

Welcome to Pine Street Family Practice's 2nd Podcast

- ▶ We hope you enjoyed our previous podcast on Anxiety.
- ▶ Our new topic will be Diabetes.
- ▶ To review the podcast will review brief information on a health topic, such as:
 - ▶ What is Diabetes
 - ▶ Signs and symptoms
 - ▶ Risk Factors
 - ▶ Management
 - ▶ Complications
 - ▶ Living with Diabetes



Diabetes

Pine Street Family Practice Podcast #2

By Maryanne Gallagher APN



Statistics on Diabetes

- ▶ Prevalence or how many people are living with diabetes
 - ▶ 30.3 million Americans, or 9.4% of the population
 - ▶ 7.2 million were undiagnosed
 - ▶ 12.2 million are seniors aged 65 and older
- ▶ New cases: 1.5 million Americans are diagnosed with diabetes annually
- ▶ Prediabetes:
 - ▶ 84.1 million Americans age 18 and older have prediabetes
- ▶ Deaths
 - ▶ Diabetes is the 7th leading cause of death in the United States



What is Diabetes?

Diabetes is a problem in the body that causes the blood sugar or glucose to elevate.

There are a few types T1, gestational, and T2 which is the most common.

In the body, the pancreas, an organ in the abdomen area, makes a hormone called insulin, insulin circulates reduces the glucose in the blood and pushes the glucose to enter cells, which is used for energy.

How does the body find glucose? There are 2 major sources, our food and our liver both stores and makes glucose. When we don't eat or fast and our body needs glucose our liver breaks down the stored glucose called glycogen and releases it to the body to keep our level normal.

With T2 Diabetes the body doesn't use insulin properly and then can become insulin resistant. In the beginning, the pancreas increases insulin production to try and keep up with the demand. Eventually the pancreas gets tired and can't make enough insulin to keep the body's glucose at a normal level and the glucose builds up and stays in the blood stream.



