



STRIDES

FOR DIABETES AWARENESS

TM

Disclaimer

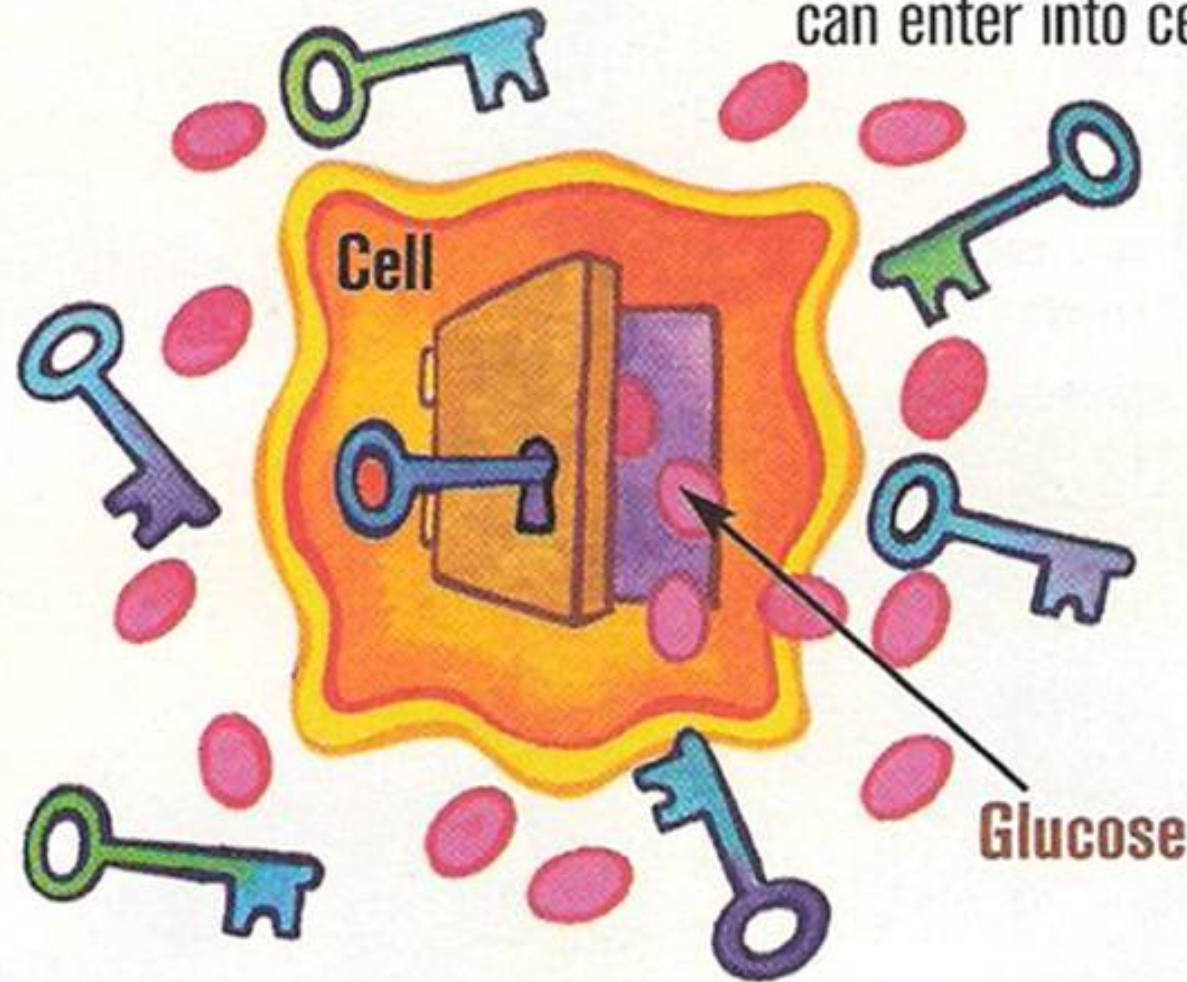
- This presentation is for informational purposes only.
- Before changing any regiment regarding diet exercise or medication, speak with your physician.



