



Tues, March 28, 2017

Honors: Please bring in
field trip forms & sign up
for Wed

Pick up: none

Today you will:

1. DSQ ISN pg 191
2. Understand the function of the immune system,
how pathogens spread & how vaccines work

Homework/Planner:

Anything not complete up to ISN pg 181

Daily Science Question

- A student wonders, “Does the moisture content in soil affect how far a worm can dig?” Identify the variables that are being considered in this experiment and the variables that need to be controlled.
- **Independent =**
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Daily Science Question

**What are some ways of preventing heart
disease?**

LET'S MINGLE!

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What happens when someone sneezes?

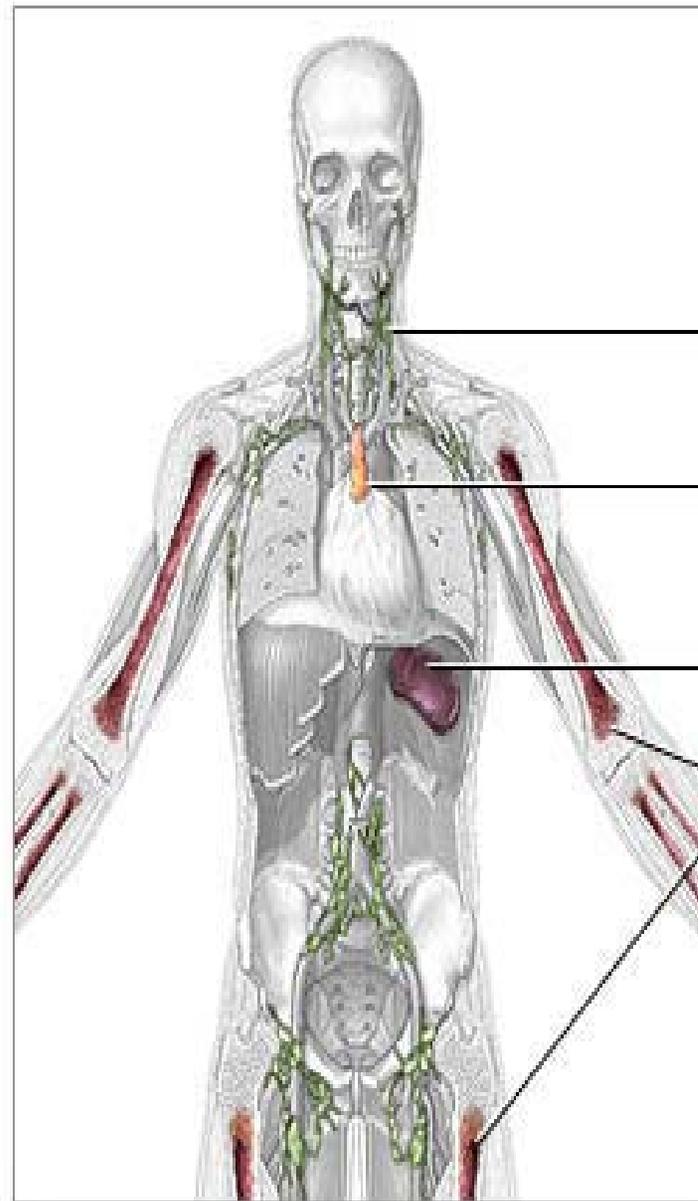
***What you need to know re.
the Immune System
Chapter 31 ISN pg 190***

- 1. Pathogens & the 5 types**
- 2. Vector**
- 3. Active vs Passive Immunity**
- 4. Specific vs Non Specific Response**
- 5. Antibiotics**
- 6. Antibiotic Resistance**
- 7. Vaccines**
- 8. Communicable Disease – communicated from one person to another-CONTAGIOUS**
- 9. Chronic Disease – long-lasting, controlled but not cured**
- 10. T cells vs B cells**

THE IMMUNE SYSTEM

COPY Overall
Functions ISN pg
: 190

1. Microscopic armor that protects the cells of your body from bacteria, viruses, & poisons



Immune system structures

Lymph nodes

Thymus

Spleen

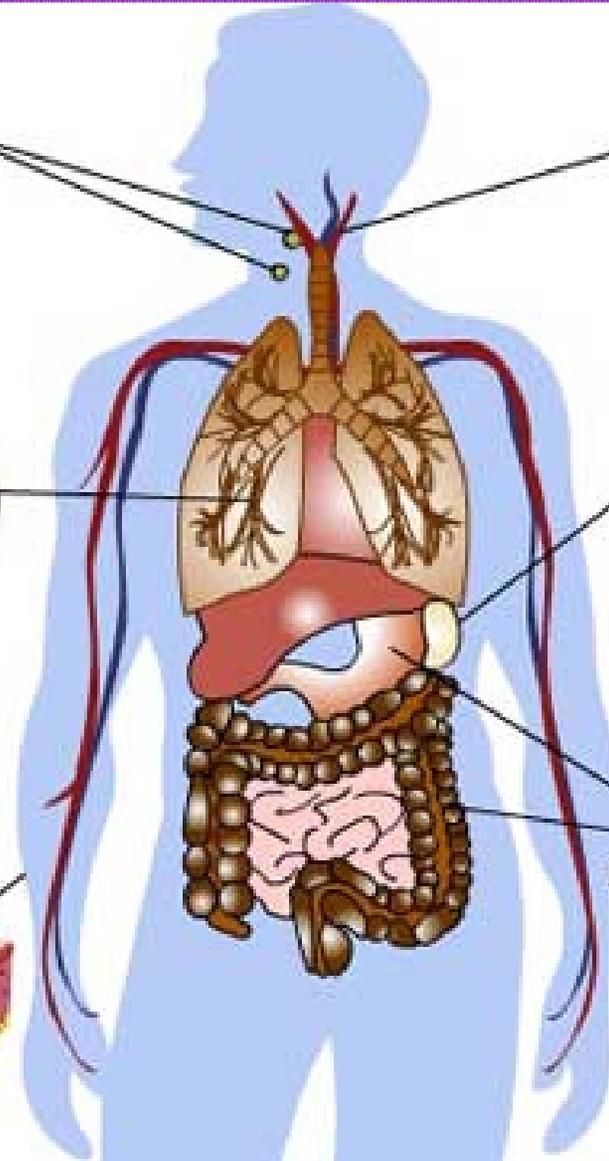
Long bones

The immune system

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Respiratory system
The cilia (fine hair-like projections) line the airway and move mucus and contaminants upward and out of the respiratory tract