T2 Diabetes

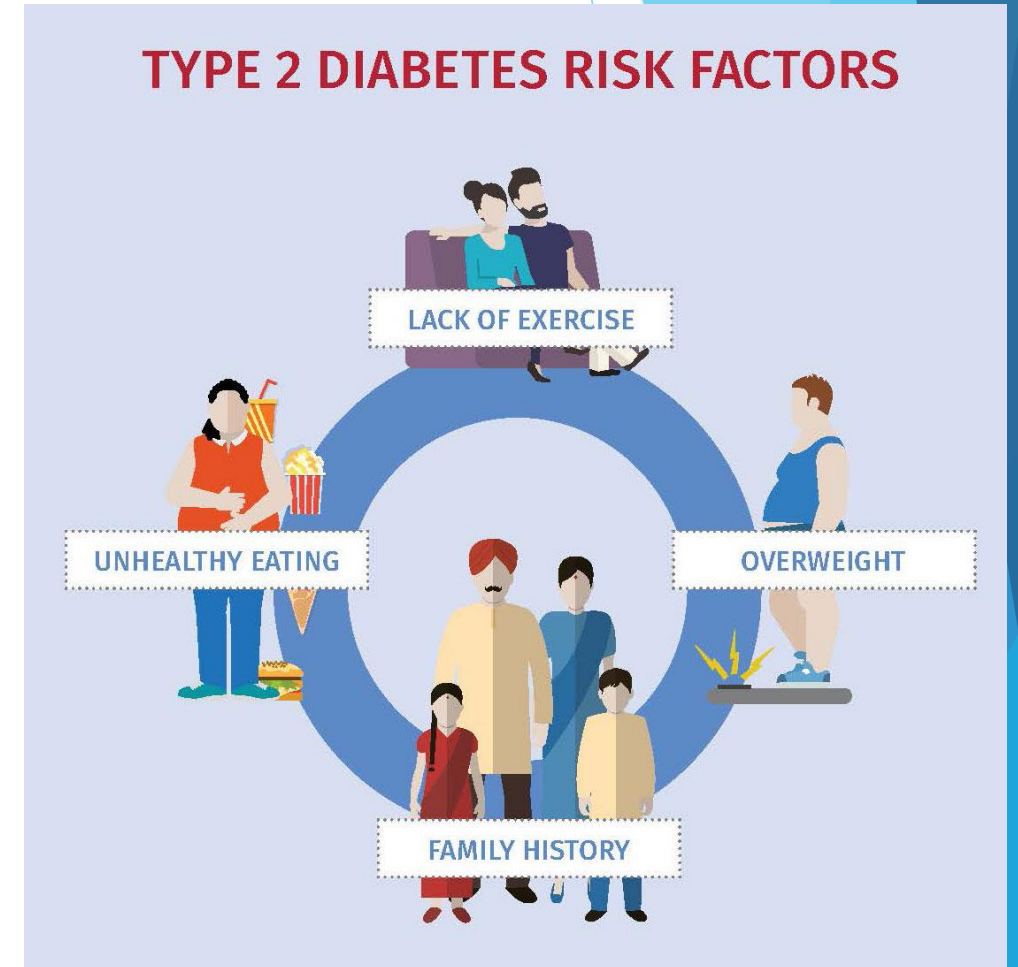
Signs and Symptoms

- ▶ Increased thirst
- ▶ Increased hunger especially after eating
- ▶ Dry mouth
- ▶ Increased and frequent urination
- ▶ Sweating
- ▶ Unexplained weight loss/gain when eating normally
- ▶ Fatigue
- ▶ Blurry vision
- ▶ Slow healing cuts/sores
- ▶ Frequent urination
- ▶ Tingling in hands/feet



T2 Diabetes Risk Factors

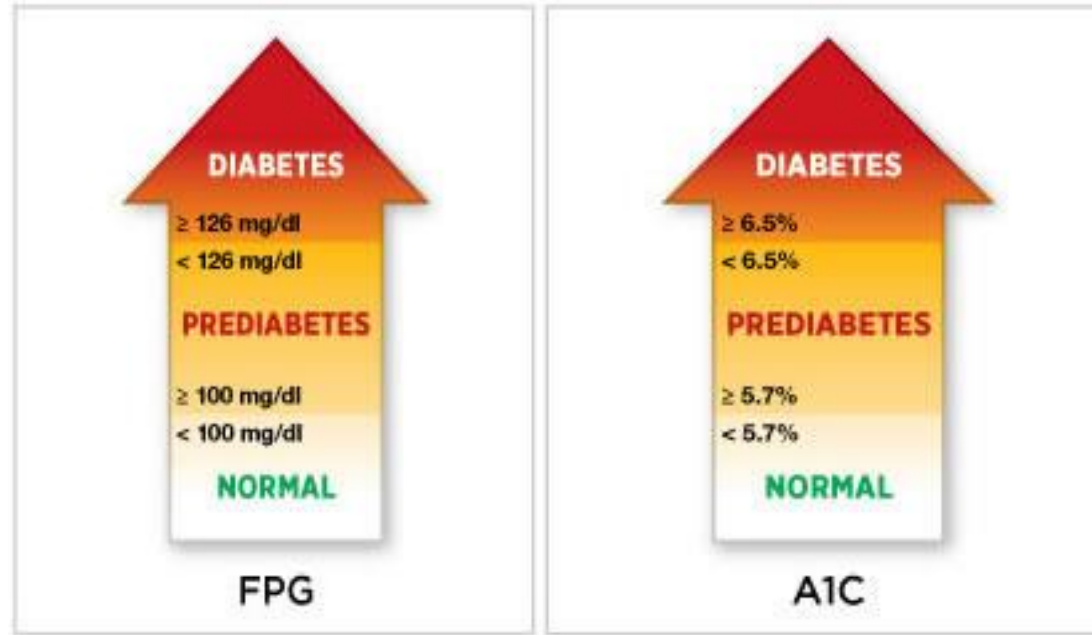
- ▶ Diabetes can be genetic, if a parent/sibling have diabetes
- ▶ Pre diabetes **we will discuss this on the next slide**
- ▶ Being inactive
- ▶ Being overweight
- ▶ Hypertension or high blood pressure
- ▶ Heart disease
- ▶ Good cholesterol is low <40
- ▶ High Triglycerides >150
- ▶ Females with gestational diabetes or PCOS
- ▶ Age >45 increases the risk
- ▶ Ethnicity



Pre Diabetes

What does this mean? When your blood sugar is higher than normal but not high enough to be considered having diabetes. A1C measures the percentage of blood sugar attached to the hemoglobin or the oxygen carrying red blood cells over 3 months.

