

# REVERSING DIABETES CLINIC

To defeat diabetes, educate more and medicate less



CUT CARBOHYDRATES



ADD GOOD FATS AND PROTEINS



THROW AWAY SUGARS, GRAINS & HEAVILY-PROCESSED VEGETABLE OILS

To Begin The Journey Of Diabetic Remission

	Name:	
	MR No:	
4		
		- Carlotte

Narayana Nethralaya's Reversing Diabetes Clinic is one-of-a-kind initiative by NN with a primary goal of bringing healthy lifestyle changes through personalized diet plan or reduced medications for patients with diabetes.

Our Reversing Diabetes Clinic consists of a team of highly skilled experts including doctors, dieticians and counsellors with adequate knowledge in the field of medicine, along with a state-of-the-art laboratory for all your tests under one roof.

Professional and personalized guidance along with periodic visits and gradual withdrawal of medicines over a period of 6-12 months with our experts ensures best results based on the patient's medical history.

## 'Low Carbohydrates and Healthy Fats' food habits

## I am a diabetic for several years – is this diet suitable for me?

Yes, it is suitable. You will need to make modifications to your routine and get adapted to it. You will see good results if you follow to the suggested plan.

#### Will the diet help with weight loss and improve my blood pressure levels?

Yes, these are the two of the main benefits of this diet. There will be a reduced dependence on medication, improvements in insulin sensitivity, lower blood pressure and improvement in good cholesterol levels, besides others. If you are on medication, you will need to speak to our doctor, who will be able to advise you on what precautions to take to reduce the risk of hypoglycaemia.

## Can I practice intermittent fasting on keto?

Yes, you can. It is a very useful tool to boost fat burning. However, you should get keto-adapted first before attempting it.

## What are the other health benefits of this diet?

Early studies have now shown that the diet can have benefits for a wide variety of different health conditions:

- Heart disease
- Cancer
- Alzheimer's
- disease
- EpilepsyParkinson's disease
- Polycystic ovary syndrome
- Arthritis
- Allergies
- Migrane
- Infertility

## What does the new food habits of low carb-healthy fats entail?

This is a very-low carb, moderate protein and high healthy fat diet. It typically contains 70 to 75 percent fat, 20 percent protein, and about 5 to 10 percent carbs. In terms of grams per day, it would be:

- 20-50g of carbohydrate
- · 60-80g of protein
- No set limit for good fat
   Fats in the diet provide the majority of calories and no limit is set as energy requirements can vary significantly from person to person. Good intake of non-starchy vegetables are preferred as these are very low in carbohydrate.

## Do I need to count or restrict calories?

No, a low carb-healthy fat diet can be eaten to satiety.

#### What are the foods to avoid?

Any food that is high in carbs should be limited

- Grains or starches: rice, wheat, cereals
- Fruit: most fruits except small portions of berries
- Root vegetables: potatoes, sweet potatoes
- Sugary foods: soda, fruit juice, smoothies, cake, ice cream, chocolates
- Unhealthy fats: processed vegetable oils, margarine
- Sugar-free diet foods: sugar-free candies, sweeteners, desserts

## What kind of foods am I allowed to eat?

You should base the majority of your meals around these foods:

- Meat: chicken, red meat, pork
- Fatty fish: salmon, trout, tuna, and mackerel
- Eggs: pastured or omega-3 whole eggs Butter and cream: grass-fed butter and heavy cream
- Cheese: unprocessed cheeses like cheddar, goat, cream, blue, or mozzarella
- Nuts and seeds: almonds, walnuts, flaxseeds, pumpkinseeds, chia seeds
- Avocados: whole avocados or freshly made guacamole
- Healthy oils: extra virgin olive oil, coconut oil, and avocado oil
- Low carb veggies: green veggies, tomatoes, onions, capsicum

#### I'm physically active, can I still do a low carb-healthy fat diet?

You may need to reduce your workout intensity or not engage in anything that demands a lot of glucose while you try to get fat-adapted. Carb re-feed days can be helpful for active people who might need carbs around the time of their workout.

## What is the "keto flu" and how can I avoid it?

Your body has always relied on glucose as its primary source of energy.
Therefore, when you cut or reduce carbohydrates drastically, the body's metabolism has to resort to burning fat for energy. This period of adaptation, which can take up to 4 weeks, can cause symptoms similar to flu like mild weakness or lack of energy. Changes in bowel habits, leg cramps and bad breath are other symptoms. This state is temporary and keeping yourself well hydrated should help.

## How long does it take to get adapted to this diet?

With a low carb diet, your body will need to transit from burning glucose to using your body's fat as fuel. It will take a few days or weeks to get used to it. You may experience some gastrointestinal symptoms of carbohydrate withdrawal at first, but once you become fat-adapted, it will be much easier.

