What is diabetes?

Diabetes is a chronic condition characterized by elevated blood sugar (glucose) levels. A fasting blood glucose level of 7mmol/L or above on two separate tests is considered diabetes. Fasting blood glucose of 5.6-6.9mmol/L is considered prediabetes and fasting blood glucose 5.5 mmol/L or below is considered normal

What are the different types of diabetes?

There are multiple forms of diabetes, but the most common forms are type I and Type II diabetes.

What is type I diabetes?

Typer 1 diabetes is characterized by inability of the pancreas to synthesize insulin and the absence thereof of insulin from the bloodstream. This may lead to dangerously high blood glucose levels.

What is type II diabetes?

In type II diabetes the pancreas does produce insulin, but it is either in insufficient amount or it is produced in sufficient amounts, but the body has developed resistance to the insulin. Both cases result in high blood glucose levels.

What are the symptoms of diabetes?

The common symptoms of diabetes are: Frequent urination, especially at Night, Feeling abnormally thirsty, Unexplained weight loss, Blurry vision, Slow healing of wounds, Presence of ketones in the urine

How is diabetes diagnosed?

A fasting blood glucose level of 7mmol/L or above on two separate tests is considered diabetes. OR a random blood glucose test result above 8mmol/L or/and an HbA1C result of 6.5% or greater. Or presence of ketone bodies in the urine.

What are the risk factors for diabetes?

(1) Being overweight (having a BMI of 25 or beyond) or obese, (2) Having a waist circumference of greater than 90cm for men and 85 cm for women, (3) Leading a sedentary lifestyle / lack of physical activity, (4) Age: being 35 years or older, (5) Having a family history of diabetes, (6) Ethnicity: being of African, Indian, Asian, Hispanic origin or ancestry genetically predispose to a higher risk, (7) Having prediabetes , (8) Having a history of gestational diabetes

How can diabetes be prevented?

(1) maintain a healthy, normal weight. If you are overweight or obese lose weight, (2) exercise regularly, (3) if you smoke, stop smoking, (4) Eat a balanced diet with whole foods instead of highly processed foods.

Can diabetes be reversed?

Diabetes cannot be reversed, however prediabetic can be reversed before it progresses to diabetes. With lifestyle and dietary changes diabetes can be managed with a good control over blood glucose levels.

What are the long-term complications associated with diabetes?

Diabetes increases the risk of cardiovascular diseases, kidney problems, retinopathy (eye problems), foot problems, nerve damage, infection of genitalia among others

How Can I manage my diabetes? How can I control my blood sugar?

Diabetes can be managed with a healthy lifestyle.

Consuming a balanced meal with 50-60% of calories from carbohydrates from wholegrains and wholefoods, such as brown rice, wholewheat, oats, beans and pulses

20-25% of total calories from proteins, lean meat, poultry, fish, chicken, dairy

10-15% of total calories from fat, limiting saturated fats to a minimum, and prioritizing foods with mono and polyunsaturated fats such as fatty fish, nuts, olive oil avocado.

30g of fibre daily from wholegrains, fruit and vegetables, you may use the diabetes plate model from the American diabetes association (ADA) to set the right proportions for your meals.

How Can I manage my diabetes? How can I control my blood sugar?

What are the dietary and lifestyle recommendations for managing blood sugar levels and overall health? (1) Consume high fibre foods with each meal (add raw salads or cooked vegetables to each meal, even for breakfast and snacks). (2) It is also important to ensure that sufficient protein-rich foods are consumed at each meal. (3) It is better to eat small portions regularly, with snacks in between your main meals, although it is important to watch that you do not overeat as a result. (4) Eating your favourite foods: Sugary foods can cause your blood-sugar levels to rise steeply, especially if you eat them on an empty stomach. If you want something sweet, have it as part of a meal. If you do choose to eat a food containing sugar, you need to imperatively adjust the total amount of carbohydrate you eat accordingly. (5) Even modest amounts of weight loss can improve insulin resistance and help correct high blood-sugar levels. In addition, exercise reduces your risk of cardiovascular disease, for example by reducing high blood pressure. It also helps control weight, increases energy levels, and generally brings about a healthier outlook on life. (6) It is recommended to take a light walk after a main meal. This can help regulate blood sugar levels. (7) Recommended order to consume your meal: start with your vegetables and salads followed by your protein source (chicken, meat, eggs, pulses) and finish with your source of carbohydrate (rice, bread, pasta, quinoa

What foods should I avoid if I am diabetic?

Avoid/ limit foods and drinks with added sugar, refined carbohydrates (white rice, white bread) processed meats, high fat foods, high amounts of salt

Should I stop eating riced if I am diabetic?

You may continue to eat rice as part of a balanced diet if you are diabetic, brown rice or low GI rice are better options to manage blood glucose levels.

Should I stop eating potatoes if I am diabetic?

You may eat potatoes as part of a balanced diet, sweet potatoes have a lower impact on blood glucose than normal potatoes. Eat a small amount only and in combination with other low GI foods. The same can be applied to rice, bananas and other high starch and high sugar foods

Can I drink freshly pressed fruit juices if I am diabetic?

The absence of fiber in freshly-pressed juice makes fruit juices a poor option for managing diabetes as it can cause blood sugar levels to rise, a better option is consuming fresh fruits which contain fiber, the presence of which slows down the release of sugars during digestion.

