

Lifestyle Disease's

Eat Healthy



A balanced diet will keep your body strong and healthy. Eating more fruit and vegetables will reduce the risk of heart disease, which is one of the major killers in Singapore.

Fruit (except for coconut and avocado) and vegetables are not only low in fat and calories but also cholesterol-free.

Keep Stress Under Control



We're all susceptible to stress whether at work or at home. What's most important is we must learn how to manage stress.

Some skills that'll help you manage stress:

- Be firm when needed.
- Do not procrastinate.
- Prioritise your goals.
- Exercise regularly.
- Talk to a friend.
- Give a smile!

Exercise Regularly



Exercise at least 3 times a week. If you've not been exercising for a long period of time, seek medical clearance first.

Some suggestions:

- Climbing stairs for 15 minutes.
- Running 2.4 km in 15 minutes.
- Skipping for 15 minutes.
- Walking 3.2 km in 30 minutes.

Watch Your Weight



Maintaining a healthy weight is a life-long effort. By keeping your weight within the healthy range, you'll minimise the risks of getting heart disease, stroke and certain cancers.

The more active you're the more calories you'll expend. So start to live a more physically active and healthy lifestyle.

Heart Disease Facts

- Leading cause of death in the United States for adults
- 1 in 4 adults are ill with a form of this disease.
- Heart disease develops slowly over a lifetime.

What is the difference between heart disease and cardiovascular disease?

- Heart disease refers to the heart.
- Cardiovascular disease refers to the heart AND blood vessels.

Arteriosclerosis

- Arteriosclerosis means hardening of the arteries.
- Accumulation of soft fat on the inner walls of the arteries.
- Cuts off nutrients and oxygen.
- Also leads to high blood pressure.



Normal Artery
Opening

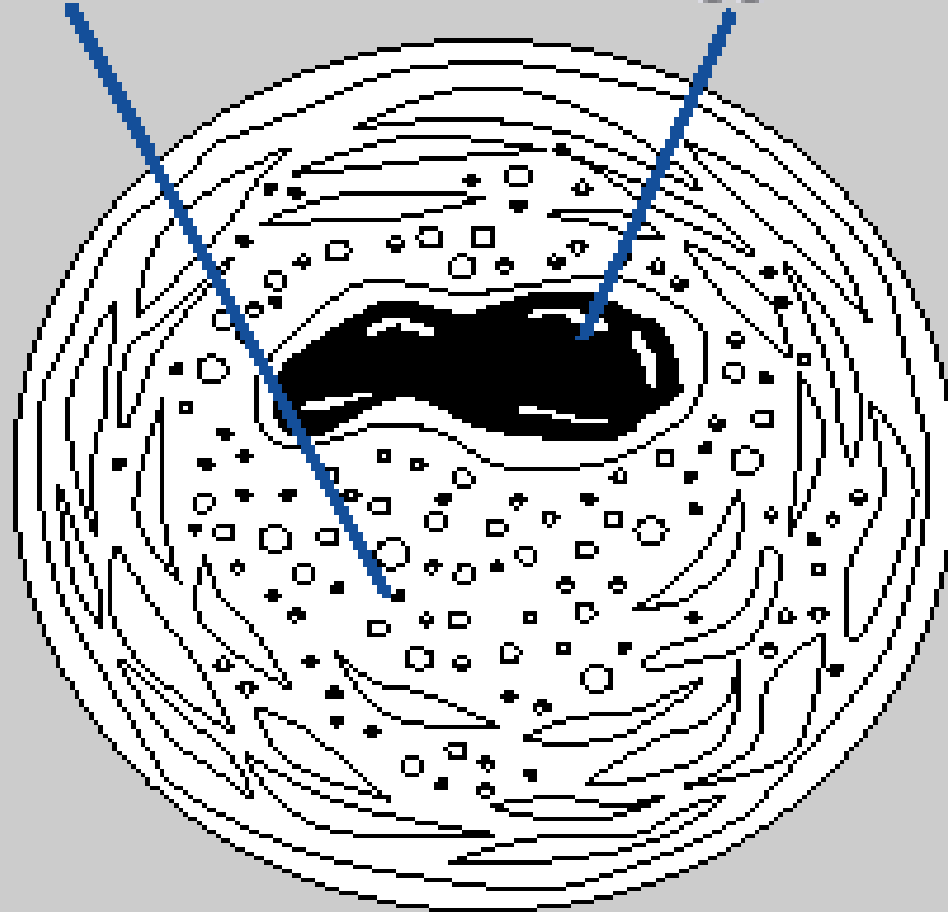
Abnormal Narrowed
Artery Opening

Blood Clots

- Happens because platelets begin to clot the plaque that has formed on the artery walls
- Some clots begin to travel in the blood stream until they become caught in an area they cannot pass through.

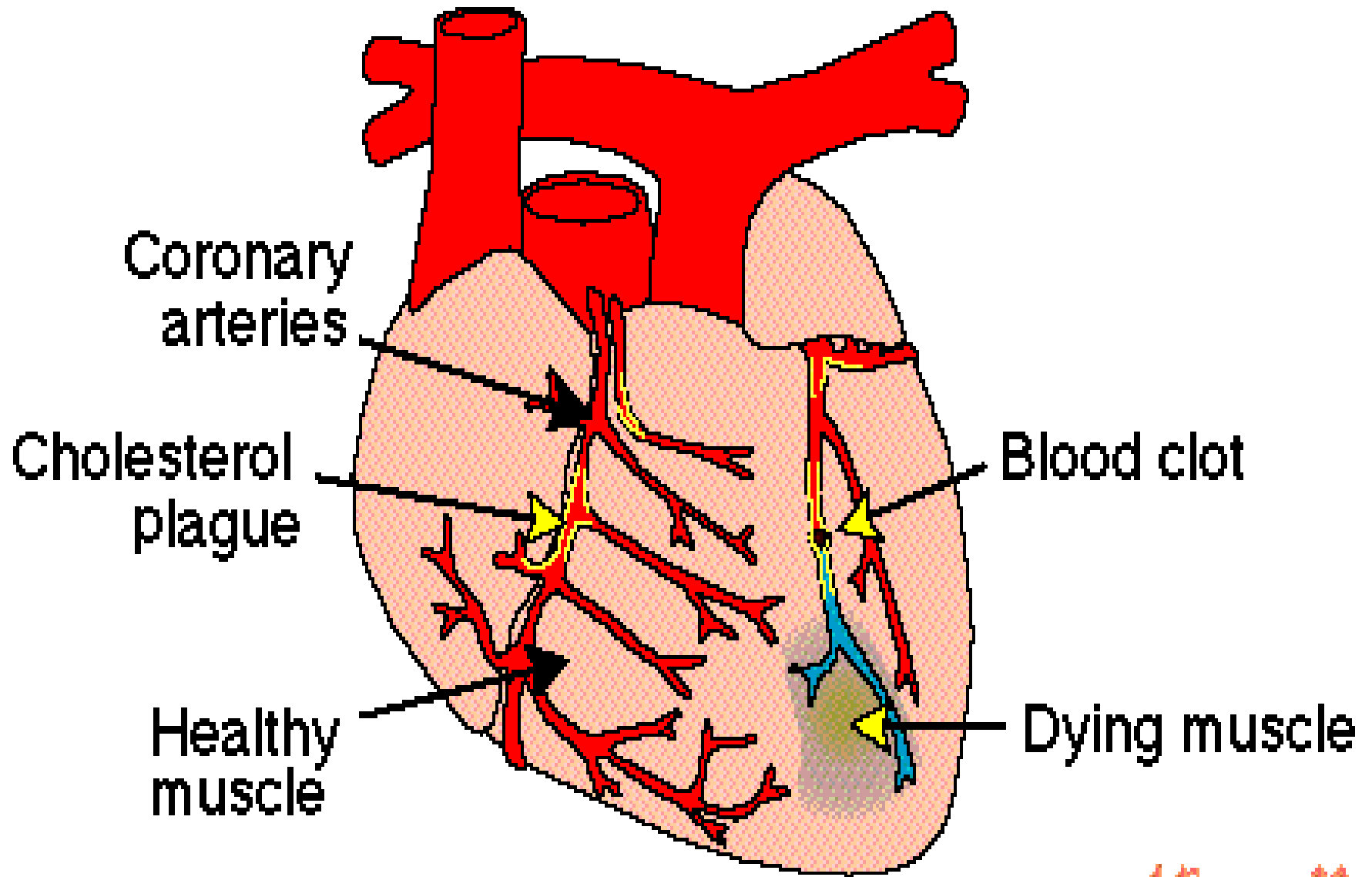
**Fatty
Deposits**

**Blood Clot
(Clogged Vessel)**



Heart Attack

When there is blockage
in the arteries located in
the heart.