Non-Diabetic

Normal Cell

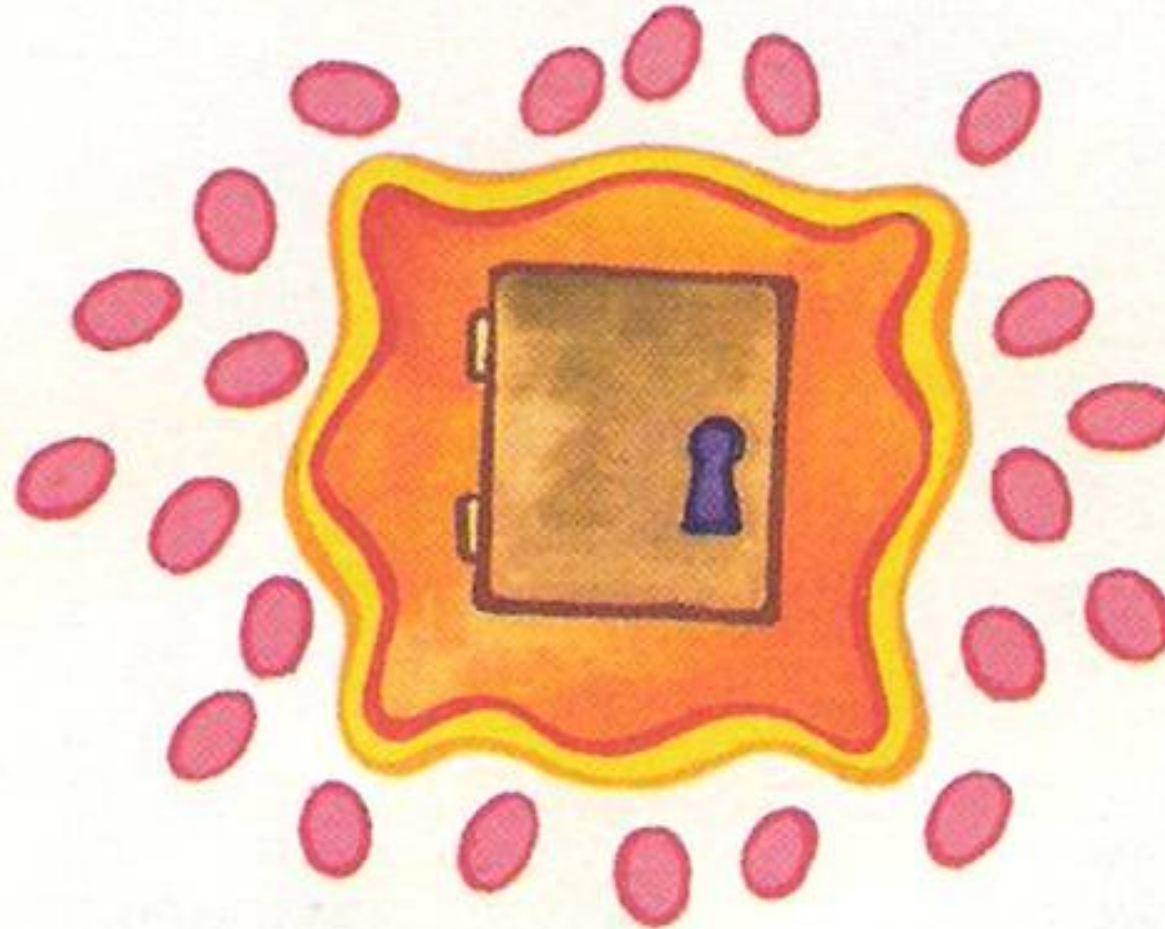
Insulin = Keys
Opens lock so glucose
can enter into cell



