

Steps Forward

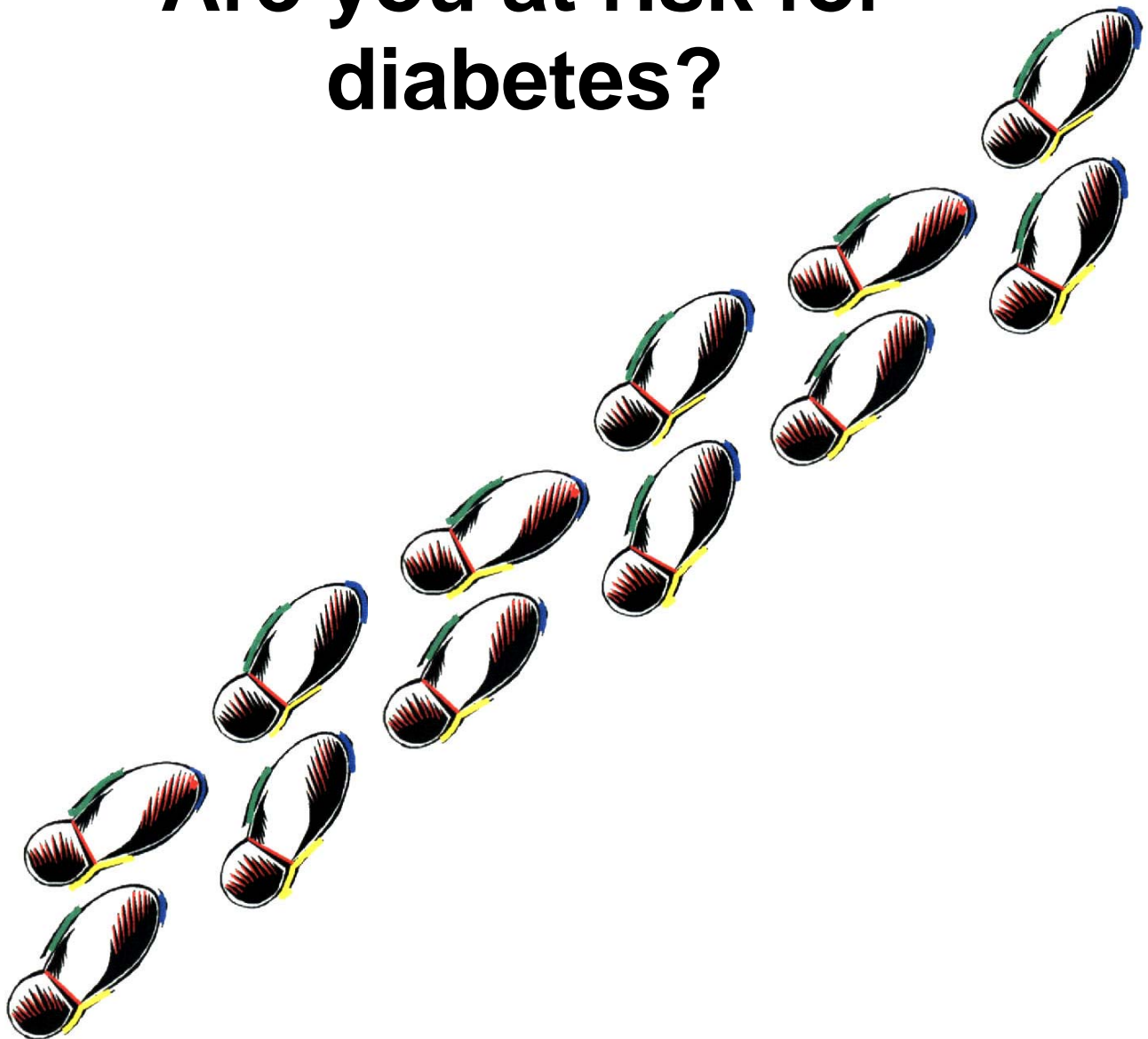
A curriculum dedicated to the prevention of diabetes, heart disease and other chronic diseases and the promotion of physical activity

Picture Cards for Sessions 3 and 12

Session 3

Picture Cards

**Are you at risk for
diabetes?**

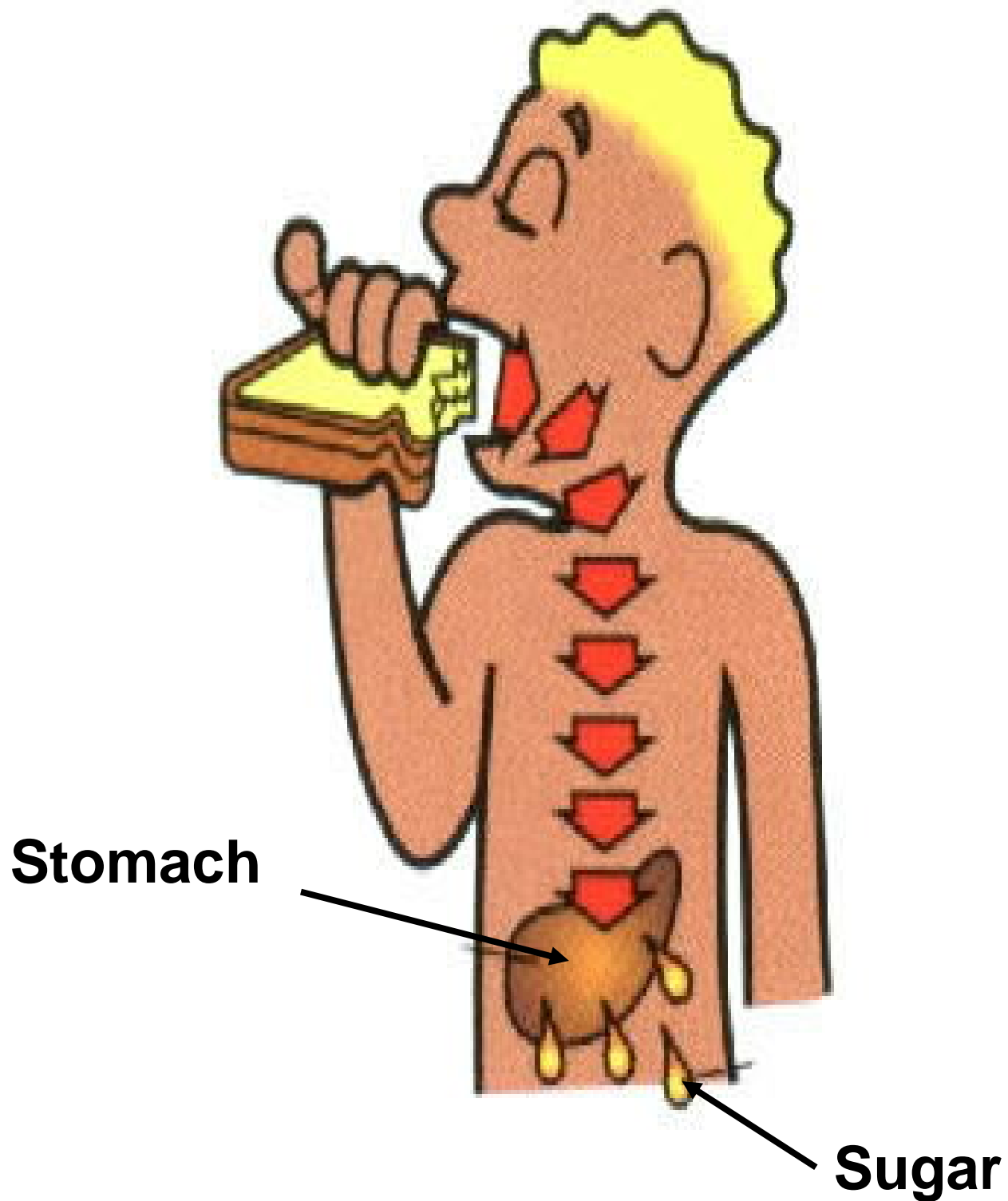


Picture Card 3-1

The Body and Food

- The body has a way of digesting and then using food for energy.
- First, the body converts the food into glucose (another word for sugar).
- The yellow droplets represent the glucose in the picture.
- Glucose is the energy source that the body uses.

