

SCUTZM

By Josh and Sabreen




- DISEASE RESULTING FROM A DEFICIENCY OF VITAMIN C
- AKA BARLOW'S DISEASE.
- MOST COMMON WITH SAILORS IN THE 16TH TO 18TH CENTURY.
- NOW IT USUALLY OCCURS IN ELDERLY PEOPLE, ALCOHOLICS, OR THOSE WHO DON'T HAVE VEGGIES OR FRUITS IN THEIR DIET.



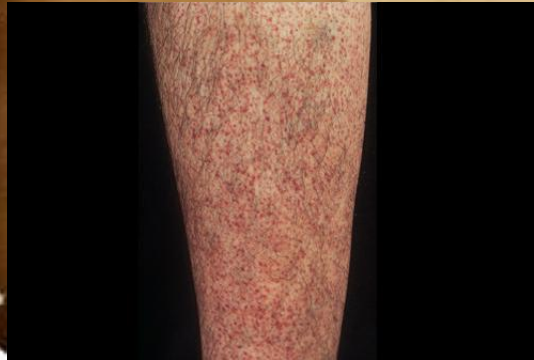
SYMPTOMS + SIGNS

SYMPTOMS OF SCURVY BEGIN WITH FATIGUE, APPETITE LOSS, WEIGHT GAIN, DIARRHEA AND AS IT PROGRESSES YOU SEE, FORMATION OF SPOTS ON THE SKIN, SPONGY GUMS, AND BLEEDING FROM THE MUCOUS MEMBRANES. SPOTS ON THE THIGHS AND LEGS, AND PALE COMPLEXION, FEEL DEPRESSED, AND BE PARTIALLY IMMOBILIZED. AS SCURVY ADVANCES, THERE CAN BE OPEN, SUPPURATING WOUNDS, LOSS OF TEETH, YELLOW SKIN, FEVER, NEUROPATHY AND FINALLY DEATH FROM BLEEDING.

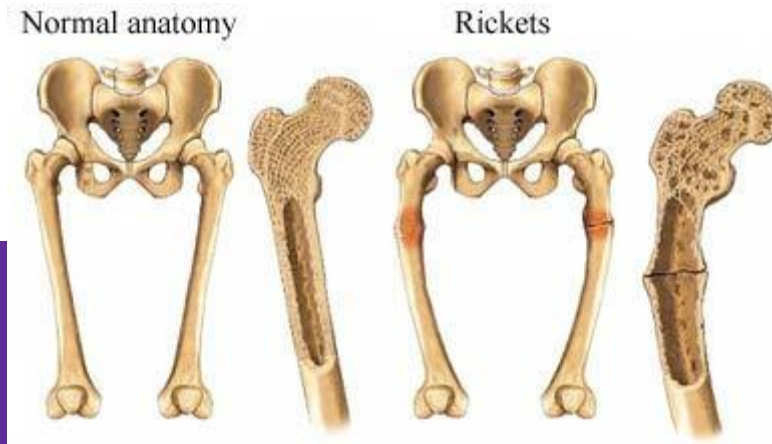


TREATMENT/CURE

TREATED BY PROVIDING THE PATIENT WITH VITAMIN C, WHICH CAN BE GIVEN ORALLY OR FROM INJECTION AND ALSO VITAMIN SUPPLEMENTS.



Rickets



Carly Greenstein and Stephanie Dilorio

What is rickets?

-A softening and weakening of bones in children, usually due to inadequate vitamin D

Symptoms/signs?

- delayed growth
- pain in spine, pelvis, and legs
- muscle weakness
- bowed legs
- thickened wrists and ankles
- breastbone projection
- dental defects
- seizures