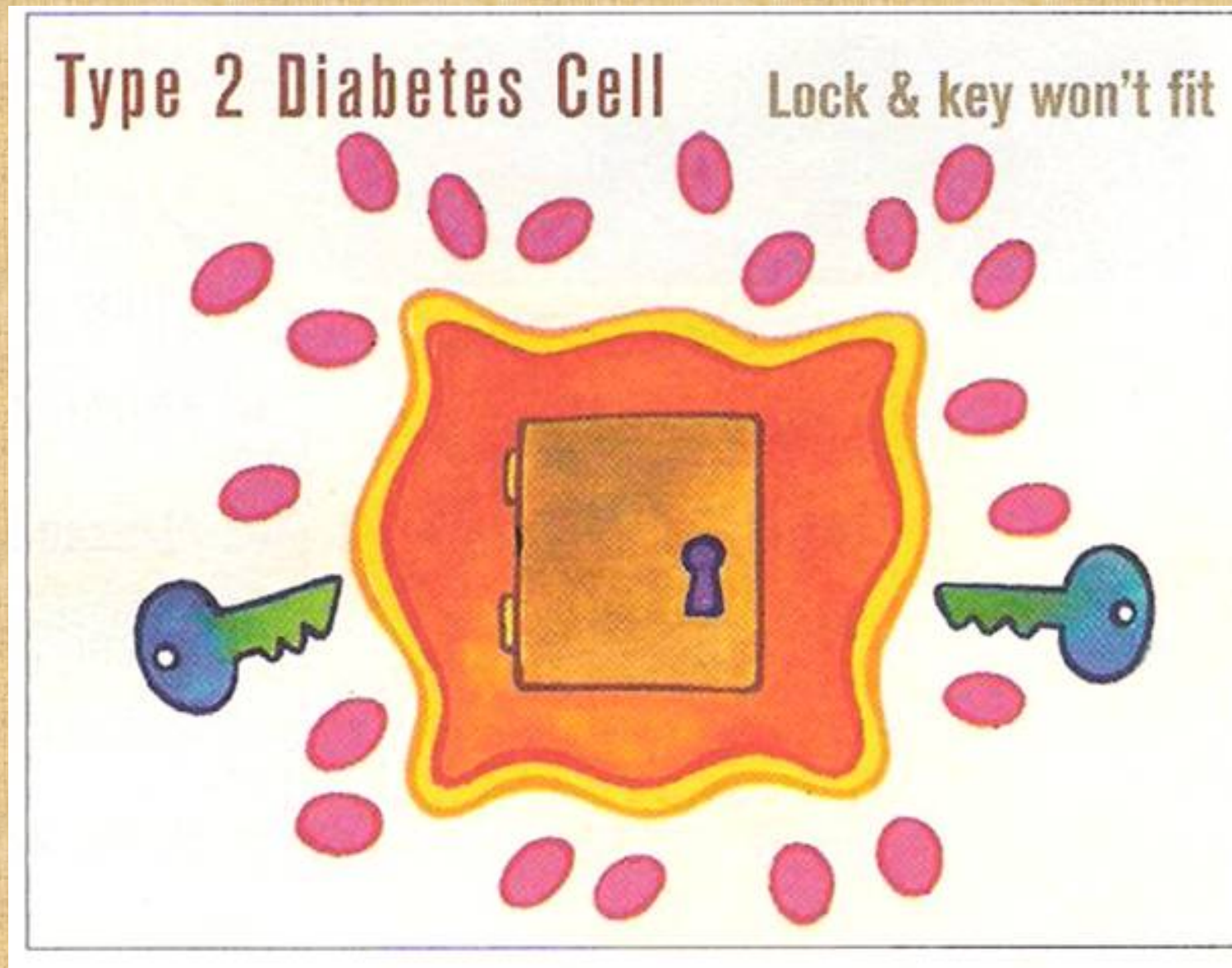
Type 1 Diabetic

Type 1 Diabetes Cell

Insulin = No keys



Type 2 Diabetic





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What Causes Type 1

- Auto immune Disease
- Immune system attacks beta Cells
- Hereditary



What Causes Type 2

- Hereditary
- Overweight
- Lack of Exercise
- Poor Diet
- Lifestyle



Symptoms Type 1 Diabetes

- Thirsty
- Urination
- Weight Loss
- Fatigue
- Fruity Breath (*ketoacidosis*)
- Blurred Vision



