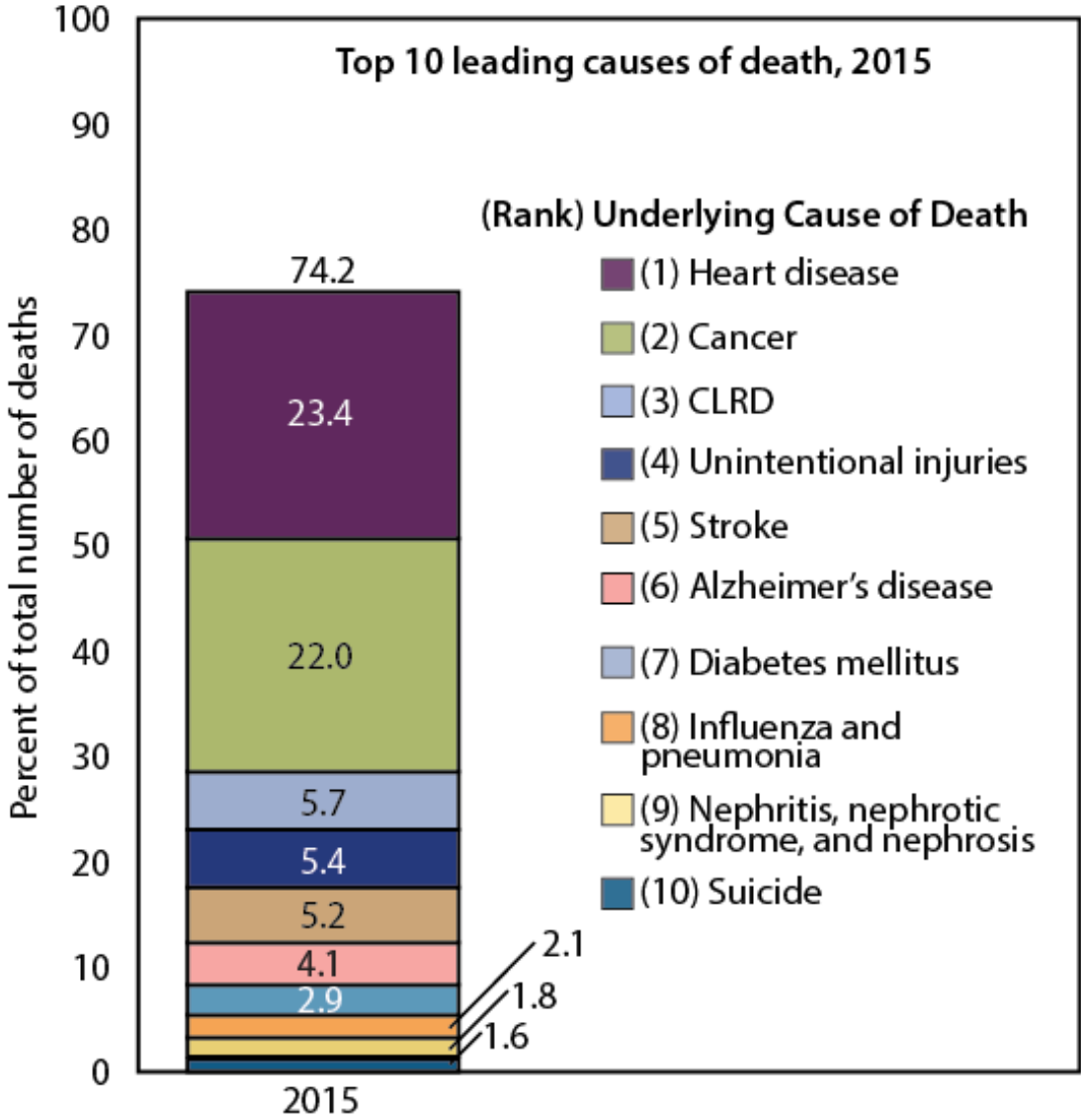


Chronic Disease

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Leading Causes of Death in 2015

