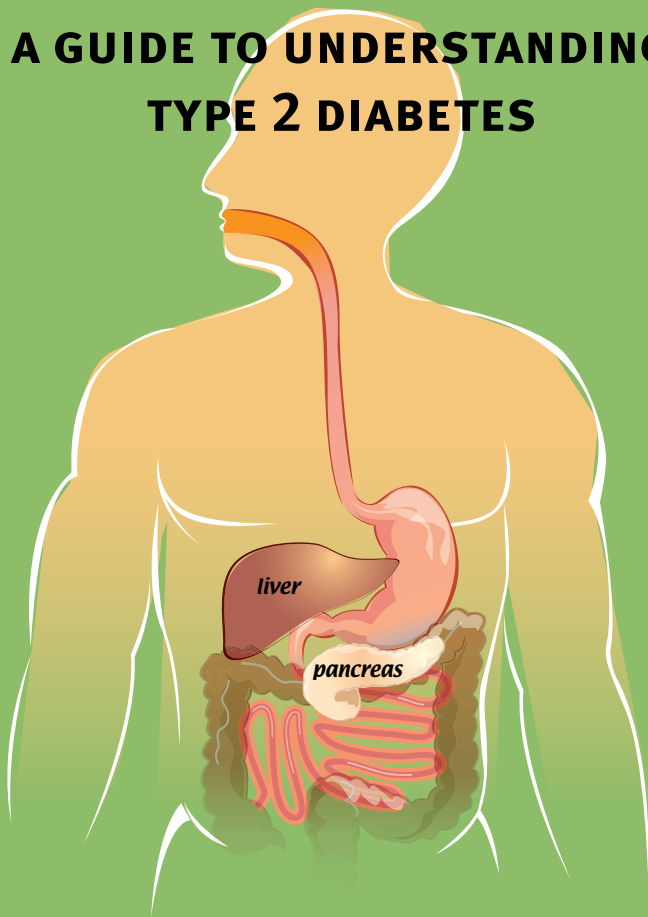


# WHAT IS DIABETES?

## A GUIDE TO UNDERSTANDING TYPE 2 DIABETES



Conseil Cri de la santé et des services sociaux de la Baie James

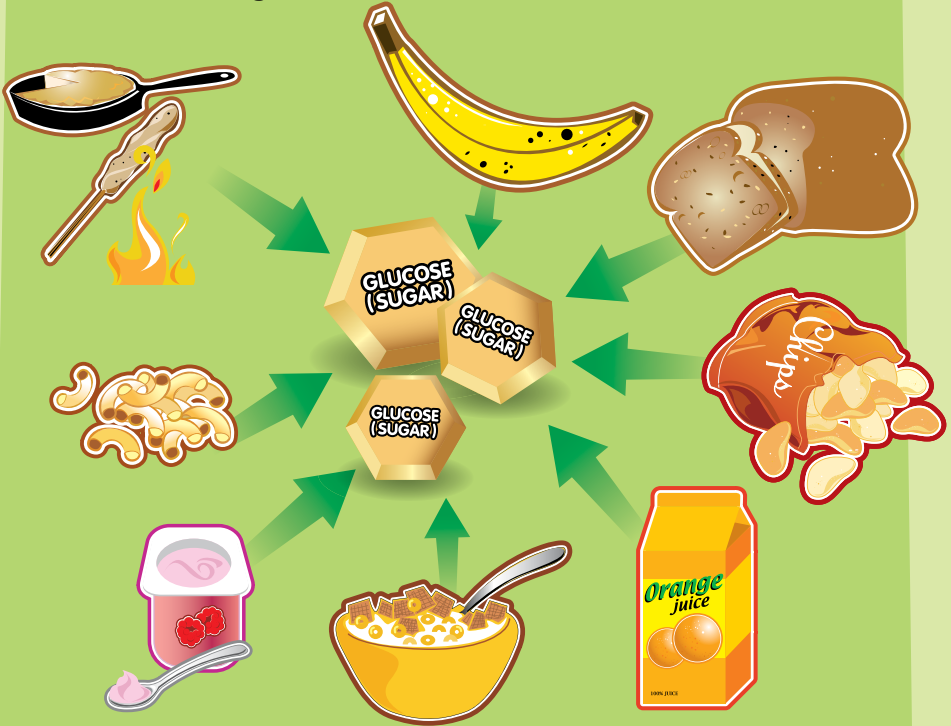
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Cree Board of Health and Social Services of James Bay

# WHERE SUGAR COMES FROM

In this booklet, glucose means the kind of sugar found inside our body (blood sugar).