The Body and Food

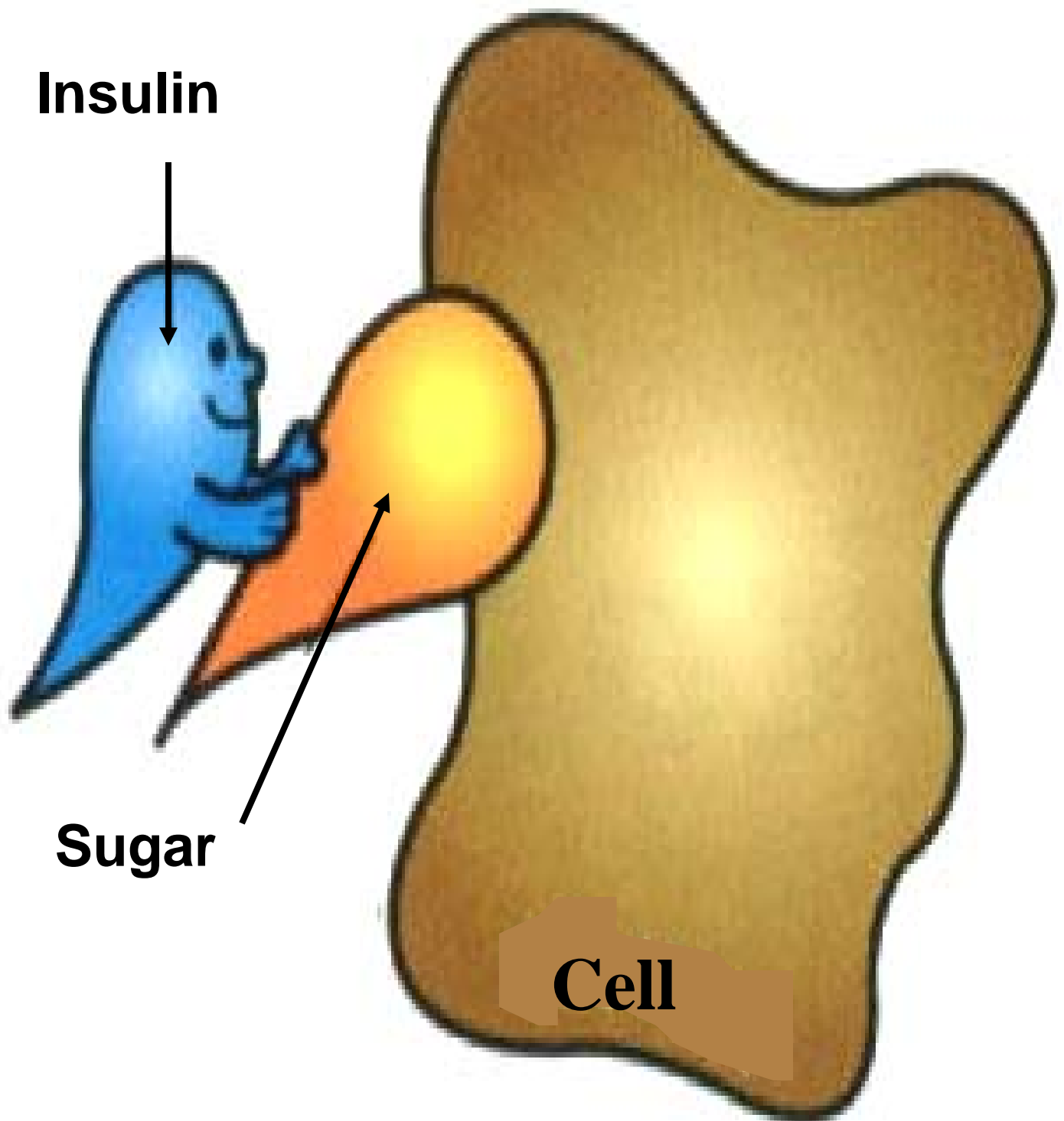


Picture card 3-2

How Does Sugar Enter Cells?

- The blood takes the sugar to the cells, which need the energy.
- However, glucose cannot just enter the cells by itself; it needs help.
- Glucose needs insulin to help it enter the cells.
- Insulin is a natural chemical (a hormone) the body makes in the pancreas.
- The blue drops represent insulin in the picture.

How Does Sugar Enter Cells?

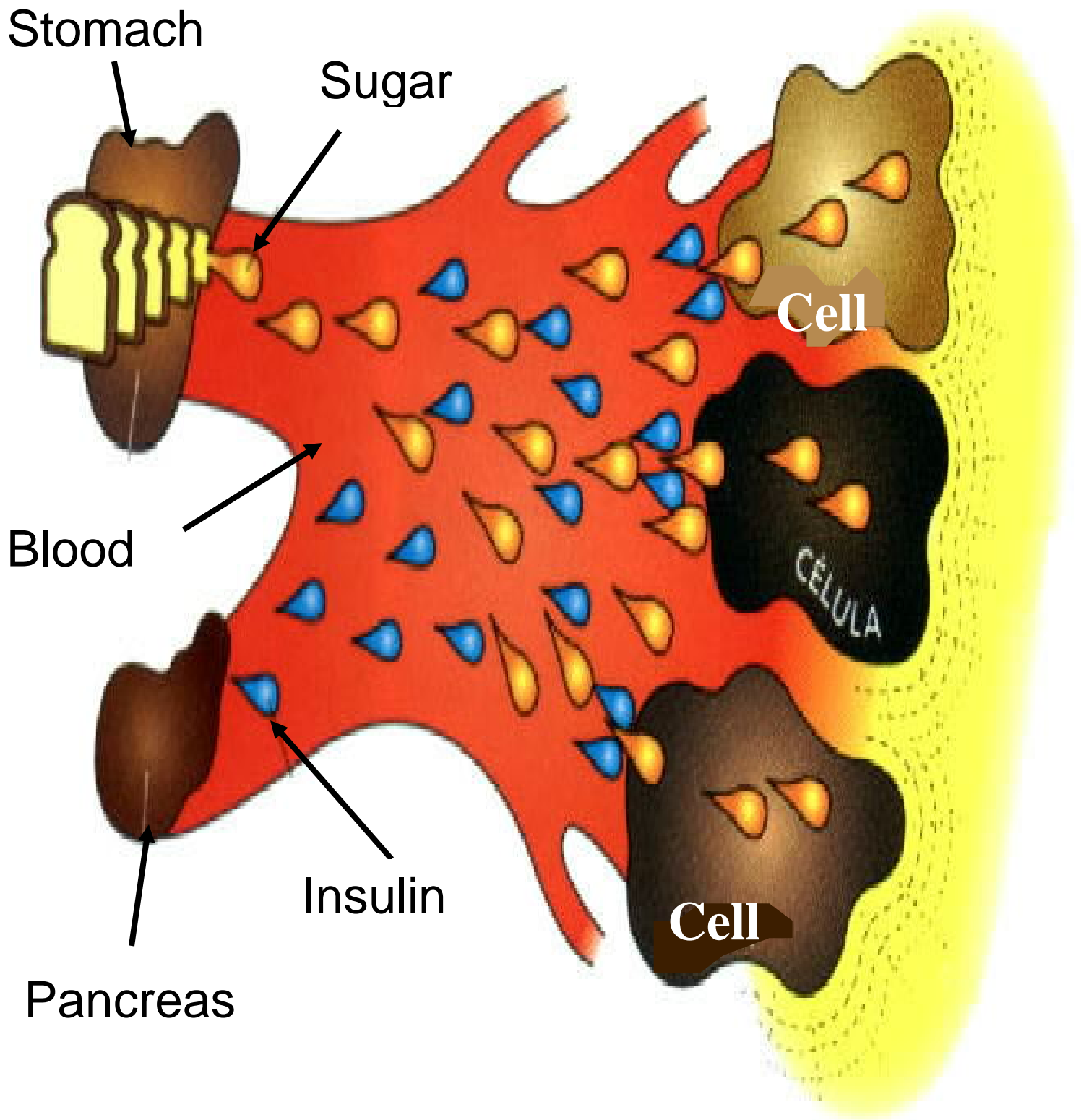


Picture card 3-3

Normal - No Diabetes

- The pancreas releases insulin into the blood stream.
- The insulin then helps the glucose enter the cells.
- This picture is of a normal person, who has enough insulin and insulin that is being utilized well. However, if the body doesn't produce enough insulin **or** if the cells do not recognize the insulin, then the glucose cannot enter the cells and remains in the blood.
- People who have high levels of sugar in their blood have diabetes.

Normal – No Diabetes

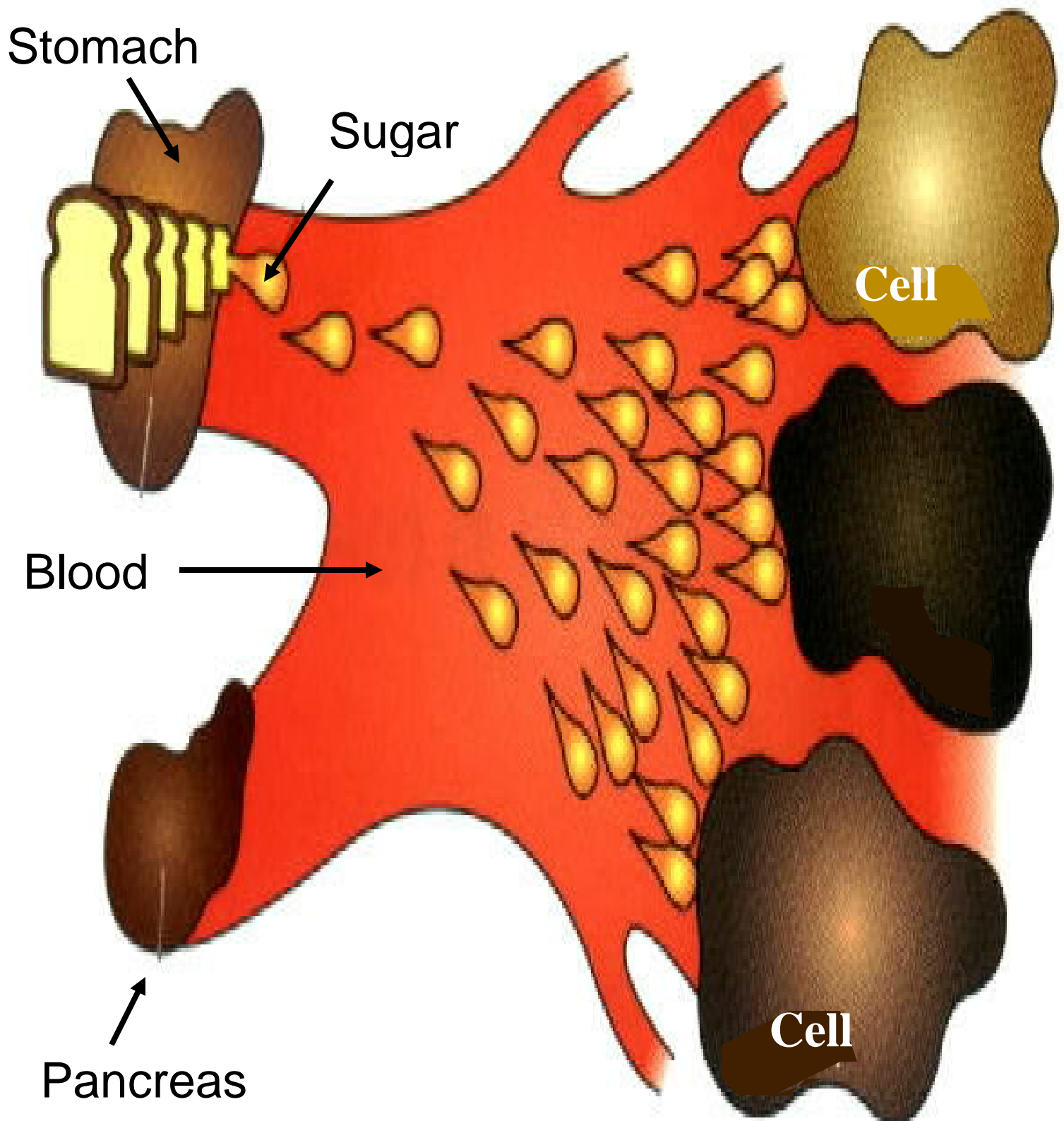


Picture card 3-4

Type 1 Diabetes

- This person has diabetes type 1.
- The pancreas does not produce insulin.
- Note in the picture that there is no glucose/sugar inside the cells.
- This type of diabetes can only be controlled by insulin injections.