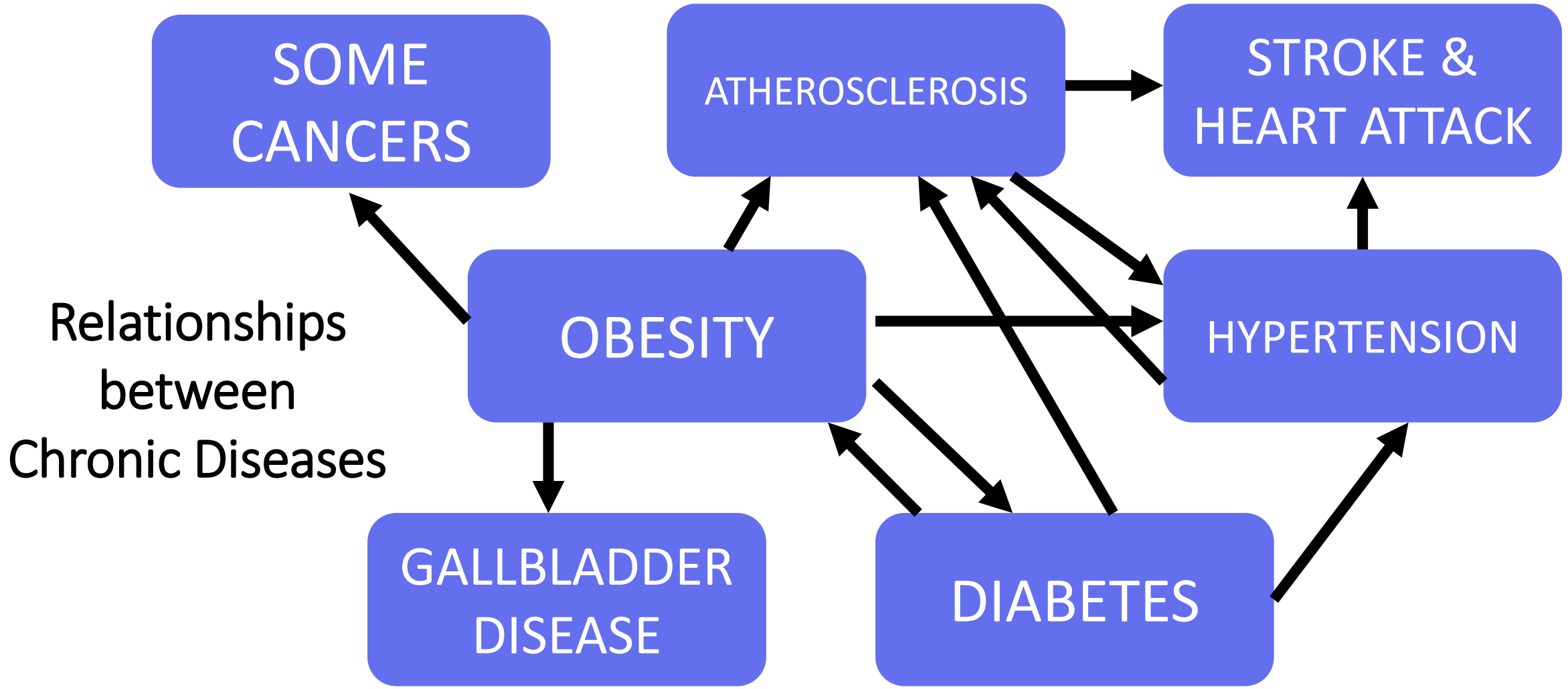


Which of these are diet-related?

- **Heart disease (#1 cause of death)**
- **Cancer (#2 cause of death)**
- **Stroke (#5 cause of death)**
- **Diabetes mellitus (#7 cause of death)**

= 53.5% of all deaths in the US, 2015

SOURCE: NCHS, *Health, United States, 2016*, Figure 8. Data from the National Vital Statistics System (NVSS).



RISK FACTORS	CANCER	HYPERTENSION	TYPE 2 DIABETES	OSTEOPOROSIS	ATHEROSCLEROSIS	OBESITY	STROKE
Diet high in fat, saturated fat, trans fat	X	X	X		X	X	X
Excessive alcohol intake	X	X		X	X	X	X
Low fiber intake	X		X		X	X	X
Low vitamin & mineral intake	X	X		X	X		
High sugar intake			X			X	
High salt or pickled foods intake	X	X					
Genetics	X	X	X	X	X	X	X
Age	X	X	X	X	X		X
Sedentary lifestyle	X	X	X	X	X	X	X
Smoking	X	X		X	X		X
Stress		X			X		X
Environmental factors	X						

Cardiovascular Heart Disease (CHD)