Sugar comes from most of the food we eat. **Not just sweet tasting food.**



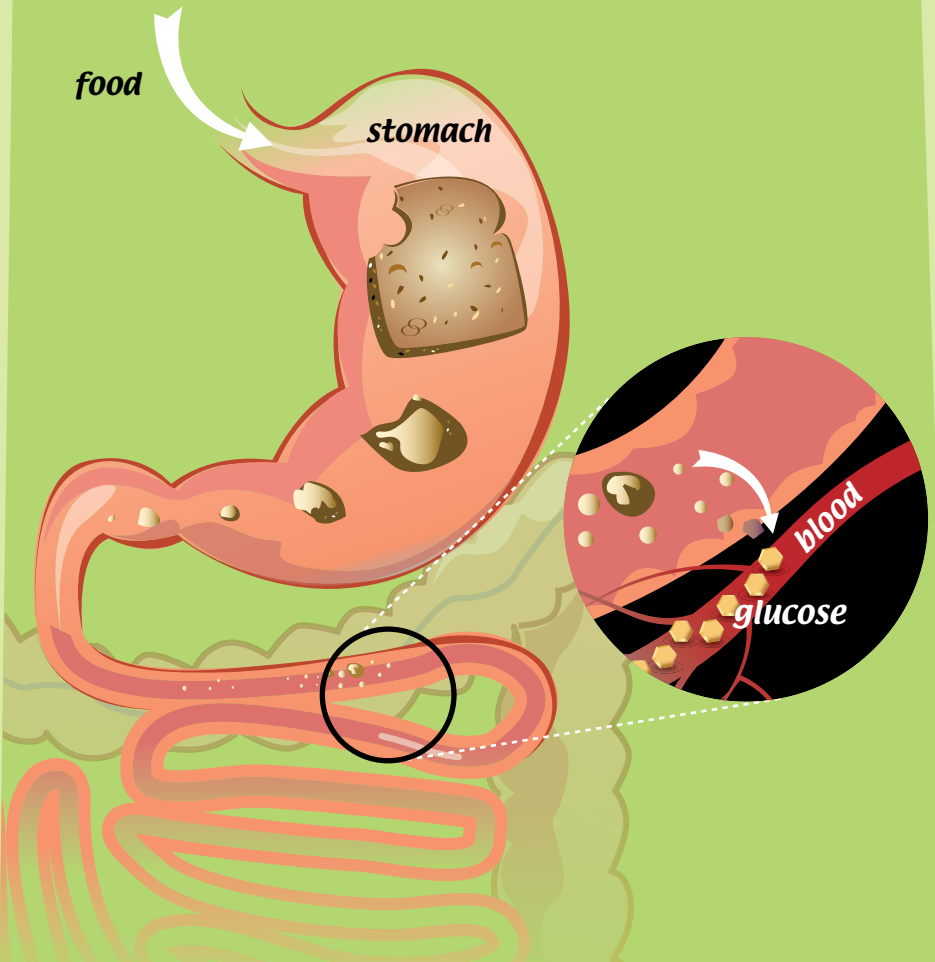
## Food that contains sugar includes:

- Anything made of flour (bannock, bread, pasta, etc.)
- Rice, potatoes, corn and cereals
- Fruits and fruit juices
- Milk and yogurt
- Desserts, sweets and sweet drinks

