

Introduction¹

Diabetes is a long-term health condition where blood sugar levels are too high, which can lead to serious problems with the heart, blood vessels, eyes, kidneys, and nerves. The most common form is type 2 diabetes, which happens when the body doesn't make enough insulin or becomes resistant to it, usually in adults. Type 1 diabetes is different—it occurs when the body produces little or no insulin and is often diagnosed in younger people. Managing diabetes with proper treatment, like insulin, is essential for survival.



Know your number²

Normal Blood Sugar Levels

Criteria	Prediabetes	Diabetes
A1C	5.7–6.4% (39–47 mmol/mol)	≥6.5% (48 mmol/mol)
FPG (Fasting Plasma Glucose)	100–125 mg/dL (5.6–6.9 mmol/L)	≥126 mg/dL (7.0 mmol/L)
2-hour plasma glucose during 7 5-g OGTT	140–199 mg/dL (7.8–11.0 mmol/L)	≥200 mg/dL (11.1 mmol/L)
Random plasma glucose	-	≥200 mg/dL (11.1 mmol/L)



"Balanced Nutrition for Diabetes Management"

Know What Is Good for You³



Healthier carbohydrates



Less red and processed meat



More fruit and veg



Less salt



Drink alcohol sensibly



Be smart with snacks



Minerals and vitamins from foods



Cut down sugar



Avoid so-called diabetic food



Healthier fats

Food Items You Can Easily Consume in Diabetes³

Whole Grains	Vegetables	Protein Sources	Healthy Fats	Fruits
Chapati, brown rice, quinoa, and millets	Spinach, kale, cauliflower, bell peppers, and bitter gourd	Tofu, lentils, and beans	Avocado, nuts, seeds, and olive oil	Berries, apples, oranges, and guava

Including these foods in a diabetic diet helps manage blood sugar while offering delicious and nutritious meal options.

Know the Hidden Sugar⁴

Foods that may contain hidden added sugars:



Condiments
and sauces



Protein
bars/yogurt



Milk/creamers



Granola/cereals



Canned fruit/jams



Nut butters



Drinks

Diabetic Diet Chart for North-India⁴

This diet chart offers balanced meals tailored for individuals with diabetes, focusing on whole grains, lean proteins, and healthy fats for a North Indian palate.

Meal	Item	Portion
Breakfast	Baked paratha (whole wheat)	1 paratha
	Savoury chutney	½ cup
	Papaya	½ cup
	Unsalted almonds	¼ cup
	Chai (tea with skim milk, no sugar)	1 cup
Lunch	Cholay (curried chickpeas)	1 cup
	Rice (brown rice suggested)	½ cup
	Cauliflower or broccoli	½ cup
	Orange	1 fruit
	Tea, coffee, or water	1 cup
Snack	Hummus on whole wheat roti or chapati	2 tablespoons + 1 roti/chapati
	Berries	½ cup
Dinner	Tandoori chicken	2½ oz
	Whole wheat naan	½ large naan
	Cooked spinach	1 cup
	Rice (brown rice suggested)	½ cup
	Salad with oil-based dressing	1 cup + 1 tablespoon dressing



Diabetic Diet Chart for East-India⁵

This diabetic-friendly meal plan offers a balance of essential nutrients while focusing on portion control and low-fat food choices.

Meal Type	Food Products
Breakfast	1 cup of tea with skim milk (no sugar), 2 whole wheat rotis or 2 slices of bread toast
Morning Snack	3 biscuits
Lunch	1½ cups cooked brown rice, ½ cup dhal, 1 cup stir-fried vegetables, ¼ cup baked/pan-fried fish (Hilsa, Rohu, Katla) or chicken, 2 tablespoons chutney
Afternoon Snack	1 fresh fruit
Dinner	½ cup cooked brown rice, 1 roti, 1 cup stir-fried vegetables, ¼ cup baked/pan-fried fish (Hilsa, Rohu, Katla) or chicken
Snack	1 cup of skim milk

Diabetic Diet Chart for West-India⁵

This West Indian diabetic diet plan incorporates traditional foods like thepla, rotli, and paratha, with mindful portions and healthy snacks like roasted peanuts and almonds for added nutrition.

Meal	Item	Portion
Breakfast	Tea with skim milk (no sugar)	1 cup
	Thepla or plain Khakhras	1 Thepla or 2 Khakhras
Morning Snack	Unsalted roasted peanuts	10 peanuts
Lunch	Sooki Rotli (without ghee)	1 Rotli
	Toor dhal	½ cup
	Black-eyed peas	¼ cup
	Cooked rice	¼ cup
Afternoon Snack	Tea with skim milk (no sugar)	1 cup
	Chevda	¾ cup
Dinner	Paratha	1 paratha
	Spinach with soybeans/Paneer/Tofu	½ cup
	Yoghurt	½ cup
Evening Snack	Dried dates	3 dates
	Almonds	6 almonds



Diabetic Diet Chart for South-India⁵

This South Indian diabetic diet is balanced with small snacks such as fresh fruit and cereal mix, it supports stable blood sugar levels throughout the day.