## Are some tips and tricks to make it easier?

Although it can be challenging, the below measures can make it easier

- Look at food labels and check the grams of fat, carbs, and fiber to determine how they can fit into your diet.
- Many websites, food blogs, apps, and cookbooks also offer recipes and meal ideas that you can use to build your own custom menu
- Some meal delivery services even offer keto-friendly options for a quick and convenient way to enjoy keto meals at home.
- When going to social gatherings or visiting family and friends, you can consider taking your own food, which can make it much easier to curb cravings and stick to your meal plan.

## A FAT LOT OF GOOD



#### **GREEN ZONE: EAT PLENTY**



**Drinks** 

Green Tea | Green Coffee | Herbal Tea | Bone Broth | Infused Water | Sugarless Coffee and Tea



Nuts

Almonds | Walnuts | Brazil Nuts | Pecans | Pine Nuts | Macadamia | Hazel Nuts





Flax Seeds | Chia Seeds | Pumpkin Seeds | Sunflower Seeds | Sesame Seeds | Basil Seeds | Melon Seeds



Dairy

Cream | Butter | Cheese | Cottage Cheese | Yogurt | Curd | Ghee | Full Fat Milk



Non-dairy alts

Coconut Milk/Cream | Plant based Nuts & Seeds Milk | Seeds butter | Nuts Butter | Almond Milk |



Oils (Cold Pressed Oils)

Coconut Oil | Olive Oil | Ground Nut Oil | Mustard Oil | Avocado oil | Sunflower oil



**Flour** 

Almond Flour | Coconut Flour | Keto Flour | Low crab flour



Sauces

Mayonnaise | Mustard | Chutney



**Sweet suppliments** 

Stevia | Erythritol



**Vegetables** 

Cabbage | Cauliflower | Broccoli | Asparagus | Zucchini | Brussel Sprouts | Egg Plant | Olives | Spinach | Mushrooms | Cucumber | Lettuce | Onions | Capsicums | Tomatoes | Green Leafy Vegetables | Lady's Finger



**Fruits** 

Avocado | Berries (Strawberries, Raspberries, Goose berries, Blueberries) | Wood Apple | Palm Fruit | Lime | Amla | Star Fruit | Jamun Fruit



Non-veg

Egg | Fish | Chicken | Lamb | Pork | Crab | Shrimp | Prawns | Oysters



**Others** 

Spices | Herbs | Pickles



#### **RED ZONE: AVOID**



#### **Drinks**

Fruit Juices | Sports Drinks | Energy Drinks | Flavoured Milks | Colas | Carbonated Beverages



#### Grains

Cereals | Millets | Oats | Rice Cakes | Quinoa | Noodles | Muffins | Muesli & Muesli Bars | Pasta | Energy Bars | Semolina | Rice & Rice products | Millet & Millet products | Wheat& Wheat products | Ragi & Ragi products



#### **Fruits**

Mango | Pine Apple | Banana | Oranges | Grapes | melons | Sapota | Papaya | pomegranate | Dry Fruits



#### Meats

Highly Processed | Nuggets | Hot Dogs



#### Suaar

Soft Drinks | Chocolates | Ice Cream | Pies | Pastries | Maple syrup | Coconut sugar | Palm sugar



#### **Others**

Flavoured Yogurt | Frozen Yogurt | Artificial Sweetners | Anything Deep- Fried | Tender coconut | Coconut Water



#### **Bakery**

Bread | Buns | Biscuits | Cakes



#### Processed Vegetable Oils

Safflower oil | Vanaspathi | Palm oil | Canola oil | Corn oil

Food item	Glycemic index	Serve size g	How does each food affect blood glucose compared with one 4gm teaspoon of table sugar?				
Basmati rice	69	150	10.1	~~~~~~~			
Potato, white boiled	96	150	9.1	~~~~~~			
French fries baked	64	150	7.5	*****			
paghetti white boiled	39	180	6.6	~~~~			
Sweet corn boiled	60	80	4.0	~~~			
Frozen peas, boiled	51	80	1.3	• 4			
Banana	62	120	5.7	~~~~			
Apple	39	120	2.3	•••			
/holemeal smallslice	74	30	3.0				
Broccoli	15	80	0.2	Other foods in the very low glycemic range would be chicken			
Eggs	0	60	0	oily fish, almonds, mushrooms, cheese			

26 TEASPOONS OF SUGAR EACH DAY



**40 KILOS OF SUGAR EACH YEAR** 

Source: Dr. David Unwin's

## **OCTOBER 2021 TO JULY 2023**

No. of patients enrolled for RDC 5391 No. of patients who 3112 came for review 1-2 kg/ Average weight loss month No. of patients whose 1583 medications reduced to half of the initial dosage No. of patients who 818 were on Insulin No. of patients 106 completely off insulin No. of patients completely 910 off medications



## ALL YOU NEED TO WEIGH RIGHT IS A RIGHT DIET

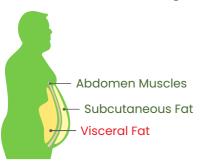
**BODY MASS INDEX (BMI)** What is your BMI range?