**Meat, fish, cheese and eggs do not contain sugar.**

# HOW THE BODY WORKS

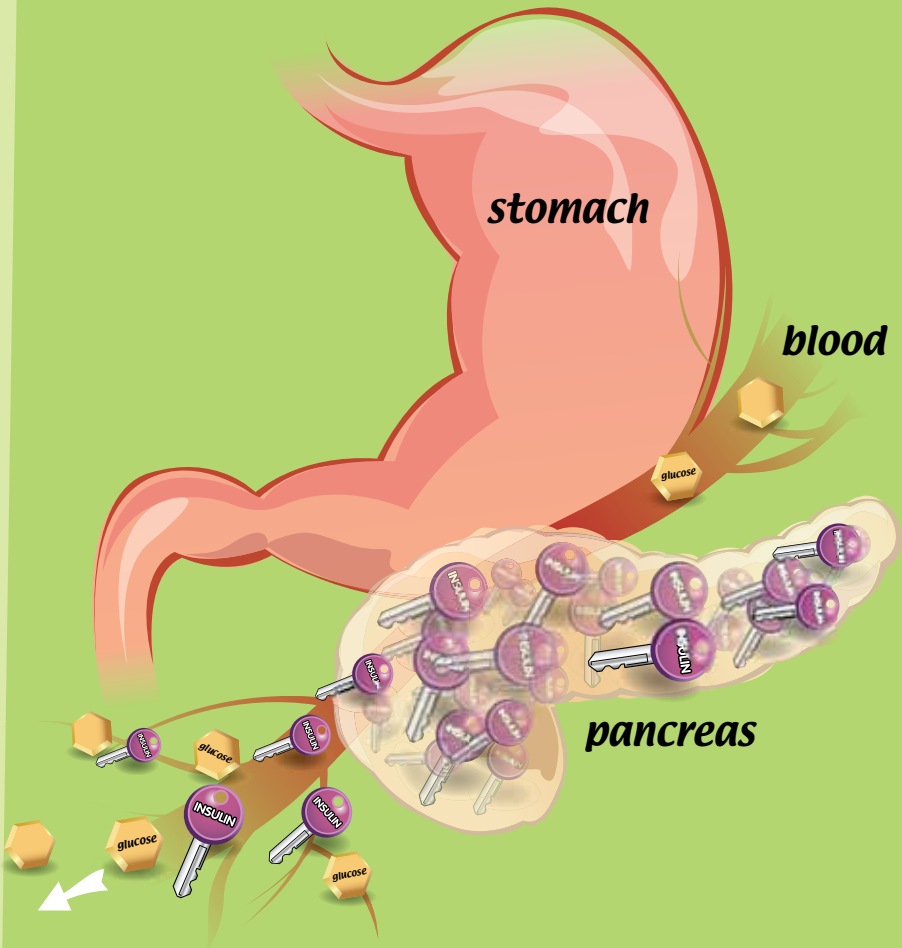
When we eat, the sugar from the food goes into the blood. The blood carries the sugar (glucose) to the different parts of the body (muscles, heart, brain, etc.).



Glucose is the fuel that gives us energy to move, work, hunt, run, etc.