Type 1 Diabetes

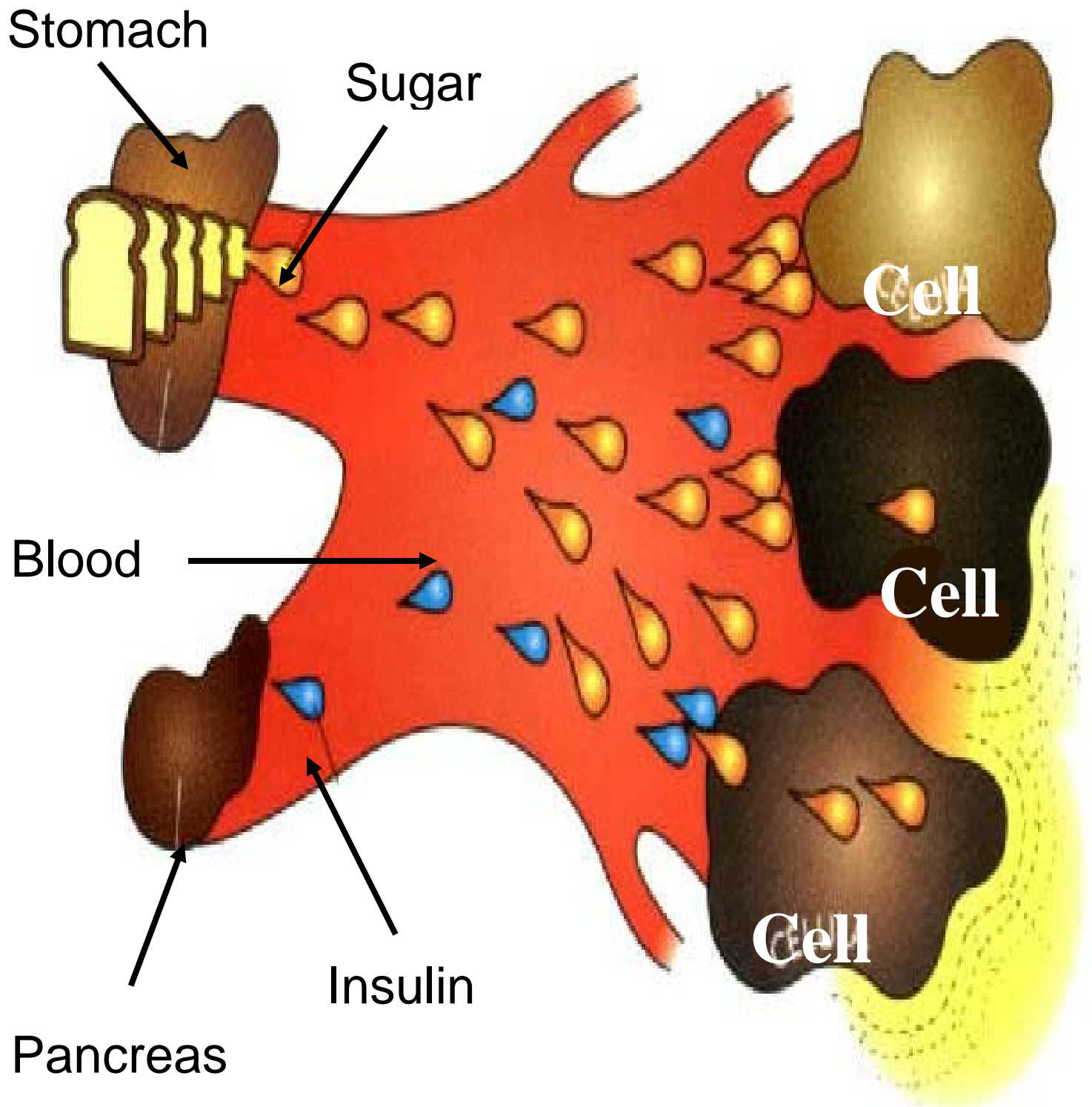


Picture card 3-5

Type 2 Diabetes

- This person has diabetes type 2.
- In this picture, the body does not produce enough insulin. Other people with type 2 diabetes have enough insulin, but their cells do not let the insulin help the glucose into the cells.
- Note in the picture that, in this case, there is only a little bit of insulin and there is much less glucose inside the cells as compared to the normal person.
- Control of type 2 diabetes can be achieved with changes in the diet (diet meaning the foods we normally eat) and physical activity. We will talk more about this in Session 8. Control also may require oral pills or insulin injections to maintain blood sugar levels.

Type 2 Diabetes

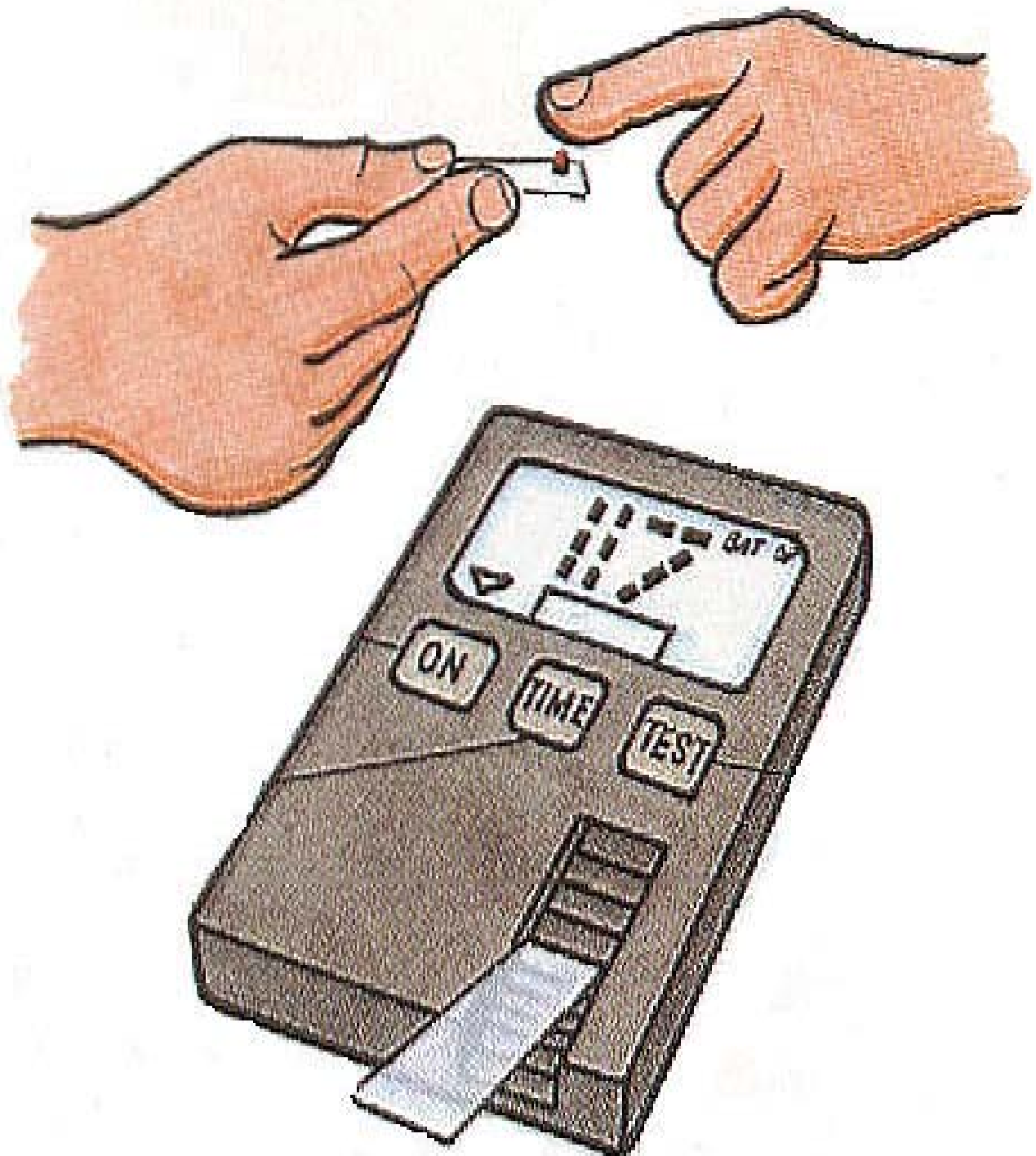


Picture card 3-6

The Glucometer

- This can be done using a glucometer and a tiny bit of blood.
- We will have a glucometer at Session 8 if anyone would like to try.