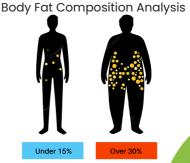


#### **BODY COMPOSITION**

Body composition refers to the percentage of fat, muscle and bone in the body. It is crucial to maintain a healthy body composition besides healthy body weight.

There are 2 types of fats - Subcutaneous and visceral. Subcutaneous fat is the jiggly fat visible just under the skin. Visceral fat is the one that lies out of reach beneath the abdominal wall and surrounds the internal organs.





#### COMPLICATIONS

Overweight/ obesity/ excess body fat composition in the body may lead to several health complications like diabetes, hypertension, cardiovascular diseases, liver diseases, gallbladder diseases, thyroid, osteoporosis, PCOS, cancer and so on.



#### LOW CARB HEALTHY FAT DIET

Cutting down carbohydrates and increasing good fats with adequate amount of protein in the diet is helpful in achieving healthy body weight and composition.

Foods to be restricted - Cereals, millets, lentils, tuberous vegetables, sugary fruits, dry fruits, milk, refined oils, all kinds of sweeteners, juices, carbonated beverages, junk foods, alcohol.

Foods to be taken - Tofu, leafy vegetables, vegetables which grow above the ground, fruits with low sugar content, mushroom, almond, walnut, chia seeds, flax seeds, melon seeds, sunflower seeds, pumpkin seeds, curd, yoghurt, paneer, cheese, butter, cream, ghee, cold pressed oils, coconut, eggs, fish, chicken, limited amounts of red meat.

#### **WEIGHT LOSS JOURNEY**

Reaching weight goals depends on about 80% dietary habits and 20% physical activity. Weight loss progression varies from person to person. It depends on an individual's body type, genetics, family history, physiological state, psychological condition, sleep pattern, physical activity and so on. One needs to be patient and show a positive attitude towards the journey since the results are not spontaneous but gradual.





#### REVERSING DIABETES CLINIC

#### SELF MONITORING BLOOD GLUCOSE (SMBG)

Name :\_\_\_\_\_\_\_ M.R.No: \_\_\_\_\_ Age / Sex :\_\_\_\_\_

DATE	OES	АВ	BL	AL	BD	AD	ANY TIME	REMARKS

#### **Abbreviation Used:**

OES - On Empty Stomach
AB - 2 Hours After Food
BD - Before Dinner
AD - 2 Hours After Dinner

BL - Before Lunch

AL - 2 Hours After Lunch

SYMPTOMS OF HYPOG	GLYCEMIA AND MEASURES TO BE TAKEN
(L	ow Blood Glucose)
<ol> <li>Excessive hunger</li> <li>Tremors</li> <li>Anxiety</li> <li>Palpitations</li> </ol>	<ul><li>5. Excessive Sweating</li><li>6. Cold hands and feet</li><li>7. Blurring of vision</li><li>8. Giddiness</li></ul>
Measures	s to be taken immediately :
	oreferable to measure blood glucose. If it is not d to worry. Go ahead with further measures.
<ul> <li>If the symptoms are mild, tak</li> </ul>	e some snacks
	ved in 20 to 30 minutes or if it is severe, then without sugar / glucose or any sweets. If the symptoms I then repeat the step.
Contact the doctor once you	have taken the above steps.
<ul> <li>If the hypoglycemia is due to them</li> </ul>	mistake in the taking meals or drugs, then correct
If they are correct, then reduce	ce the dose of tablets/insulin as advised by the doctor
(NEVER NEGLECT THE SYMP	TOMS OF HYPOGLYCEMIA EVEN IF THEY ARE MILD.)
I,	agree to follow all the instructions as
	ne Dietitian as well as the recommended Diet Chart.
Date:	Signature

## **FOOD DIARY**

DAY	Breakfast	Lunch	Dinner	Snack
1				
2				
3				
4				
5				
6				
7				

### **Disclaimer**

The content of this brochure is to build awareness only and does not represent professional medical advice. Wide options of Food items have been suggested for the benefit of the patients. However, they should select the items based on their medical history, source, quality and quantity of food items to avoid blood sugar fluctuations. Patients have to visit the clinic and consult experts to develop a customized diet plan for effectively reversing diabetes

#### SCAN HERE FOR VIDEOS



REVERSING DIABETES



OPEN YOUR CAMERA



AIM IT AT THE



TAP TO OPEN

### NN 1 - RAJAJI NAGAR #121/C Chord Road, 1st 'R' Block, Rajaji Nagar, Bangalore, 560 010 - India.

TEL: 080-66121641 / 1643

#### NN 2 - NARAYANA HEALTH CITY #258/A, Bommasandra, Hosur Road, Bangalore, 560 099 - India. TEL: 080-66660655

#### **Suggested Resources**

mww.narayananethralaya.org/reversing-diabetes-clinic/

● NNethralaya | Shttps://bit.ly/nnblr | NNEyeCare | Onarayananethralaya