# HOW THE BODY WORKS

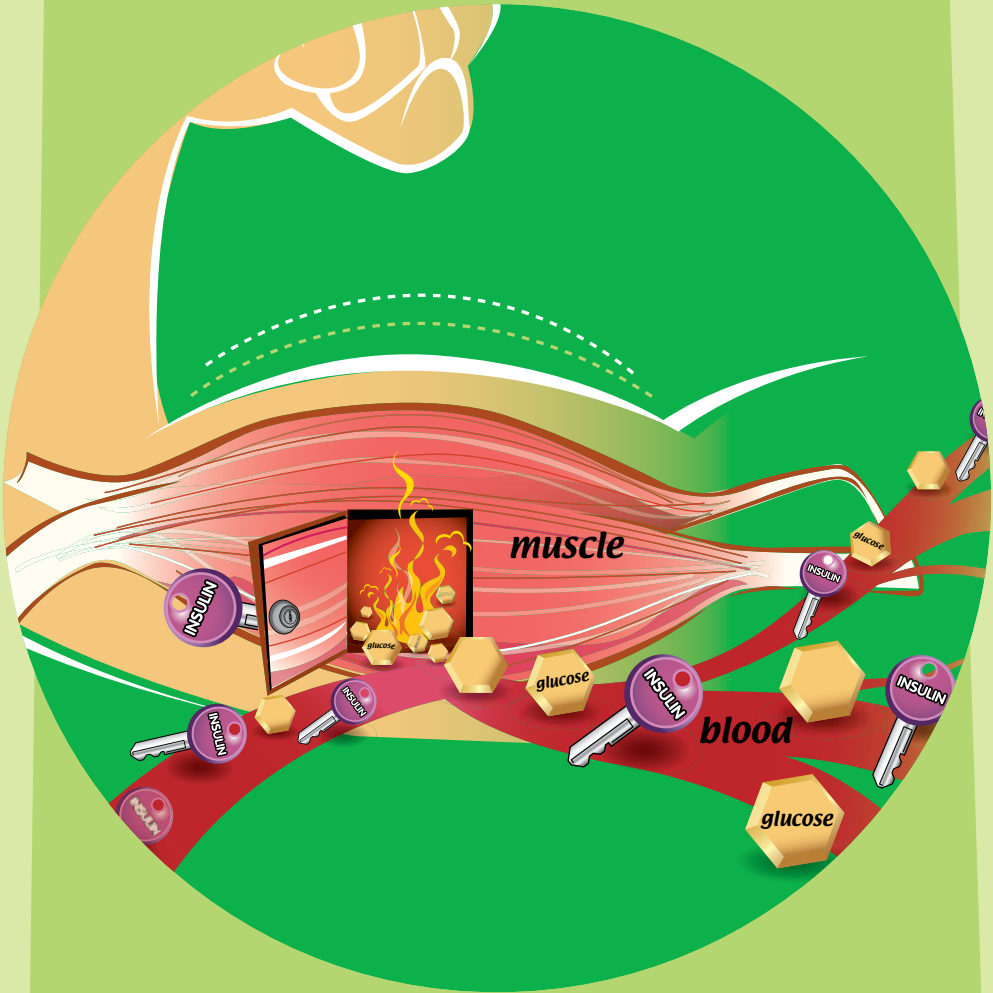
To get glucose from the blood into the different parts of the body, we need a **key**. The key is called **insulin**.



The pancreas makes **insulin**. The amount of insulin needed depends on the food we eat; this is how our pancreas keeps our blood glucose level healthy.

# HOW THE BODY WORKS

**Insulin** is like a key that unlocks the door, and allows glucose to enter the different parts of the body.



Our body uses glucose for **energy**. This is why we all need some glucose in our blood.

# HOW THE BODY WORKS

During sleep, our liver releases glucose into the blood to keep a healthy blood glucose level. This allows us to sleep through the night without eating.



Once a blood glucose level is reached, the insulin will turn off the liver.

# DIABETES

Blood glucose rises because:

