
- A handful cherry tomatoes
- Raw veg e.g. sugar snap peas, cubes of raw turnip, sliced peppers
- Carrot and celery sticks with homemade salsa:
 - For the salsa, finely chop 4 fresh plum tomatoes, 1 bunch of rocket and 1 bunch of flat leafed parsley and mix together
 - Chop carrots and celery into 4cm sticks and dip in the salsa

RETURN TO NORMAL, REDUCED ENERGY DIET

- This is best done in gradual stages over 2-6 weeks
- Stage 1: add in one meal to replace one shake – continue 2 shakes and veg
- Stage 2: add in a second meal and replace another shake (continue 1 shake per day)
- Stage 3: Add in your third meal – no more shakes

HOW MUCH TO EAT?

- As a guide you should aim to eat about $\frac{3}{4}$ of the amount you ate before the weight loss
- Snacking between meals is not necessary, try to avoid it
- Keep tempting foods out of the house or at least out of sight
- Apps such as My Fitness Pal can calculate your calorie requirements based on your age, sex and new lower weight, and help you track your calorie intake.

WHAT TO EAT/WHAT TO LIMIT & AVOID

- Choose high quality protein foods (meat, fish, eggs, beans, pulses, tofu, quorn, milk, yogurt, cheese) over processed products (which contain less filling protein for the same calories)
- Limit processed carbohydrate foods like biscuits, crisps, cakes, pastries, sweets and chocolate
- Avoid fruit juice, smoothies and sugary drinks
- Choose wholegrain and slow release starchy carbohydrates at meals. Limit the portion size to no more than $\frac{1}{4}$ of a 10" plate – they are not essential. Better choices include:
 - Bulgur wheat, or quinoa instead of rice
 - Chickpea, coconut or almond flour instead of wheat flour
 - Squash, carrot, swede or celeriac in place of white potatoes
 - Konjac flour products such as Lo-Dough bread, Bare Naked Rice and Bare Naked Noodles, pastas from health food stores
 - Cauliflower rice, courgette or carrot strips as spaghetti
- Have half a plate full of vegetables or salad with each meal (or have your veg as a soup starter if preferred)
- Use healthy natural fats – full fat dairy, olive oil, nuts, seeds, avocados and olives, rapeseed oil are all good choices
- Choose fruits such as berries, a slice of melon, an apple, a small orange. Have more veg than fruit each day, and limit tropical fruits which are higher in sugar