Can I eat fruits if I am diabetic?

Diabetics may consume fruits which are rich sources of fiber, vitamins, minerals and antioxidants. Limiting portion size and opting for fruits with a low – moderate glycemic score can be helpful in maintaining normal blood sugar level. A portion of fruit is roughly what can fit in a palm and it is recommended to consume at least 5 portions of fruits and vegetables daily.

What is the glycemic index?

The glycemic index is a measure of how quickly a food rises blood glucose levels. It can range from 0 to 100, with glucose having a glycemic index of 100. A low glycemic index value less than 55 e.g. beans. A moderate Glycemic Index value is between 55 -70 e.g. oats A High Glycemic index value is greater than 70 e.g. potatoes, bread. The glycemic index of a food alone differs from the glycemic index of that same food within a meal.

Meals and foods with low GI break down more slowly in the digestive tract leading to a smaller rise in blood sugar after meal which can be beneficial.

How can I use the glycemic index to manage diabetes?

Prioritize foods with a low to moderate glycemic index the majority of the time Occasionally, consume foods with a high GI in combination with foods with a low GI. E.g. fresh fruits with unsweetened yogurt.

What is the glycemic load of a food and how can I use it?

The glycemic load is a combination of the glycemic index and the amount of carbohydrate. The glycemic load is not only useful to manage blood glucose levels but also manage weight, which, in case of a diabetic who is overweight or obese can be of additional benefit. A low glycemic load is 10 or less. A moderate glycemic load is 11-19. A high glycemic load is 20 or more. The lower the glycemic load of a food, the lower the rise in blood glucose levels after eating.

Banana cake, made with sugar - According the research made by Harvard medical school Banana cake, made with sugar has Glycemic index 47. A Serving size of 60 grams of banana cake, made with sugar has glycemic load 14 which can raise your blood glucose level by 14.

Banana cake, made without sugar - According to the research made by Harvard medical school Banana cake, made without sugar has Glycemic index 55. A Serving size of 60 grams of banana cake, made without sugar has glycemic load 12 which can raise your blood glucose level by 12

Sponge cake, plain - According to the research made by Harvard medical school Sponge cake, plain has Glycemic index 46. A Serving size of 63 grams of sponge cake plain has glycemic load 17 which can raise your blood glucose level by 17.

Vanilla cake made from packet mix with vanilla frosting (Betty Crocker)- According to the research made by Harvard medical school Vanilla cake made from packet mix with vanilla frosting (Betty Crocker) has Glycemic index 42. A Serving size of 111 grams of sponge cake plain has glycemic load 24 which can raise your blood glucose level by 24.

Apple muffin, made with rolled oats and sugar- According to the research made by Harvard medical school Apple muffin, made with rolled oats and sugar has Glycemic

index 44. A Serving size of 60 grams of Apple muffin, made with rolled oats and sugar has glycemic load 13 which can raise your blood glucose level by 13.

Apple muffin, made with rolled oats and without sugar- According to the research made by Harvard medical school Apple muffin, made with rolled oats and without sugar has Glycemic index 48. A Serving size of 60 grams of Apple muffin, made with rolled oats and without sugar has glycemic load 9 which can raise your blood glucose level by 9.

Waffles, Aunt Jemima- According to the research made by Harvard medical school Waffles, Aunt Jemima has Glycemic index 76. A Serving size of 35 grams of Waffles, Aunt Jemima has glycemic load 10 which can raise your blood glucose level by 10.

Bagel, white, frozen- According to the research made by Harvard medical school Bagel, white, frozen has Glycemic index 72. A Serving size of 70 grams of Bagel, white, frozen has glycemic load 25 which can raise your blood glucose level by 25.

Baguette, white, plain- According to the research made by Harvard medical school Bagel, white, plain has Glycemic index 95. A Serving size of 30 grams of Bagel, white, plain has glycemic load 14 which can raise your blood glucose level by 14.

Coarse barley bread, 80% kernels- According to the research made by Harvard medical school Coarse barley bread, 80% kernels have Glycemic index 34. A Serving size of 30 grams of Coarse barley bread, 80% kernels have glycemic load 7 which can raise your blood glucose level by 7.

Hamburger bun- According to the research made by Harvard medical school Hamburger bun has Glycemic index 61. A Serving size of 30 grams Hamburger bun has glycemic load 9 which can raise your blood glucose level by 9.

Kaiser roll- According to the research made by Harvard medical school Kaiser roll has Glycemic index 73. A Serving size of 30 grams Kaiser roll has glycemic load 12 which can raise your blood glucose level by12.

Pumpernickel l bread- According to the research made by Harvard medical school has Pumpernickel bread Glycemic index 56. A Serving size of 30 grams Pumpernickel bread has glycemic load 7 which can raise your blood glucose level by7.

50% cracked wheat kernel bread- According to the research made by Harvard medical school 50% cracked wheat kernel bread has Glycemic index 58. A Serving size of 30 grams 50% cracked wheat kernel bread has glycemic load 12 which can raise your blood glucose level by 12.

White wheat flour bread, average- According to the research made by Harvard medical school **White wheat flour bread, average** has Glycemic index 75. A Serving size of 30

grams White wheat flour bread, average has glycemic load 11 which can raise your blood glucose level by 11.