**1** The insulin **can't open all the locks** (insulin resistance).

AND/OR

**2** The **liver releases too much glucose** into the blood (leaky liver).

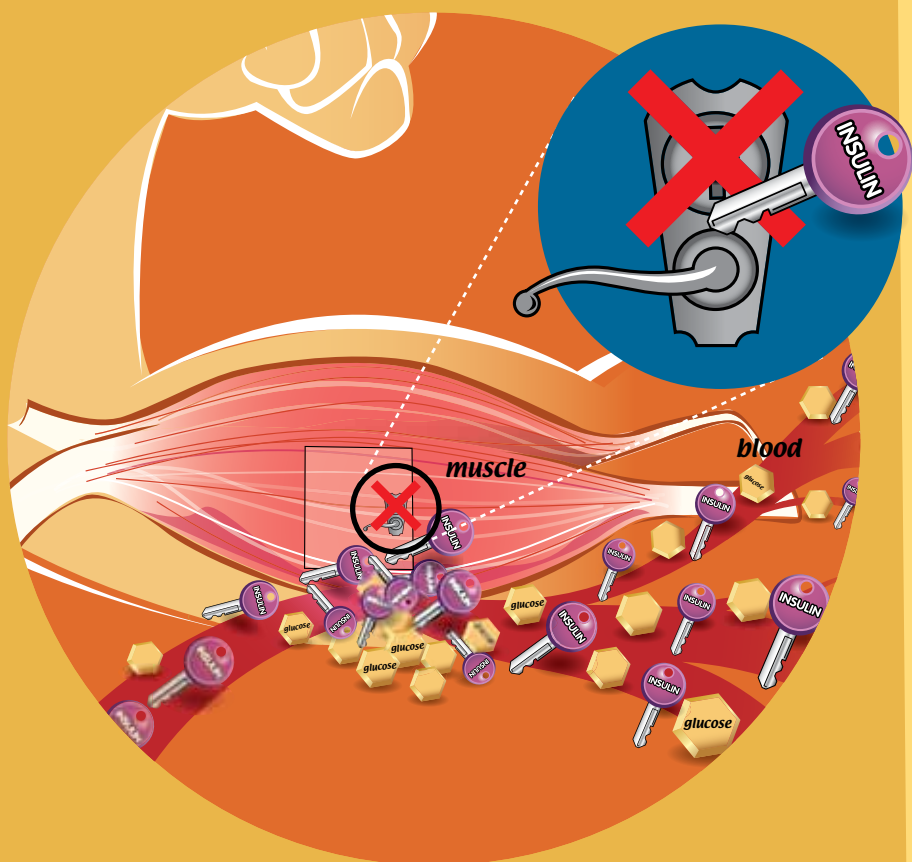
AND/OR

**3** The **pancreas doesn't make enough insulin**.

These causes of diabetes are explained in the next pages.

# 1 INSULIN CAN'T OPEN ALL THE LOCKS

**At the beginning of diabetes**, the pancreas is still able to make insulin. But this insulin can't open all the locks to move glucose out of the blood. This is called **insulin resistance**.





# 2 LEAKY LIVER

When we have diabetes, the insulin can't completely turn off the liver after it has released enough glucose.



The liver is like a faucet, leaking glucose while we sleep. This causes high blood glucose when we wake up.

# WHY INSULIN CAN'T OPEN THE LOCKS OR TURN OFF THE LEAKY LIVER

## 1 Lack of activity

When we lack physical activity or don't use our muscles enough, the insulin has difficulty opening the locks.

## 2 Being overweight

When we gain too much weight, the extra fat blocks the locks.

## 3 Family history of diabetes

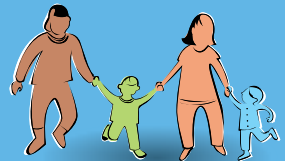
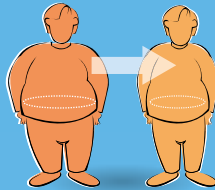
## HOW TO HELP INSULIN OPEN THE LOCKS

### 1 Be more active

(walking, chopping wood,..)

### 2 Lose a few pounds

### 3 Take your diabetes medications



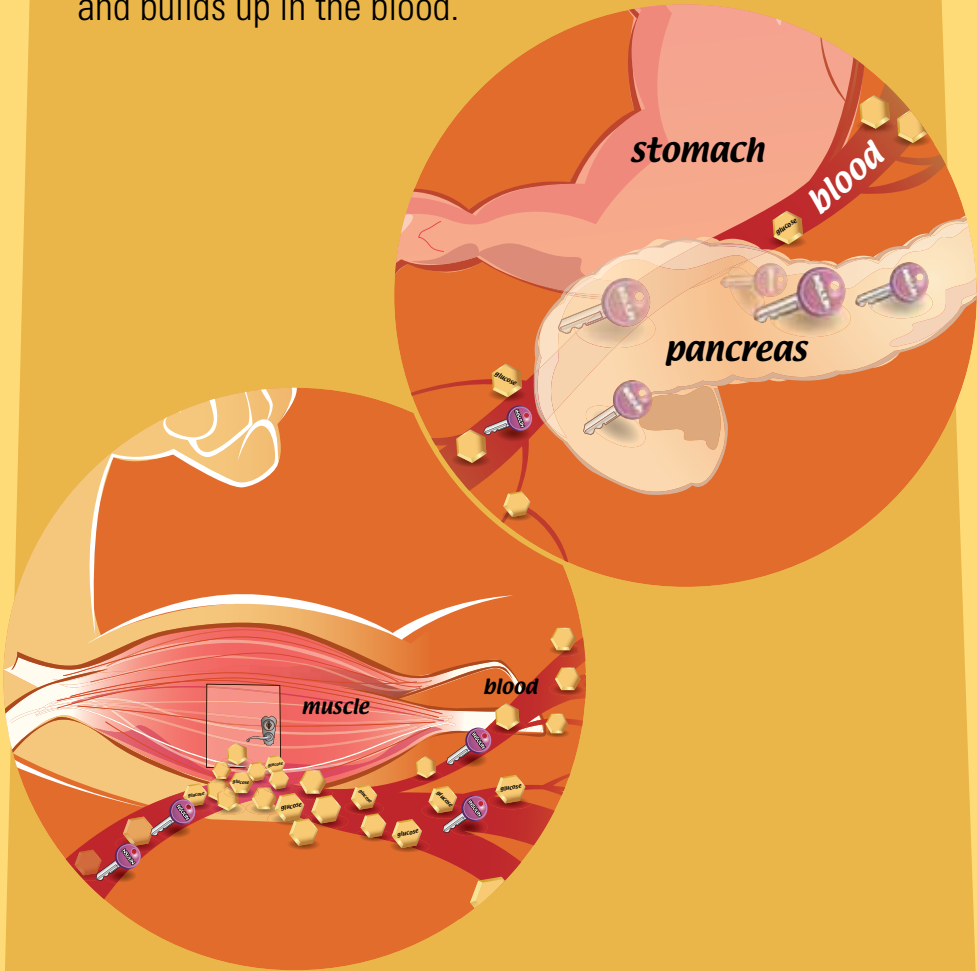
Adopting healthy lifestyles can help your whole family from developing diabetes.