ATHEROSCLEROSIS

- cholesterol deposits (PLAQUE) that can clog the arteries, leading to heart attacks & stroke
- Possible causes: high cholesterol, smoking, hypertension
- - See how atherosclerosis works in the Interactive Cardiovascular Library: https://watchlearnlive.heart.org/CVML_Player.php?moduleSelect=athero

HYPERTENSION

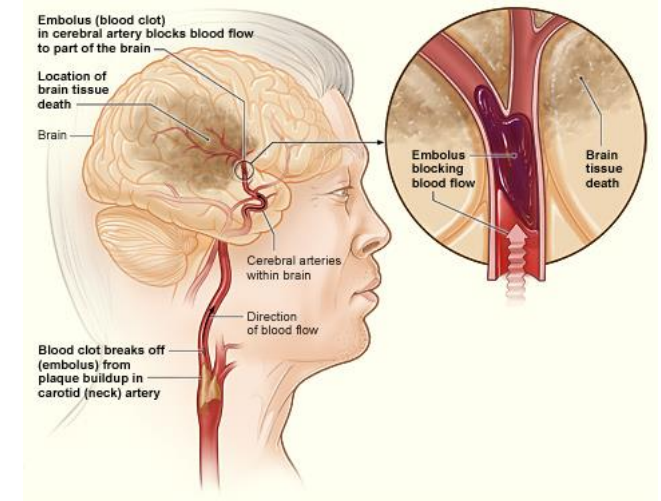
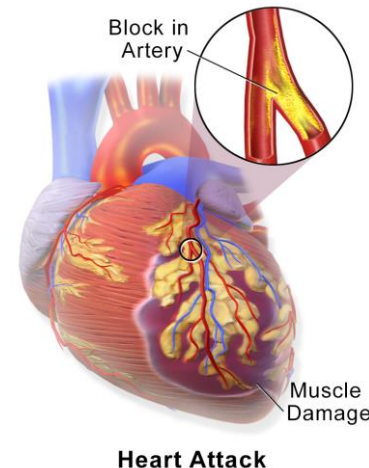
- High blood pressure (force of blood flowing through vessels)
- Risk factor for heart attacks & stroke
- Often comorbid with obesity, diabetes, high cholesterol
- Can be caused by excess sodium in diet

HEART ATTACK

- Blood flow (carrying oxygen) to heart muscle is severely reduced or cut off completely

STROKE

- Blood clots in artery, cutting off oxygen to brain



Types of Diabetes

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graph LR; A[Types of Diabetes] --- B[Type 1 Diabetes]; A --- C[Type 2 Diabetes]; A --- D[Gestational Diabetes]; B --- E[Results from the body's failure to produce insulin; insulin injections required]; C --- F[Pancreas doesn't produce enough insulin to control glucose levels OR cells don't respond to insulin]; D --- G[Occurs when pregnant woman's body does not secrete extra insulin required, leading to increased blood sugar levels]
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Type 1 Diabetes