Skin
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The spleen assists the body in protecting itself against bacterial infections

Stomach and intestines
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ISN page 190

Communicable Disease

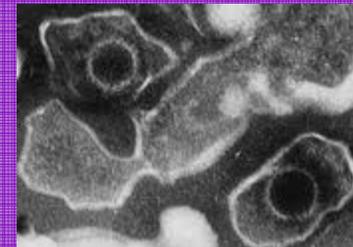
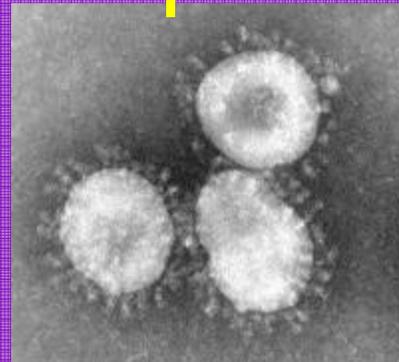
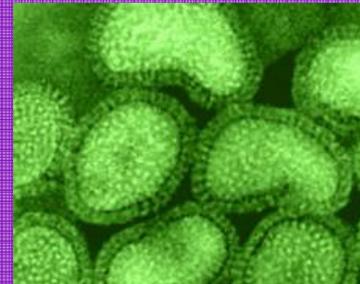
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2. EX: Flu, cold, Epstein-Barr (mono), skin, athletes foot, ringworm

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 4. Protozoa
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1. Latin for 'carrier'
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Just think about what the words active and passive mean.