A Glucometer

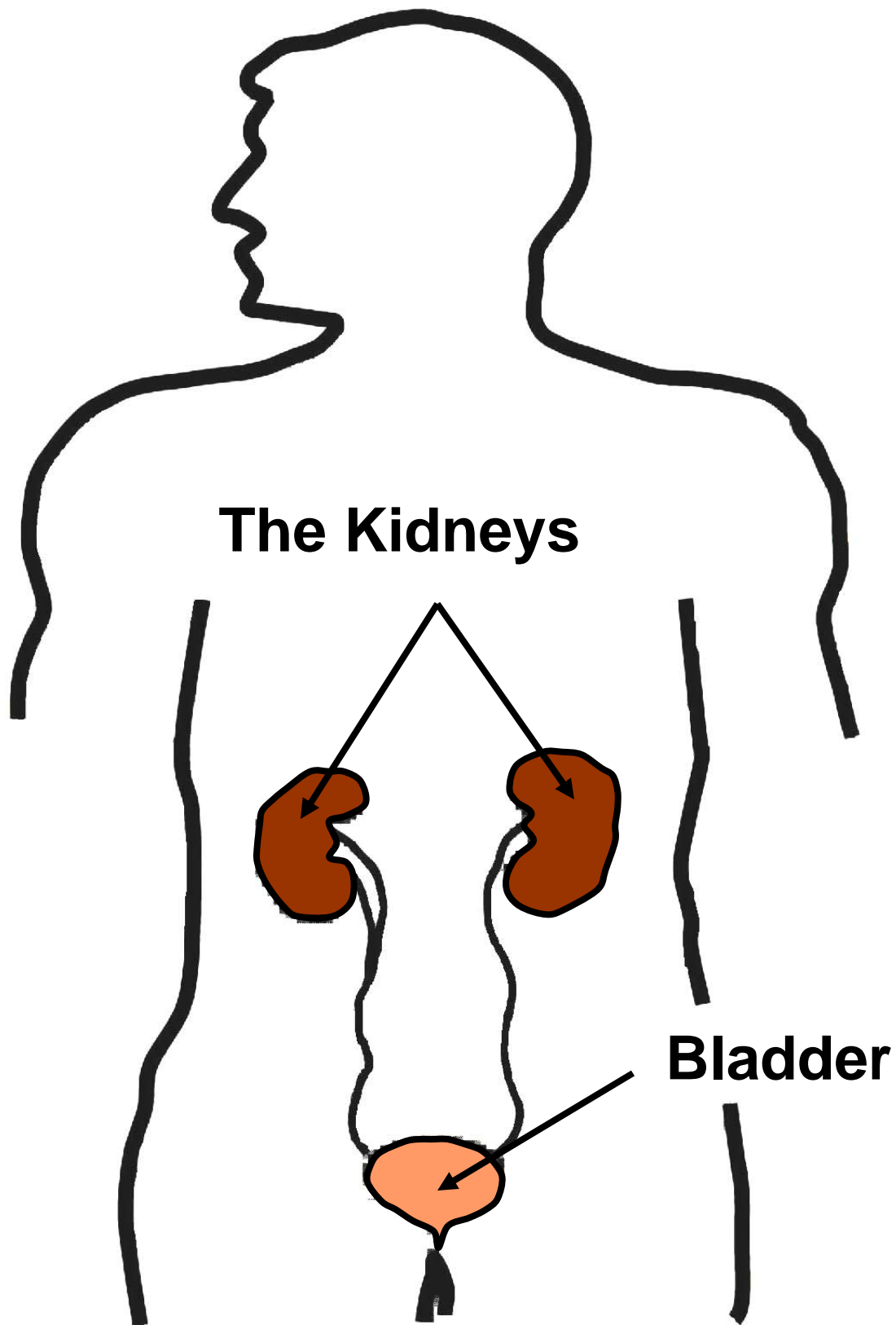


Picture card 3-7

The Kidneys and Bladder

- The urine leaves the kidneys and enters the bladder.
- The bladder fills with urine, and when it is full, we feel the need to urinate.

The Kidneys and Bladder

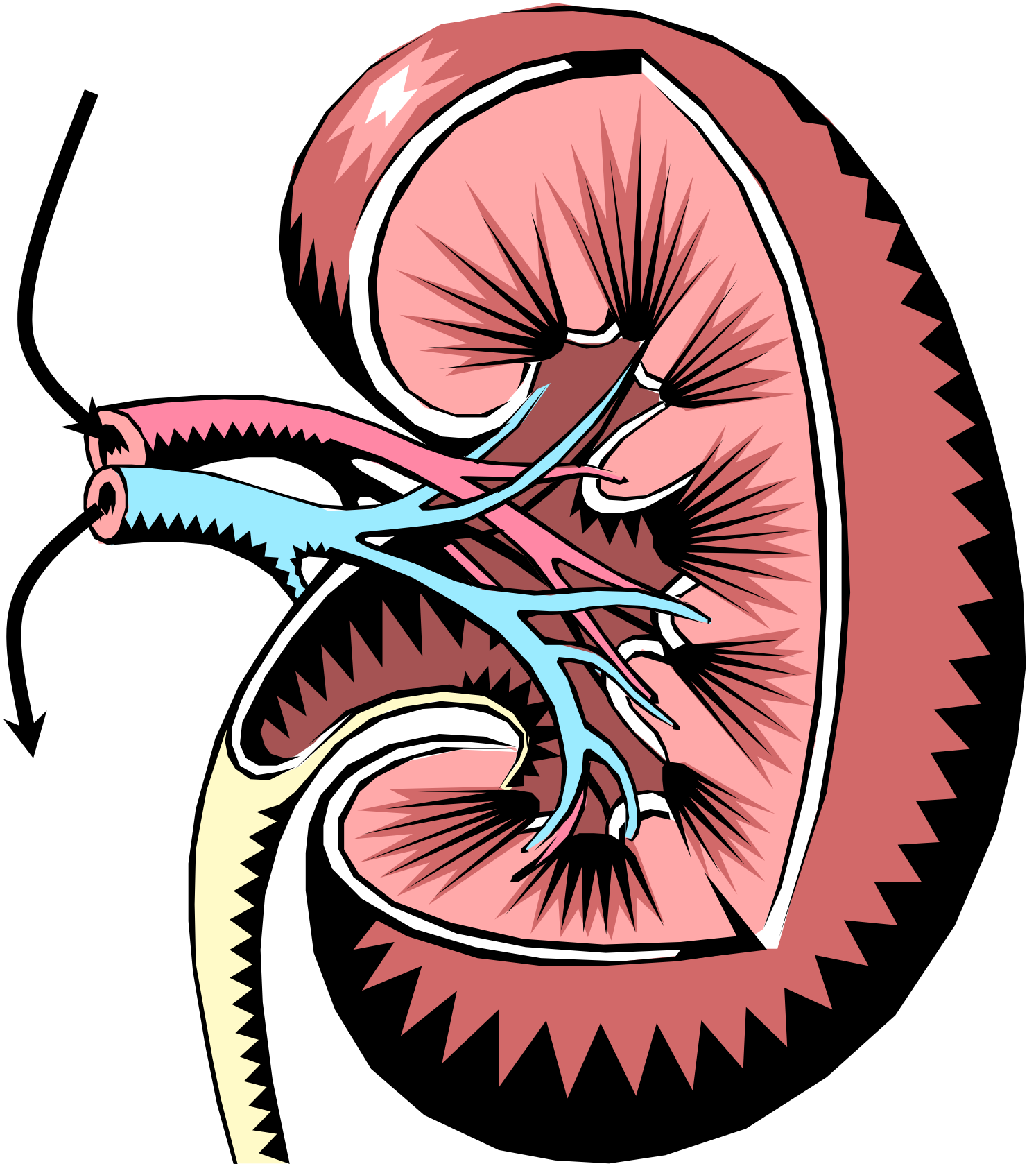


Picture card 3-8

The Kidneys

- The kidneys are organs that are the size of one's fist, just like the heart, and are shaped like a bean.
- Blood enters the kidneys through an artery (in red in the picture) which then divides into smaller and smaller blood vessels in the kidney. These blood vessels become so small that they can be smaller than the size of a pin.
- A complex interchange occurs between the kidneys and blood, and the waste and some water in the blood are removed and enter the bladder.
- The clean blood then leaves the kidney through a vein (in blue).

The Kidneys



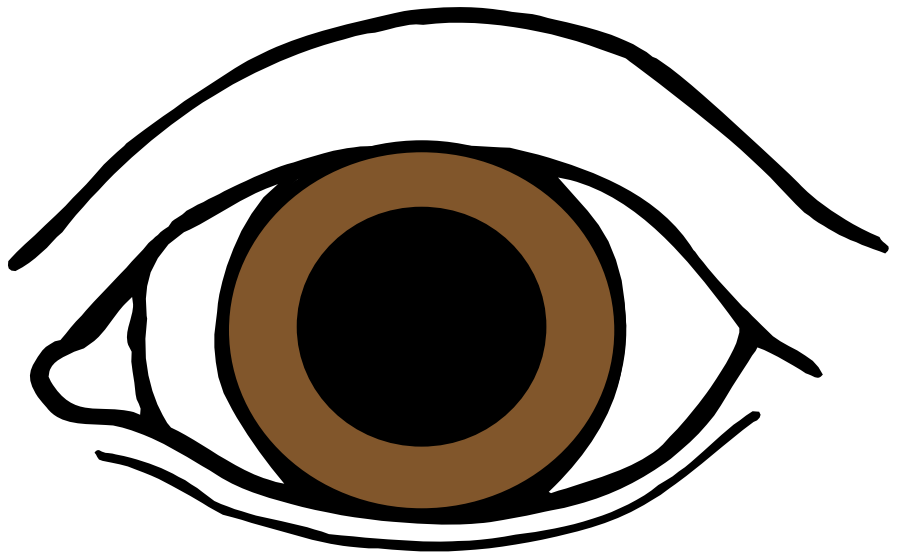
Picture adapted from: Microsoft Clip Art, "Design Gallery Live" (<http://dgl.microsoft.com/?CAG=1>)

