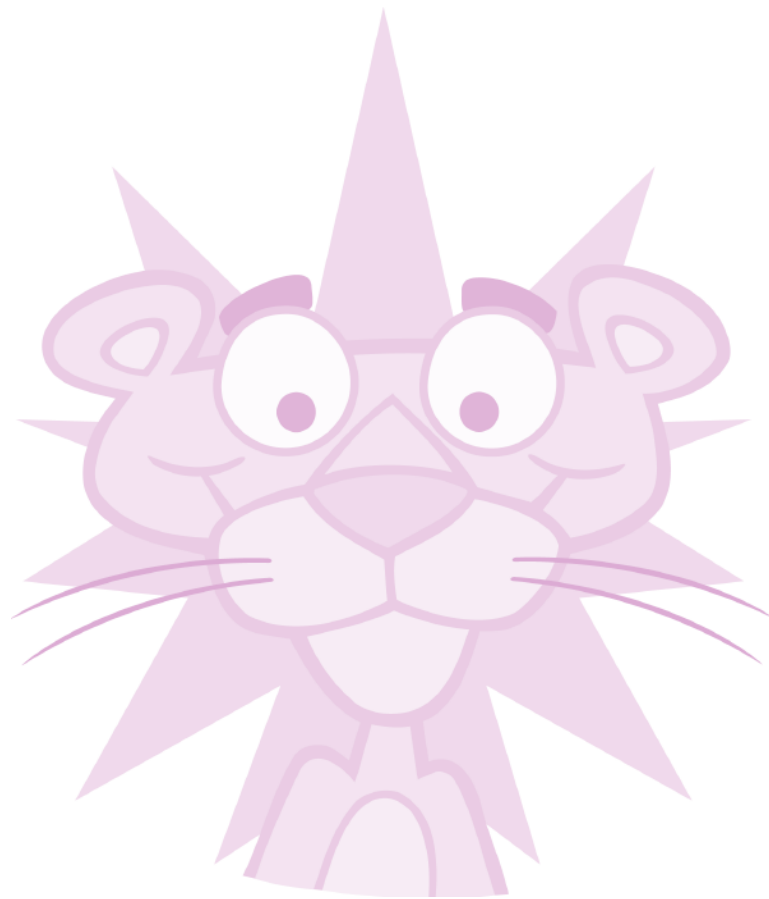


## Chapter 2

# What Is Diabetes?



**Type 1** (Childhood, Juvenile, Insulin-dependent) **diabetes** is due to not enough insulin being made in the pancreas (see picture). The most common signs are:

- 1 frequent passing of urine
- 2 constant thirst
- 3 weight loss

For people with **type 1 diabetes**, insulin must be taken through a needle. Insulin cannot be taken as a pill because the stomach acid would destroy it.

Type 1 diabetes is different from **type 2 diabetes** (adult-onset, or non-insulin dependent diabetes) where insulin is still made but doesn't work very well. People with type 2 diabetes can sometimes use pills (which are not insulin) and diet and exercise to control their diabetes (see Chapter 4). Eating healthy food and exercising are also important for people with type 1 diabetes, but they will always need to take insulin shots.