ACTIVE IMMUNITY

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Passive Immunity

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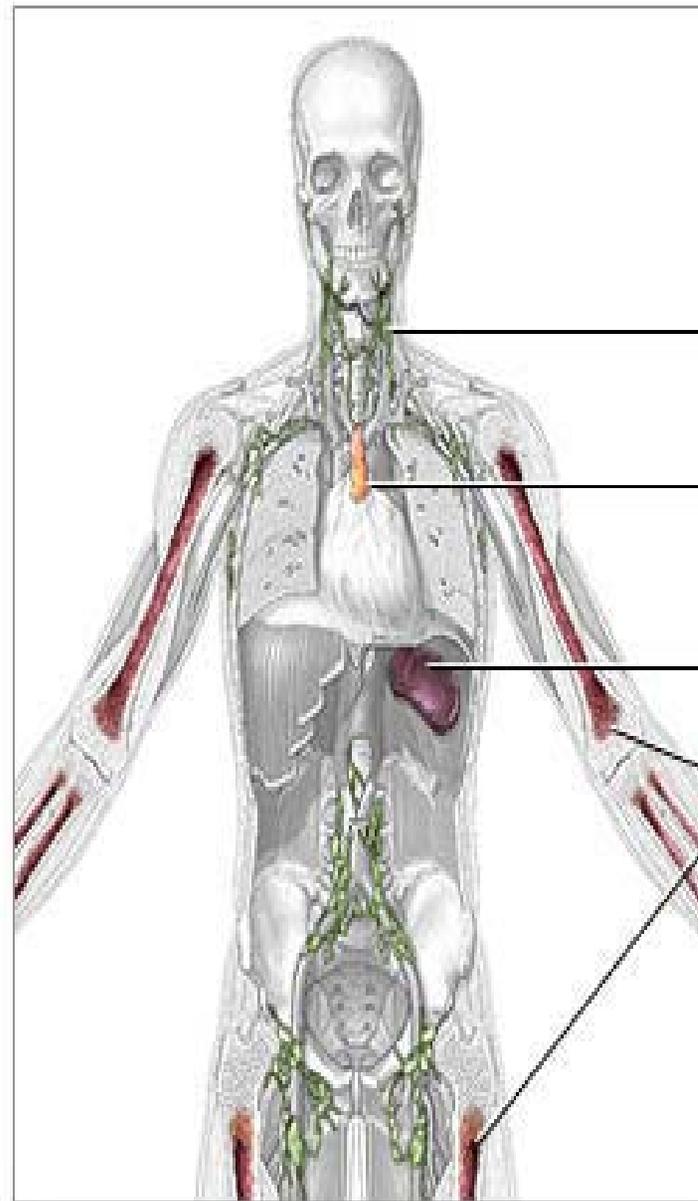
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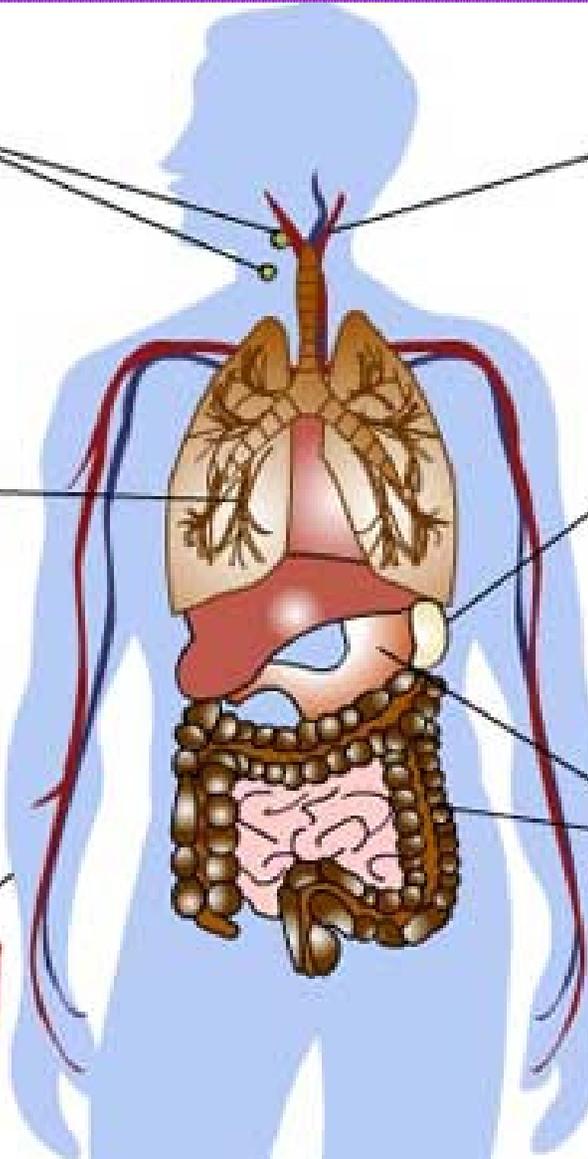
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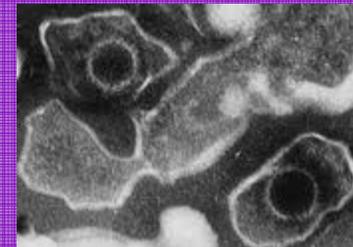
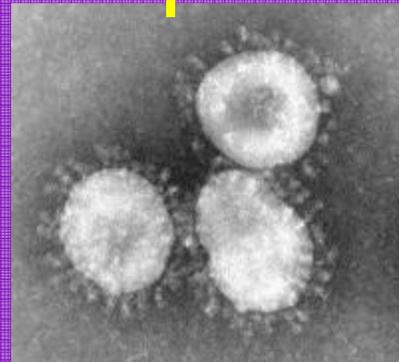
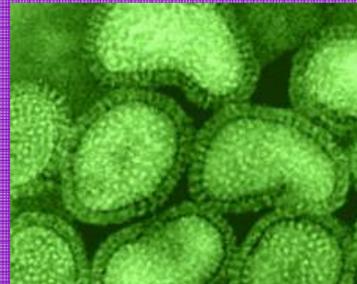
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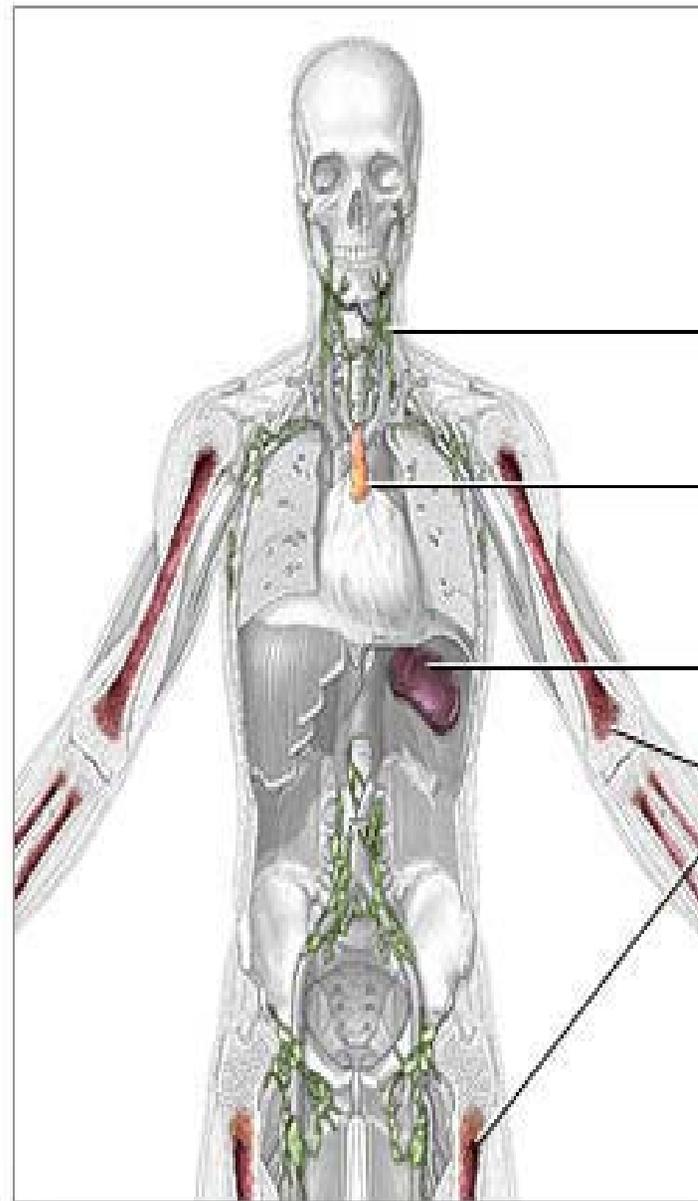