Picture card 3-9

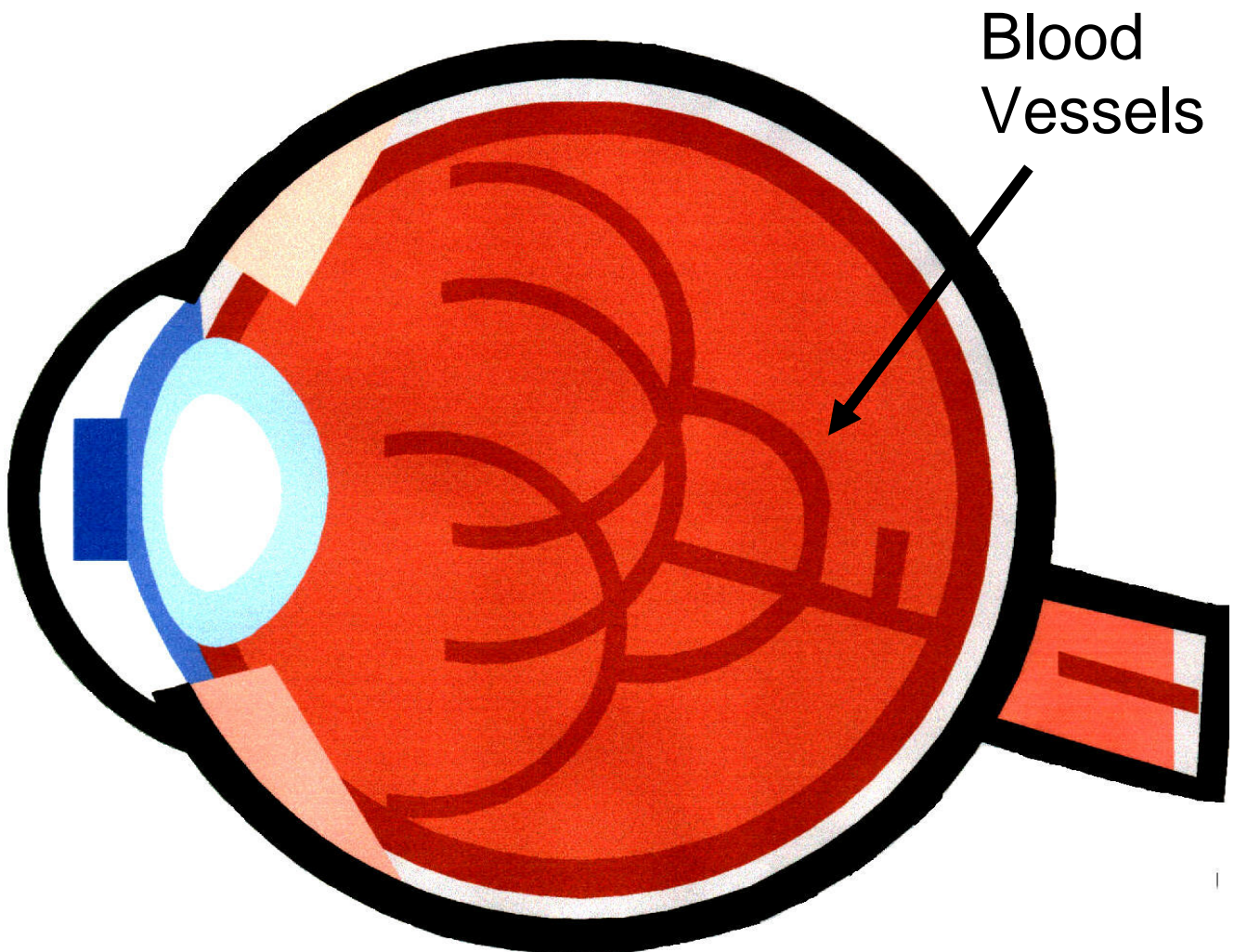
The Eyes

- Diabetes can affect vision.
- When blood sugar levels vary, the eye liquids may increase and cause high pressure in the eye. If there is too much liquid in the eye, the eye will swell, resulting in blurry vision.

The Eyes



Side view of the eye

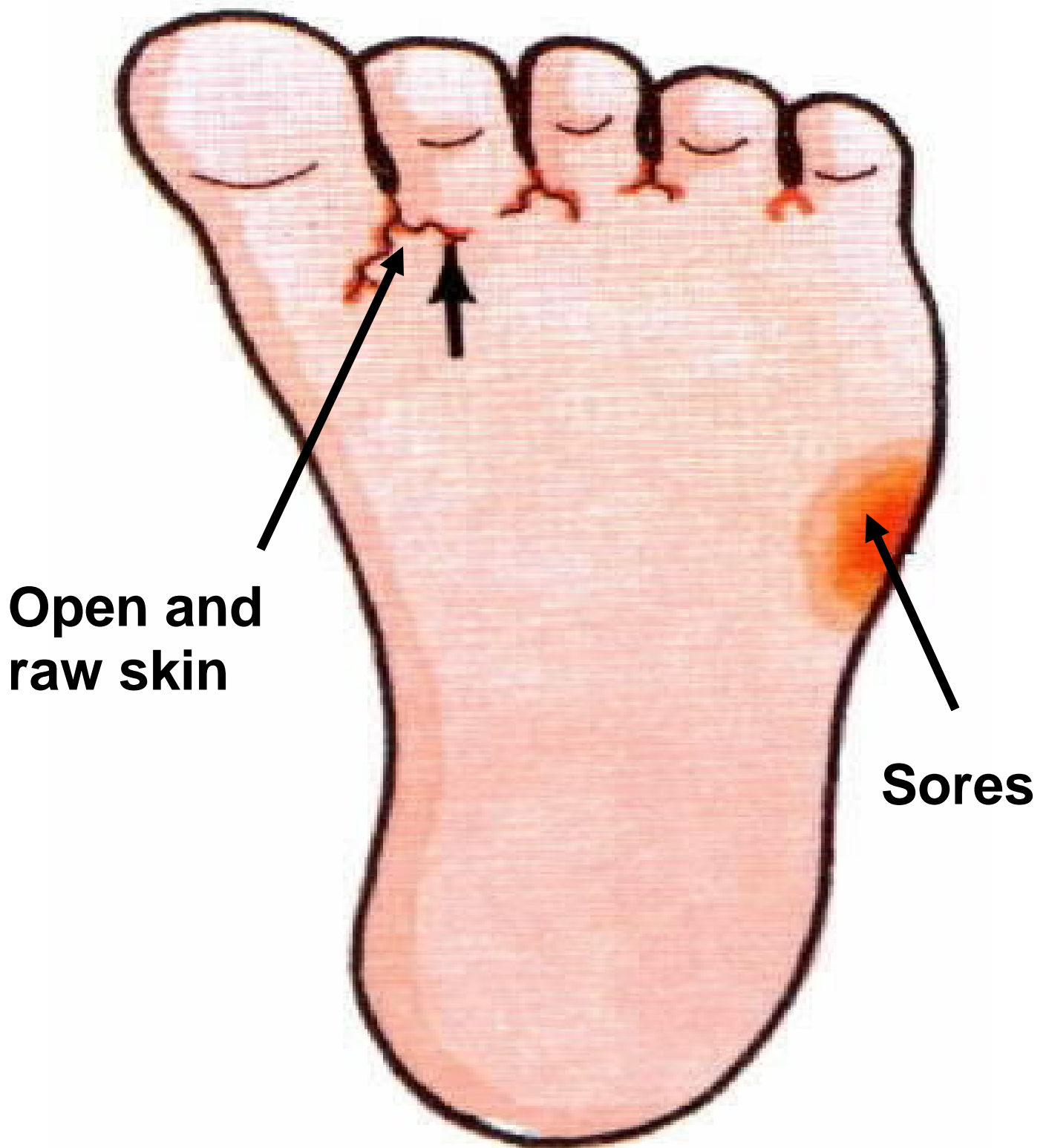


Picture card 3-10

The Feet

- Diabetes can hurt your feet.
- Diabetes causes you to slowly lose sensitivity in your toes, feet, and legs.
- Because you cannot feel your feet or legs very well, you do not know when your feet are hurt or infected.
- A bad infection may lead to the amputation of a foot or leg.