Meal	Item	Portion
Breakfast	Coffee with skim milk (no sugar)	1 cup
	Idlis or cracked wheat upuma	2 small idlis or 1 cup upuma
Morning Snack	Fresh fruit	1 fruit
	Diluted buttermilk	1 cup
Lunch	Cooked brown rice or small rotis with brown rice	1½ cups rice or 2 rotis + ½ cup rice
	Sambhar	1 cup
	Rasam	1 cup
	Green beans curry	1 cup
Afternoon Snack	Roasted pappad/appalam	1 small
	Coffee with skim milk (no sugar)	1 cup
Dinner	Dry cereal mix (puffed rice/wheat with peanuts/cashews)	½ cup
	Cooked brown rice or cracked wheat	½ cup
	Whole gram dhal or chickpeas sundal	1 cup
	Spinach curry	1 cup
Evening Snack	Baked/pan-fried fish/chicken or boiled egg	¼ cup fish/chicken or 1 egg
	Fresh fruit	1 fruit

Know which yoga-asans/ Exercise is good for you

Exercise helps in

- control weight
- lower blood pressure
- lower harmful LDL cholesterol and triglycerides
- raise healthy HDL cholesterol
- strengthen muscles and bones
- reduce anxiety
- improve your general well-being

There are added benefits for people with diabetes: exercise lowers blood glucose levels and boosts your body's sensitivity to insulin, countering insulin resistance.



Know Which Yoga-asans / Exercise is Good for You (Yoga for Diabetes)

- Seated postures such as ardhamatsyendrasan, and mandukasan improve pancreatic function.
- Asanas with forward bends massage and pressurize the pancreas and stimulate the secretion of insulin.
- Twisting poses, such as vakrasan (Twisted pose) squeeze the intestines and massage them to prevent the stagnation of colonic contents.



Poses need to be maintained for approximately
30 seconds to 1 minute, approximately

7 Yoga for Diabetes

1. Legs-Up-the-Wall Pose

- Sit on a folded blanket or towel with your right side against a wall.
- Swing your legs up the wall and lie flat on your back, forming a 90-degree angle.
- Keep your sitting bones close to the wall, relax your neck, chin, and throat, and stretch your arms out with palms facing up.
- Hold for 5–15 minutes, then slide your legs down to release.





2. Reclining Bound Angle Pose

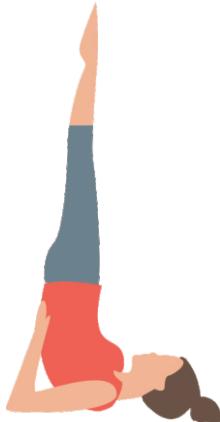
- Sit with the soles of your feet together and knees out to the sides, using a bolster under your knees if needed.
- Lean back until your back is flat on the floor, relaxing your hips. Rest your hands alongside your body, palms up, or press down on your thighs to deepen the stretch.
- Hold for up to 10 minutes, then use your hands to bring your knees together and sit up slowly.

3. Seated Forward Bend

- Sit on the edge of a folded blanket with legs extended, placing a prop under your knees if needed.
- Press your feet as if against a wall, toes drawing toward your shins. Root into your sit bones, lengthen your spine, and open your chest.
- Hinge at your hips, walking your hands toward your feet, folding your torso over your legs.
- Tuck your chin to your chest and hold for up to 3 minutes.



4. Supported Shoulderstand



- Lie flat on your back with a folded blanket under your shoulders, aligning them with the edge.
- Rest your arms alongside your body, palms down. Lift your legs straight up, then slowly lower them toward your head.
- Support your lower back with your hands, fingers facing up, and raise your legs so your shoulders, spine, and hips form a straight line.
- Hold for 30 seconds to 3 minutes, then release by rolling your spine down and lowering your legs to the floor.



5. Plow Pose

- From Shoulderstand, bring your feet to the floor above your head, using a pillow or block if needed. Keep your hands on your lower back for support.
- Hold for 1 to 5 minutes, then release by rolling your spine down, raising your legs to a 90-degree angle, and lowering them back to the mat.

6. Upward-Facing Dog

- Lie on your stomach with your legs extended behind you.
- Place your palms flat on the floor. Your forearms should be perpendicular to the floor.
- Press into your palms to straighten your arms and lift up your body and legs.
- Come onto the tops of your feet.
- Keep a slight bend in your elbows as you engage your thigh, arm, and abdominal muscles.
- Maintain a firmness in your buttocks and shoulder blades.
- Keep your gaze straight ahead.
- Soften your throat and neck.
- Remain in this pose for up to 30 seconds.