Wonder bread, average - According to the research made by Harvard medical school **Wonder bread, average** has Glycemic index 73. A Serving size of 30 grams Wonder bread, average has glycemic load 10 which can raise your blood glucose level by10.

Whole wheat bread, average - According to the research made by Harvard medical school Whole wheat **bread, average** has Glycemic index 69. A Serving size of 30 grams Whole wheat bread, average has glycemic load 9 which can raise your blood glucose level by 9.

100% Whole Grain bread (Natural Ovens) - According to the research made by Harvard medical school 100% Whole Grain bread (Natural Ovens) has Glycemic index 51. A Serving size of 30 grams **100% Whole Grain bread (Natural Ovens)**, average has glycemic load 7 which can raise your blood glucose level by7.

Pita bread, white - According to the research made by Harvard medical school Pita bread, white has Glycemic index 68. A Serving size of 30 grams Pita bread, white, average has glycemic load 10 which can raise your blood glucose level by10.

Corn tortilla - According to the research made by Harvard medical school Corn tortilla, white has Glycemic index 52. A Serving size of 50 grams Corn tortilla, white, average has glycemic load 12 which can raise your blood glucose level by12.

Wheat tortilla- According to the research made by Harvard medical school **Wheat** tortilla, white has Glycemic index 30. A Serving size of 50 grams **Wheat** tortilla, white, average has glycemic load 8 which can raise your blood glucose level by 8.

Coca Cola (US formula)- According to the research made by Harvard medical school, Coca Cola (US formula) has Glycemic index 63. A Serving size of 250 ml Coca Cola (US formula) has glycemic load 16 which can raise your blood glucose level by 16.

Fanta, orange soft drink- According to the research made by Harvard medical school Fanta, orange soft drink has Glycemic index 68. A Serving size of 250 ml Fanta, orange soft drink has glycemic load 23 which can raise your blood glucose level by 23

Lucozade, original (sparkling glucose drink) - According to the research made by Harvard medical school Lucozade, original (sparkling glucose drink), has Glycemic index 95. A Serving size of 250 ml **Lucozade, original (sparkling glucose drink)** has glycemic load 40 which can raise your blood glucose level by 40.

Apple juice, unsweetened- According to the research made by Harvard medical school Apple juice, unsweetened has Glycemic index 41. A Serving size of 250 ml **Apple juice, unsweetened** has glycemic load 12 which can raise your blood glucose level by 12.

Cranberry juice cocktail (Ocean Spray)- According to the research made by Harvard medical school Cranberry juice cocktail (Ocean Spray) has Glycemic index 68. A Serving size of 250 ml Cranberry juice cocktail (Ocean Spray) has glycemic load 24 which can raise your blood glucose level by 24.

Gatorade, orange flavor (US formula))- According to the research made by Harvard medical school Gatorade, orange flavor (US formula) has Glycemic index 89. A Serving size of 250 ml Gatorade, orange flavor (US formula) has glycemic load 13 which can raise your blood glucose level by 13.

Orange juice, unsweetened, average- According to the research made by Harvard medical school **orange juice, unsweetened, average** has Glycemic index 50. A Serving size of 250 ml **orange juice, unsweetened, average-** has glycemic load 12 which can raise your blood glucose level by 12.

Tomato juice, canned, no sugar added - According to the research made by Harvard medical school **Tomato juice, canned, no sugar added** has Glycemic index 38. A Serving size of 250 ml **Tomato juice, canned, no sugar added** has glycemic load 4 which can raise your blood glucose level by 4.

All-Bran, average- According to the research made by Harvard medical school **All-Bran average** has Glycemic index 44. A Serving size of 30g **All-Bran, average** has glycemic load 9 which can raise your blood glucose level by 9.

Coco Pops, average- According to the research made by Harvard medical school **Coco Pops, average** has Glycemic index 77. A Serving size of 30g **Coco Pops, average** has glycemic load 20 which can raise your blood glucose level by 20.

Cornflakes, average - According to the research made by Harvard medical school **Cornflakes, average** has Glycemic index 81. A Serving size of 30g **Cornflakes, average, average**, has glycemic load 20 which can raise your blood glucose level by 20.

Cream of Wheat- According to the research made by Harvard medical school **Cream of Wheat** has Glycemic index 66.A Serving size of 250g **Cream of Wheat**, has glycemic load 17 which can raise your blood glucose level by 17.

Cream of Wheat, Instant- According to the research made by Harvard medical school **Cream of Wheat, Instant** has Glycemic index 74.A Serving size of 250g **Cream of Wheat, Instant**, has glycemic load 22 which can raise your blood glucose level by 22

Grape-Nuts- According to the research made by Harvard medical school **Grape-Nuts,** has Glycemic index 75.A Serving size of 30g **Grape-Nuts** has glycemic load 16 which can raise your blood glucose level by 16

Muesli, average- According to the research made by Harvard medical school **Muesli, average,** has Glycemic index 56 A Serving size of 30g **Muesli, average** has glycemic load 10 which can raise your blood glucose level by 10

Oatmeal, average- According to the research made by Harvard medical school **Oatmeal, average,** has Glycemic index 55 A Serving size of 250g **Oatmeal, average** has glycemic load 13 which can raise your blood glucose level by 13