Results from the body's failure to produce insulin; insulin injections required

Type 2 Diabetes

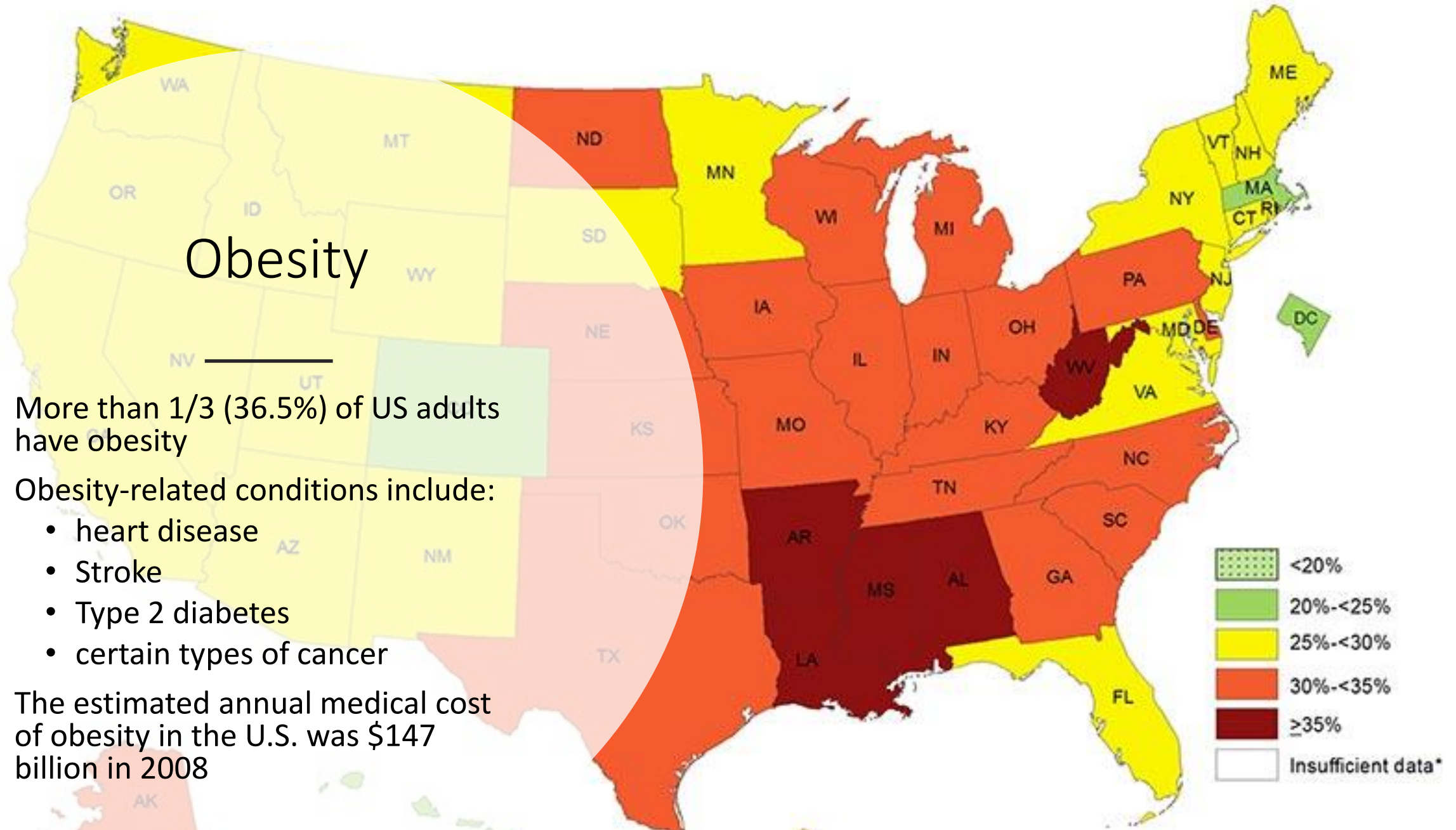
Pancreas doesn't produce enough insulin to control glucose levels OR cells don't respond to insulin

Gestational Diabetes

Occurs when pregnant woman's body does not secrete extra insulin required, leading to increased blood sugar levels

