



## Diabetes Blood Sugar Levels Chart

Before sharing the diabetes blood sugar levels chart, it's essential to OVER EMPHASIZE the importance of gaining the best control of your blood sugar levels as you possibly can. Just taking medication and doing nothing is really not enough.

Often people are not fully informed by their doctors that it is crucial to do this because if you already have a diabetes diagnosis then you are already at high risk for heart disease and other vascular problems.

During your pre-diabetic period, there is a lot of damage that is already done so you want to prevent any of the nasty complications from occurring.

Truly, ask anyone having to live with complications and they'll tell you it's the pits! You DO NOT want it to happen to you if you can avoid it.

Just taking medication and doing nothing is really not enough! Yet many diabetics do this. Please don't let that be you.

Why is it not enough, even if your blood sugars seem under control?

Well one common research observation in diabetics is there is a slow and declining progression of blood sugar control and symptoms. Meaning over time your ability to regulate sugars and keep healthy gets harder. If you take medication you will likely have to take more and more.

BUT, if you empower yourself with the right nutrition and lifestyle practices, then you can prevent this gradual decline. What that means for you is a happier healthier life overall and I'm sure you want that right?

Many people gain excellent blood glucose control and it's 'as if' they don't have type 2 diabetes at all. Achieving a high level of health is possible. It does take work but just know that it IS achievable.

The basic principles are to eat well, exercise regularly, stress less, and sleep well.

All the best,  
The DMP Team

## Blood Sugar Levels Chart

### Charts: mg/dl

Category	Fasting value		Post prandial / aka post meal
	Minimum	Maximum	2 hours after meal
Normal	70 mg/dl	100 mg/dl	Less than 140 mg/dl
Pre-diabetes	101 mg/dl	126 mg/dl	140-200 mg/dl
Diabetes	More than 126 mg/dl		More than 200

\*This chart shows the blood sugar levels from normal type 2 diabetes diagnoses.

### Diabetes Blood Sugar Level Initial Goals

Time to Check	mg/dl
Upon waking before breakfast (Fasting)	70-130 (Ideal under 110)
Before meals (lunch, dinner, snacks)	70-130 (Ideal under 110)
Two hours after meals	Under 180 (Ideal is under 140)
Bedtime	90-150

\*This chart shows the blood sugar levels to work towards as your initial goals.

### Ultimate Blood Sugar Goals

Time to Check	mg/dl
Upon waking before breakfast (Fasting)	90-100
Before meals (lunch, dinner, snacks)	Under 100
Two hours after meals	120-140

\*Once you have established good blood glucose control, you can work towards these ultimate goals. Note: These take work to achieve but they are achievable.

### Diabetes Control Chart

	Excellent			Good		Poor			
HbA1c	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	>12.0
mg/dl	50	80	115	150	180	215	250	280	315

\*This chart shows the Hba1c levels and blood glucose correlation.

## Blood Sugar Levels Chart

### Charts: mmol/l

\*This chart shows the blood sugar levels from normal to type 2 diabetes diagnoses.

Category	Fasting value		Post prandial / aka post meal
	Minimum	Maximum	2 hours after meal
Normal	4 mmol/l	6 mmol/l	Less than 7.8 mmol/l
Pre-diabetes	6.1 mmol/l	6.9 mmol/l	7.8-11.1 mmol/l
Diabetes	More than 7 mmol/l		More than 11.1 mmol/l

### Diabetes Blood Sugar Level Initial Goals

Time to Check	mmol/l
Upon waking before breakfast (Fasting)	4-7.2 (Ideal under 6.1)
Before meals (lunch, dinner, snacks)	4-7.2 (Ideal under 6.1)
Two hours after meals	Under 10 (Ideal is under 7.8)
Bedtime	5-8.3

\*This chart shows the blood sugar levels to work towards as your initial goals.

### Ultimate Blood Sugar Goals

Time to Check	mmol/l
Upon waking before breakfast (Fasting)	5-5.5
Before meals (lunch, dinner, snacks)	Under 5.5
Two hours after meals	6.6-7.8

\*Once you have established good blood glucose control, you can work towards these ultimate goals. Note: These take work to achieve but they are achievable.

### Diabetes Control Chart

	Excellent			Good		Poor			
HbA1c	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0>
mmol/l	2.6	4.7	6.3	8.2	10	11.9	13.7	15.6	17.4>

\*This chart shows the Hba1c levels and blood glucose correlation.

**Most important thing:** Try not to let yourself get above 7.8 for any length of time.

## Why Is Blood Sugar High In The Morning?

Let's cover one of the most frequently asked questions.

### 1. Glucose Happens 24/7

All the cells in the body need glucose to fuel their function, even when we sleep. So the body breaks down stores in the liver so that the body and brain can continue to go about their functions. This glucose production will still occur when you don't eat and in fact if you skip a meal it can increase the liver's production of glucose.

### 2. Hormones Raise Blood Glucose

Cortisol (our stress hormone) is the hormone that slowly increases in levels from around 3 am onwards to reach its peak early in the morning. This occurs to get us moving and to give us energy. There are also other hormonal factors involved in blood sugar regulation that can influence your highs. But as a natural consequence of rising cortisol, this stimulates a rise in blood glucose so it is in fact a 'normal' response.