Insulin allows sugar to pass into our cells

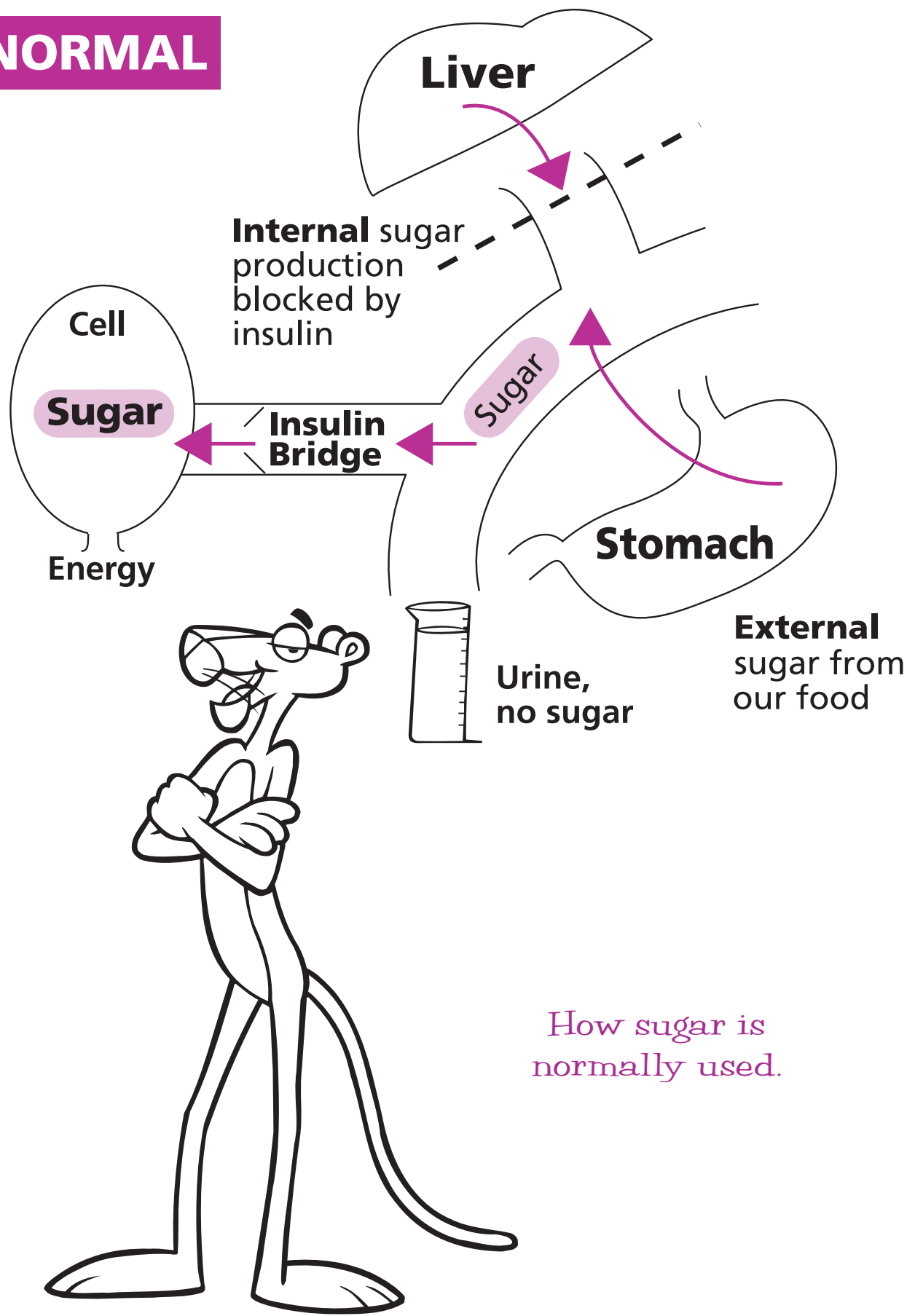
to be used for energy. It also turns off the body's making of sugar. When not enough insulin is present, the sugar cannot pass into the body's cells. The sugar is high in the blood and it passes out in the urine. Frequent passing of urine is the result. (See Figures on the next 2 pages.)

Because sugar cannot be used for energy, the body breaks down fat for energy. Ketones are the result of using fat for energy.

When insulin treatment begins, the urine ketones (see Chapter 5) gradually disappear. After a few days, the blood sugars become lower and the passing of urine and drinking of water will be less often. Weight is gained back and the person starts to feel much better.

Often a "**honeymoon**" time begins a few weeks or months after a person with type 1 diabetes starts insulin shots. The insulin dose (amount of insulin given) may go down and it may seem like the person does not have diabetes, but **THEY DO!** This period may last from two weeks to two years.