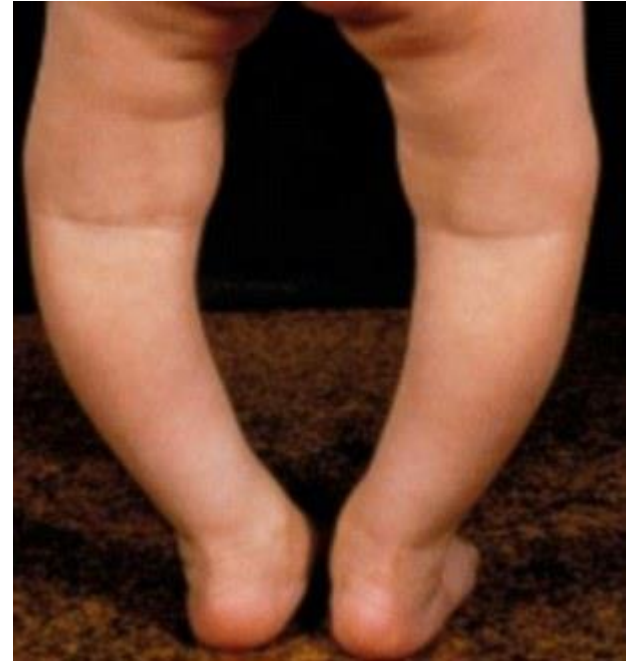
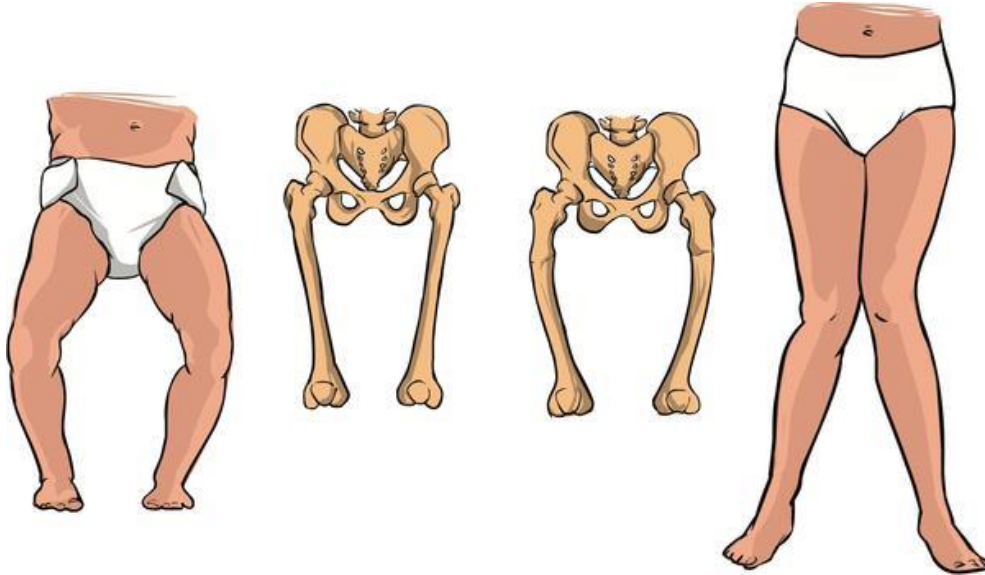
Who does it affect? Where can it be found?

- Children 3 months to 3 years
- People who live in areas with less sunshine
- Children born in a premature birth
- People who take anti-seizure meds
- Babies who are breastfed