Symptoms Type 2

- Blurred Vision
- Fatigue
- Weight (Loss or Gain)
- No Symptoms



Definition of Diabetes

- Fasting Blood Sugar >126
- 2 hour post prandial >200



Glucose Goals

- Non-diabetic <100
- Type 2 90-110
- Type 1 100-160



Definition of Diabetes

- Non-Diabetic 5.6 or lower A1C
- Pre-Diabetic 5.7 – 6.2
- Diabetic 6.3 >
- Target for insulin dependent diabetic - 7.0



HbA₁C

- When > 7%, complications go up exponentially
- Measures the amount of glucose attached to beta chain of normal hemoglobin
- Check every 3 months since this is the life span of hemoglobin in the body



Understand results of A1C

A1C Conversion Table

A1C	GLUCOSE		A1C	GLUCOSE		A1C	GLUCOSE		A1C	GLUCOSE		A1C	GLUCOSE		A1C	GLUCOSE
4	68		6	126		8	183		10	240		12	298		14	355
4.1	71		6.1	128		8.1	186		10.1	243		12.1	301		>14	YIKES !!
4.2	74		6.2	131		8.2	189		10.2	246		12.2	303			
4.3	77		6.3	134		8.3	192		10.3	249		12.3	306			
4.4	80		6.4	137		8.4	194		10.4	252		12.4	309			
4.5	83		6.5	140		8.5	197		10.5	255		12.5	312			
4.6	85		6.6	143		8.6	200		10.6	258		12.6	315			
4.7	88		6.7	146		8.7	203		10.7	260		12.7	318			
4.8	91		6.8	149		8.8	206		10.8	263		12.8	321			
4.9	94		6.9	151		8.9	209		10.9	266		12.9	324			
5	97		7	154		9	212		11	269		13	326			
5.1	100		7.1	157		9.1	215		11.1	272		13.1	329			
5.2	103		7.2	160		9.2	217		11.2	275		13.2	332			
5.3	105		7.3	163		9.3	220		11.3	278		13.3	335			
5.4	108		7.4	166		9.4	223		11.4	281		13.4	338			
5.5	111		7.5	169		9.5	226		11.5	283		13.5	341			
5.6	114		7.6	171		9.6	229		11.6	286		13.6	344			
5.7	117		7.7	174		9.7	232		11.7	289		13.7	347			
5.8	120		7.8	177		9.8	235		11.8	292		13.8	349			
5.9	123		7.9	180		9.9	237		11.9	295		13.9	352			



Glucose Monitoring

- Educate patients on the use of a glucometer.
- Use of glucometer has shown to decrease complications by 50%



Contributes to other chronic conditions

- ✓ 50% - of diabetics will have heart attacks
- ✓ 50% - will end up on hemodialysis
- ✓ 30% - will have a stroke
- ✓ 10-15% - will lose a limb
- ✓ 5% - will go blind



Treatment

- Exercise
- Diet
- Medication

Camp EDI



Diet

- Complex (Slow) Carbohydrates
- Simple (Fast) Acting Carbs “Fruit”
- A healthy diet like everyone else
- Moderation



Simple “Fast” Carbohydrates



Complex “Slow” Carbohydrates



Medication

Oral Agents

Biguanides

Metformin (Glucophage)

Metformin liquid (Riomet)

Metformin extended release
(Glucophage XR, Fortamet,
Glumetza)