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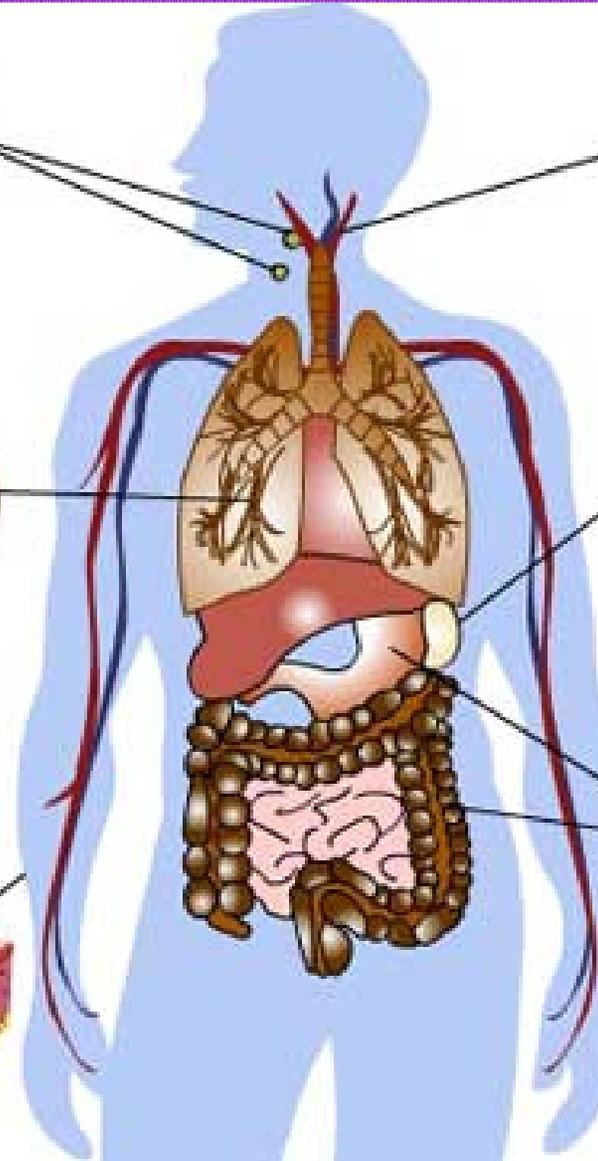
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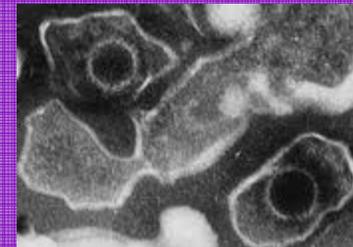
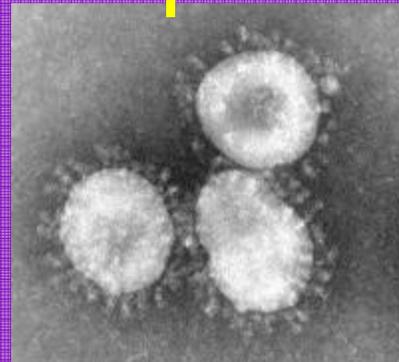
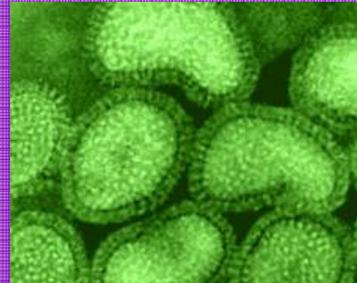
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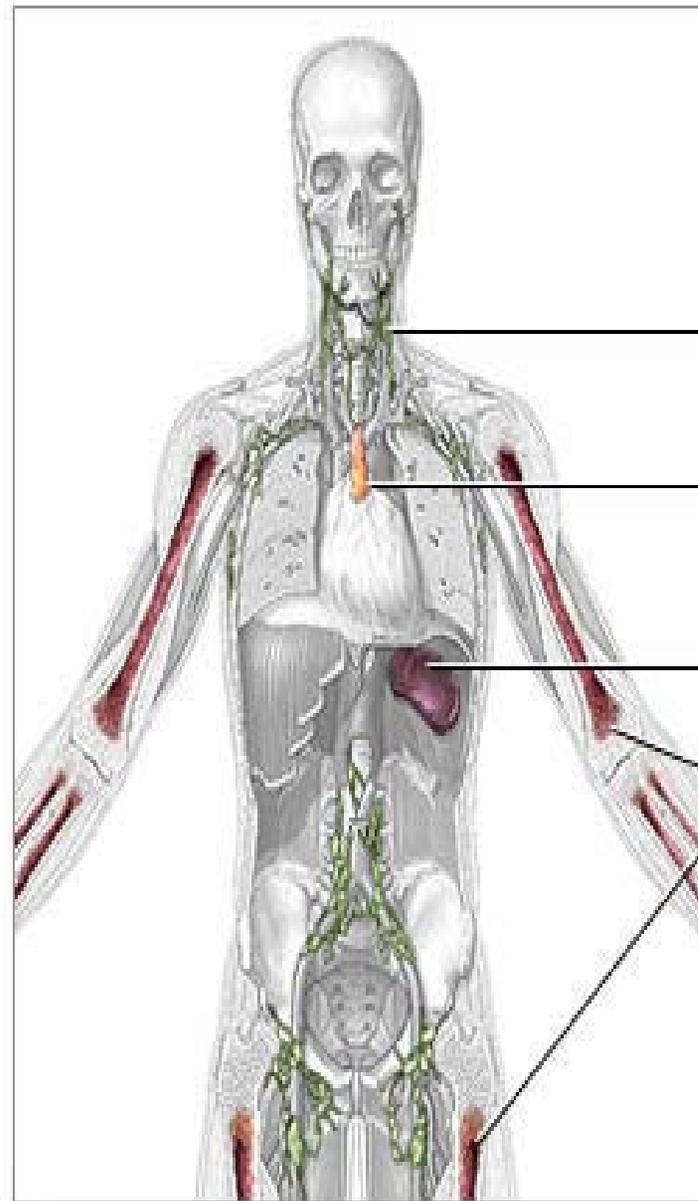
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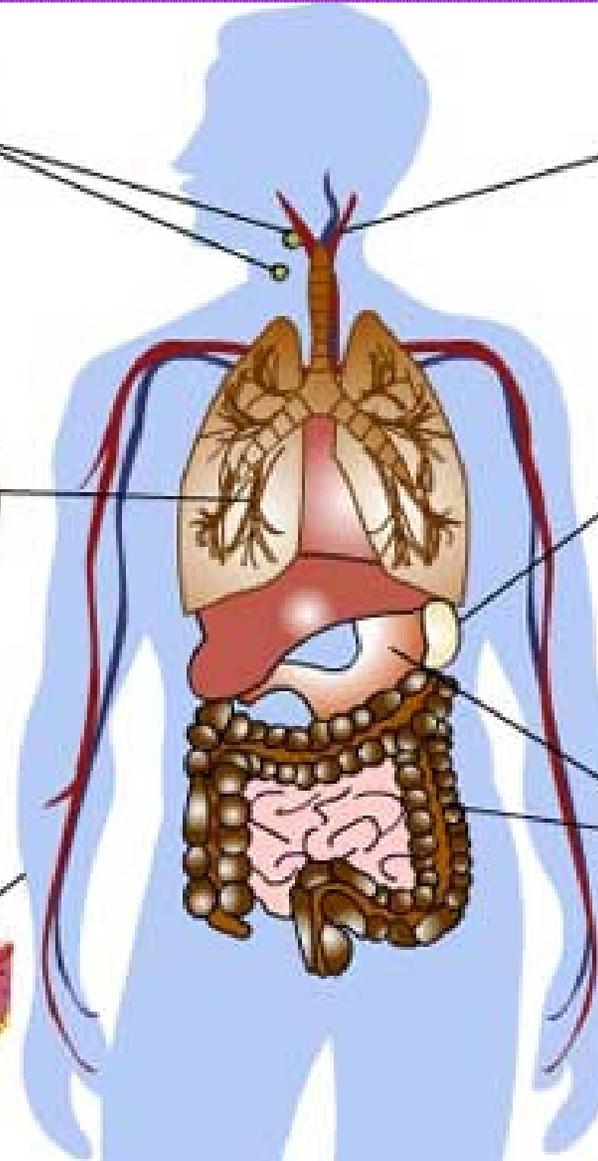
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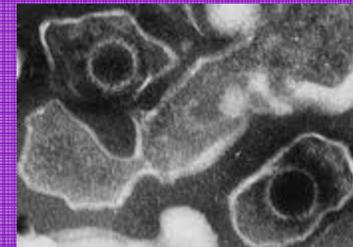