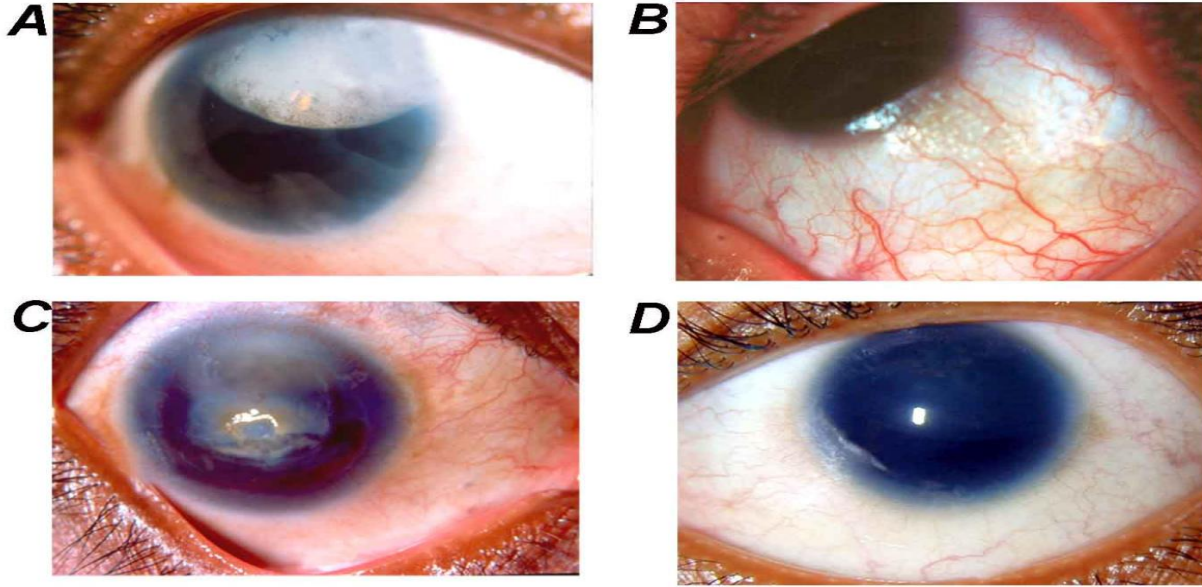


Cures/Treatments

- vitamin D and calcium supplements
- Special bracing for children to correct bow legs



Xerophthalmia



By: Ahmad Amer

What is it?

- Abnormal dryness of the conjunctiva and cornea of the eye, with inflammation and ridge formation, typically associated with vitamin A deficiency.

Symptoms, Signs + Cures

- Often a failure to produce tears with dry eyes
- Very rare condition
- Associated w/ aging + poor eyelid closure
- Can lead to blindness in severe situations
- Radioiodine therapy can soothe the symptoms
- the condition can be reversed in vitamin A deficient rats by retinoic acid supplementation (however the retinal damage continues)
- Can use artificial tears in form of tear drops to re-moisturize

Defective Blood Clotting (Vitamin K)

Bella and Ilknur

Causes

— — —

Bleeding disorders are often caused by a failure of the blood to clot. Several conditions can affect the way the blood clots. Many causes are related to protein defects in the plasma (the liquid component of blood).

The majority of these defects are hereditary.

Signs/Symptoms

— — —

Reported symptoms

- bleeding from the umbilical cord stump at birth
- bleeding into joints (hemarthrosis)
- bleeding in soft tissue and muscle
- bleeding in the gut (gastrointestinal hemorrhage)
- easy bruising
- excessive bleeding after surgery

Rare symptoms

- bleeding in the brain (intracranial hemorrhage)
- skeletal abnormalities and mild hearing loss (in severe cases)

Treatment/Cure? How?

medication and vitamin K supplements can treat the deficiency

not curable(hereditary)



Beriberi



Where, Why, and Who?

Lack of thiamine pyrophosphate (vitamin B-1)

Occurs mostly in people who abuse alcohol

Alcohol makes it harder for the body to absorb nutrients

- Can occur quickly since the body cannot produce thiamine, and is unable to store more than 25mg
- Wet Beriberi affects the cardiovascular system
- Dry Beriberi affects the nervous system
- It can be inherited as a genetic disease but it's rare

Symptoms/ Signs Treatment

- loss of appetite
- pain in the limbs
- shortness of breath
- swollen feet or legs
- loss of feeling in hands or feet

Cure/

- Thiamine supplements (injection or by mouth)
- Eat more foods with Vitamin B-1
 - whole grain
 - beans
 - beef

Cretinism

Rashmi Naik and Catherine Pfromm



What is it? (Causes, Signs, and Symptoms)

Cretinism is a condition of severely stunted physical and mental growth due to untreated congenital deficiency of thyroid hormones usually due to maternal hypothyroidism.

The term endemic cretinism is used to describe clusters of infants with goiter and hypothyroidism in a defined geographic area. Such areas were discovered to be low in iodine, and the cause of endemic cretinism was determined to be iodine deficiency.