Sulfonylureas

Glimepiride (Amaryl)

Glyburide (Diabeta, Micronase)

Glipizide (Glucotrol, Glucotrol XL)

Micronized glyburide (Glynase)



Diabetes is a progressive disease

- What commonly happens with type 2 Diabetes is that eventually oral agents fail since
- Islet cells get exhausted
- After 10 years, 50% of diabetics will fail oral agents with progressive rise of HbA₁C
- Insulin eventually needed



Insulin



Insulin Pump



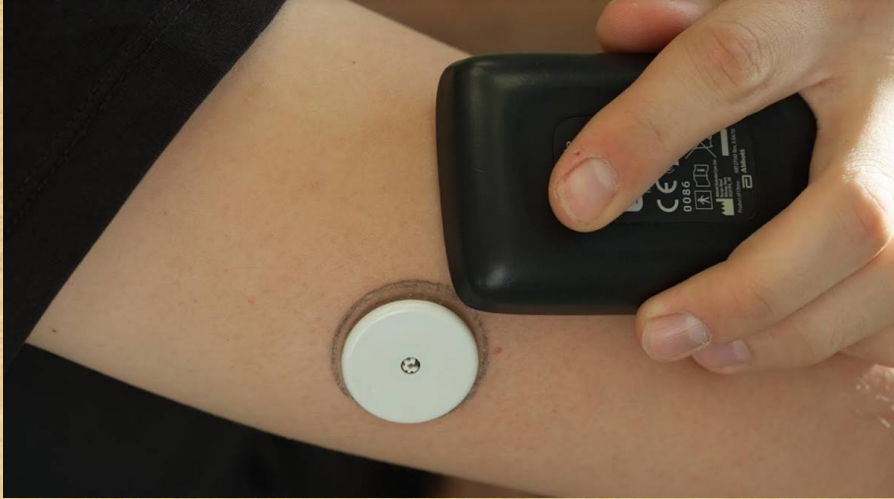
Medtronic



Tandem

Omnipod

Continuous Glucose Monitoring (CGM)



Sensor Data (mg/dL)