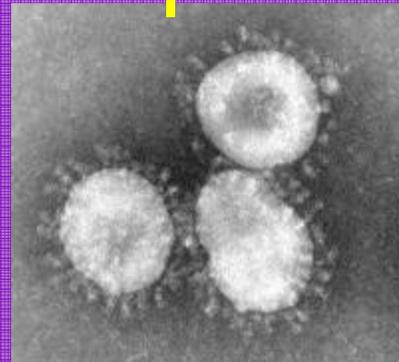
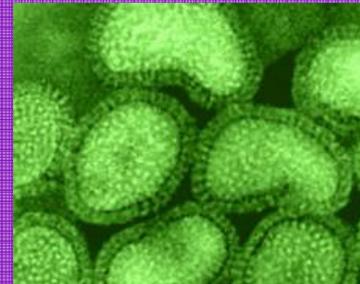
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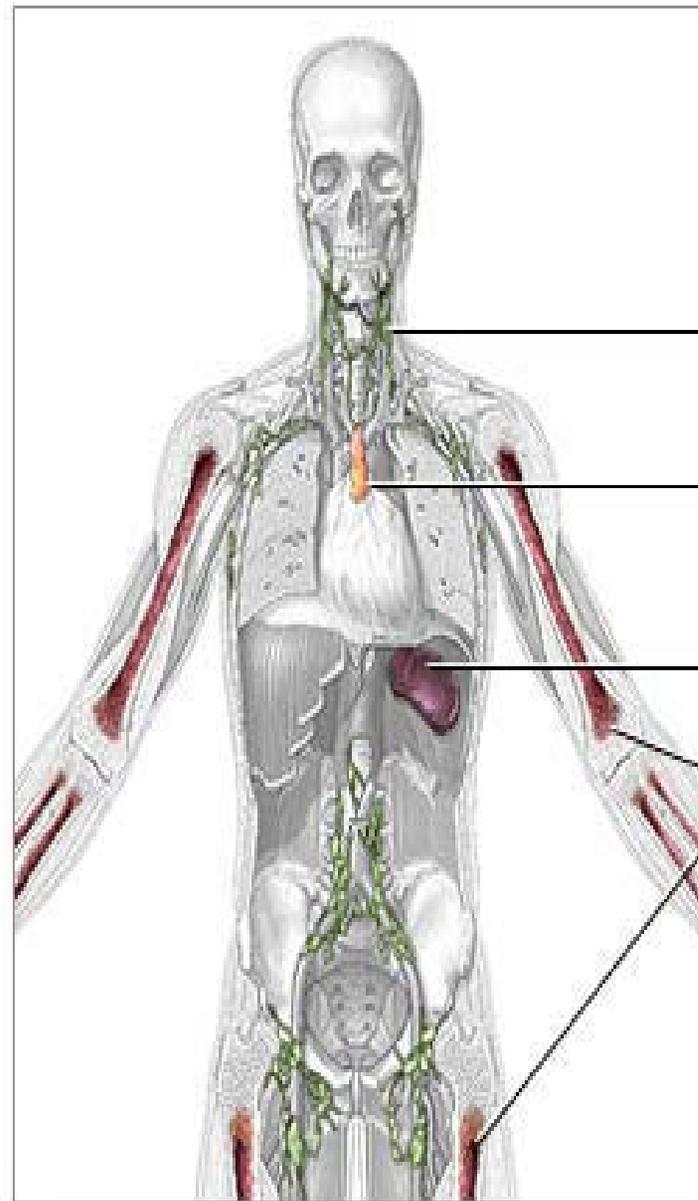
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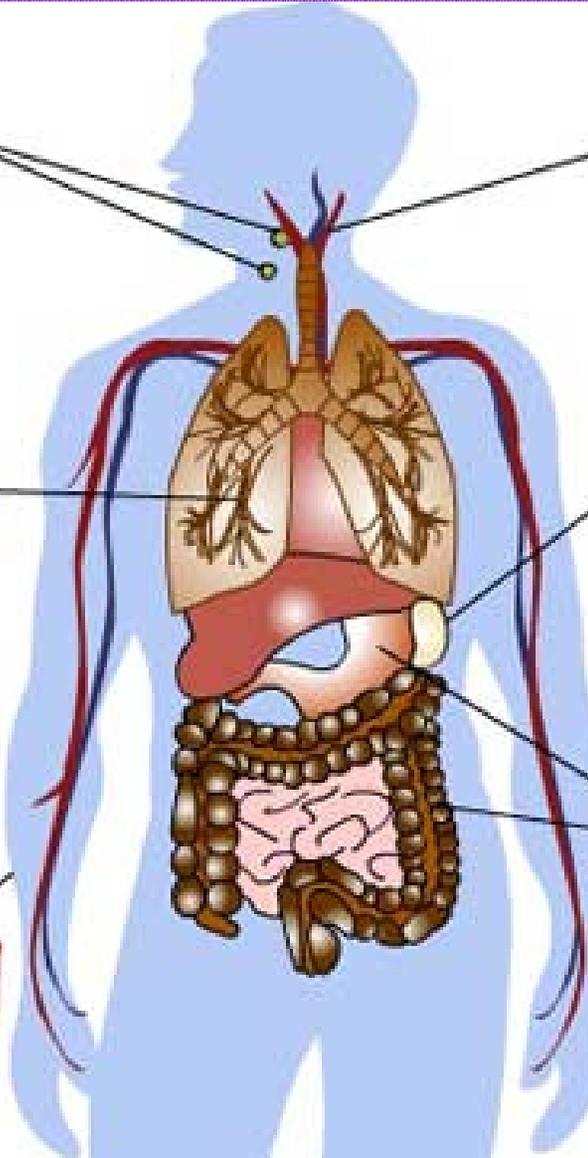
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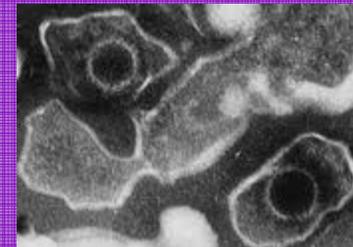
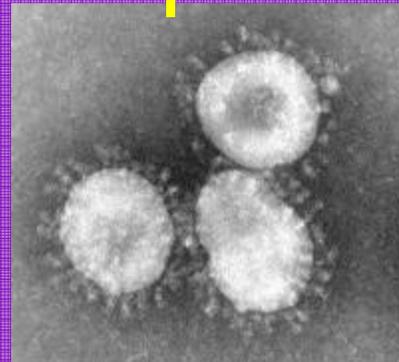
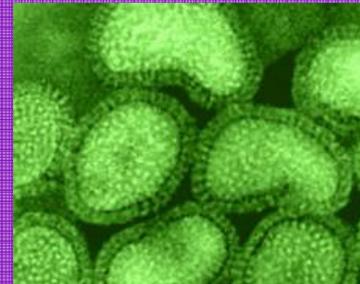
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2. EX: Heart disease, cancer, diabetes, Alzheimer's, hypertension