Signs

Low hair line, dry brittle hair, newborn's face looks dull, puffy, and has slow reaction, Macroglossia: large tongue, thick and protruding, protruded belly button, edema: periorbital (eyelids), extremities, genitalia, Jaundice: yellowish discoloration of the skin, Hypothermia: low temperature, Hypotonia: decreased muscle tone, hoarse or low cry, dyspnea: difficulty of breathing, cardiac problems: Bradycardia (slow pulse), heart valve abnormality, short stature or poor growth, poor weight gain

Symptoms

Excessive sleeping, decreased activity, poor feeding patterns, constipation, choking

How can it be taken care of? (Treatment/Cure)

4 Ways to Treat Cretinism

1. **L-thyroxine:** This is a replacement thyroid hormone that comes in tablet form. A child will typically take this hormone everyday and increase the dosage as they grow.
2. **Monitoring and Evaluation:** Regular visits to the doctor are essential to examine the child's weight, height, development, and general health. Also, it is expected that the child will be having regular blood test every one to three months until age one.
3. **Diet:** It is beneficial for people with Cretinism to take Iodine supplements. This prevents brain damage in cretinism endemic areas.
4. **Activity:** It is essential for kids with cretinism to participate in physical activity to develop their motor skills.

Where can it be found?/ Who does it affect?/ Who is at risk?

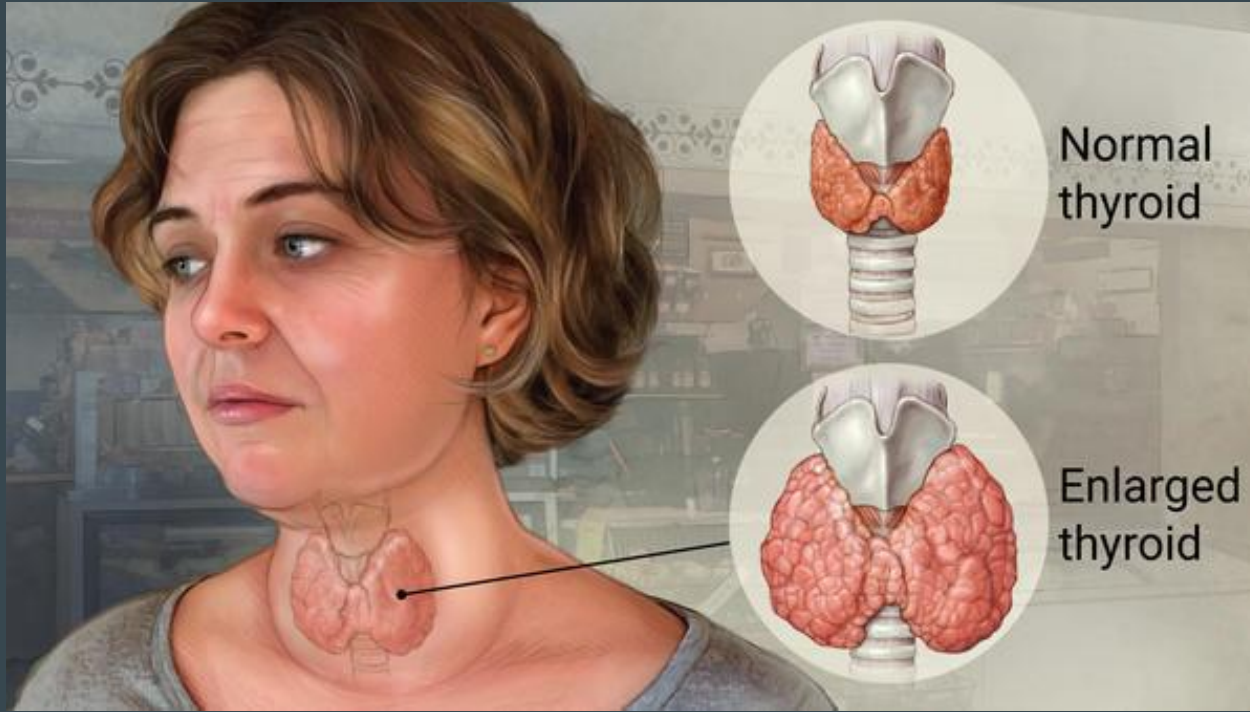
Earth deficient in iodine is most common inland and in mountainous areas and areas of frequent flooding, but can also occur in coastal regions owing to past glaciation, and leaching by snow, water and heavy rainfall, which removes iodine from the soil. Plants and animals grown in iodine deficient soils are correspondingly deficient. Populations living in those areas without outside food sources are most at risk of iodine deficiency diseases.