Result	A1C
Normal	less than 5.7%
Prediabetes	5.7% to 6.4%
Diabetes	6.5% or higher

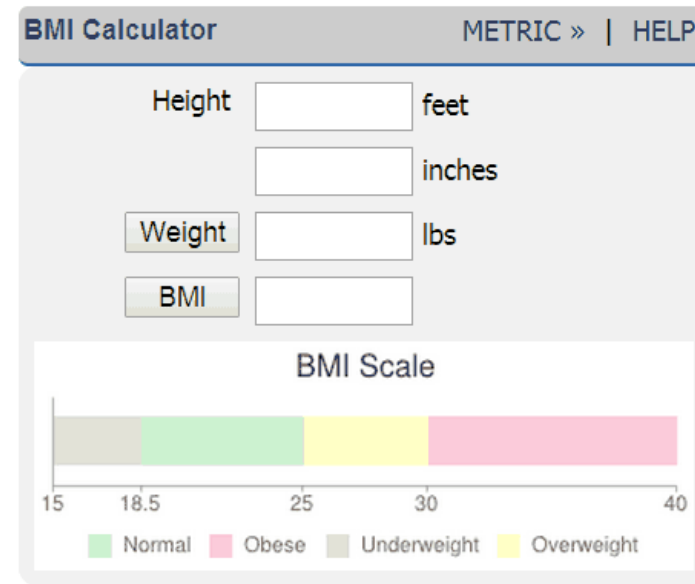


T2 Diabetes Management

Management is individualized for each person.

Weight

- ▶ keep your BMI <25
 - ▶ BMI is the body mass index, a screening tool used to evaluate a healthy range of weight, over weight or obese
- ▶ You may need to monitor and check your blood sugar/glucose daily
 - ▶ there are glucose monitors so you can check yourself at home
 - ▶ Before meals blood glucose should be between 80-130
- ▶ The doctor will monitor your bloodwork such as A1C or your 3 month blood sugar
 - ▶ Normal levels are <6.5%
- ▶ If blood sugar gets too low you can lose your ability to think clearly
- ▶ If blood sugar gets too high and stays high this can damage body organs



BMI: body mass index screening tool

BODY MASS INDEX (BMI)	
CLASSIFICATION	BMI SCORE (kg/m ²)
Underweight	< 18.5
Normal	18.5 - 24.9
Overweight	25.0 - 29.0
Obese	30.0 - 40.0
Extreme Obese	> 40.0

Your Height	Your Body Weight in Pounds													
	Healthy Range						Overweight				Obese			
4'10"	91	96	100	105	110	115	119	124	129	134	138	143	167	191
4'11"	94	99	104	109	114	119	124	128	133	138	143	148	173	198
5'0"	97	102	107	112	118	123	128	133	138	143	148	153	179	204
5'1"	100	106	111	116	122	127	132	137	143	148	153	158	185	211
5'2"	104	109	115	120	126	131	136	142	147	153	158	164	191	218
5'3"	107	113	118	124	130	135	141	146	152	158	163	169	197	225
5'4"	110	116	122	128	134	140	145	151	157	163	169	174	204	232
5'5"	114	120	126	132	138	144	150	156	162	168	174	180	210	240
5'6"	118	124	130	136	142	148	155	161	167	173	179	186	216	247
5'7"	121	127	134	140	146	153	159	166	172	178	185	191	223	255
5'8"	125	131	138	144	151	158	164	171	177	184	190	197	230	262
5'9"	128	135	142	149	155	162	169	176	182	189	196	203	236	270
5'10"	132	139	146	153	160	167	174	181	188	195	202	207	243	278
5'11"	136	143	150	157	165	172	179	186	193	200	208	215	250	286
6'0"	140	147	154	162	169	177	184	191	199	206	213	221	258	294
6'1"	144	151	159	166	174	182	189	197	204	212	219	227	265	302
6'2"	148	155	163	171	179	186	194	202	210	218	225	233	272	311
6'3"	152	160	168	176	184	192	200	208	216	224	232	240	279	319
6'4"	156	164	172	180	189	197	205	213	221	230	238	246	287	328
BMI	19	20	21	22	23	24	25	26	27	28	29	30	35	40