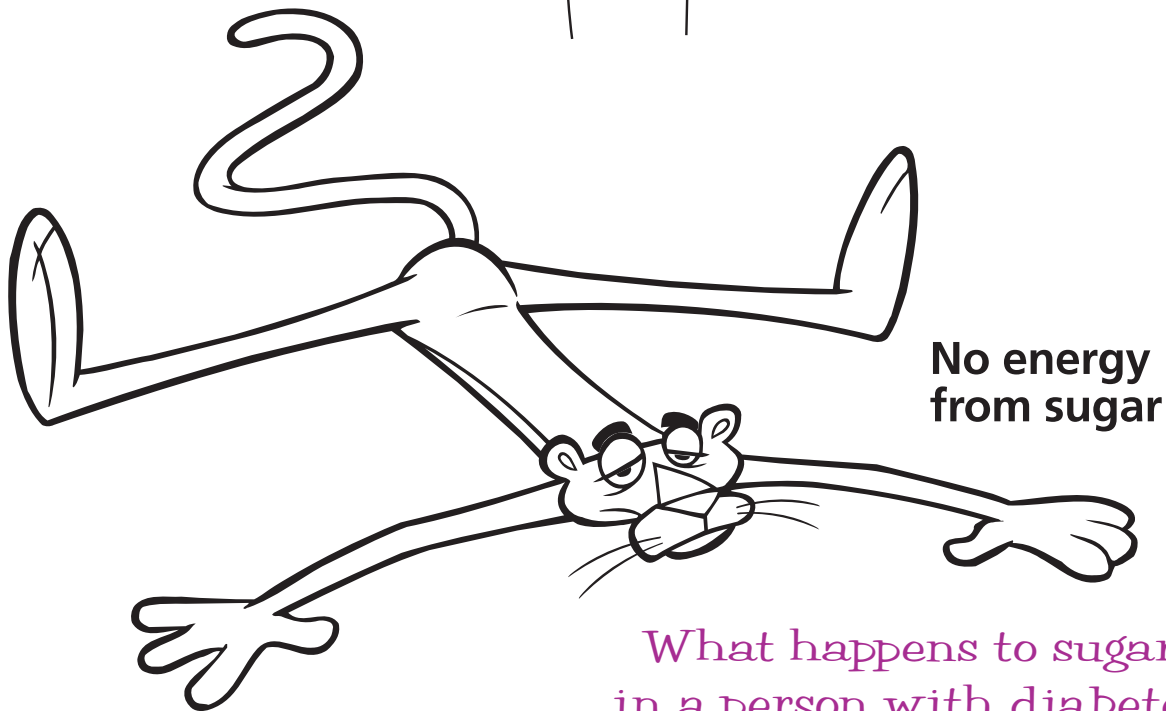
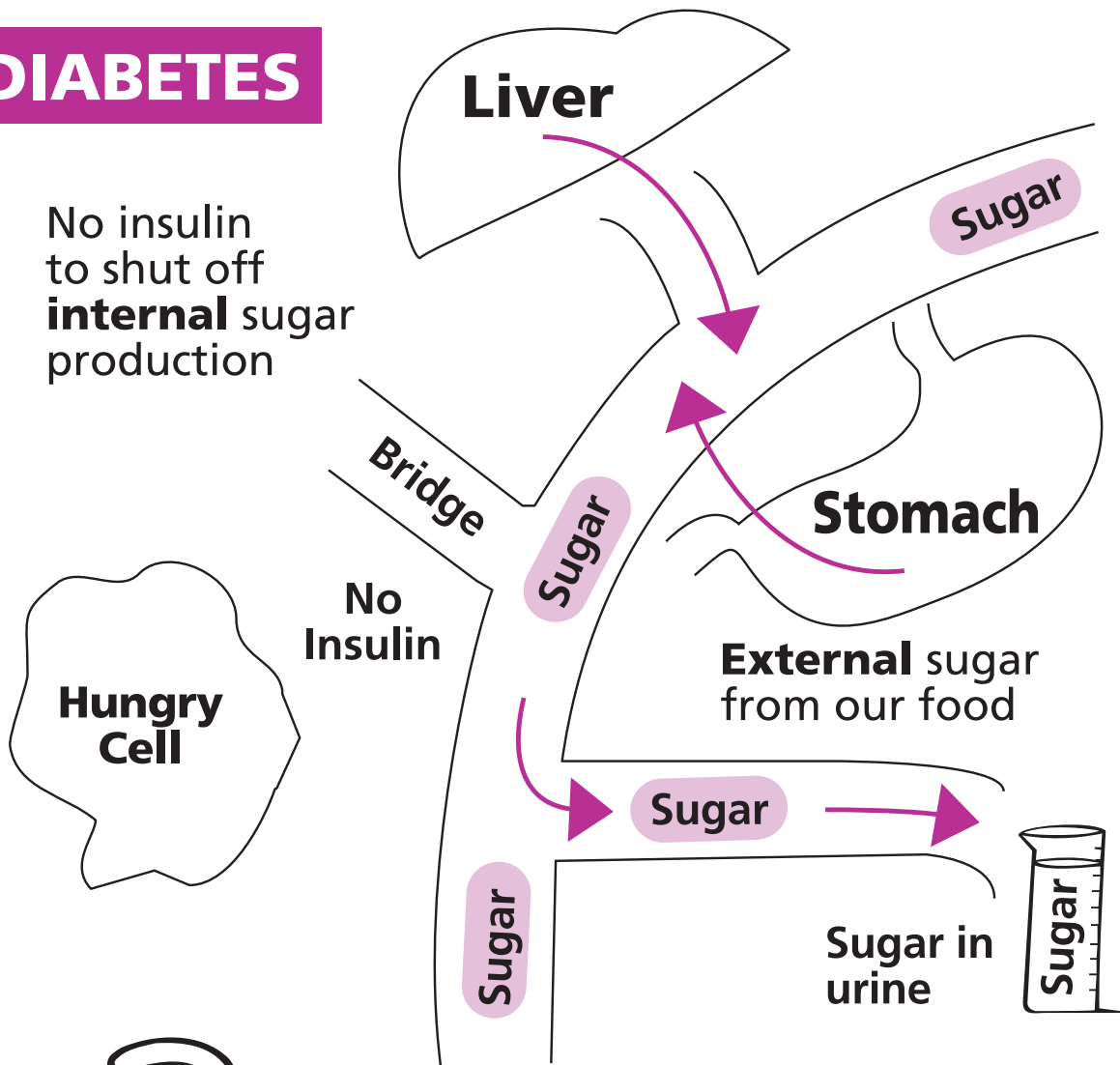
# NORMAL