Instant oatmeal, average- According to the research made by Harvard medical school **Instant oatmeal, average,** has Glycemic index 79 A Serving size of 250g **Instant oatmeal, average** has glycemic load 21 which can raise your blood glucose level by 21

Puffed wheat cereal- According to the research made by Harvard medical school **Puffed wheat cereal,** has Glycemic index 80 A Serving size of 30g **Puffed wheat cereal** has glycemic load 17 which can raise your blood glucose level by 17

Raisin Bran- According to the research made by Harvard medical school **Raisin Bran,** has Glycemic index 61 A Serving size of 30g **Raisin Bran** has glycemic load 12 which can raise your blood glucose level by 12

Special K (US formula)- According to the research made by Harvard medical school **Special K (US formula) ,** has Glycemic index 69 A Serving size of 30g **Special K (US formula)** has glycemic load 14 which can raise your blood glucose level by 14

Pearled barley, average- According to the research made by Harvard medical school **Pearled barley, average,** has Glycemic index 25 A Serving size of 150g **Pearled barley, average** has glycemic load 11 which can raise your blood glucose level by 11.

Sweet corn on the cob- According to the research made by Harvard medical school **sweet corn on the cob,** has Glycemic index 48 A Serving size of 60g **Sweet corn on the cob** has glycemic load 14 which can raise your blood glucose level by 14.

Couscous- According to the research made by Harvard medical school **Couscous,** has Glycemic index 65 A Serving size of 150g **Couscous** has glycemic load 9 which can raise your blood glucose level by 9.

Quinoa- According to the research made by Harvard medical school **Quinoa,** has Glycemic index 53 A Serving size of 150g **Quinoa** has glycemic load 13 which can raise your blood glucose level by 13.

White rice, boiled, type non-specified- According to the research made by Harvard medical school **White rice, boiled, type non-specified,** has Glycemic index 72. A Serving size of 150g **White rice, boiled, type non-specified** has glycemic load 29 which can raise your blood glucose level by 29.

Quick cooking white basmati- According to the research made by Harvard medical school **Quick cooking white basmati,** has Glycemic index 63. A Serving size of 150g **Quick cooking white basmati** has glycemic load 26 which can raise your blood glucose level by 26.

Brown rice, steamed- According to the research made by Harvard medical school **Brown rice, steamed** has Glycemic index 50. A Serving size of 150g **Brown rice, steamed** has glycemic load 16 which can raise your blood glucose level by 16.

Parboiled Converted white rice (Uncle Ben's)- According to the research made by Harvard medical school **Parboiled Converted white rice (Uncle Ben's)** has Glycemic index 38. A Serving size of 150g **Parboiled Converted white rice (Uncle Ben's)** has glycemic load 14 which can raise your blood glucose level by 14.

Whole wheat kernels, average - According to the research made by Harvard medical school **Whole wheat kernels, average** has Glycemic index 45. A Serving size of 50g **Whole wheat kernels, average** has glycemic load 15 which can raise your blood glucose level by 15.

Bulgur, average- According to the research made by Harvard medical school **Bulgur, average** has Glycemic index 47. A Serving size of 150g **Bulgur, average** has glycemic load 12 which can raise your blood glucose level by 12.

Graham crackers- According to the research made by Harvard medical school **Graham crackers** has Glycemic index 74. A Serving size of 25g **Graham crackers** has glycemic load 13 which can raise your blood glucose level by 13.

Vanilla wafers- According to the research made by Harvard medical school Vanilla wafers has Glycemic index 77. A Serving size of 25g Vanilla wafers has glycemic load 14 which can raise your blood glucose level by 14.

Shortbread- According to the research made by Harvard medical school Shortbread has Glycemic index 64. A Serving size of 25g Shortbread has glycemic load 10 which can raise your blood glucose level by 10.

Rice cakes, average- According to the research made by Harvard medical school Rice cakes, average has Glycemic index 82. A Serving size of 25g Rice cakes, average has glycemic load 17 which can raise your blood glucose level by 17.

Rye crisps, average- According to the research made by Harvard medical school Rye crisps, average has Glycemic index 64. A Serving size of 25g Rye crisps, average has glycemic load 11 which can raise your blood glucose level by 11.

Soda crackers- According to the research made by Harvard medical school Soda crackers has Glycemic index 74. A Serving size of 25g Soda crackers has glycemic load 12 which can raise your blood glucose level by 12.

Ice cream, regular, average- According to the research made by Harvard medical school Ice cream, regular, average has Glycemic index 62. A Serving size of 50g Ice cream, regular, average has glycemic load 8 which can raise your blood glucose level by 8.

Ice cream, premium (Sara Lee)- According to the research made by Harvard medical school Ice cream, premium (Sara Lee) has Glycemic index 38. A Serving size of 50g premium (Sara Lee) has glycemic load 3 which can raise your blood glucose level by 3.

Milk, full-fat, average- According to the research made by Harvard medical school Milk, full-fat, average has Glycemic index 31. A Serving size of 250ml Milk, full-fat, average has glycemic load 4 which can raise your blood glucose level by 4.