Heart Attack

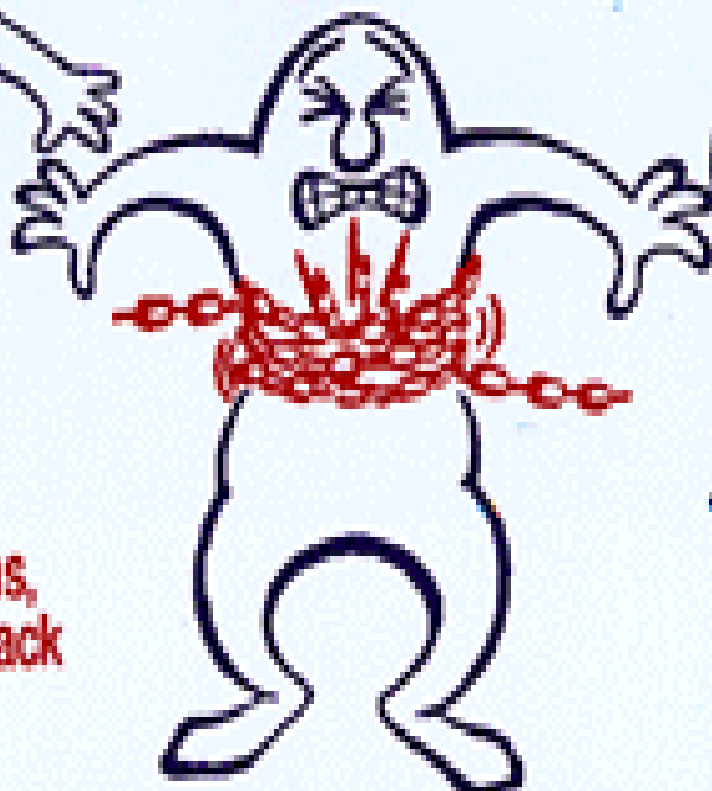
© 2000

Learn the

Heart attack warning signs



Chest pressure,
squeezing, or pain



Pain in the
jaw, neck, arms,
shoulders, or back



Nausea, sweating,
or feeling faint

Shortness
of breath

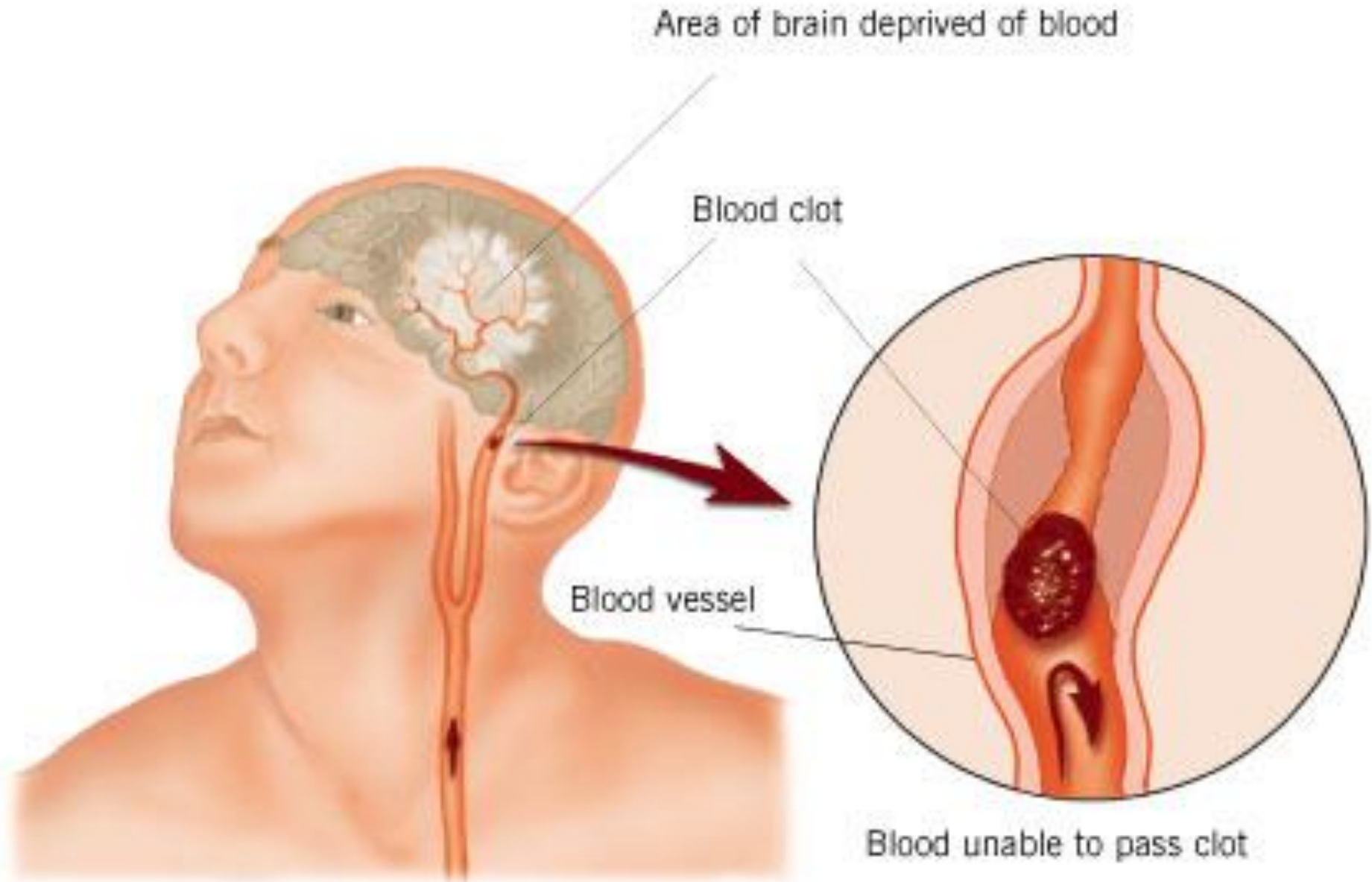


REACT Act Fast! Call 9-1-1

Stroke

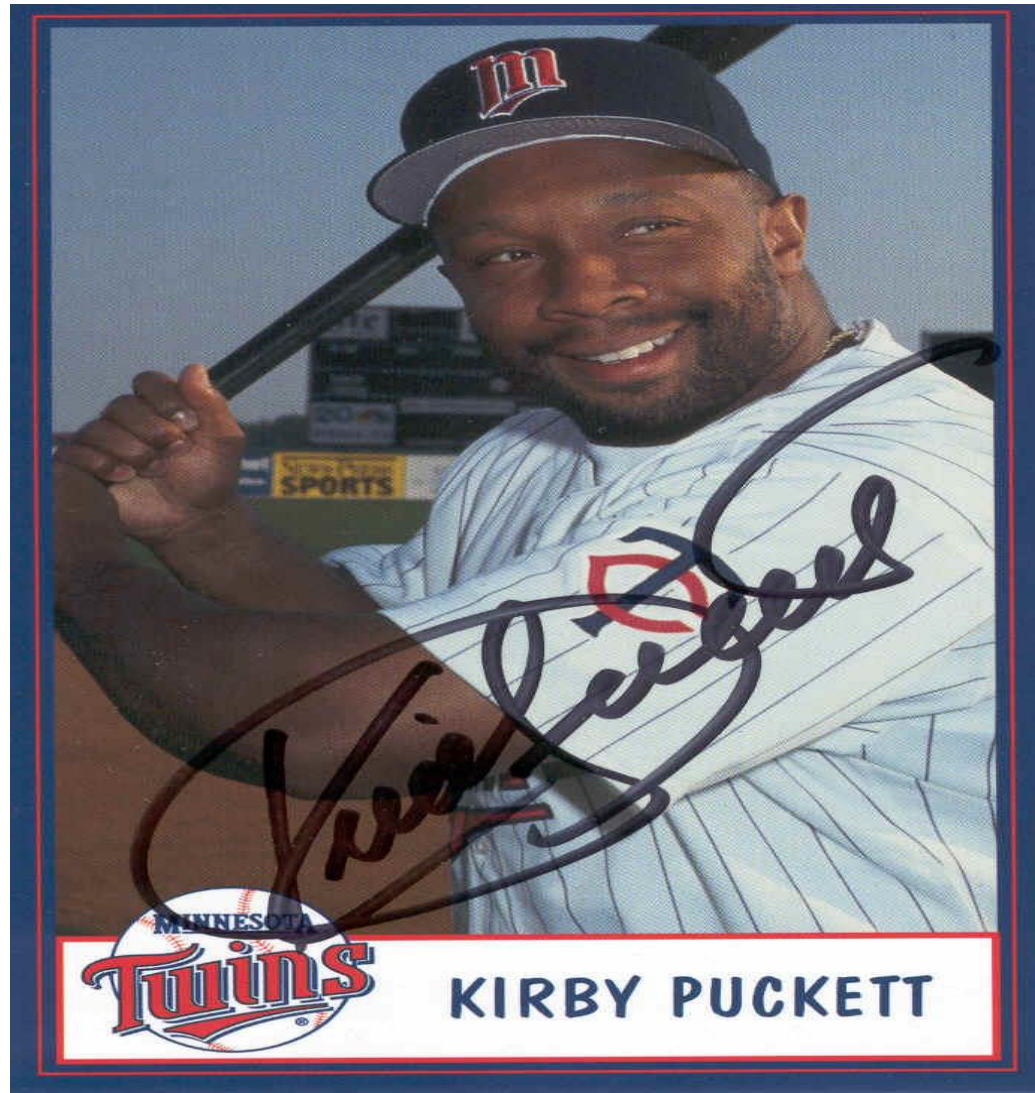
Clot/blockage in the vessels that feed the brain vital nutrients and oxygen.

STROKE



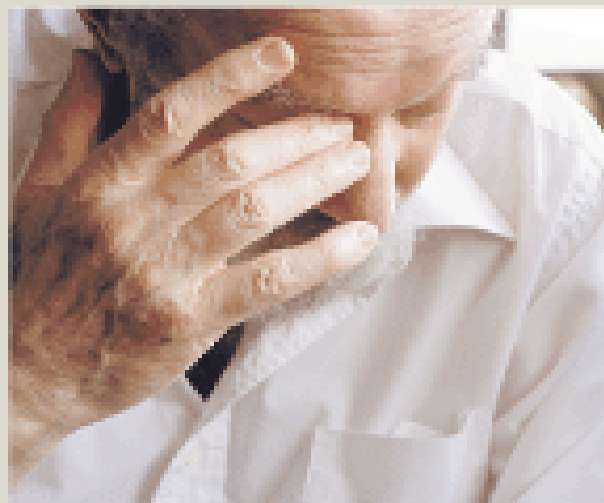
He died of massive stroke at age
45 on 4/6/06:

Heredity, weight gain , & stress probably played a significant role.



Symptoms of Stroke And Mini-Stroke

Mini-stroke symptoms can be fleeting, but are often a warning sign of a more serious stroke to come. Experts recommend heading to the emergency room if you have any of the following symptoms:



Getty Images

- Sudden numbness or weakness of face, arm or leg, especially on one side of body
- Sudden confusion or trouble speaking
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance
- Sudden, severe headache with no known cause

Source: American Stroke Association

STROKE IDENTIFICATION

S: Ask the person to Smile

T: Ask the person to Talk by saying a simple sentence, “It’s sunny outside.”

R: Ask the person to Raise both arms

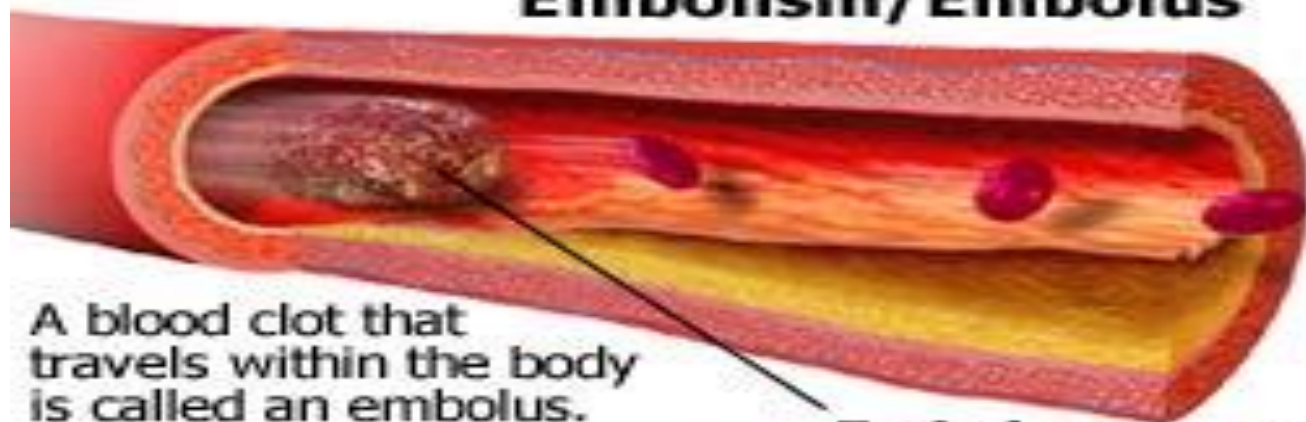
Call 911 IMMEDIATELY!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!



Embolism

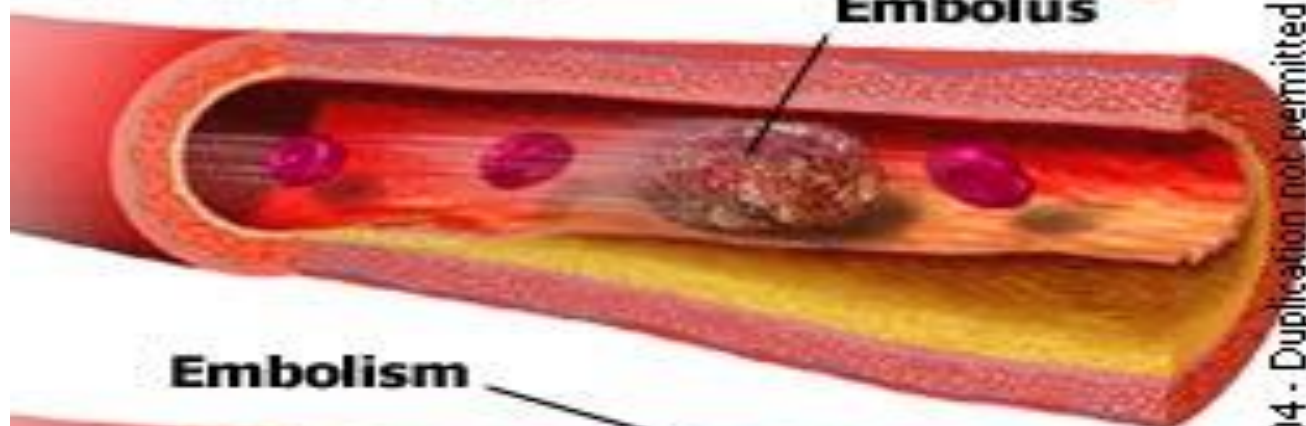
Clot breaks loose
“traveling clot” reaches
artery too small to fit
through and suddenly
blocks the vessel