T2 Diabetes Management

Diet

- ▶ Watch carbohydrates like white rice/pasta/bread they will turn into sugar in the body
- ▶ Eat more fruit, veggies, nuts, legumes, whole grains
- ▶ Less sugary foods, like cakes, cookies, candy and sweet drinks like soda

Exercise

- ▶ Walking, jogging, swimming, a fitness class, mowing the lawn, dancing, playing with your kids

It all counts, just move!

- ▶ 20-30 minutes every other day, start slow and gradually build up your tolerance.



Medication Management: classes

Biguinide (pill)

Metformin the most common and may be the first medication.

- ▶ This works by improving the body's sensitivity to insulin so the body uses insulin effectively this can sometimes cause GI upset

Sulfonylureas (pill)

- ▶ This helps the body secrete more insulin this can sometimes cause a drop in blood sugar and weight gain, examples: Amaryl

DDP-4 Inhibitors (pill)

- ▶ Helps reduce blood sugar but modestly, examples: Januvia, Onglyza, Trajenta

Insulin (injectable)

- ▶ this may be needed if your body doesn't produce enough insulin, examples: Novolin, Novolog

Meglitidines (pill)

- ▶ Similar to sulfonylureas to help stimulate the pancreas to secrete more insulin this has a quicker reaction, examples: Prandin, Starlix

Thiazolidinediones (pill)

- ▶ Like metformin, these medications make the body's tissues more sensitive to insulin, can cause to weight gain, examples: Avandia, Actos

GLP-1 (injectable)

- ▶ Slows digestion to help lower blood sugar, can cause nausea, examples: Byetta, Victoza

SGLT-2 (injectable)

- ▶ works by preventing the kidneys from absorbing the sugar it's excreted in the urine, examples: Invokan, Farxiga



Diabetes Management

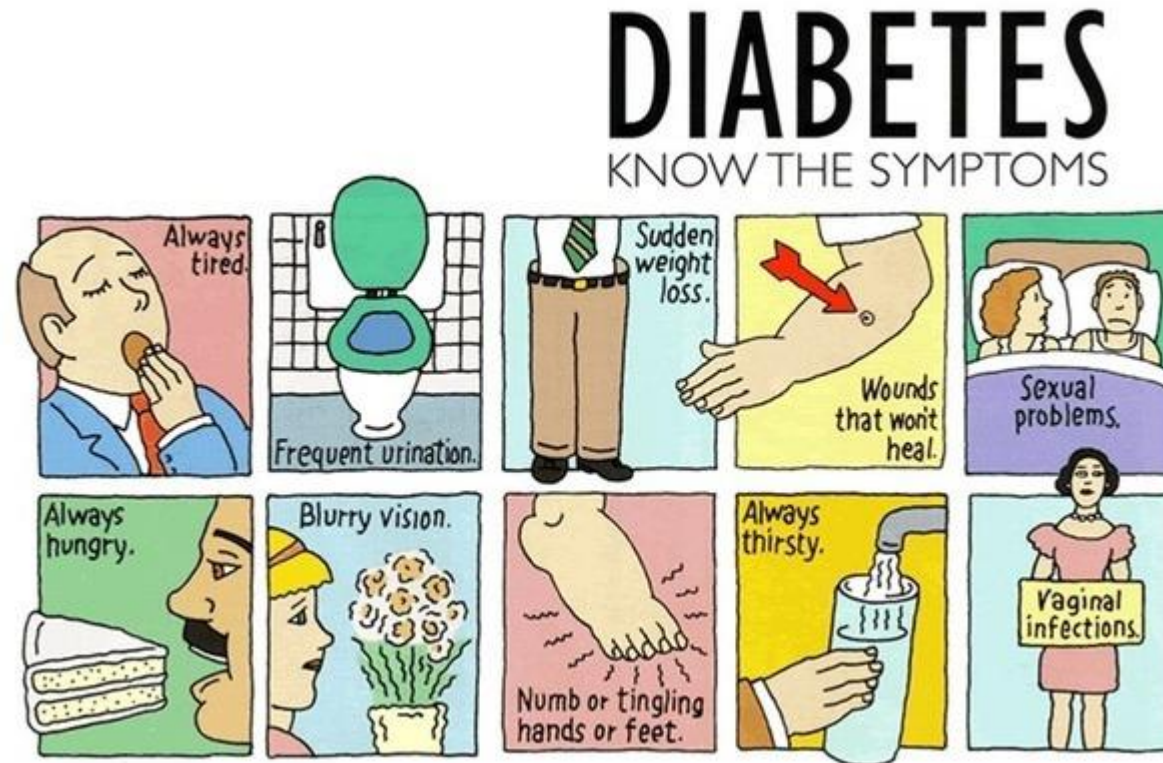
There are many medications that can help reduce blood sugar and many more new not mentioned. The reality is one needs to also help the body through a proper diet and exercise.