Milk, skim, average- According to the research made by Harvard medical school Milk, skim, average has Glycemic index 31. A Serving size of 250 ml Milk, skim, average has glycemic load 4 which can raise your blood glucose level by 4.

Reduced-fat yogurt with fruit, average- According to the research made by Harvard medical school Reduced-fat yogurt with fruit, average has Glycemic index 33. A Serving size of 200g Reduced-fat yogurt with fruit, average has glycemic load 11 which can raise your blood glucose level by 11.

Apple, average- According to the research made by Harvard medical school **Apple, average**, has Glycemic index 36. A Serving size of 120 g **Apple, average**, average has glycemic load 5 which can raise your blood glucose level by 5.

Banana, raw, average- According to the research made by Harvard medical school **Banana raw average,** has Glycemic index 48. A Serving size of 120 g of **Banana raw average** has glycemic load 11 which can raise your blood glucose level by 11.

Dates, dried, average- According to the research made by Harvard medical school **Dates, dried, average,** has Glycemic index 42. A Serving size of 60 g of **Dates, dried, average** has glycemic load 18 which can raise your blood glucose level by 18.

Grapefruit - According to the research made by Harvard medical school Grapefruit**, has** Glycemic index 25. A Serving size of 120 g of **Grapefruit** has glycemic load 3 which can raise your blood glucose level by 3.

Grapes, black- According to the research made by Harvard medical school **black grapes, has** Glycemic index 59. A Serving size of 120g of **black Grapes** has glycemic load 11 that is it can raise your blood glucose level by 11.

Average raw oranges, according to the research made by Harvard medical school **average raw oranges,** has Glycemic index 45. A Serving size of 120 g of **average raw oranges** has glycemic load 5 that is it can raise your blood glucose level by 5.

Average peach, according to the research made by Harvard medical school **average peach,** has Glycemic index 42. A Serving size of 120 g of **average peach** has glycemic load 5 that is it can raise your blood glucose level by 5.

Peach, canned in light syrup, according to the research made by Harvard medical school **Peach, canned in light syrup,** has Glycemic index 52. A Serving size of 120 g of **Peach, canned in light syrup** has glycemic load 9 that is it can raise your blood glucose level by 9.

Average raw pear, according to the research made by Harvard medical **average raw pear,** has Glycemic index 38. A Serving size of 120 g of **average raw pear** has glycemic load 4 that is it can raise your blood glucose level by 4.

Average raw pear, according to the research made by Harvard medical an **average raw pear,** has Glycemic index 38. A Serving size of 120 g of **average raw pear** has glycemic load 4 that is it can raise your blood glucose level by 4.

Pear, canned in pear juice, according to the research made by Harvard medical **Pear, canned in pear juice,** has Glycemic index 44. A Serving size of 120 g of **Pear, canned in pear juice** has glycemic load 5 that is it can raise your blood glucose level by 5.

Prunes, pitted, according to the research made by Harvard medical **Prunes, pitted,** has Glycemic index 29. A Serving size of 60 g of **Prunes, pitted** has glycemic load 10 that is it can raise your blood glucose level by 10.

Raisins- according to the research made by Harvard medical **Raisins,** has Glycemic index 64. A Serving size of 60 g of **Raisins** has glycemic load 28 that is it can raise your blood glucose level by 28.

Watermelon- according to the research made by Harvard medical a **Watermelon,** has Glycemic index 72. A Serving size of 120 g of **Watermelon** has glycemic load 4 that is it can raise your blood glucose level by 4.

Baked beans- according to the research made by Harvard medical Baked beans**,** has Glycemic index 40. A Serving size of 150 g of **Baked beans** has glycemic load 6 that is it can raise your blood glucose level by 6.

Black-eyed peas- according to the research made by Harvard medical **Black-eyed peas,** has Glycemic index 50. A Serving size of 150 g of **Black-eyed peas** has glycemic load 15 that is it can raise your blood glucose level by 15.

Black beans- according to the research made by Harvard medical **Black beans,** has Glycemic index 30. A Serving size of 150 g of **Black beans** has glycemic load 7 that is it can raise your blood glucose level by 7.

Chickpeas - according to the research made by Harvard medical **Chickpeas,** has Glycemic index 10. A Serving size of 150 g of **Chickpeas** has glycemic load 3 that is it can raise your blood glucose level by 3.

Chickpeas, canned in brine - according to the research made by Harvard medical **Chickpeas, canned in brine,** has Glycemic index 42. A Serving size of 150 g of **Chickpeas, canned in brine** has glycemic load 9 that is it can raise your blood glucose level by 9.

average navy beans - according to the research made by Harvard medical **average navy beans,** has Glycemic index 39. A Serving size of 150 g of **average navy beans** has glycemic load 12 that is it can raise your blood glucose level by 12.

average Kidney beans- according to the research made by Harvard medical **average Kidney beans,** has Glycemic index 34. A Serving size of 150 g of **average Kidney beans** has glycemic load 9 that is it can raise your blood glucose level by 9.

Lentils- according to the research made by Harvard medical **Lentils,** has Glycemic index 28. A Serving size of 150 g of **Lentils** has glycemic load 5 that is it can raise your blood glucose level by 5.