Embolism/ Embolus

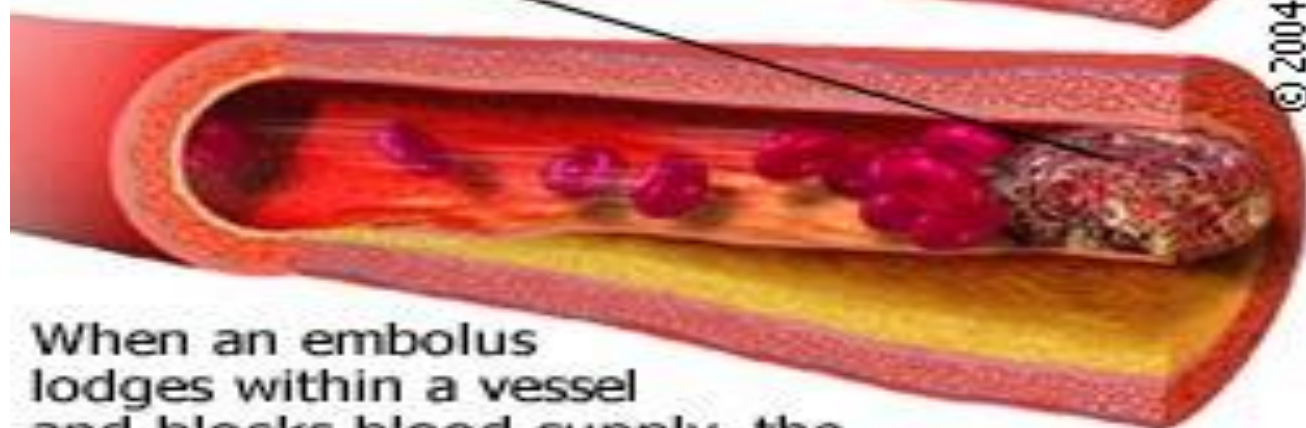


A blood clot that travels within the body is called an embolus.

Embolus

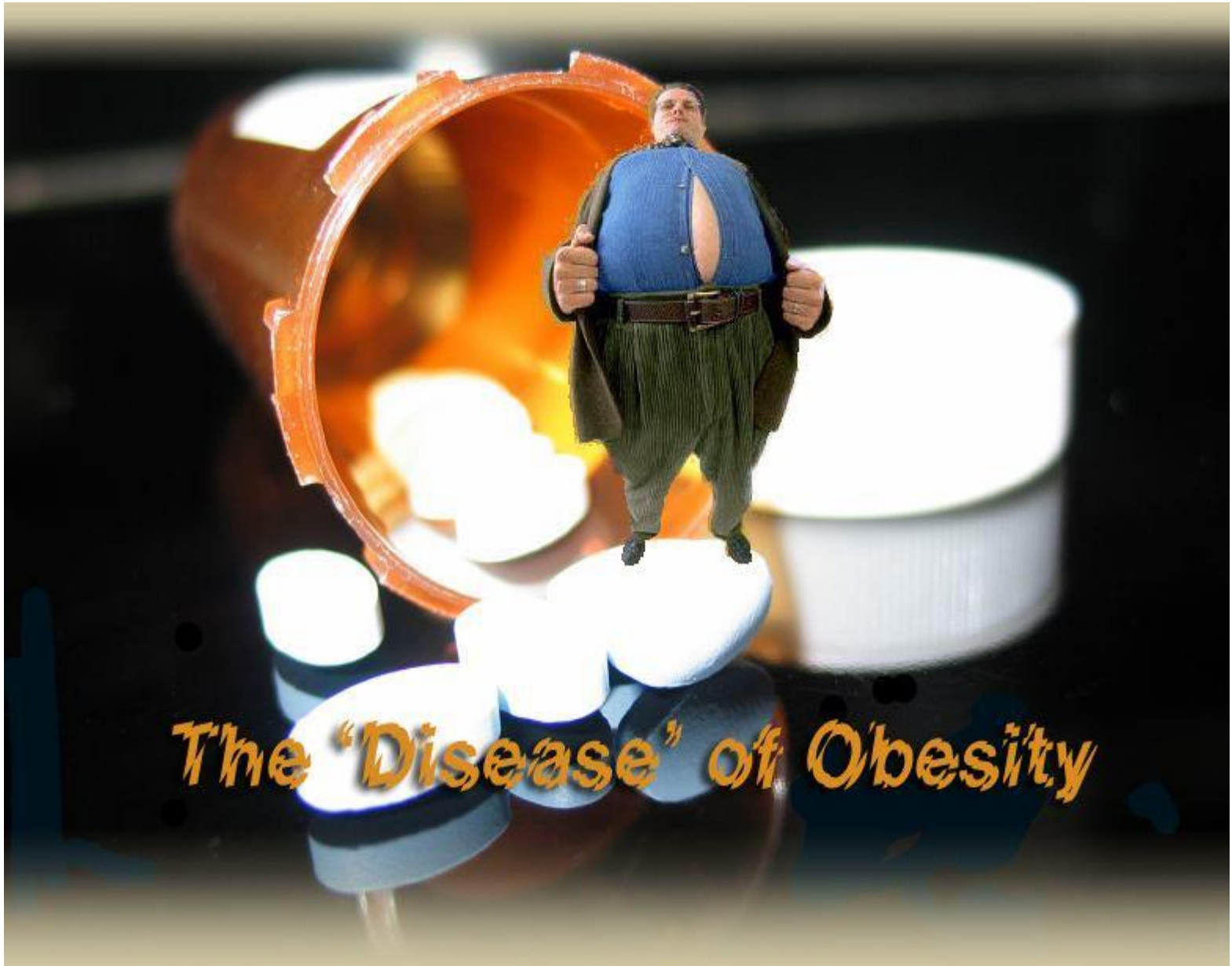


Embolism



When an embolus lodges within a vessel and blocks blood supply, the condition is called an embolism.

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The "Disease" of Obesity

Obesity Trends Among U.S. Adults between 1985 and 2005

Definitions:

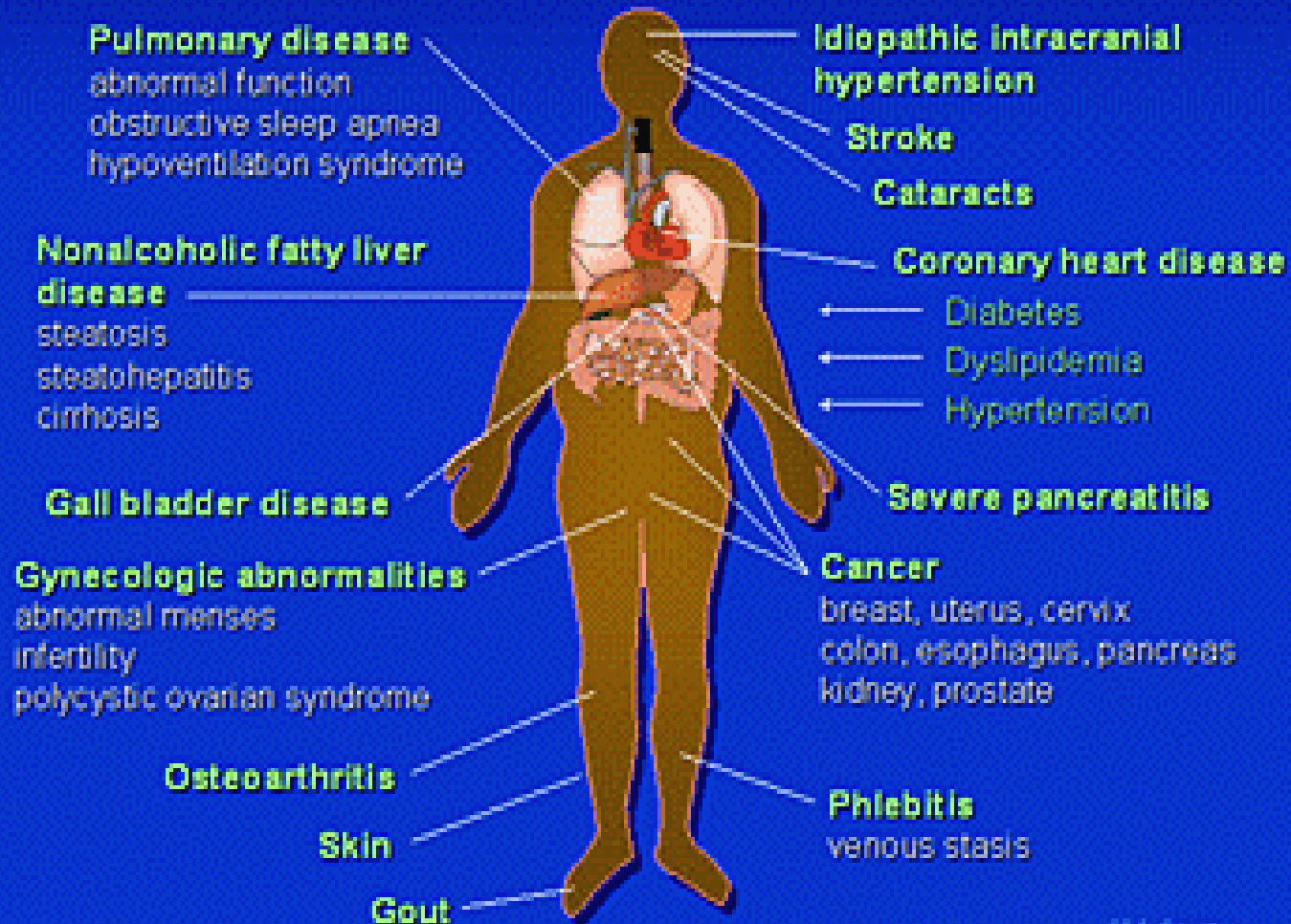
- **Obesity:** having a very high amount of body fat in relation to lean body mass, or Body Mass Index (BMI) of 30 or higher.
- **Body Mass Index (BMI):** a measure of an adult's weight in relation to his or her height, specifically the adult's weight in kilograms divided by the square of his or her height in meters.
- <http://www.nhlbisupport.com/bmi/>

<http://www.cdc.gov/nccdphp/dnpa/obesity/trend/maps/>

Obesity Is Related to Many Chronic Health Problems

- Type 2 diabetes
- Hypertension
- Heart disease
- Stroke
- Breast cancer
- Colon cancer
- Arthritis
- Gallbladder disease
- Physical disability
- Sleep disturbances
- Breathing problems

Medical Complications of Obesity



Overweight Has Important Health Consequences in Children

- 70% chance of being overweight as adults
- Childhood onset of type 2 diabetes
 - Face future risk of serious complications: kidney disease, blindness, amputations
 - Children born in 2000 have a high risk of getting diabetes in their lifetimes:
 - 33% of males
 - 39% of females
- Risk factors for heart disease
 - 61% of overweight 5-10-year olds have at least one risk factor
 - 26% have two or more risk factors

Costs Associated with Obesity are High and Growing

- A 2009 study by the [Centers for Disease Control and Prevention](#), along with RTI International (a nonprofit research group), found that the direct and indirect cost of obesity "is as high as \$147 billion annually." The study was based on figures collected in 2006.

Three Key Factors Are Related to the Onset of Obesity

- Poor dietary practices
- Decreased physical activity
- Increased inactivity

Americans' Food Practices are Shifting Dramatically

- Reduced frequency of family meals
- Increased fast food consumption
- Increased portion size
- Increased consumption of soft drinks (*from 27 to 50 gallons/year from 1972-1999*)
- Restrained eating, meal skipping

Scientists Agree on Steps to Reduce Obesity and Promote Health

- Eat a healthy diet
(e.g., 2 cups fruit and 2 and 1/2 cups vegetables each day, based on 2,000-calorie diet)
- Get regular physical activity
(e.g., for adults, at least 30 minutes of moderate-intensity activity 5 days per week, or at least 20 minutes of vigorous activity 3 days a week)
- Go for regular visits to the doctor
 - to monitor risk factors
 - if you have an obesity-related condition and are trying to lose weight



Abnormal cells multiply out of control and spread into surrounding tissues and other body parts. Cancer disrupts normal functions of 1 or more organs.

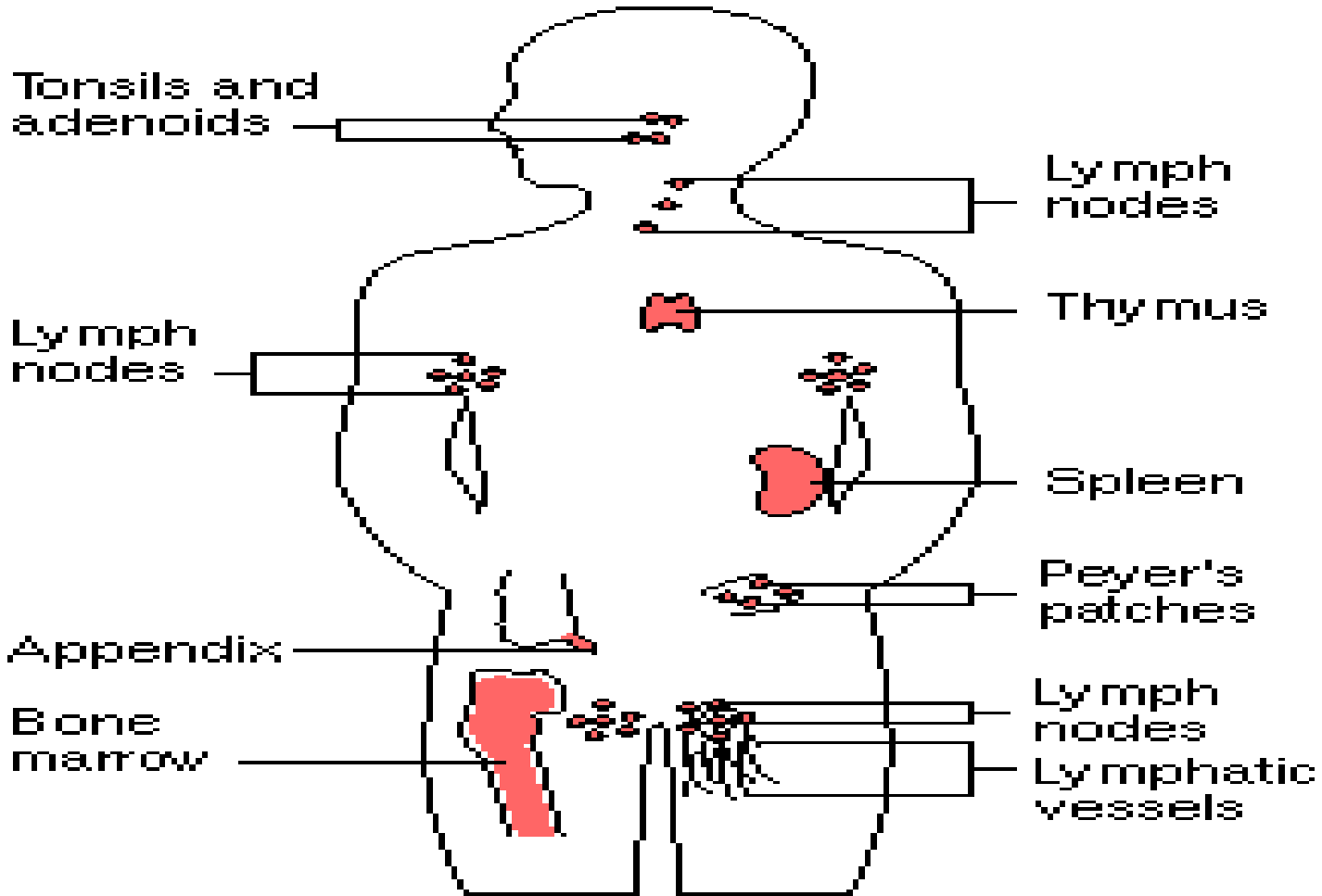
Benign / Malignant / Metastasized

- **Benign** is non-cancerous, not harmful, and unable to spread
- **Malignant** is cancerous, is harmful, and ready to spread to other parts of the body.
- **Metastasized** cancer has moved from one part of the body to the other and starts new growth just like the original.