Pathogens

1. Infectious microbes
→ disease causing
 1. Bacterial
 2. Viral
 3. Fungal
 4. Protozoa
 5. Parasitic



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1. Latin for 'carrier'
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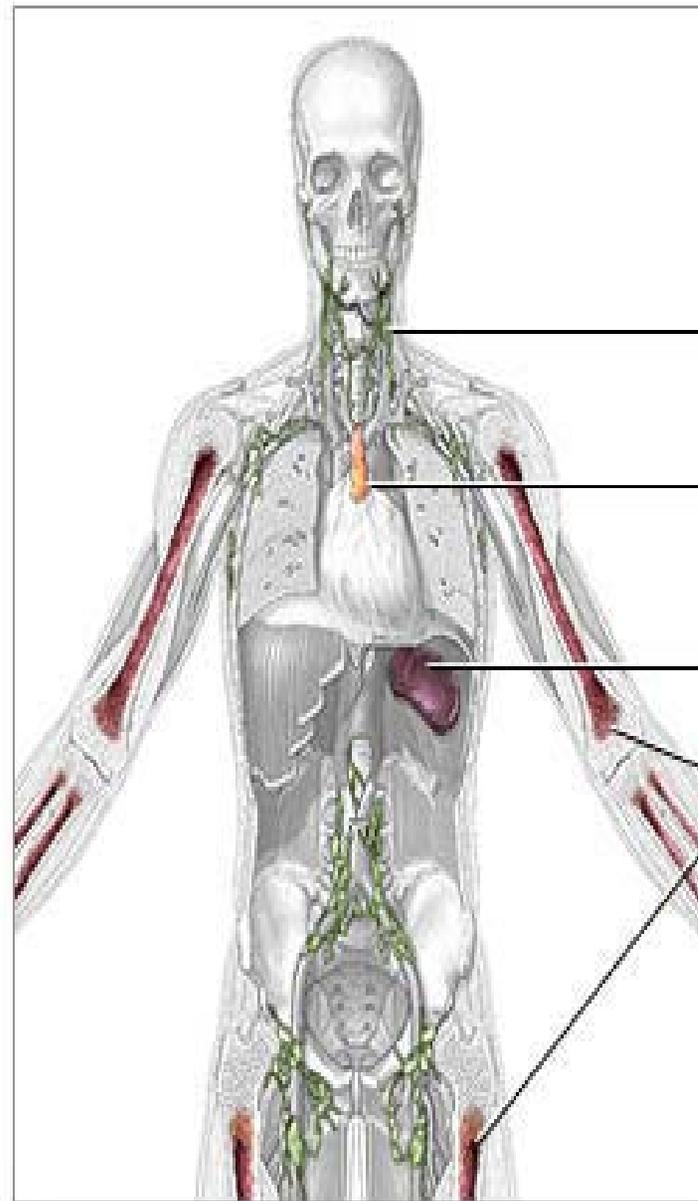
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THE IMMUNE SYSTEM

COPY Overall
Functions ISN pg
: 190

1. Microscopic armor that protects the cells of your body from bacteria, viruses, & poisons



Immune system structures

Lymph nodes

Thymus

Spleen

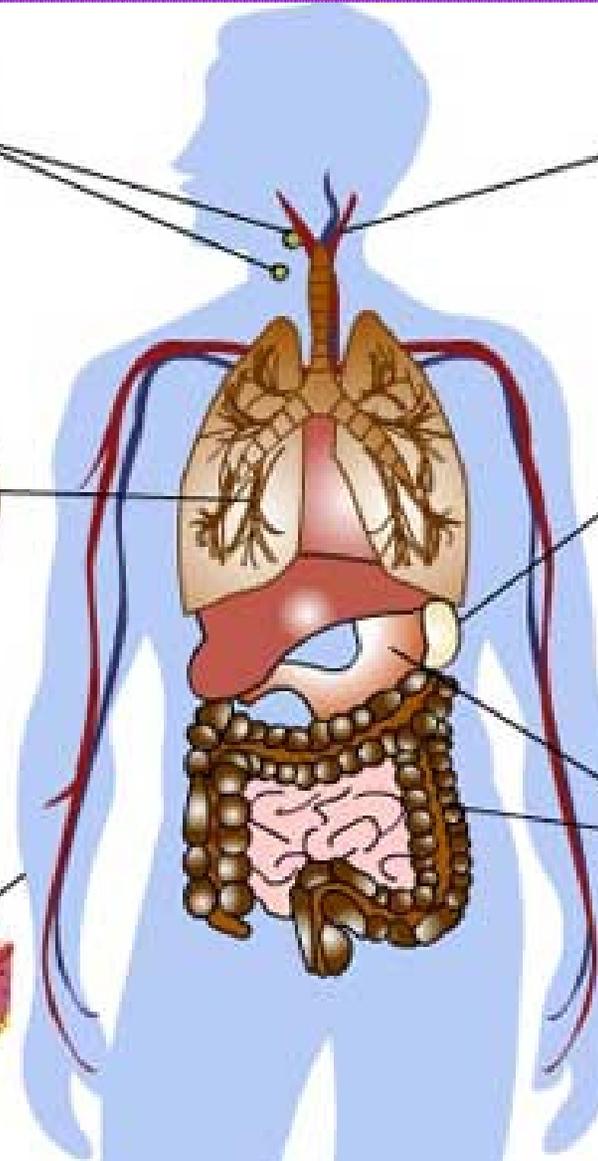
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ISN page 190