Tue 13/11

Wed 14/11

Thu 15/11

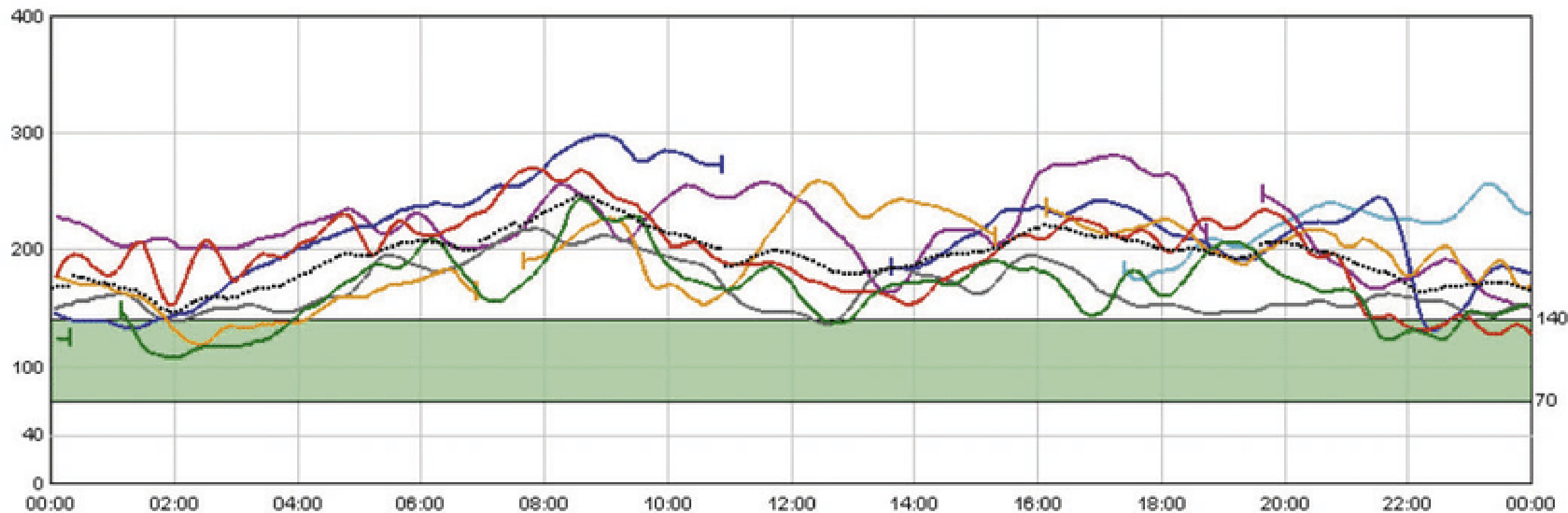
Fri 16/11

Sat 17/11

Sun 18/11

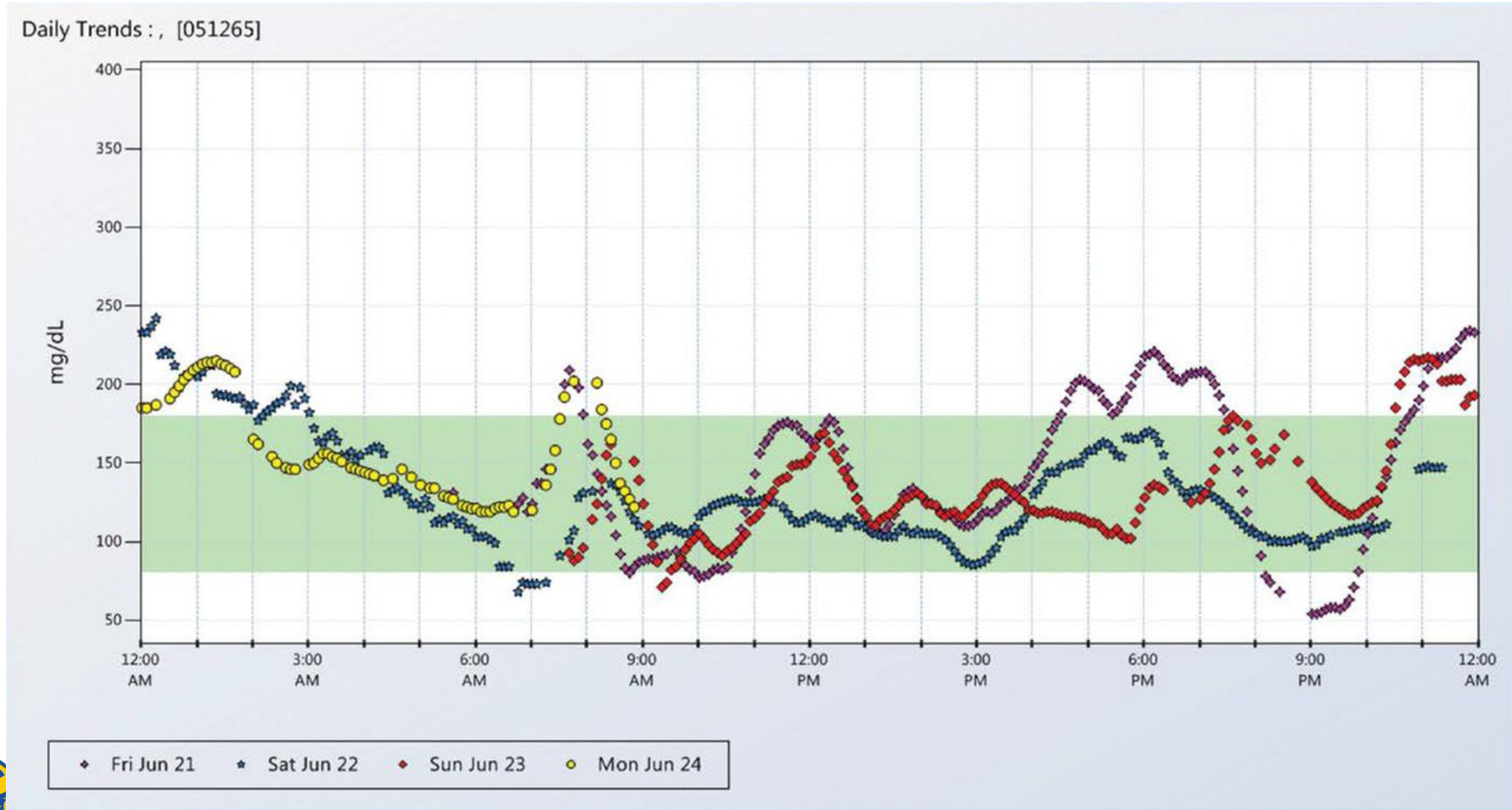
Mon 19/11

Average



	Tue 13/11	Wed 14/11	Thu 15/11	Fri 16/11	Sat 17/11	Sun 18/11	Mon 19/11	Average / Total
# Sensor Values	80	278	288	256	271	288	279	1,740
Highest	256	280	218	298	258	270	243	298
Lowest	175	151	136	131	119	127	107	107