Cretinism is prevalent in North America, Japan, Australia, and Europe.

More common in females than males.

Cretinism is a condition which may be present before or after birth. For children aged 2 years or older who developed it, it is not referred to as cretinism but as primary hypothyroidism.

Goiter



Camila Aguilar and Amanda Noonan

Causes

Goiters occur when the thyroid gland produces too much thyroid hormone or not enough.

The pituitary gland can stimulate thyroid growth to boost production of the hormone.

iodine deficiency or inflammation of the thyroid gland

Symptoms/Signs

A visible swelling at the base of your neck

A tight feeling in your throat

Coughing

Treatments

Small ones may not need treatment

Medication to fix hormonal imbalance

Aspirin can reduce inflammation

If the goiter is large and causes difficulty breathing or swallowing it can be surgically removed

Radioactive iodine treats an overactive thyroid gland

Yes it can be cured

Who is at Risk?

Anyone can get it but typically women over 40 years old are most at risk

Obesity

Cause

Genetics

Overeating

Physical Inactivity

Frequency of eating



Health Risks

Heart disease

High blood pressure

Diabetes

Cholesterol clog



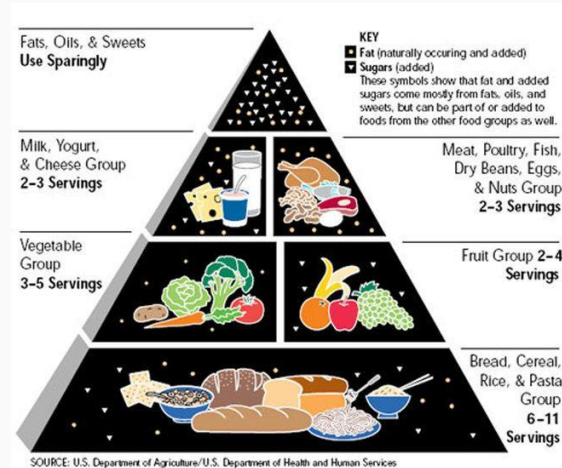
How to Lose Weight

Only when hungry - no snacks

Sleep

Low carb diet

Physical activity



Who Does it Affect?

Minorities highest obesity rates

Low income families

Urban areas




Pellagra

Patrick Warren and Gavin Hollowell


Cause/Where it's found

Niacin deficiency(pellagra) is a condition that occurs when a person doesn't get enough or can't absorb niacin or tryptophan. In the 1800s, pellagra was common among poor Americans whose diets consisted mostly of corn, molasses, and salt pork. Today, most people in the developed world get plenty of niacin in their diets. Niacin deficiency is more likely to be caused by problems that affect absorption of niacin or tryptophan. The most common cause is alcoholism.



Symptoms/Signs

It is characterized by dermatitis, diarrhea, thick, scaly pigmented rash on skin exposed to sunlight, swollen mouth and bright red tongue, vomiting, headache, apathy, fatigue, depression, disorientation, memory loss



Treatment/Cure

Get more niacin in your diet by eating niacin-rich foods like red meat, fish, poultry, fortified breads and cereals, and enriched pasta and peanuts. You can also take niacin supplements. If left untreated pellagra can lead to death.





Anemia



A condition marked by a deficiency of red blood cells or of hemoglobin in the blood, resulting in pallor and weariness.