# 3

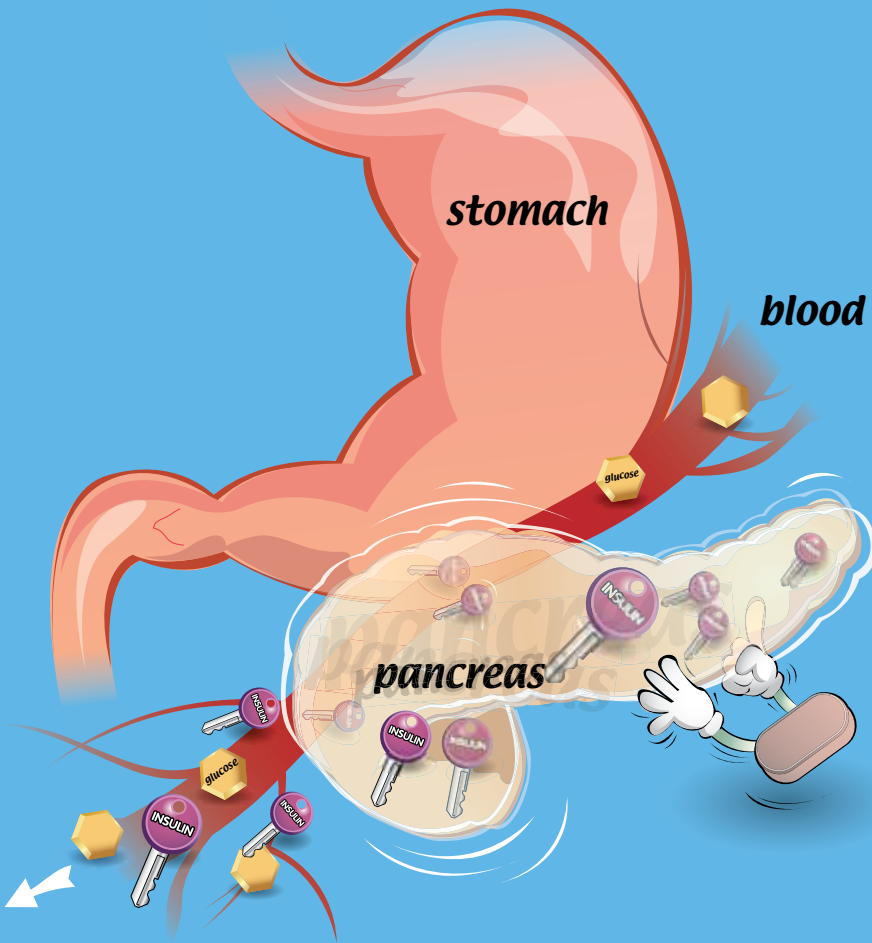
## THE PANCREAS DOESN'T MAKE ENOUGH INSULIN

**Over time**, the pancreas gets tired of making more and more insulin, until it can't make enough insulin.

Blood glucose can't get into the different parts of the body, and builds up in the blood.