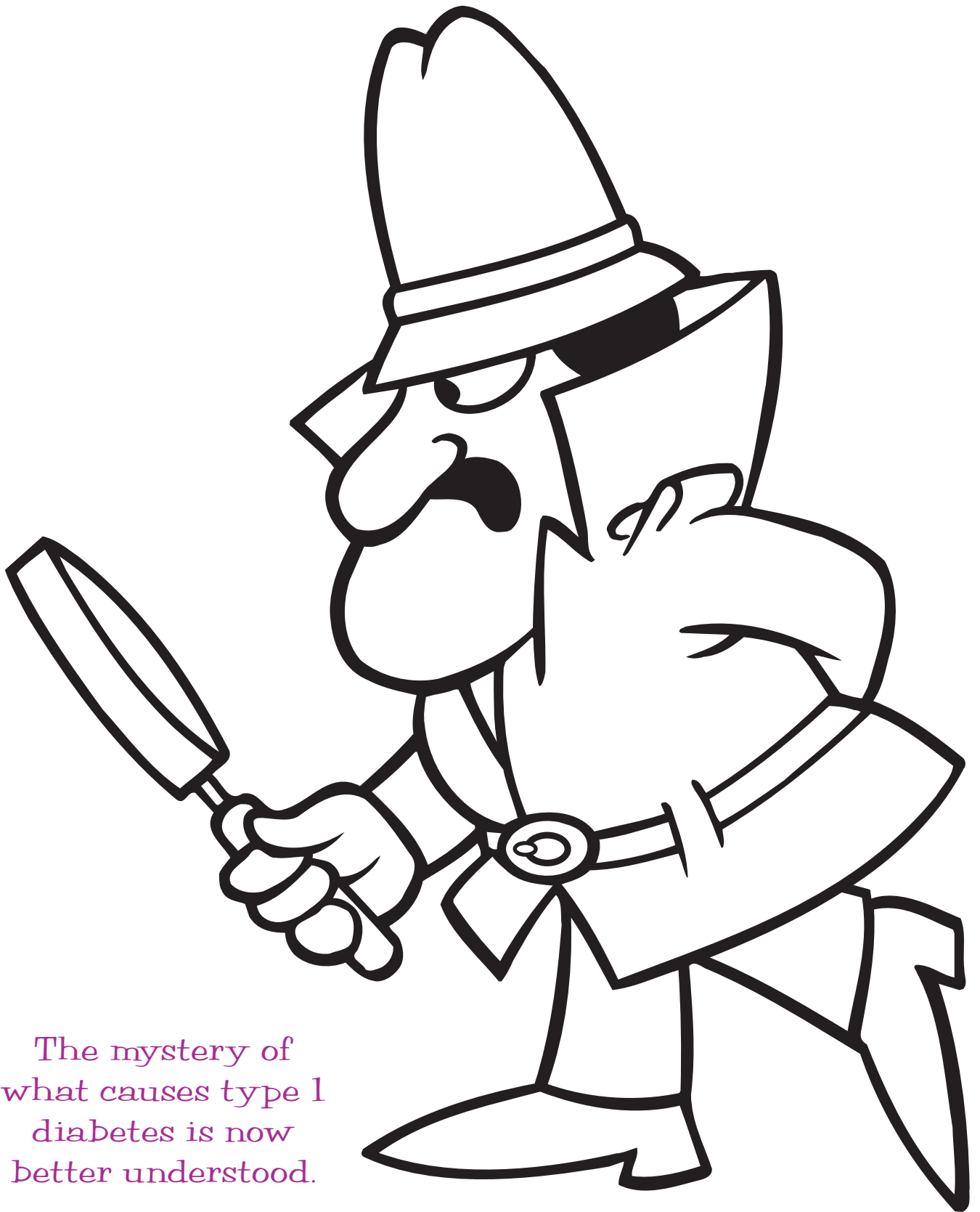
How sugar is normally used.

# DIABETES

No insulin to shut off **internal** sugar production



What happens to sugar in a person with diabetes



The mystery of  
what causes type 1  
diabetes is now  
better understood.