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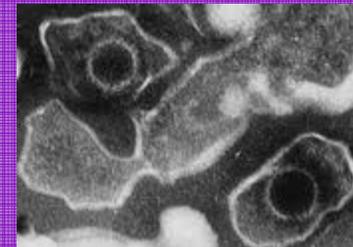
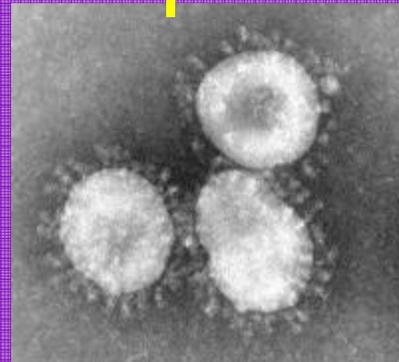
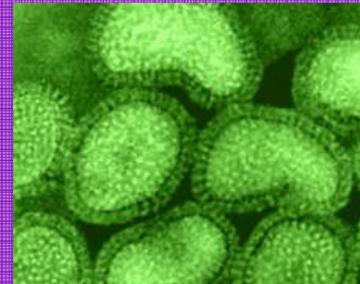
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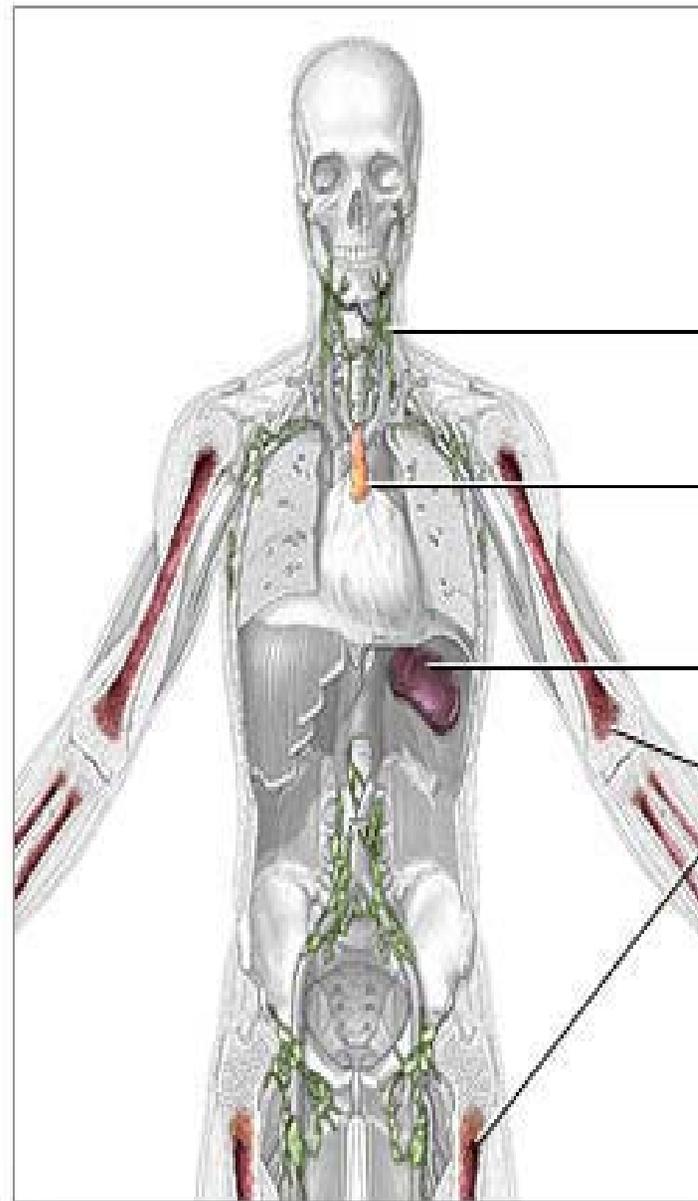
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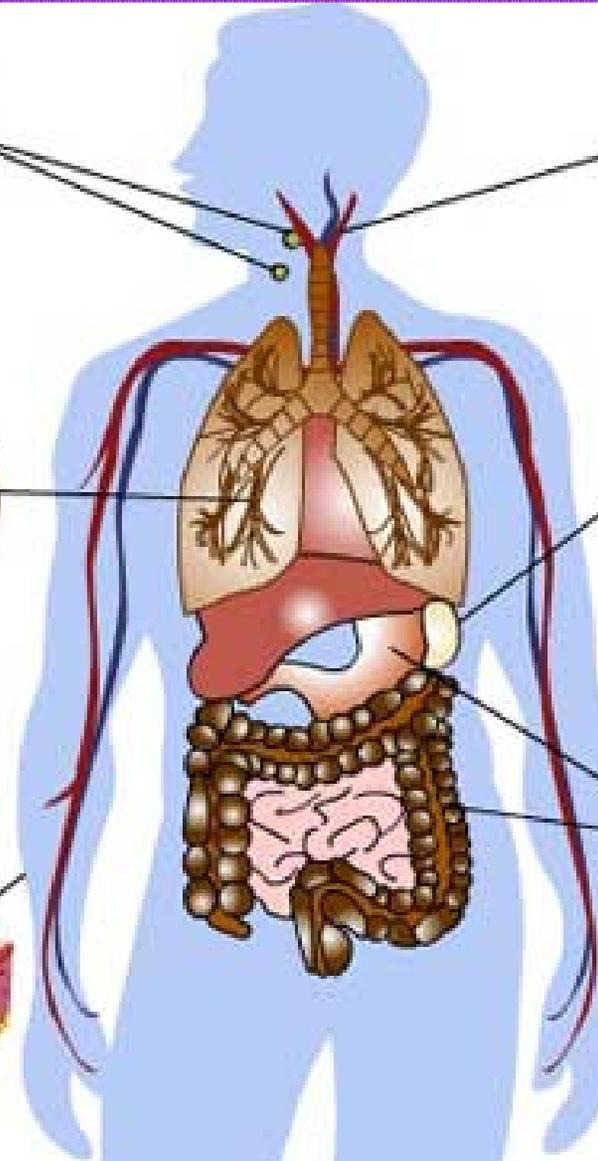
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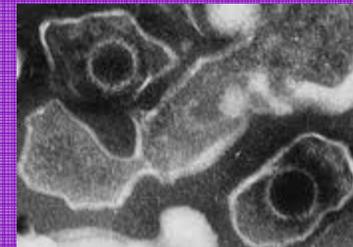