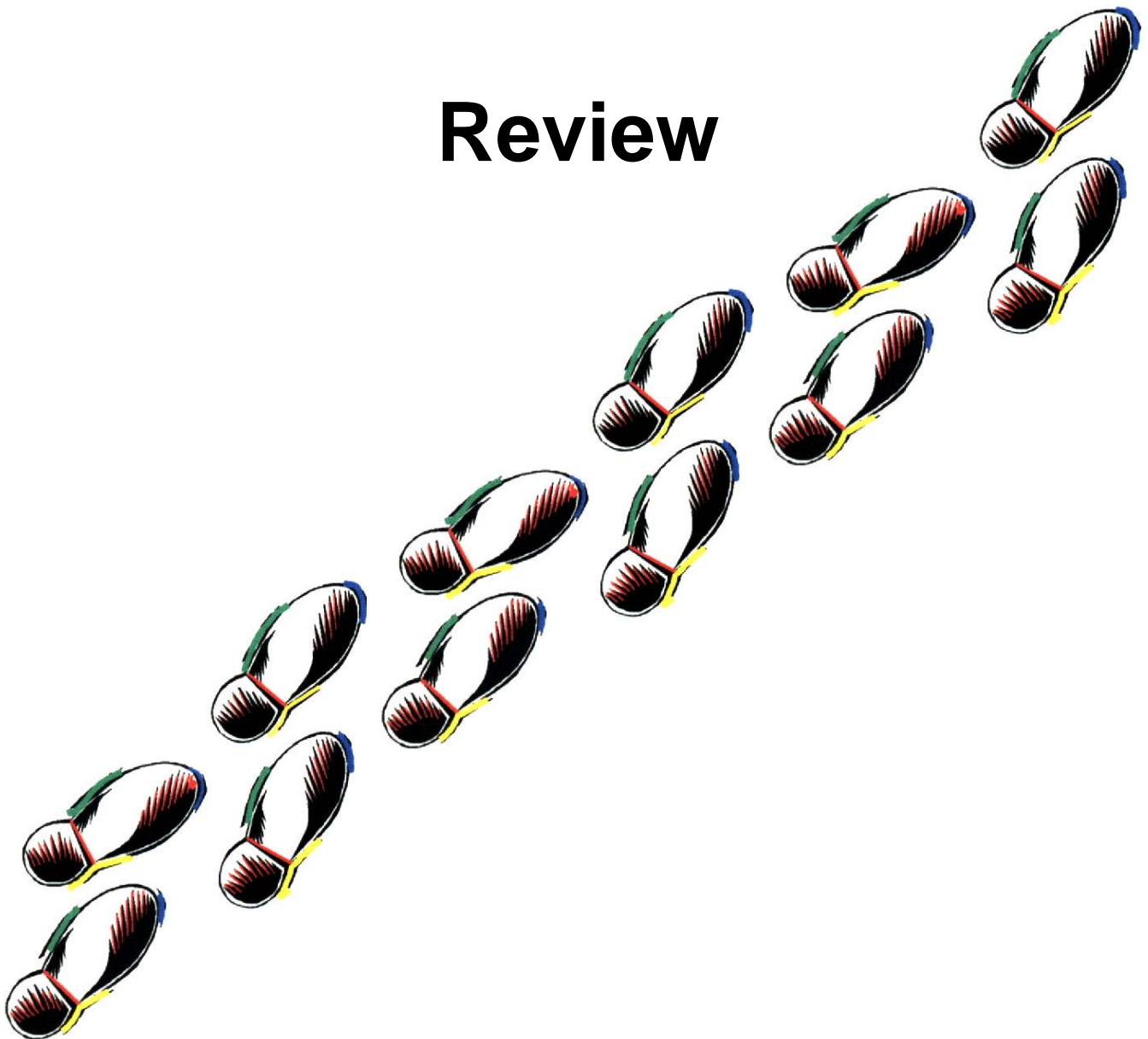
The Feet



Session 12

Picture Cards

Review

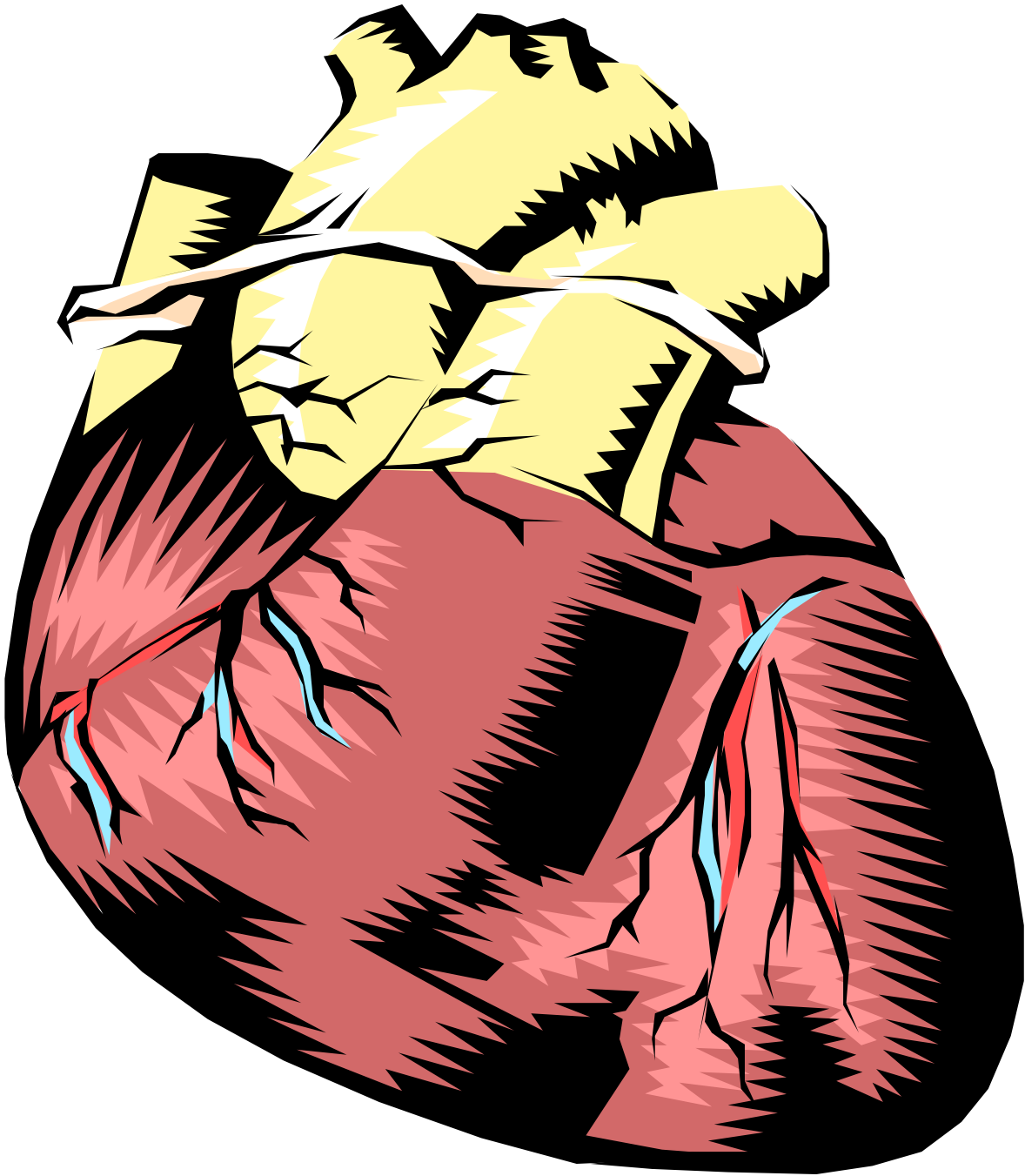


Picture Card 12-1

Heart Disease

- We talked about heart disease in the first session.
- We know how important the heart is. It can pump approximately 5 liters of blood every minute.
- It beats about 100,000 times a day.
- Heart disease causes the heart to stop working properly or can make it stop completely.

Heart Disease

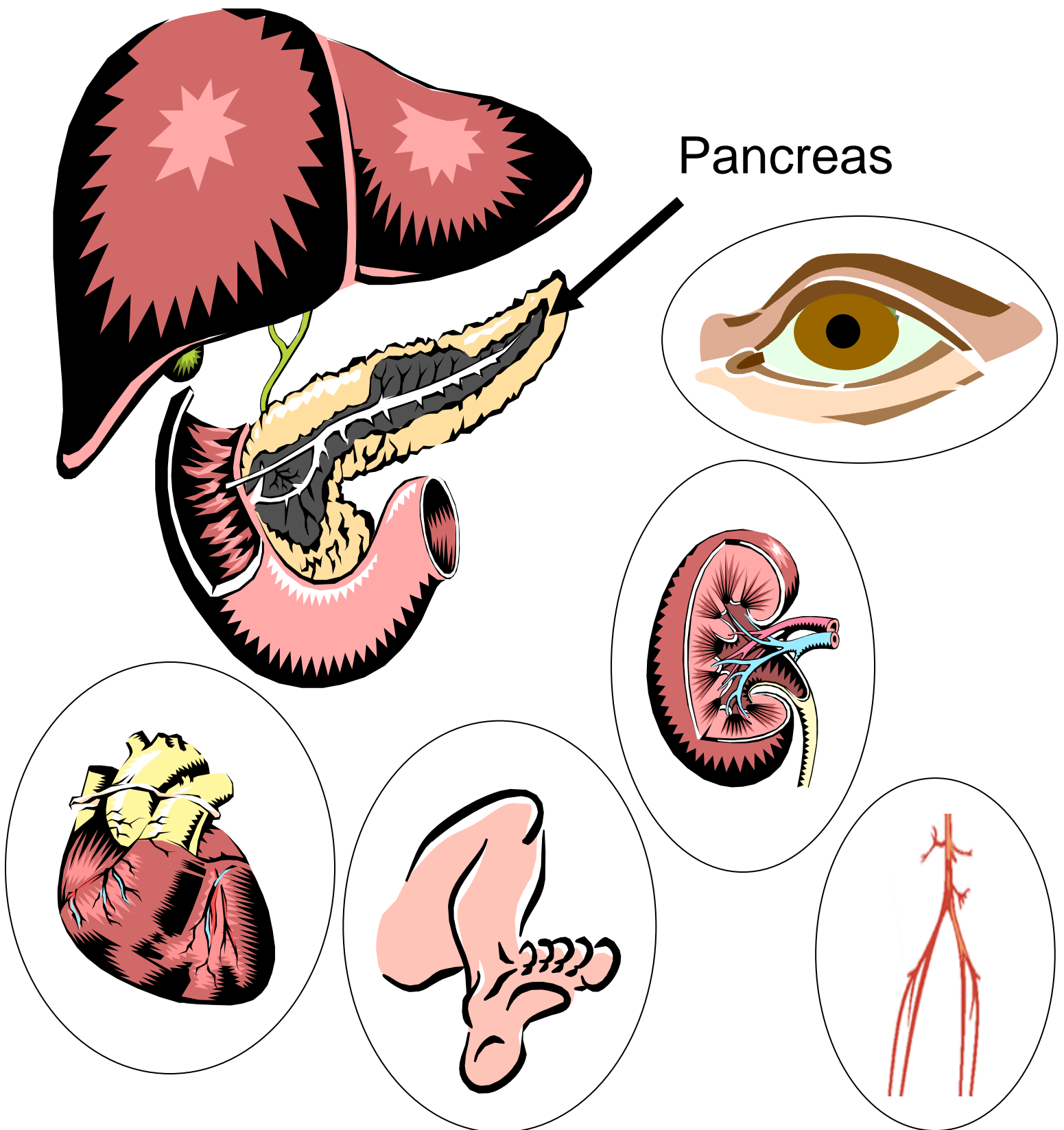


Picture card 12-2

Diabetes

- Diabetes is having excessive sugar in the blood.
- Having continually high blood sugar can cause kidney damage; vision impairment or blindness; foot, leg, and hand sores that do not heal; and it can also affect the heart.