Average	219	219	167	213	191	197	166	193
Standard Dev.	21	31	22	44	34	34	30	38
MAD %	1.7	7.4	9.8	4.7	9.3	2.2	3.6	6.1

Time in Range goal – 70%



256 / day

26,000 / 3 months

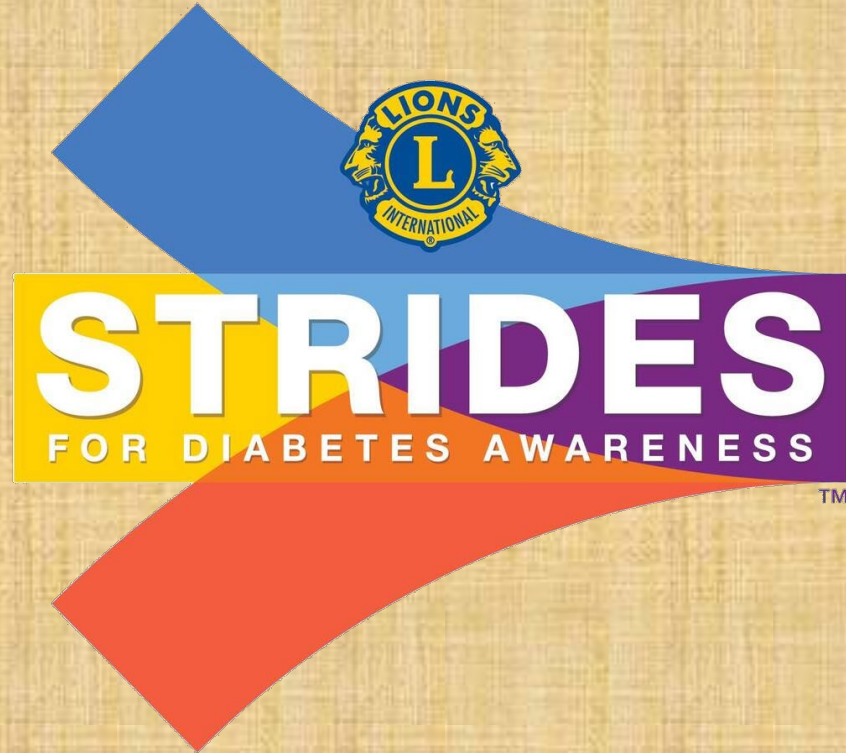
Lions Diabetes

www.LionsDiabetes.org

World Diabetes Day Sunday
November 14, 2021



Questions



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