Cause

Blood loss

Decreased or
faulty red blood
cell production

Destruction of
red blood cells



Symptoms/Signs

Fatigue

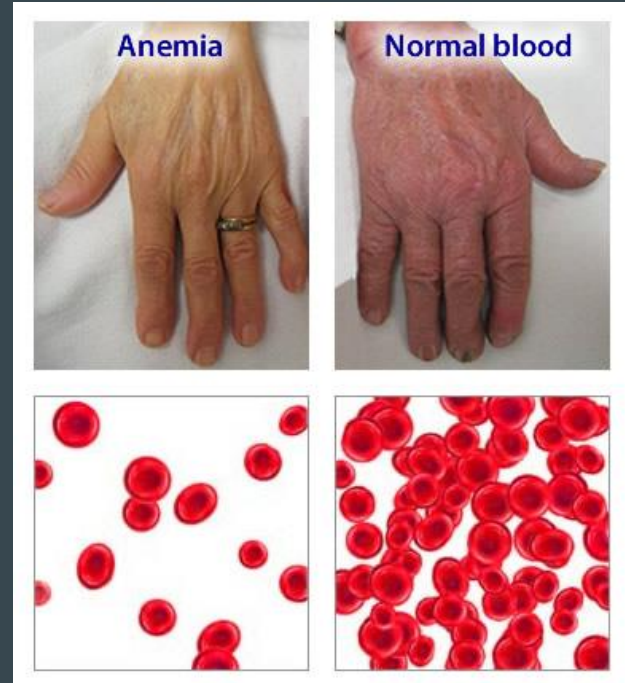
Decreased energy

Weakness

Shortness of breath

Lightheadedness

Paleness



Where can it be found? Who does it affect? Who is at risk?

It can be found everywhere

Affects people with poor diet, intestinal disorders,
chronic diseases, infections and other conditions

Pregnant women

The risk increases as people grow older

Cure? How?

No cure.

Treatment

- Blood transfusion
 - For VERY serious Anemia
- IV fluids
- Iron supplements
- Medications to induce blood formation

Kwashiorkor

Normal



Kwashiorkor



Cause

Kwashiorkor is caused by not eating enough protein. It is most common in countries where there is limited food supply or in places with low levels of education. Every cell in your body contains protein. You need protein in your diet for your body to repair cells and make new cells. A healthy body regenerates cells in this manner constantly. Protein is also important for growth during childhood and pregnancy. Children who develop kwashiorkor may not grow or develop properly. It is a very serious condition and can be life-threatening if not treated.

It is especially common in developing countries that are experiencing:

- famine

- political unrest

- natural disasters, such as earthquakes, landslides, hurricanes and floods

These are all events that can lead to lack of food supply.

Symptoms/Signs

Changes in [skin pigment](#)

Decreased muscle mass

Diarrhea

Failure to gain weight and grow

[Fatigue](#)

Hair changes (change in color or texture)

Treatment

Getting more calories and protein will correct kwashiorkor, if treatment is started early enough. However, children who have had this condition will never reach their full potential for height and growth.

Treatment depends on the severity of the condition. People who are in shock need immediate treatment to restore blood volume and maintain blood pressure.

Calories are given first in the form of [carbohydrates](#), [simple sugars](#), and fats. Proteins are started after other sources of calories have already provided energy. Vitamin and mineral supplements are essential.

Since the person will have been without much food for a long period of time, eating can cause problems, especially if the calories are too high at first. Food must be reintroduced slowly. Carbohydrates are given first to supply energy, followed by protein foods.

Many malnourished children will develop intolerance to milk sugar ([lactose intolerance](#)). They will need to be given supplements with the [enzyme](#) lactase so that they can tolerate milk products.

Cure? How?

Kwashiorkor can be cured!

It needs to be treated early and gradually re-introduce proteins in the child's diet.

However even with treatment, children who have had kwashiorkor may never reach their full growth and height potential. If treatment comes too late, a child may have permanent physical and mental problems.

If left untreated, the condition can lead to coma, shock, or death.

Where and Who?

The disease is most frequently found in children and infants in Africa and Central America.

common in areas where there is:

- Famine

- Limited food supply

- Low levels of education (when people do not understand how to eat a proper diet)

This disease is more common in very poor countries. It often occurs during a drought or other natural disaster, or during political unrest. These conditions are responsible for a lack of food, which leads to malnutrition.

Marasmus



Definition and Cause

- Severe undernourishment causing an infant's or child's weight to be significantly low for their age.
- Caused solely by poor nutrition (not getting enough proteins/calories).
- This lack of nutrition can range from shortage of vitamins to complete starvation.

Symptoms

- Vary depending on the severity and whether associated infections or other conditions are present.