Diabetes

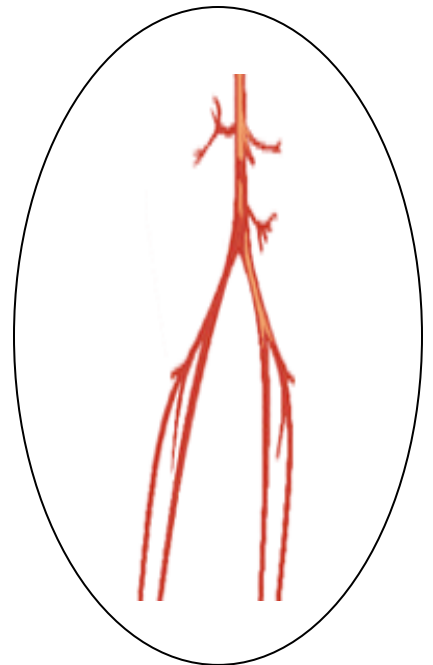
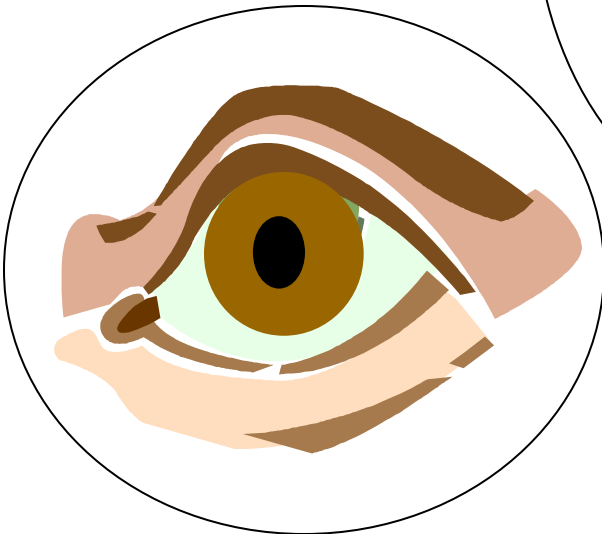
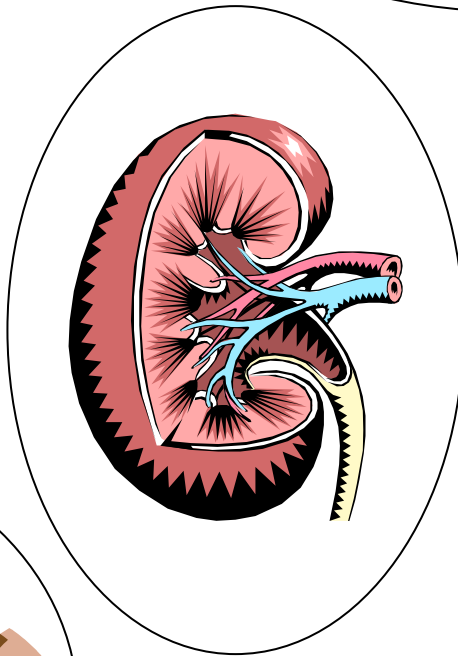
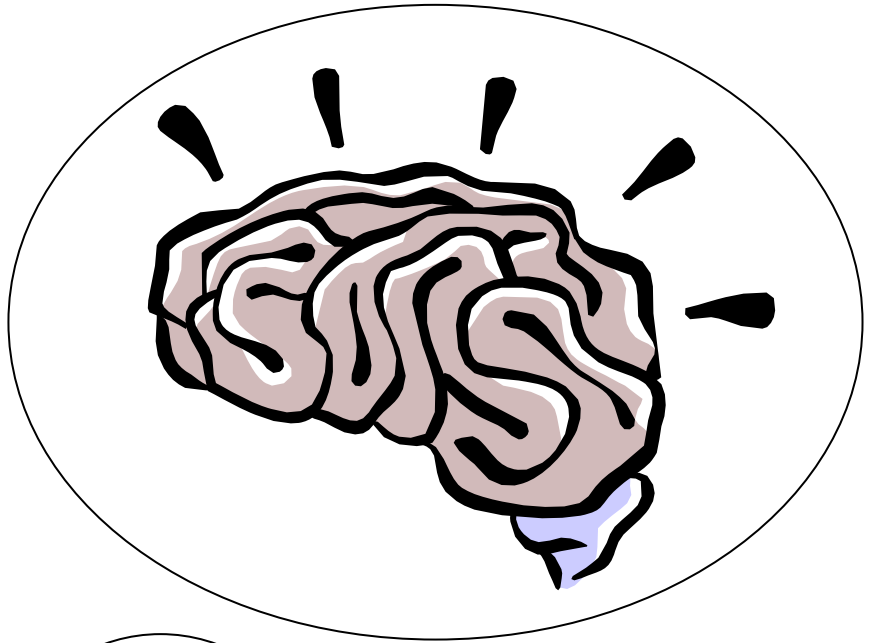
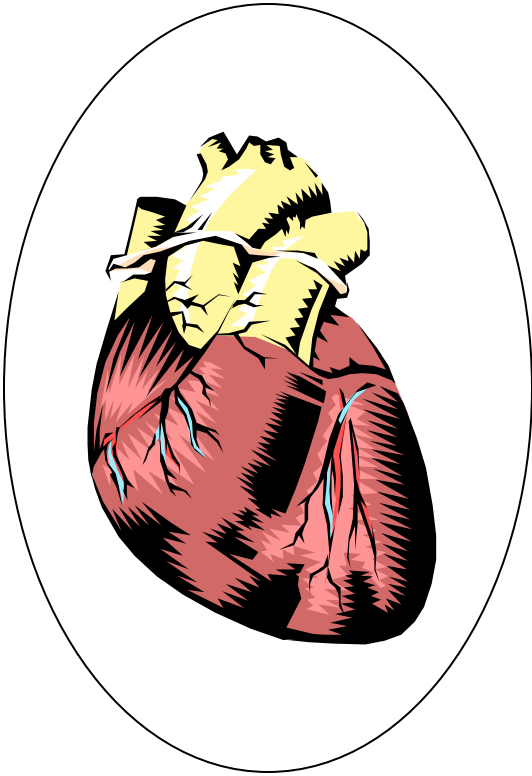


Picture card 12-3

Hypertension

- We talked about hypertension in Session 4.
- It is when blood pressure is continually high.
- Hypertension can cause damage to the arteries, eyes, kidneys, heart, and brain.

Hypertension



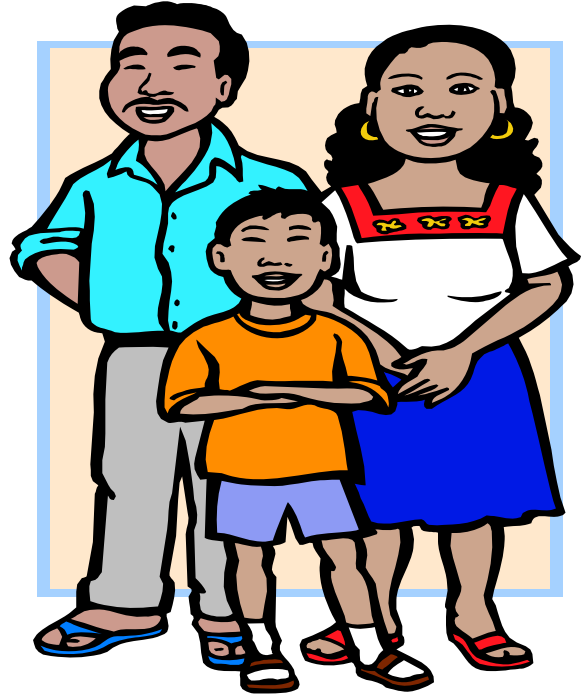
Picture card 12-4

Uncontrollable Risk Factors

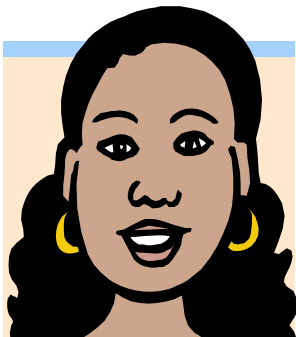
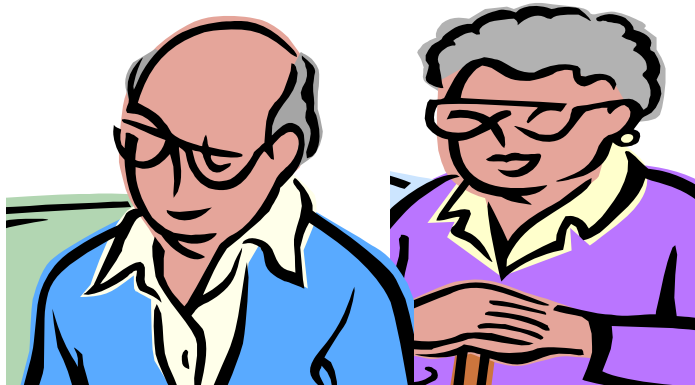
- These are some of the risk factors we cannot change for preventing chronic diseases:
 - Family history of the disease
 - Age
 - Being a man or woman
 - Ethnicity (Latinos, African Americans, Asians, and Native Americans have a higher risk)

Uncontrollable Risk Factors

Family History



Age



Latino



**African
American**



Asian



**Native
American**

Picture card 12-5

High Blood Pressure

- There are many risk factors we can do something about.
- The first one is high blood pressure.

High Blood Pressure



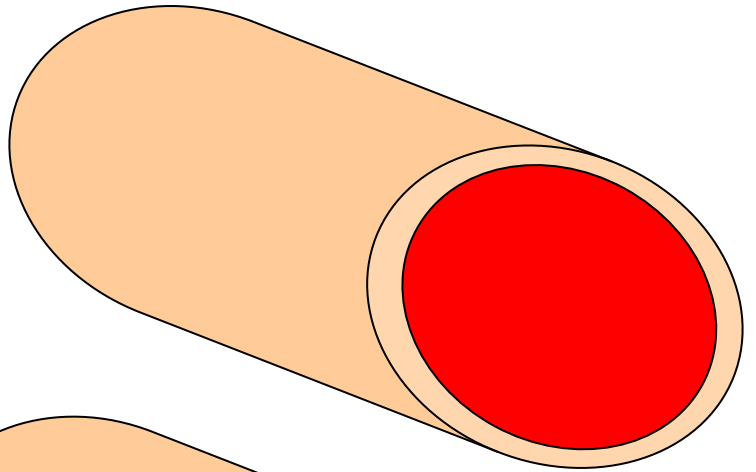
Picture card 12-6

Blood Cholesterol

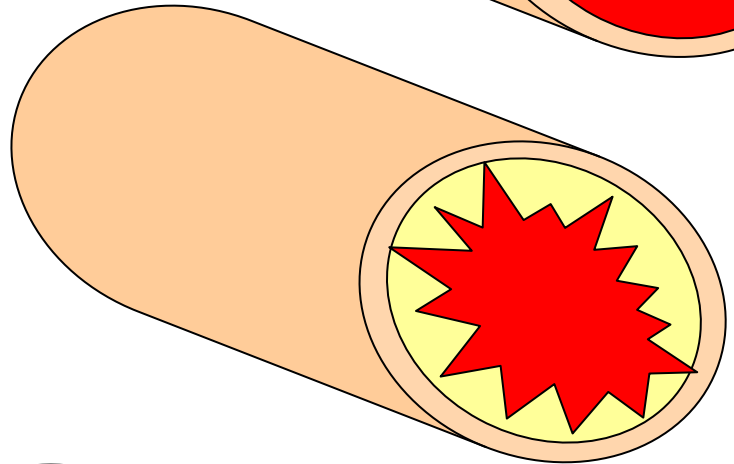
- We can also control our blood cholesterol.
- Remember, when blood cholesterol is high, it can block arteries and prevent blood from flowing, causing a heart attack or stroke.