But if you are diabetic there is one factor that impacts both the overnight glucose production and the rise in glucose with cortisol, and that is decreased insulin production.

### 3. Decreased Insulin Production

Because most type 2 diabetics naturally have decreased insulin production there is not enough insulin being produced to bring these rising levels down, even during the night when you are sleeping. Your body is still producing glucose, your hormones are still doing their thing, but insulin production is low and this is especially so during periods of fasting.

### 4. Hypoglycaemia known as the Simonyi effect

This is less common but in some people with diabetes low blood sugar (hypoglycaemia) can occur while you are sleeping. This can also cause more glucose production. Remember our cells need it so if the body thinks it's low it will naturally produce more. So if you're trying to identify why your blood sugar is so high in the morning, you might want to wake yourself up during the night to test it, just in case this might be your situation and your insulin needs to be adjusted.

### 5. Poor Food Choices

The last thing that can have an effect is poor food choices. Regardless of the time of day poor food choices will impact your glucose levels negatively.

## 10 Practical Tips To Lower Morning Blood Sugar

### 1. Fancy Some Apple Cider Vinegar & Cheese Before Bed?

One small study showed that having 2 tablespoons of apple cider vinegar with 1 oz. (28 g) cheese (which is just 1 slice cheese) before bed reduced morning glucose by 4% compared to 2% when the participants only had cheese and water.

People that had a typical fasting glucose above 130 mg/dl or 7.2 mmol/l had an even better result of 6% decrease in morning blood sugar levels. It's not fully understood why vinegar has such a beneficial effect but it seems that the acetic acid in the vinegar does have a positive influence so taking apple cider vinegar might just be the most effective thing.

### 2. Have A Specially Designed Snack

Many people find that a bedtime snack can help. This is most likely because it shortens the 'fasting' time and may slow down the liver's own glucose production. If you're not using the apple cider vinegar method above, try having a mix of protein and fat combined before going to bed.

Here are a few ideas:

- A tablespoon of natural peanut butter
- A small piece of chicken with avocado
- A small handful of macadamia nuts
- A couple of slices of cheese

These are all simple snacks that contain both protein and fat.

### 3. Enjoy A Good Dinner

Make sure you eat something substantial for dinner; a meal high in fiber and low in carbs is best. It's never a good idea to skip meals because this raises blood glucose levels. The liver will still produce glucose even if you don't eat.

### 4. Sleep Soundly

Make sure you get a good restful sleep every day because lack of sleep can increase cortisol production (our key stress hormone) and this pushes glucose levels higher.

## 5. Avoid Alcohol

Although drinking alcohol might seem relaxing it is best to steer clear of it because it's actually a stimulant and prevents deep REM sleep. We just pointed out that lack of sleep could increase the production of our stress hormone cortisol, which also increases blood glucose.

## 6. Try A Protein Powered Morning Start

To help bring blood sugar levels down eat something when you get up but make sure it's a protein – eating carbs when your blood glucose is already high will only push it up further. You only need a snack and then you can follow that with a little bit of exercise, such as a short walk.

## 7. Adopt A Morning Ritual

Developing a morning ritual is a great habit for a healthy mind and body and it will also help lower your morning blood sugar as well. Try doing some stretching or go for a walk first thing in the morning – it's often best to have that protein-powered snack first before you do exercise.

## 8. Speak To Your Physician

If you think your morning levels are way too high or no matter what you do you can't get them down, talk to your physician or health practitioner to see if you might need to alter your medication.

## 9. Control Your Diabetes

Manage your diabetes and hormones by eating a healthy diet, eating the right type of carbs, exercising regularly, and stressing less. The more controlled you can keep your blood sugars overall, the better your morning sugars will be as well.

## 10. Lose Some Weight

Even a small amount of weight loss can help lower blood glucose, balance hormones, reduce inflammation and generally make you feel a whole lot better.

Different things work for different people but keep these things in mind and give a few of them a try to see what works best for you

## Would You Like More Great Tools & Resources?

Join our VIP Club Members and gain access to menus, meal plans, recipes plus loads of tools and resources to make life easier.

- Menus and meal plans
- Food lists & cheat sheets
- Food & nutrition info
- Recipe database
- And loads more



### References

<http://www.lillydiabetes.com/Pages/blood-sugar-goals-and-targets.aspx>

[http://www.joslin.org/info/goals\\_for\\_blood\\_glucose\\_control.html](http://www.joslin.org/info/goals_for_blood_glucose_control.html)

[http://www.medindia.net/patients/calculators/bloodsugar\\_chart\\_result.asp](http://www.medindia.net/patients/calculators/bloodsugar_chart_result.asp)

<http://www.webmd.com/diabetes/blood-glucose?page=3>

<http://www.diabetes.org/living-with-diabetes/treatment-and-care/blood-glucose-control/checking-your-blood-glucose.html#sthash.TE96fEWJ.dpuf>

<http://care.diabetesjournals.org/content/30/11/2814.full>