Average soy beans - according to the research made by Harvard medical **average soy beans,** has Glycemic index 15. A Serving size of 150 g of **average soy beans** has glycemic load 1 that is it can raise your blood glucose level by 1.

salted Cashews- according to the research made by Harvard medical **salted Cashews,** has Glycemic index 22. A Serving size of 50 g of **salted Cashews** has glycemic load 3 that is it can raise your blood glucose level by 3.

Peanuts- according to the research made by Harvard medical **Peanuts** has Glycemic index 13. A Serving size of 50 g of **Peanuts** has glycemic load 1 that is it can raise your blood glucose level by 1.

Fettucini- according to the research made by Harvard medical **Fettucini,** has Glycemic index 32. A Serving size of 180 g of **Fettucini** has glycemic load 15 that is it can raise your blood glucose level by 15.

Average macaroni- according to the research made by Harvard medical **Average macaroni,** has Glycemic index 50. A Serving size of 180 g of **Average macaroni** has glycemic load 24 that is it can raise your blood glucose level by 24.

Macaroni and Cheese (Kraft)- according to the research made by Harvard medical **Macaroni and Cheese (Kraft),** has Glycemic index 64. A Serving size of 180 g of **Macaroni and Cheese (Kraft) has** glycemic load 33 that is it can raise your blood glucose level by 33.

Average boiled white Spaghetti- according to the research made by Harvard medical **Average boiled white Spaghetti** has Glycemic index 46. A Serving size of 180 g of **Average boiled white Spaghetti has** glycemic load 22 that is it can raise your blood glucose level by 22.

White Spaghetti which has been boiled for 20 min- according to the research made by Harvard medical **White Spaghetti which has been boiled for 20 min** has Glycemic index 58. A Serving size of 180 g of **White Spaghetti which has been boiled for 20 min** glycemic load 26 that is it can raise your blood glucose level by 26.

Boiled whole grain Spaghetti - according to the research made by Harvard medical **Boiled whole grain Spaghetti** has Glycemic index 42. A Serving size of 180 g of **Boiled whole grain Spaghetti** glycemic load 17 that is it can raise your blood glucose level by 17.

Plain salted corn chips - according to the research made by Harvard medical **Plain salted corn chips** has Glycemic index 42. A Serving size of 50g of **Plain salted corn chips i** glycemic load 11 that is it can raise your blood glucose level by 11.

Fruit Roll-Ups- according to the research made by Harvard medical **Fruit Roll-Ups** has Glycemic index 99. A Serving size of 30g of **Fruit Roll-Ups has** glycemic load 24 that is it can raise your blood glucose level by 24.

M & M's, peanut- according to the research made by Harvard medical **M & M's, peanut** has Glycemic index 33. A Serving size of 30g of **M & M's, peanut** glycemic load 6 that is it can raise your blood glucose level by 6.

Average plain microwave popcorn - according to the research made by Harvard medical **Average plain microwave popcorn** has Glycemic index 65. A Serving size of 20g of **Average plain microwave popcorn** glycemic load 7 that is it can raise your blood glucose level by 7.

Average potato chips - according to the research made by Harvard medical **Average potato chips** has Glycemic index 56. A Serving size of 50g of **Average potato chips** glycemic load 12 that is it can raise your blood glucose level by 12.

oven-baked Pretzels - according to the research made by Harvard medical **oven-baked Pretzels** has Glycemic index 83. A Serving size of 30g of **oven-baked Pretzels** glycemic load 16 that is it can raise your blood glucose level by 16.

Average snickers bar - according to the research made by Harvard medical **Average snickers bar** has Glycemic index 51. A Serving size of 60g of **Average snickers bar** glycemic load 18 that is it can raise your blood glucose level by 18.

Green peas- according to the research made by Harvard medical **Green peas** has Glycemic index 54. A Serving size of 80g of **green peas** glycemic load 4 that is it can raise your blood glucose level by 4.

Average carrot- according to the research made by Harvard medical **Average carrot** has Glycemic index 39. A Serving size of 80g of **Average carrot** glycemic load 2 that is it can raise your blood glucose level by 2.

Parsnips- according to the research made by Harvard medical **Parsnips** has Glycemic index 52. A Serving size of 80g of **Parsnips** glycemic load 4 that is it can raise your blood glucose level by 4.

Baked russet potato- according to the research made by Harvard medical **Baked russet potato** has Glycemic index 111. A Serving size of 150g Baked russet potato glycemic load 33 that is it can raise your blood glucose level by 33.

average boiled white potato- according to the research made by Harvard medical **average boiled white potato** has Glycemic index 82. A Serving size of 150g of **average boiled white potato** glycemic load 21 that is it can raise your blood glucose level by 21.

Instant mashed potato, average- according to the research made by Harvard medical **Instant mashed potato, average** has Glycemic index 87. A Serving size of 150g of **Instant**

mashed potato, average glycemic load 17 that is it can raise your blood glucose level by 17.

Average Sweet potato- according to the research made by Harvard medical an **Average Sweet potato** has Glycemic index 70. A Serving size of 150g of **Average Sweet potato** glycemic load 22 that is it can raise your blood glucose level by 22.

Yam, average- according to the research made by Harvard medical **Yam, average** has Glycemic index 54. A Serving size of 150g of **Yam, average** glycemic load 20 that is it can raise your blood glucose level by 20.