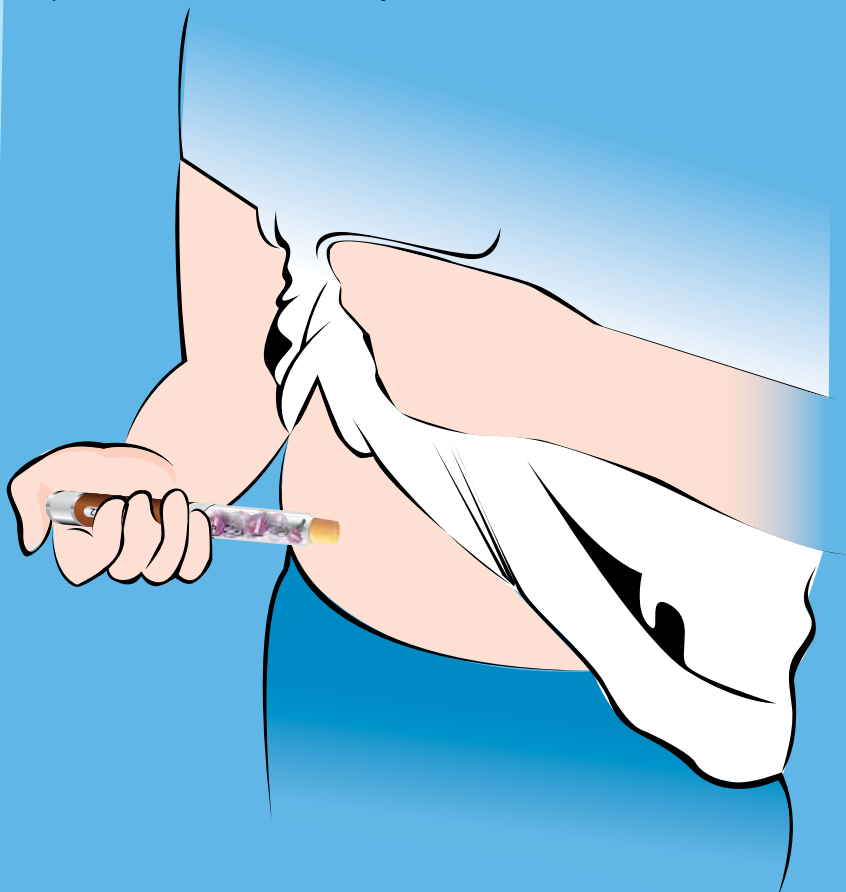
# HOW TO HELP YOUR PANCREAS MAKE INSULIN



Some **diabetes pills** can lower blood glucose by pushing the pancreas to make more insulin.

# INSULIN

When the pancreas is too tired to make enough insulin, you will need insulin injections.



Insulin can't be made into a pill, it can only be injected.

Types of insulin:

- **Bedtime** insulin will help turn off the leaky liver and lower blood glucose **in the morning**
- **Mealtime** insulin will help lower blood glucose **after the meals**