7. Bow Pose



- Lie down on your stomach.
- Allow your arms to rest alongside your body with your palms facing up.
- Bend your knees and bring your hands to the outside of your ankles.
- Lift up your head, chest, and knees.
- Breathe deeply and gaze forward.
- Remain in the pose for up to 30 seconds.
- On exhale, release the pose.
- Place one hand on top of the other to make a pillow for your forehead.
- Gently shake your hips from side to side to relax your lower back.
- Repeat this pose one or two times.



Benefits of Yoga for Diabetes

Modulate gene expression and increase muscle activity, strength, endurance, flexibility, and balance

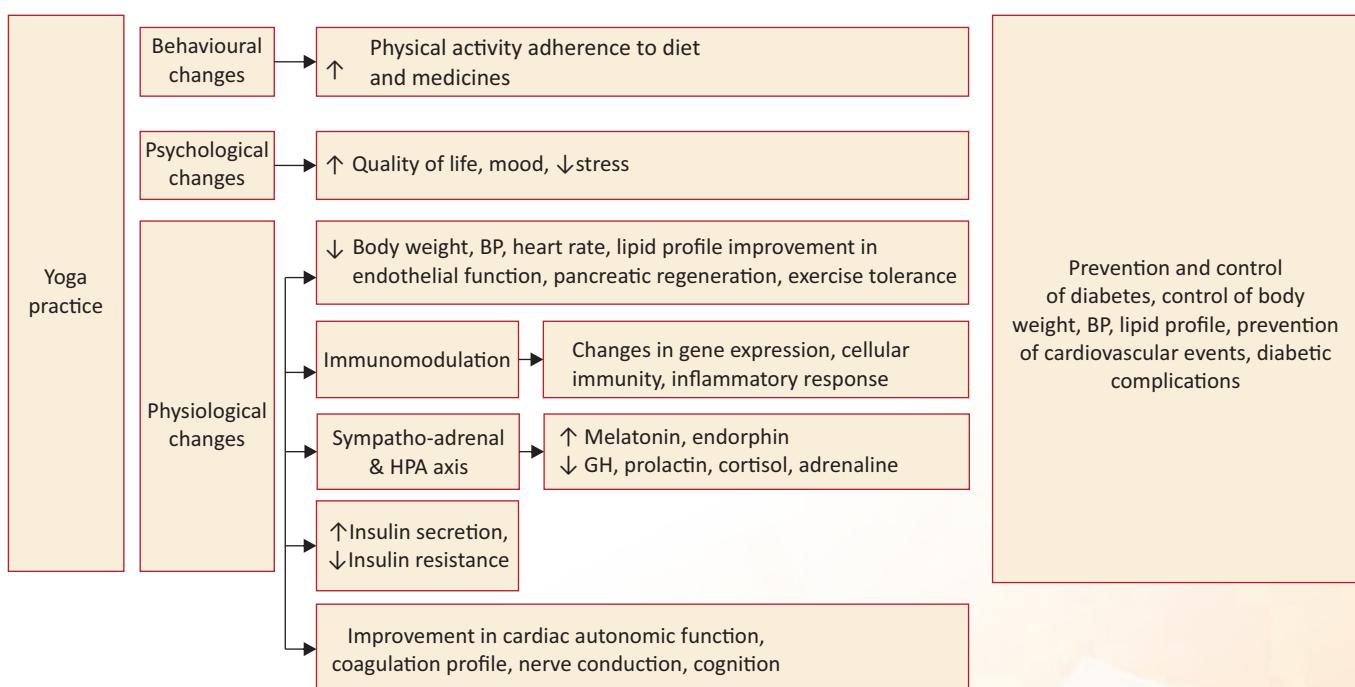
resulting in favourable effects on body weight, adiposity, dyslipidaemia, and insulin resistance.

Improves

- Cell-mediated immunity, as demonstrated by improvements in the lymphocyte migration test.
- Glycaemic control without increasing body weight.

Reduces

- Levels of free fatty acids, indirectly indicating improved insulin sensitivity or reduced insulin resistance and the risk of diabetes-related complications.



References: 1. https://www.who.int/health-topics/diabetes#tab=tab_1; 2. <https://diabetesjournals.org/clinical/article/41/1/4/148029/Standards-of-Care-in-Diabetes-2023-Abridged-for>; 3. <https://www.cdc.gov/diabetes/healthy-eating/spotting-hidden-sugars-in-everyday-foods.html>; 4. <https://www.unlockfood.ca/en/Articles/Diabetes/Diabetes-and-Healthy-Eating/Eating-well-with-Diabetes-North-India-and-Pakistan.aspx>; 5. https://www.sukham.org/wp-content/uploads/2019/06/aapi_guide_to_nutrition_health_and_diabetes.pdf