Complications

If blood sugar is not treated and stays too high it can cause many complications:

- ▶ Blurred vision, eye damage
- ▶ Sudden weight loss
- ▶ Heart disease
- ▶ Vascular problems
- ▶ Non stop hunger
- ▶ Nerve damage
- ▶ Kidney problems
- ▶ Foot damage
- ▶ Fatigue
- ▶ Vaginal infections
- ▶ Skin conditions
- ▶ Depression

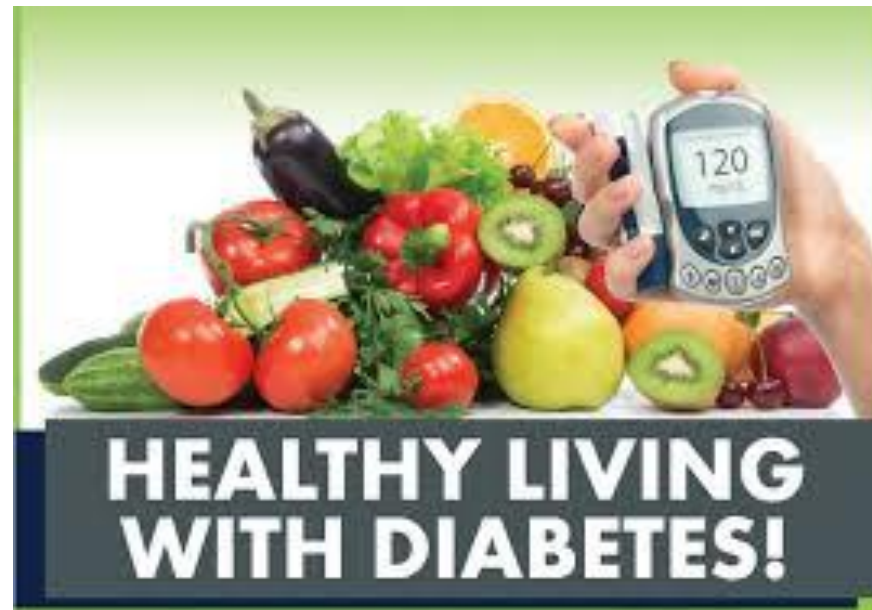


Living with Diabetes

When a person is diagnosed with diabetes it can be traumatic. Talk to the provider let them know if you are struggling with this illness. Don't ignore it!!

There is no cure for diabetes but one can manage the symptoms and delay or avoid the complications and a healthful life managing diabetes.

If you have questions ask the provider at your next visit at Pine Street Family Practice!



Resources

https://www.google.com/search?q=bmi+calculator&rlz=1C1RNVH_enUS540US541&oq=bmi+calcu&aqs=chrome.0.0j69i60j69i57j0l3.2693j1j7&sourceid=chrome&ie=UTF-8

<http://www.diabetes.org/are-you-at-risk/prediabetes/>

<https://www.ncbi.nlm.nih.gov/books/NBK279141/>

<https://www.mayoclinic.org/diseases-conditions/diabetes/symptoms-causes/syc-20371444>

<https://www.mayoclinic.org/diseases-conditions/type-2-diabetes/diagnosis-treatment/drc-20351199>

<http://www.diabetes.org/assets/pdfs/basics/cdc-statistics-report-2017.pdf>