Common symptoms

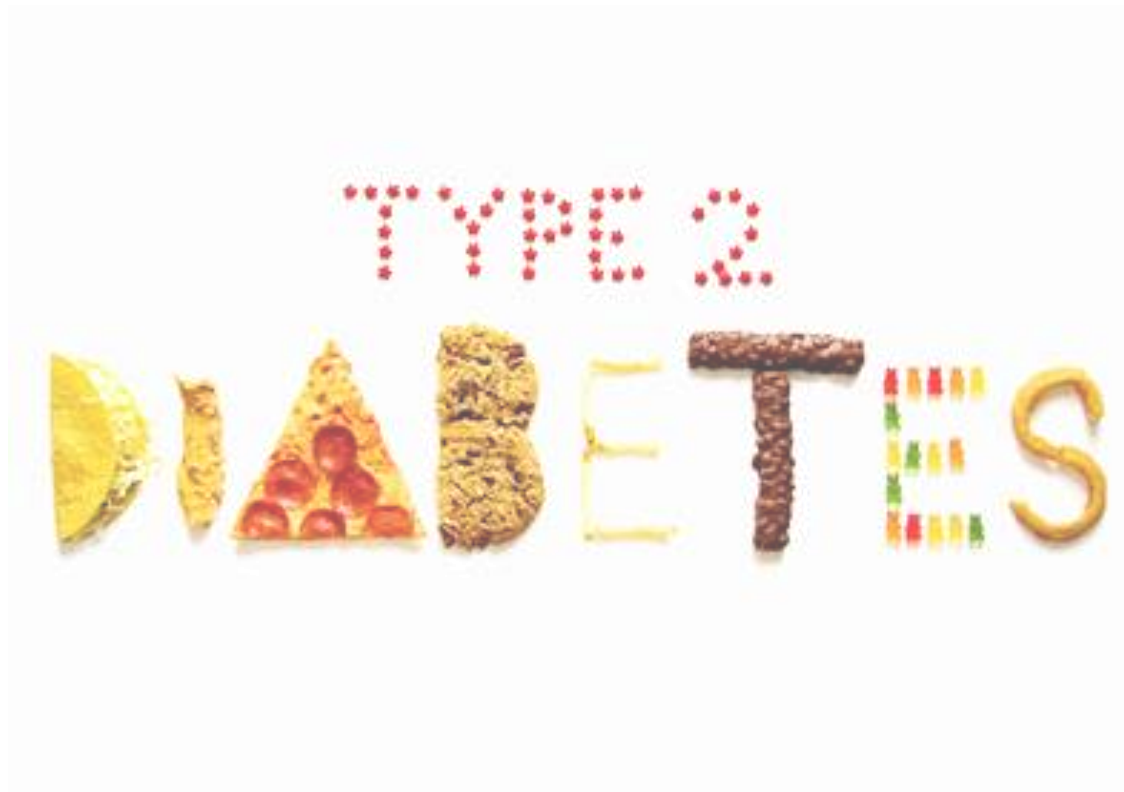
- Distended abdomen
- Dramatic loss of muscle mass
- Dizziness
- Dry, peeling skin
- Failure to achieve an appropriate weight to age/size

Where it can be found

- Marasmus is a serious problem and is most common in children/infants in developing regions, such as Africa, Latin America, and South Asia, where poverty, along with inadequate food supplies and contaminated water, are prevalent. Contaminated water may contain bacteria or parasites that enter the body when the water is consumed and cause infections that complicate the condition.

Solutions

- A nutritious, well-balanced diet with lots of fresh fruits and vegetables, grains, and protein will reduce the risk of malnutrition and any related marasmus.
- Treatment of marasmus involves a special feeding and rehydration plan and close medical observation to prevent and manage complications of malnutrition.
- Intravenous fluids, oral rehydration solutions, and nasogastric feeding tubes are forms of treatment that may be used.



Powerpoint by: Matt Talarico

Type 2



Cells in the body cannot use insulin correctly-->High blood sugar

Symptoms include...

Signs include

-Frequent Urination
Loss

-Obesity/Weight

-Fatigue

-Vomiting

-Blurry Vision

-Thirst

Type 2 Diabetes

No specific cure

Demographics:

Can be regulated
more common in men

-Exercise

Minorities more at risk

-Healthy diet

Could be genetic

-Insulin therapy

lifestyle choices=higher risk

-Slightly

-

-

-Poor