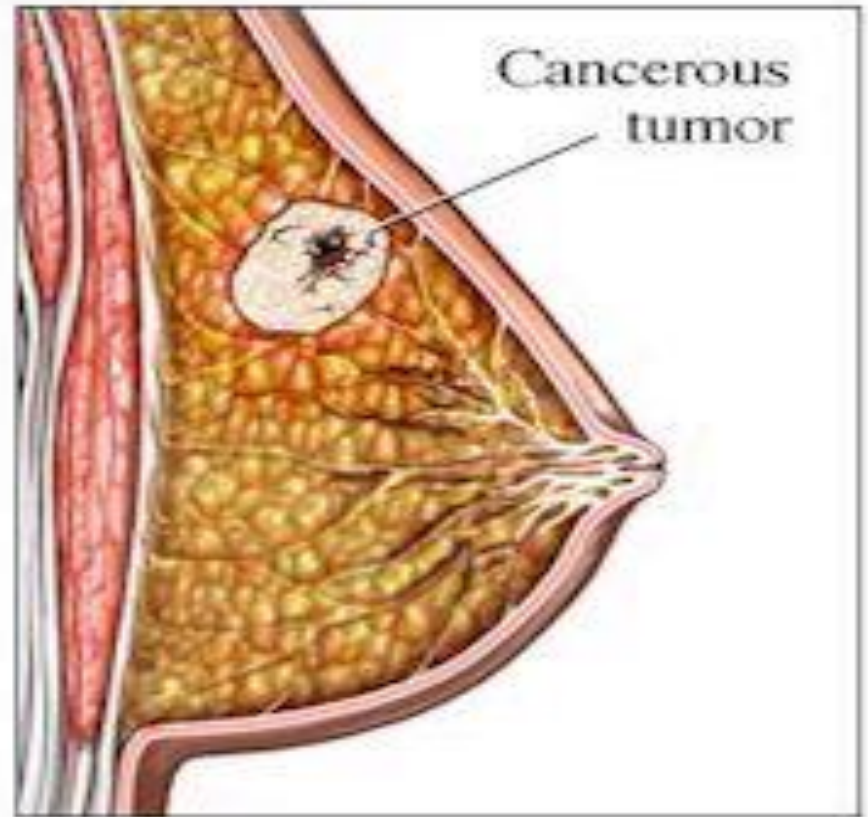
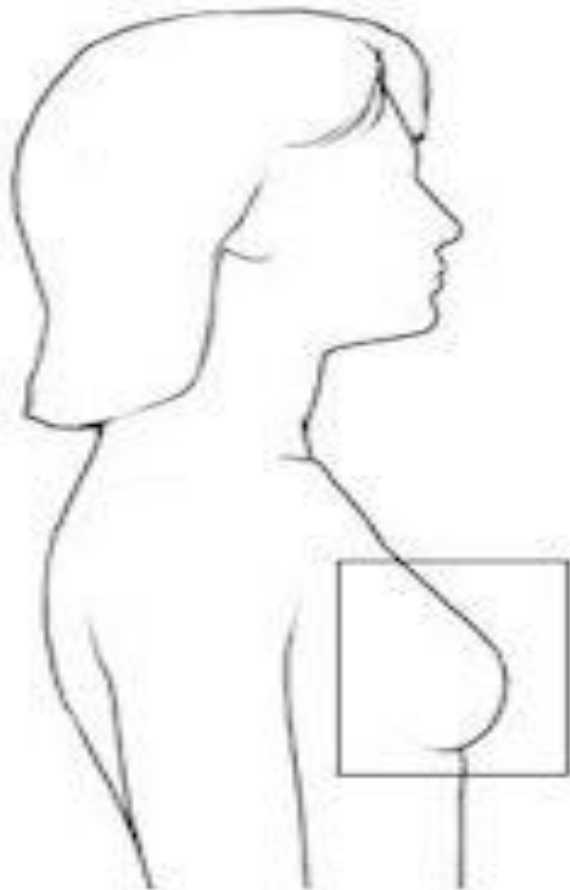
The four different classes
cancer can be assigned to:

- **Lymphomas**- immune system organs
- **Leukemia's**- blood-forming organs
- **Carcinomas**- glands and body lining
(skin, digestive tract)
- **Sarcomas**- connective tissues
(bones, ligaments, and muscles)

Immune System



Breast Cancer: Sarcoma



This little girl has Leukemia



Skin Cancer: Carcinoma



Skin Cancer Facts

- Cancer risk is just as high in tanning beds as in the sun.
- By 18 years of age most people have accumulated most of their lifetime sun exposure.
- Melanin-is the pigment in dark-skinned individuals that protect them against UV damage
- SPF of 30 or higher is recommended

How does Cancer develop?

- 1) Exposure to a carcinogen
- 2) Entry of a carcinogen into the body
- 3) Change of cells genetic material
- 4) Out-of-control multiplication of the cells
- 5) Tumor formation

Cancer Risks You Can Control:

- 1) Tobacco Use
- 2) Alcohol Abuse
- 3) Poor Physical Activity

CAUTIONS-things to watch for

Change in bowel or bladder habits

A sore that does not heal

Unusual bleeding or discharge

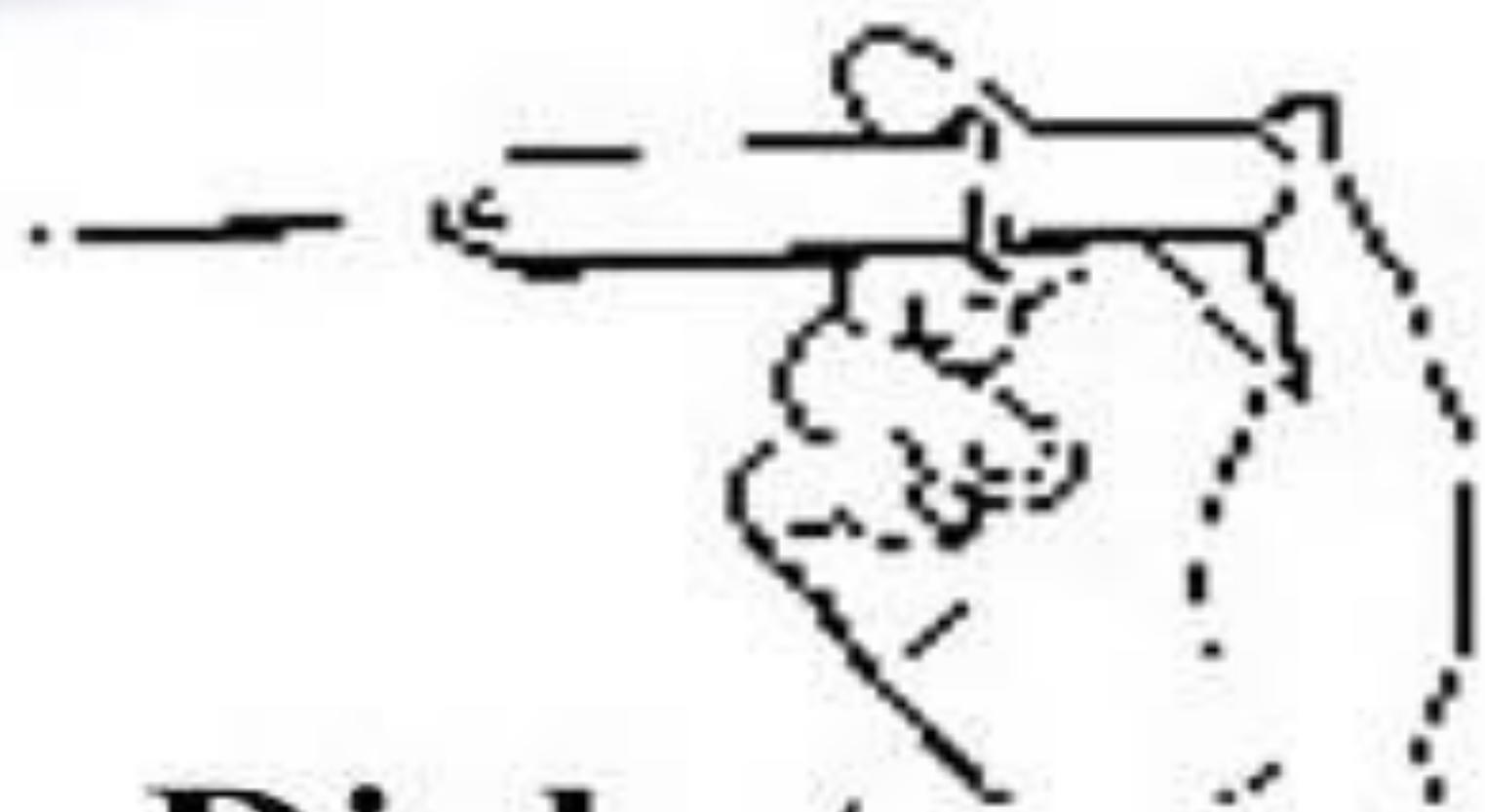
Thickening or lump that suddenly appears anywhere

Indigestion or difficulty swallowing

Obvious change in a wart or mole

Nagging cough or hoarseness

Sudden weight loss



Diabetes

Diabetes

Diabetes is a condition of abnormal use of glucose, usually caused by too little insulin or lack of response to insulin.

Diabetes Facts

- The 6th leading cause of death in the U.S.
- Leading cause of blindness in the U.S.
- Contributes greatly to heart disease.
- Type 2 accounts for 80% of the cases, and most often affects those individuals middle age and older.
- Type 2 is recently on the rise in children.
- \$175 billion spent annually on Diabetes

Diabetes Awareness Month Sheds Light on Alarming Trends 11/1/10

Dr. Amy Criego.....Kare 11.com)

Type 1

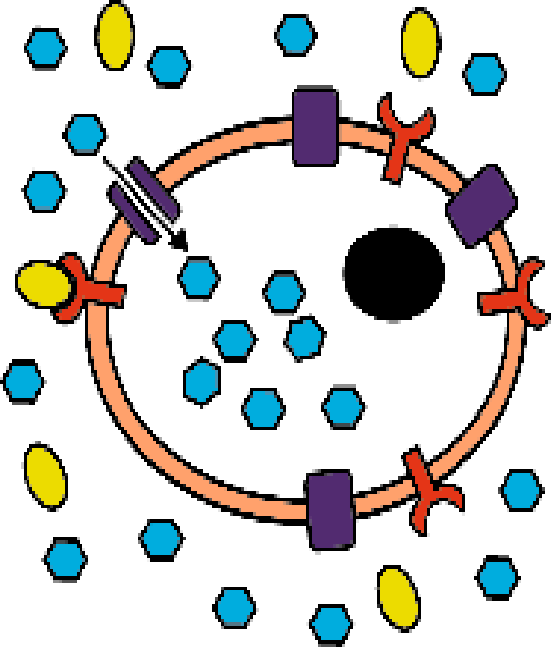
- Usually sets in during childhood or adolescence with no controlling factors
- Pancreas makes too little or no insulin
- Insulin shots required
- Low to average body fatness

Type 2

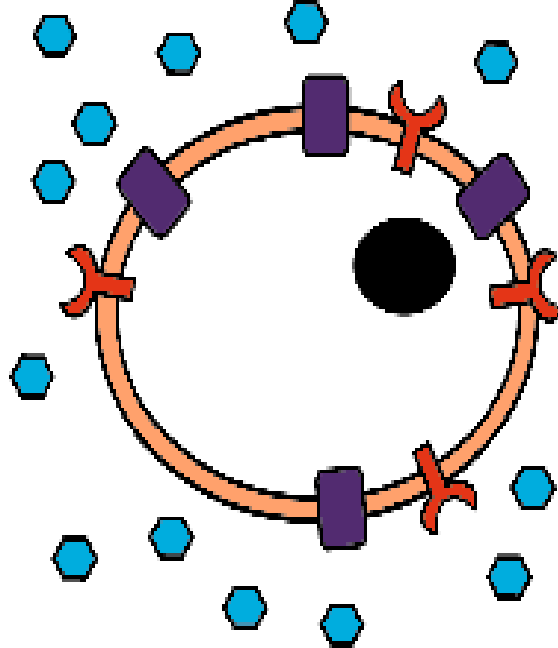
- Usually sets in during adulthood, but is now prevalent in children
- Pancreas makes enough or too much insulin
- Insulin shots generally not required, but other drugs may be of help
- body fatness
- Lifestyle related

The pancreas performs 2 main functions:

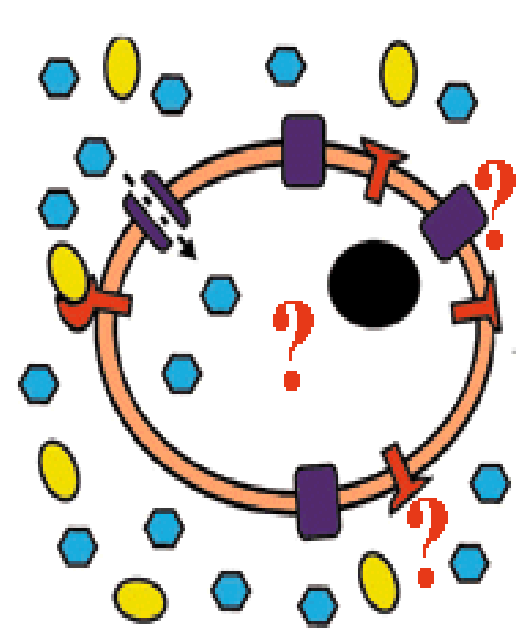
- To produce digestive juices, which aid digestion.
- To produce the hormone insulin, which controls blood glucose.
- Considered to be in both the digestive and hormonal systems.