Cholesterol

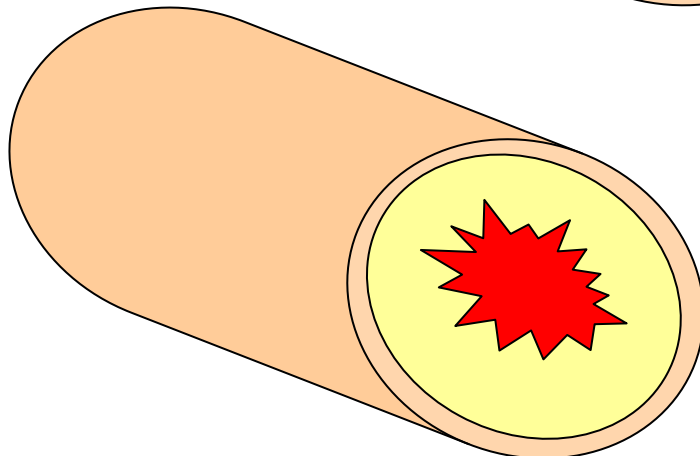
Normal Artery



Obstructed Artery



Almost
Completely
Obstructed

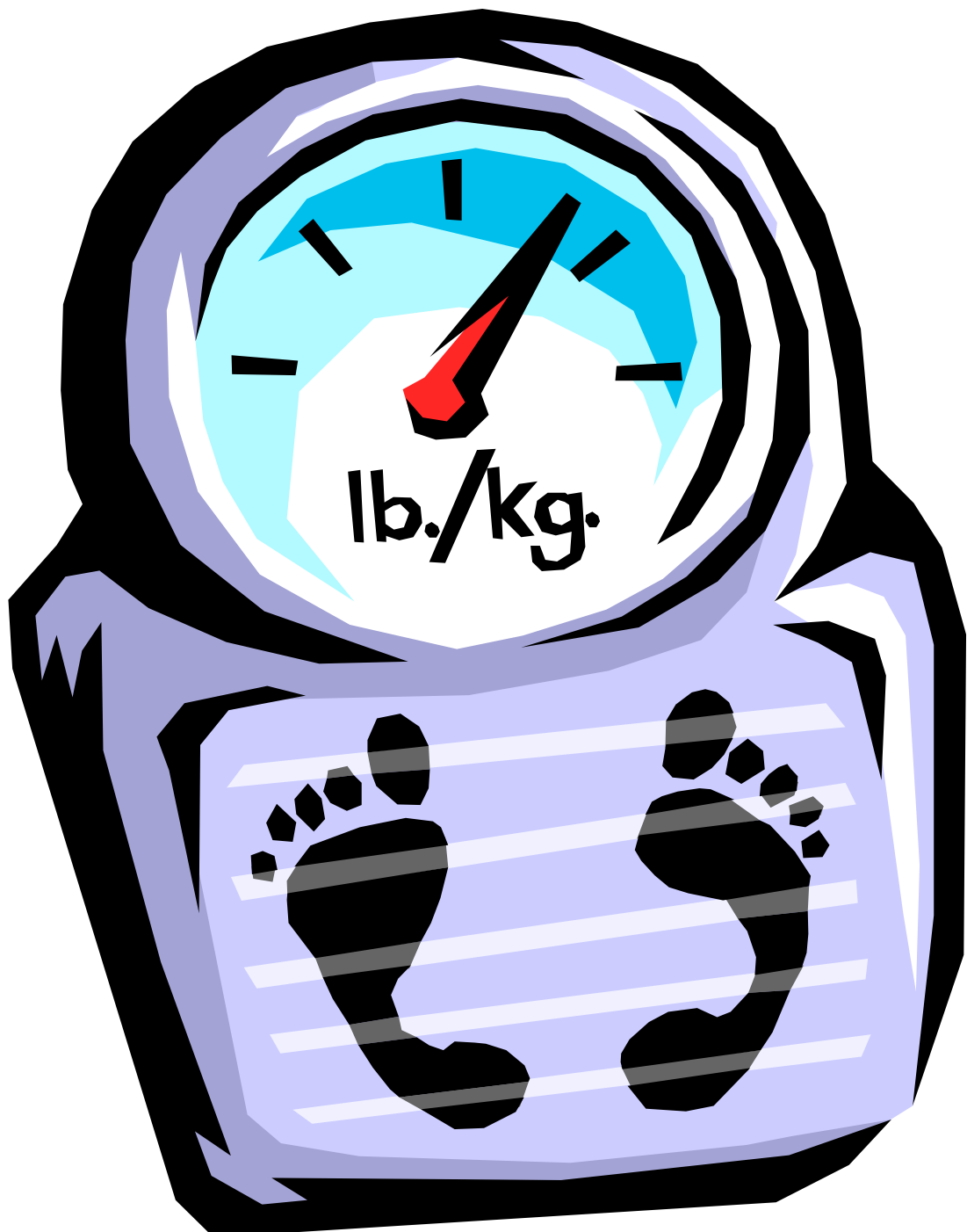


Picture card 12-7

Weight

- We can control our weight, making sure that we are not overweight.

Weight

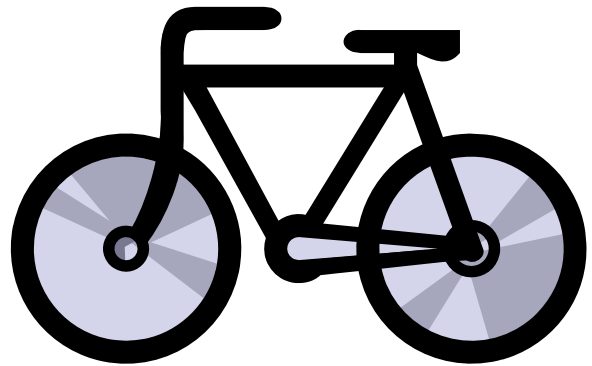
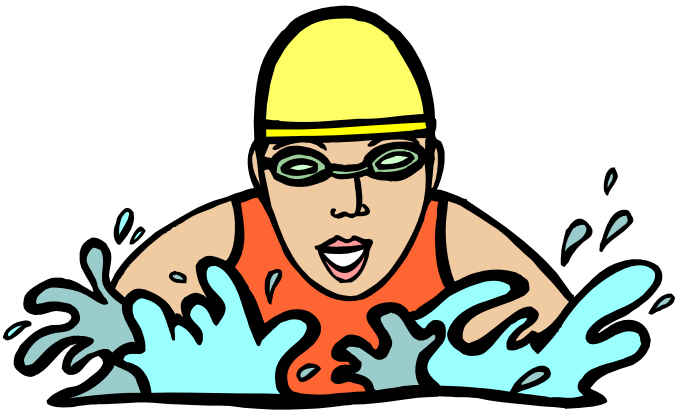


Picture card 12-8

Physical Activity

- We can make sure that we are physically active.
- Remember being physically active can mean:
 - walking, like we have been doing
 - swimming
 - riding a bicycle
 - gardening
 - even doing housework, like vacuuming

Physical Activity

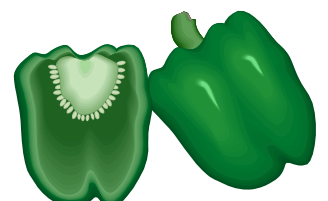
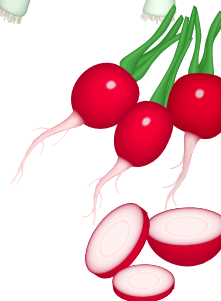
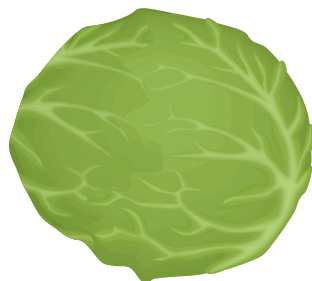
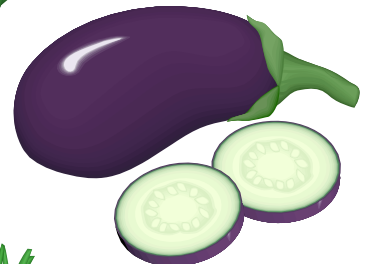
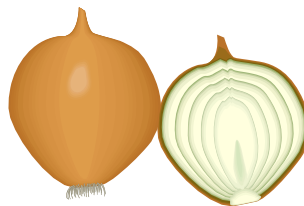
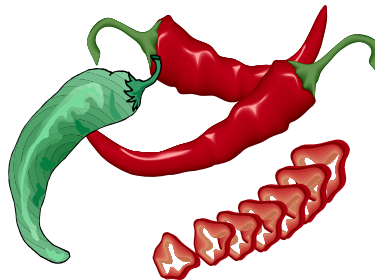
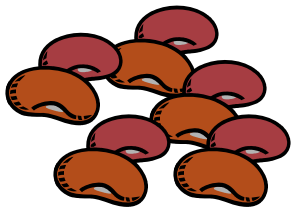
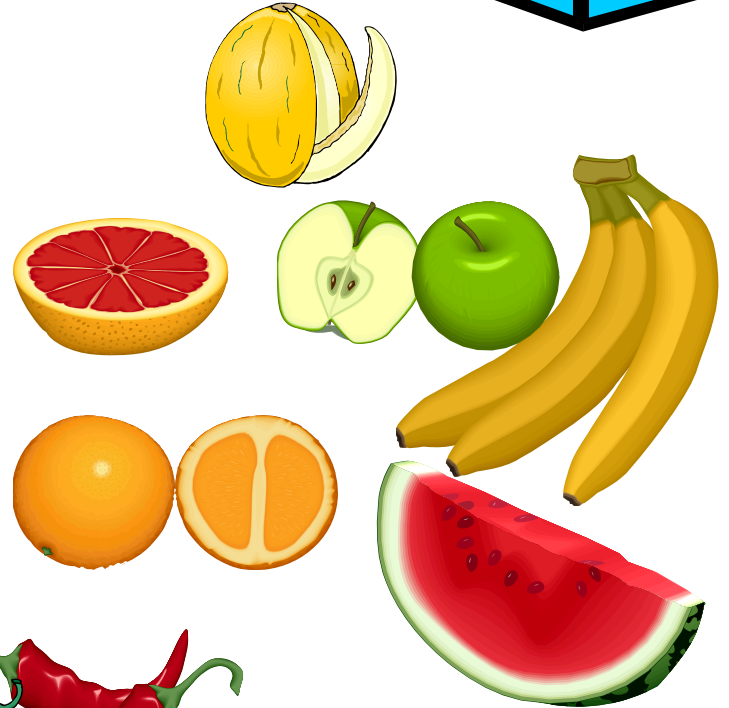
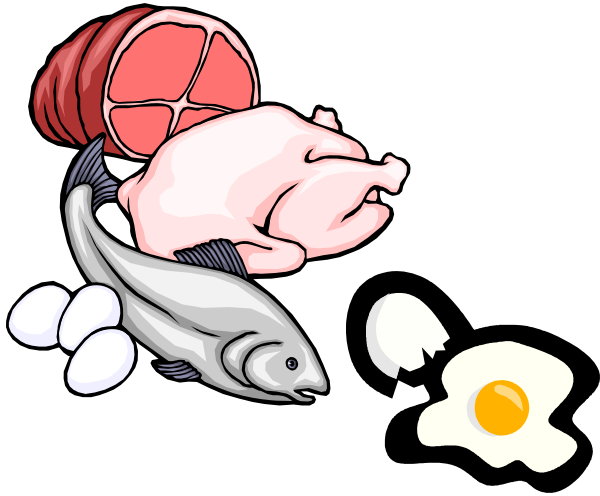


Picture card 12-9

Good Nutrition

- We can eat nutritious foods, and we can eat non-nutritious foods in moderation.

Good Nutrition



Picture card 12-10

Smoking

- We can stop smoking and help those around us to stop or quit smoking.

Smokin