Hummus (chickpea salad dip)- according to the research made by Harvard medical **Hummus (chickpea salad dip)** has Glycemic index 6. A Serving size of 30g of **Hummus (chickpea salad dip)** glycemic load 0 that is it can raise your blood glucose level by 0.

Frozen Chicken nuggets reheated in microwave oven 5 min - according to the research made by Harvard medical Frozen **Chicken nuggets reheated in microwave oven 5 min** has Glycemic index 46. A Serving size of 100g of **Frozen Chicken nuggets reheated in microwave oven 5 min** glycemic load 7 that is it can raise your blood glucose level by 7.

Pizza, plain baked dough, served with parmesan cheese and tomato sauce- according to the research made by Harvard medical Pizza**, plain baked dough, served with parmesan cheese and tomato sauce** has Glycemic index 80. A Serving size of 100g of **Pizza, plain baked dough, served with parmesan cheese and tomato sauce** glycemic load 22 that is it can raise your blood glucose level by 22.

Pizza, Super Supreme (Pizza Hut) according to the research made by Harvard medical **Pizza, Super Supreme (Pizza Hut)** has Glycemic index 36. A Serving size of 100g of **Pizza, Super Supreme (Pizza Hut)** has glycemic load 9 that is it can raise your blood glucose level by 9.

Average Honey - according to the research made by Harvard medical Average **Honey** has Glycemic index 61. A Serving size of 25g **Average Honey has** glycemic load 12 that is it can raise your blood glucose level by 12.

According to Harvard medical school the Glycemic index of White wheat bread is 75 ± 2

According to research made by Harvard medical school the Glycemic index of White Whole wheat/whole meal bread is 74 ± 2

According Harvard medical school the Glycemic index of Specialty grain bread is 53 ± 2

According to research made by Harvard medical school the Glycemic index of Unleavened wheat bread is 70 ± 5

According by Harvard medical school the Glycemic index of Wheat roti is 62 ± 3

According to Harvard medical school the Glycemic index of Chapatti is 52 ± 4

According to Harvard medical school the Glycemic index of Corn tortilla is 46 ± 4

According to Harvard medical school the Glycemic index of White boiled rice is 73 ± 4

According to Harvard medical school the Glycemic index of Barley, is 28 ± 2

According to Harvard medical school the Glycemic index of sweet corn, is 52 ± 5

According to Harvard medical school the Glycemic index of white Spaghetti is 49 ± 2

According to Harvard medical school the Glycemic index of Spaghetti, whole meal, white, is 48 ± 5

According to Harvard medical school the Glycemic index of Rice noodles is 53 ± 7

According to Harvard medical school the Glycemic index of Udon noodles is 55 ± 7

According Harvard medical school the Glycemic index of Couscous is 65 ± 4

According to Harvard medical school the Glycemic index of Cornflakes is 81 ± 6

According to Harvard medical school the Glycemic index of Wheat flake biscuits is 69 ± 2

According to Harvard medical school the Glycemic index of Porridge, rolled oats is 55 ± 2

According to Harvard medical school the Glycemic index of Instant oat porridge is 79 ± 3

According to Harvard medical school the Glycemic index of Rice porridge/congee is 78 ± 9

According to Harvard medical school the Glycemic index of Millet porridge is 67 ± 5

According to Harvard medical school the Glycemic index of Muesli is 57 ± 2

According to Harvard medical school the Glycemic index of raw apple is 36 ± 2

According to Harvard medical school the Glycemic index of raw orange is 43 ± 3

According to Harvard medical school the Glycemic index of raw banana is 51 ± 3

According to Harvard medical school the Glycemic index of raw pineapple, is 59 ± 8

According to Harvard medical school the Glycemic index of raw mango, is 51 ± 5

According to Harvard medical school the Glycemic index of raw Watermelon is 76 ± 4

According to Harvard medical school the Glycemic index of raw Dates is 42 ± 4

According to Harvard medical school the Glycemic index of Peaches, canned is 43 ± 5

According to Harvard medical school the Glycemic index Strawberry jam/jelly, canned is 49 ± 3

According to Harvard medical school the Glycemic index Apple juice is 41 ± 2

According to Harvard medical school the Glycemic index Apple juice is 50 ± 2

According to Harvard medical school the Glycemic index boiled potato is 78 ± 4

According to Harvard medical school the Glycemic index instant mash potato is 87 ± 3

According to Harvard medical school the Glycemic index Potato, French fries is 63 ± 5

According to Harvard medical school the Glycemic index boiled, Carrots is 39 ± 4

According to Harvard medical school the Glycemic index boiled, sweet potato 63 ± 6

According to Harvard medical school the Glycemic index boiled, Pumpkin 64 ± 7

According to Harvard medical school the Glycemic index Plantain/ green banana is 55 ± 6

According to Harvard medical school the Glycemic index boiled, Taro is 53 ± 2

According to Harvard medical school the Glycemic index of Vegetable soup is 48 ± 5

According to Harvard medical school the Glycemic index of full fat milk is 39 ± 3

According to Harvard medical school the Glycemic index of skim milk is 37 ± 4

According to Harvard medical school the Glycemic index of Ice cream is 51 ± 3

According to Harvard medical school the Glycemic index of Yogurt, fruit is 41 ± 2