Obesity

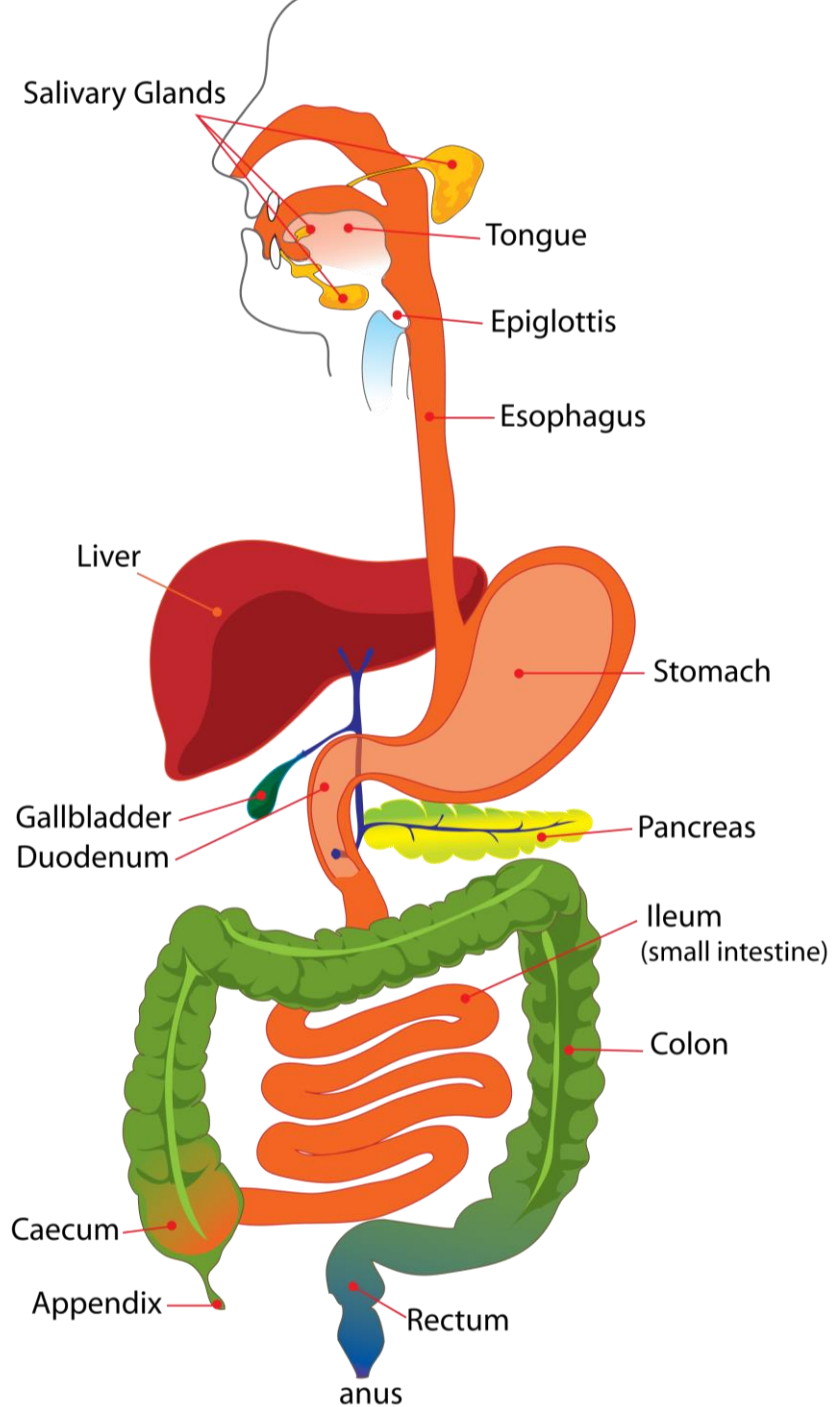
- More than 1/3 (36.5%) of US adults have obesity
- Obesity-related conditions include:
 - heart disease
 - Stroke
 - Type 2 diabetes
 - certain types of cancer
- The estimated annual medical cost of obesity in the U.S. was \$147 billion in 2008



Cancer and Nutrition

- To reduce the risk of cancer:
- Maintain a healthy weight
- Eat a variety of vegetables, fruits, whole grains, and legumes
- Limit calorie dense foods
- Limit processed meats
- Consume less salt





Gastrointestinal Disorders

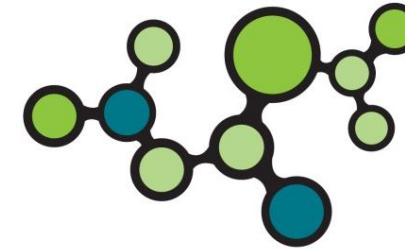
- Irritable bowel syndrome (IBS)
- Crohn's Disease
- Bowel Control Problems
- Gas
- Lactose intolerance
- Diarrhea
- Diverticulosis and Diverticulitis
- Acid Reflux (GER & GERD)

Celiac Disease

- celiac disease is a serious genetic autoimmune disorder where the ingestion of gluten leads to damage in the small intestine
- Estimated to affect 1 in 100 people worldwide
- 2.5 million Americans are undiagnosed and are at risk for long-term health complications



CELIAC DISEASE AT A GLANCE



CELIAC DISEASE IS A SERIOUS GENETIC AUTOIMMUNE DISEASE.

1 in 133 people in the United States have celiac disease. That's approximately 3 million people.



3 million



LEFT UNDIAGNOSED AND UNTREATED, people with celiac disease are at-risk for other serious health consequences, such as osteoporosis, anemia, thyroid disease, and even certain cancers.



83% of the people with celiac disease are undiagnosed.



Celiac disease is the only autoimmune disease with a known trigger—**GLUTEN**. Gluten is the protein found in wheat, rye and barley and foods and drinks that contain these grains.



CURRENTLY, THE ONLY TREATMENT FOR CELIAC DISEASE IS A STRICT GLUTEN-FREE DIET.

Learn more about celiac disease and more at www.BeyondCeliac.org