Normal Cell



Type I Diabetes Cell



Type II Diabetes Cell

-  Insulin
-  Insulin Receptor
-  Glucose
-  Closed Glucose Transporter
-  Open Glucose Transporter

Type 1 Diabetes

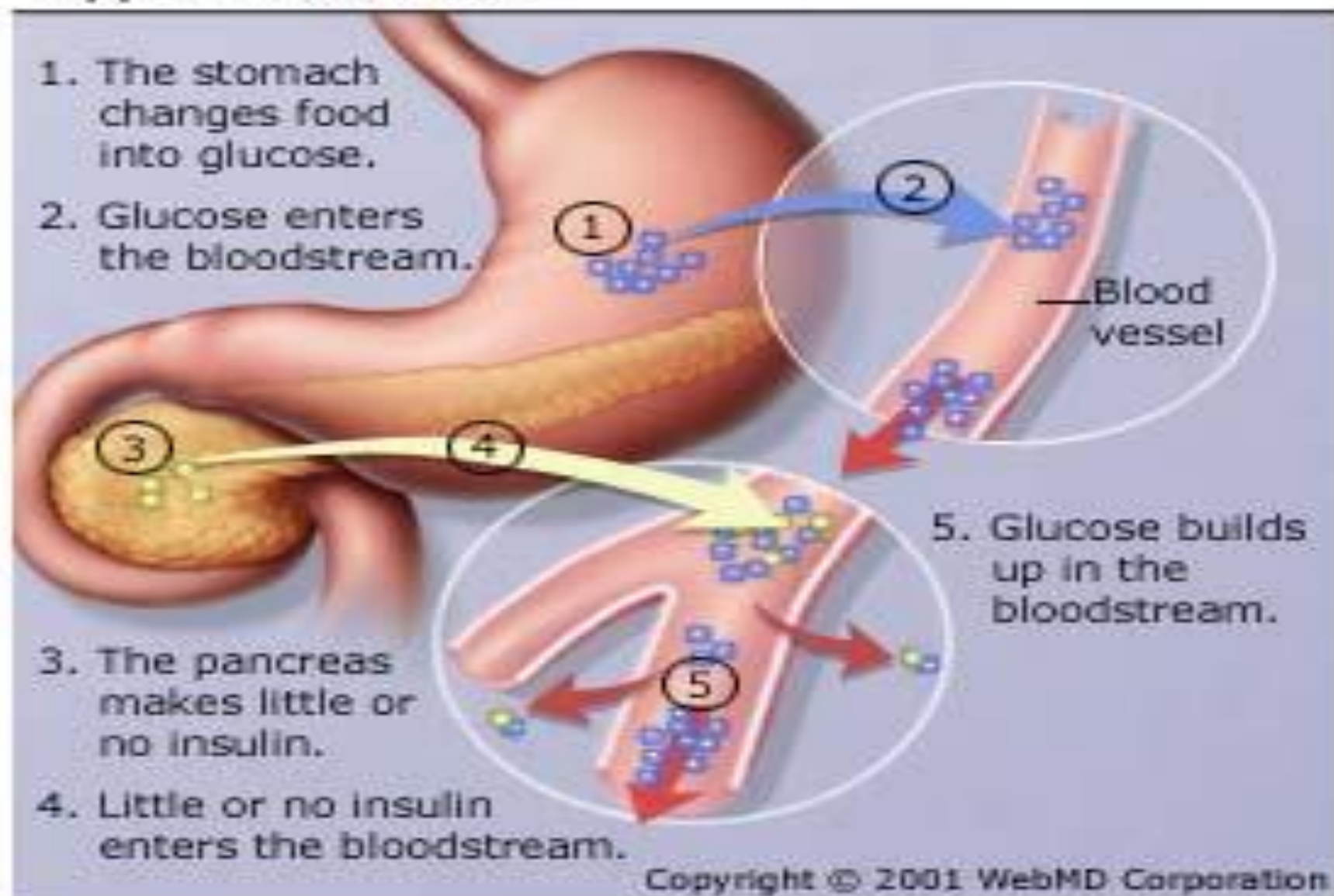
1. The stomach changes food into glucose.

2. Glucose enters the bloodstream.

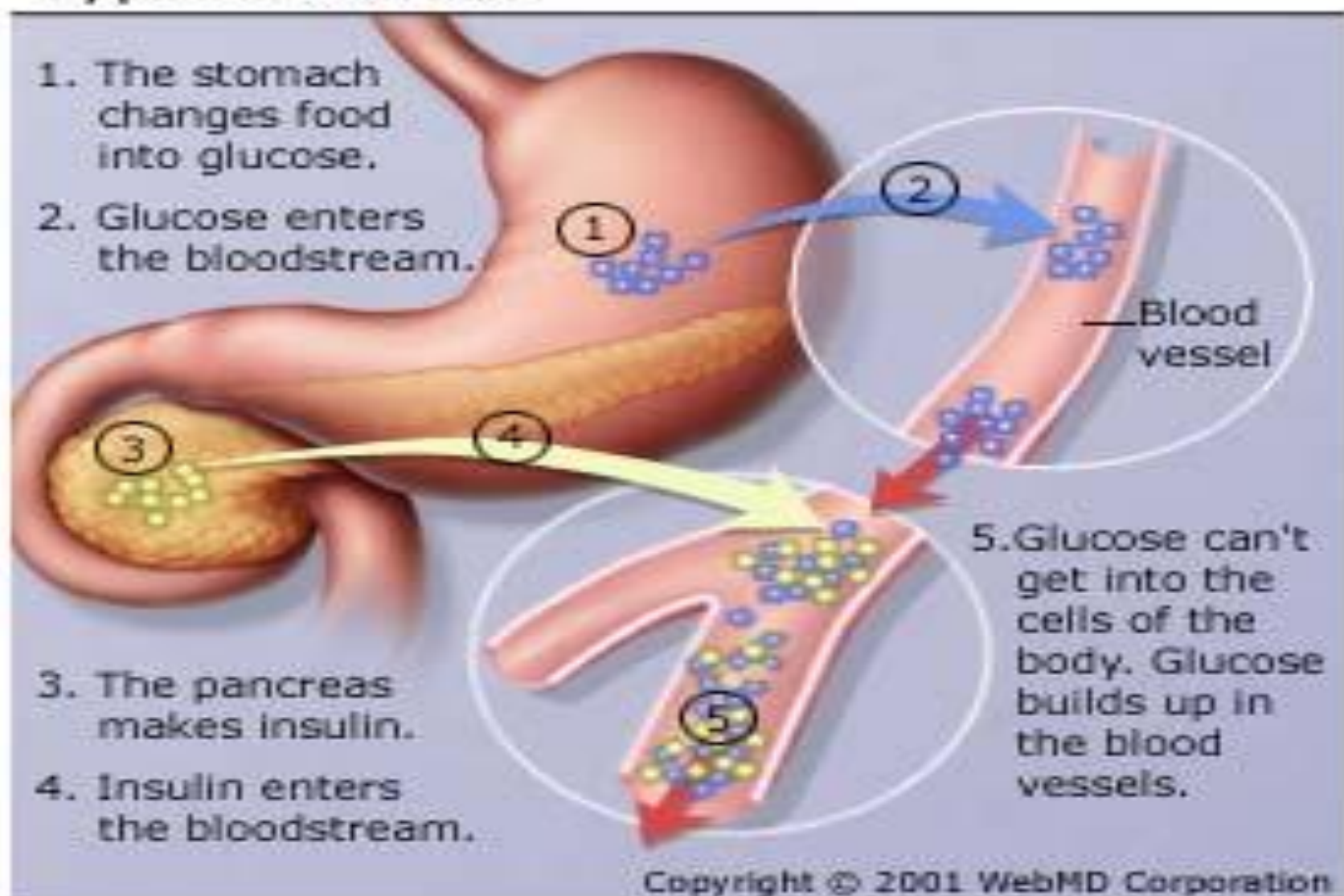
3. The pancreas makes little or no insulin.

4. Little or no insulin enters the bloodstream.

5. Glucose builds up in the bloodstream.



Type 2 Diabetes



The Dangers of Diabetes....

- **Diabetic Coma**- a loss of consciousness due to uncontrolled diabetes and the resulting buildup of toxic ketones in the blood.
- **Ketones**- fragments formed by the tissues during incomplete use of fat for energy, and released into the blood.
- **Insulin Shock**- the result of too much insulin, which causes a dangerous drop in blood glucose. Also called hypoglycemia.

Possible long-term effects of Type 2 Diabetes.

- Impaired circulation
- Disease of the feet and legs that often leads to amputation
- Kidney disease that often requires hospital care or kidney transplant
- Impaired vision or blindness due to cataracts and damaged retinas.
- Nerve damage
- Skin damage
- Strokes and heart attacks