# HOW TO KEEP BLOOD GLUCOSE HEALTHY

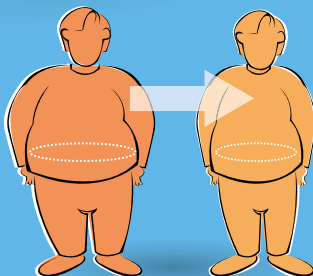
**1** Be more **active**



**2** Choose **healthy food**

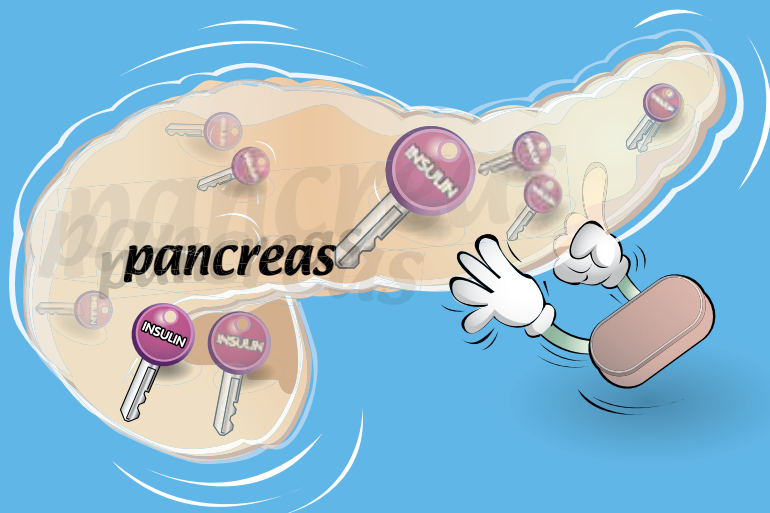


**3** Lose a **few pounds**

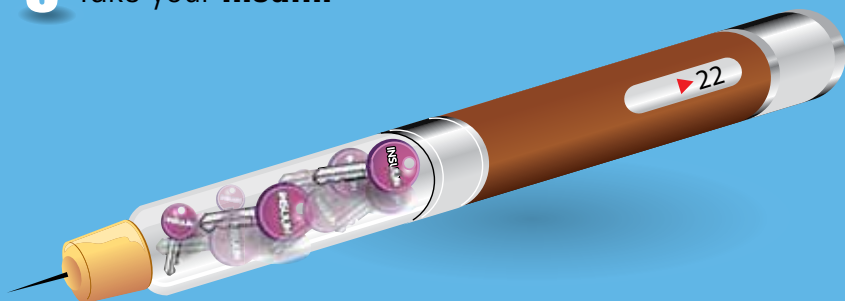


# HOW TO KEEP BLOOD GLUCOSE HEALTHY

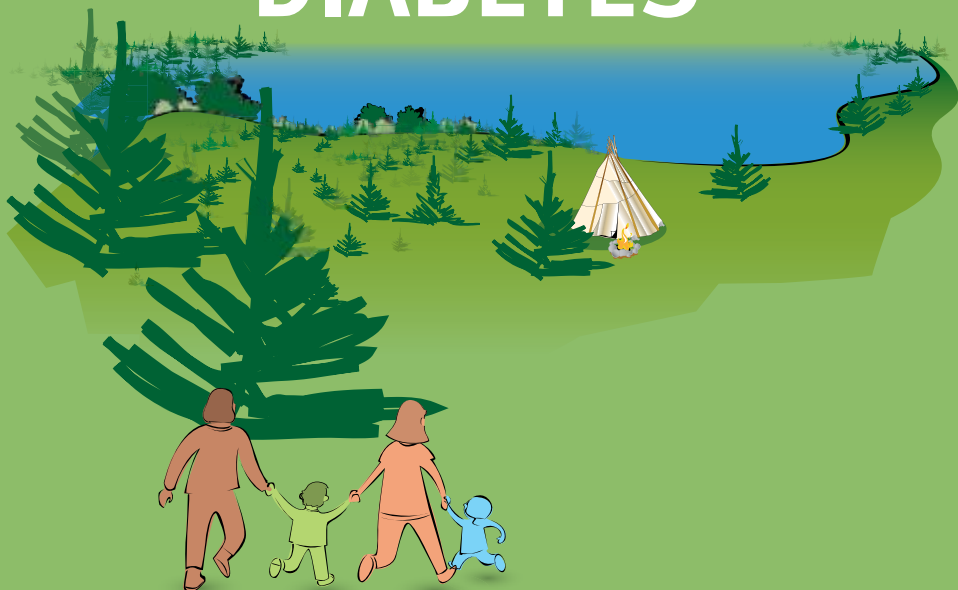
**4** Take your **diabetes pills**



**5** Take your **insulin**



# TO LIVE WELL WITH DIABETES



## CHOOSE A HEALTHY LIFESTYLE!

**Prepared by:**

Public Health Department

Cree Board of Health and Social Services of James Bay

Tel.: 418-923-3355



To print more copies of this document,  
and for different language versions, go to:  
<http://creehealth.org/library/what-is-diabetes>



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Illustrations & design: Le zeste graphique