According to Harvard medical school the Glycemic index of Soy milk is 34 ± 4

According to Harvard medical school the Glycemic index of Rice milk is 86 ± 7

According to Harvard medical school the Glycemic index of Chickpeas is 28 ± 9

According to Harvard medical school the Glycemic index of Kidney beans is 24 ± 4

According to Harvard medical school the Glycemic index of Lentils is 32 ± 5

According to Harvard medical school the Glycemic index of Soya beans is 16 ± 1

According to Harvard medical school the Glycemic index of Chocolate is 40 ± 3

According to Harvard medical school the Glycemic index of Popcorn is 65 ± 5

According to Harvard medical school the Glycemic index of Potato crisps is 56 ± 3

According to Harvard medical school the Glycemic index of soft drink/soda is 59 ± 3

According to Harvard medical school the Glycemic index of Rice crackers/crisps is 87 ± 2

According to Harvard medical school the Glycemic index of Fructose is 15 ± 4

According to Harvard medical school the Glycemic index of Sucrose is 65 ± 4

According to Harvard medical school the Glycemic index of Glucose is 103 ± 3

According to Harvard medical school the Glycemic index of Honey is 61 ± 3

Examples of high GI Foods: white rice, all products made with white refined flour (roti, biscuits, pastries), chocolates, candies, desserts with high sugar content.

Examples of low GI cereals: wholewheat bread, brown rice, quinoa, products made with rye flour.

If you have diabetes, you know all too well that when you eat carbohydrates, your blood sugar goes up. The total amount of carbs you consume at a meal or in a snack mostly determines what your blood sugar will do. But the food itself also plays a role. A serving of white rice has almost the same effect as eating pure table sugar — a quick, high spike in blood sugar. A serving of lentils has a slower, smaller effect. Picking good sources of carbs can help you control your blood sugar and your weight. Eating healthier carbohydrates may help prevent a host of chronic conditions, especially diabetes, but it is also associated with a lower risk of heart disease and certain cancers. One way to choose foods is with the glycemic index (GI). This tool measures how much a food boosts blood sugar. The glycemic index rates the effect of a specific amount of a food on blood sugar compared with the same amount of pure glucose. A food with a glycemic index of 28 boosts blood sugar only 28% as much as pure glucose. One with a GI of 95 acts like pure glucose.

Using the glycemic index is easy: choose foods in the low GI category instead of those in the high GI category (see below), and go easy on those in between.

Low glycemic index (GI of 55 or less): Most fruits and vegetables, beans, minimally processed grains, pasta, low-fat dairy foods, and nuts.

Moderate glycemic index (GI 56 to 69): White and sweet potatoes, corn, white rice, couscous, breakfast cereals such as Cream of Wheat and Mini Wheats.

High glycemic index (GI of 70 or higher): White bread, rice cakes, most crackers, bagels, cakes, doughnuts, croissants, most packaged breakfast cereals.

High glycemic foods result in a quick spike in insulin and blood sugar (also known as blood glucose). Low glycemic foods have a slower, smaller effect

Instead of eating high-glycemic index food like White rice Eat this lower-glycemic index food Brown rice or converted rice

Instead of eating high-glycemic index food like Instant oatmeal Eat replace this with lower-glycemic index like Steel-cut oats

Instead of eating high-glycemic index food like Baked potatoes Eat this lower-glycemic index food Pasta, bulgur

Instead of eating high-glycemic index food like White bread Eat this lower-glycemic index food Whole-grain bread

Instead of eating high-glycemic index food like Corn Eat this lower-glycemic index food Peas or leafy greens

What are the key components and guidelines of the Diabetes Plate Method recommended by the American Diabetes Association?

The Diabetes Plate Method of the American diabetes association (ADA) is a helpful tool for anyone who wants to eat better and learn about variety and portion sizes, including people with prediabetes. Each section of the plate (based on a nine-inch plate) is for the following three food groups: vegetables, grains, and protein. Off to the side is dairy and fruit. These five food groups are the foundation for healthy eating. Fill 1/2 of the plate with non-starchy vegetables. On starchy vegetables are low in carbohydrates. One serving amounts to one cup raw veggies, such as a salad greens or ½ cup cooked, such as broccoli. You can have as many non-starchy vegetables as you like, but make sure at least half of your plate is filled with things like green salad, broccoli, or asparagus. Fill 1/4 of the plate with grains, starchy vegetables, or beans and lentils. Choose whole grains such as brown rice or quinoa which are rich in vitamins, minerals, and fiber. Beans and lentils contain both starch and protein with good amounts of fiber. Fill 1/4 of the plate with Protein This section includes meat and other protein sources, such as eggs, fish Turkey or chicken (without the skin, clams, crabs or shrimp. Look for lean cuts of meat and low-fat cheeses. 1/4 of the plate is equivalent to a 3 oz cooked portion (about the size of a deck of cards or the palm of your hand). In the Diabetes Plate Method, healthy fats are used for cooking and as condiments. It's best to choose unsaturated fats, which are usually liquid rather than solid such as olive oil, canola oil, safflower oil, or corn oil, Avocado, Nut butters, Nuts, such as almonds, peanuts, and pecans, Olives and Non-dairy spreads. One serving of these healthy fats (which is about one teaspoon) contains 5 grams of fat and 45 calories each.