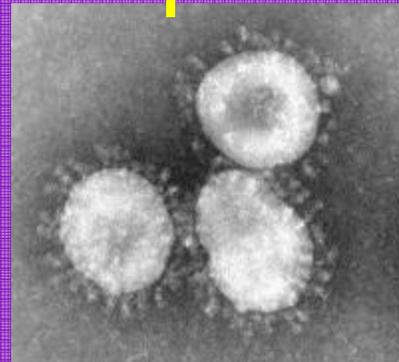
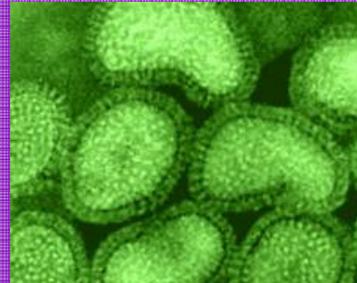
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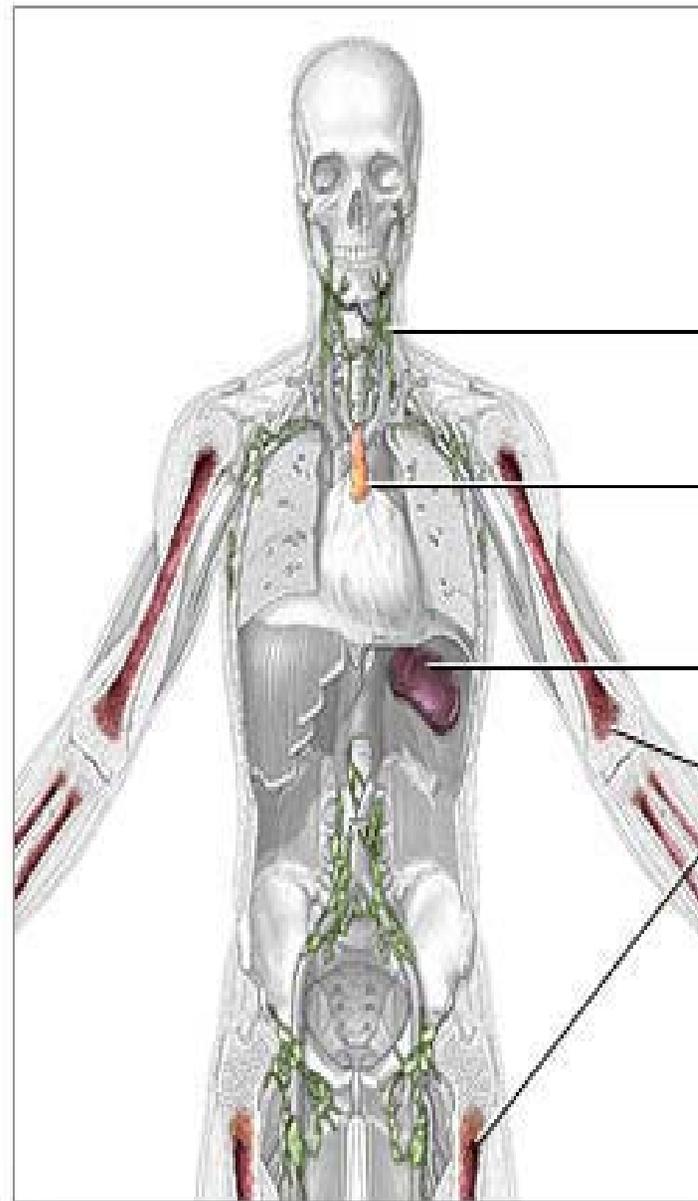
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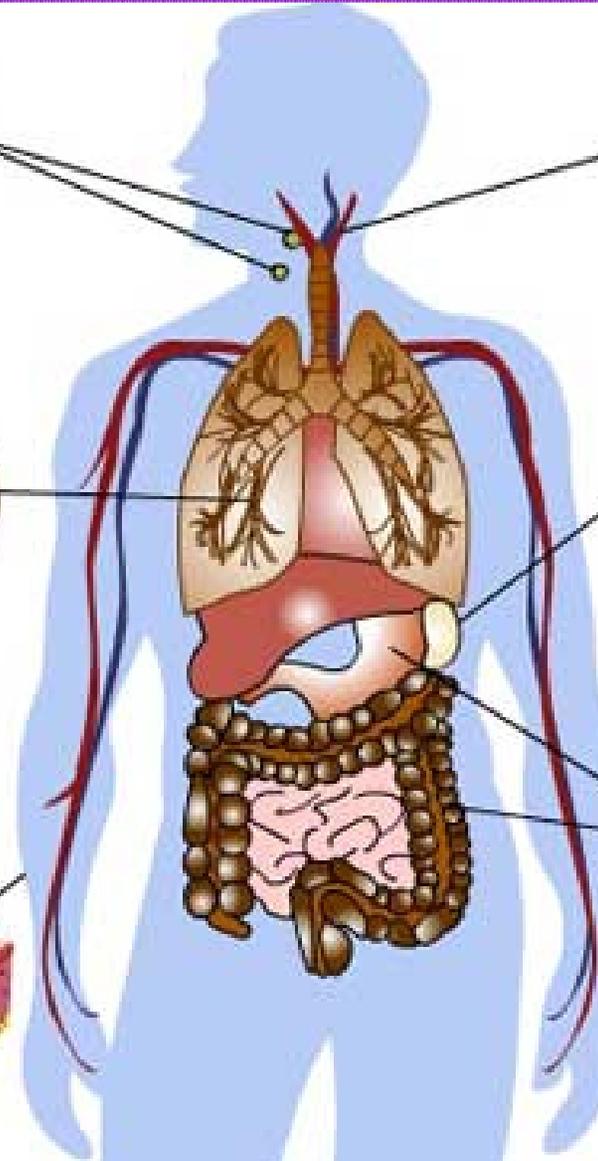
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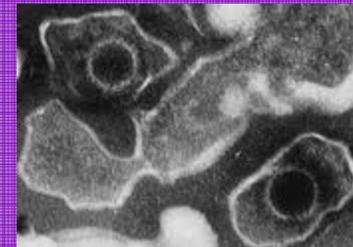
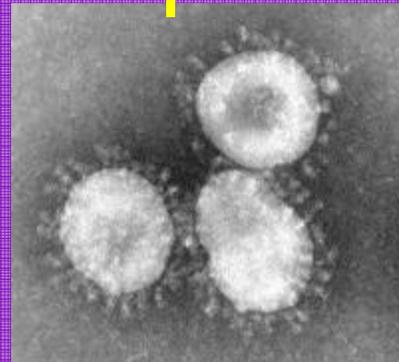
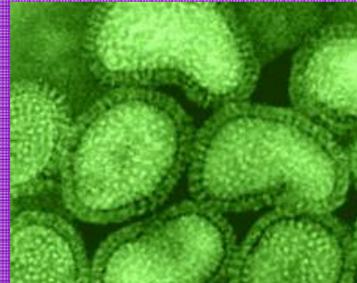
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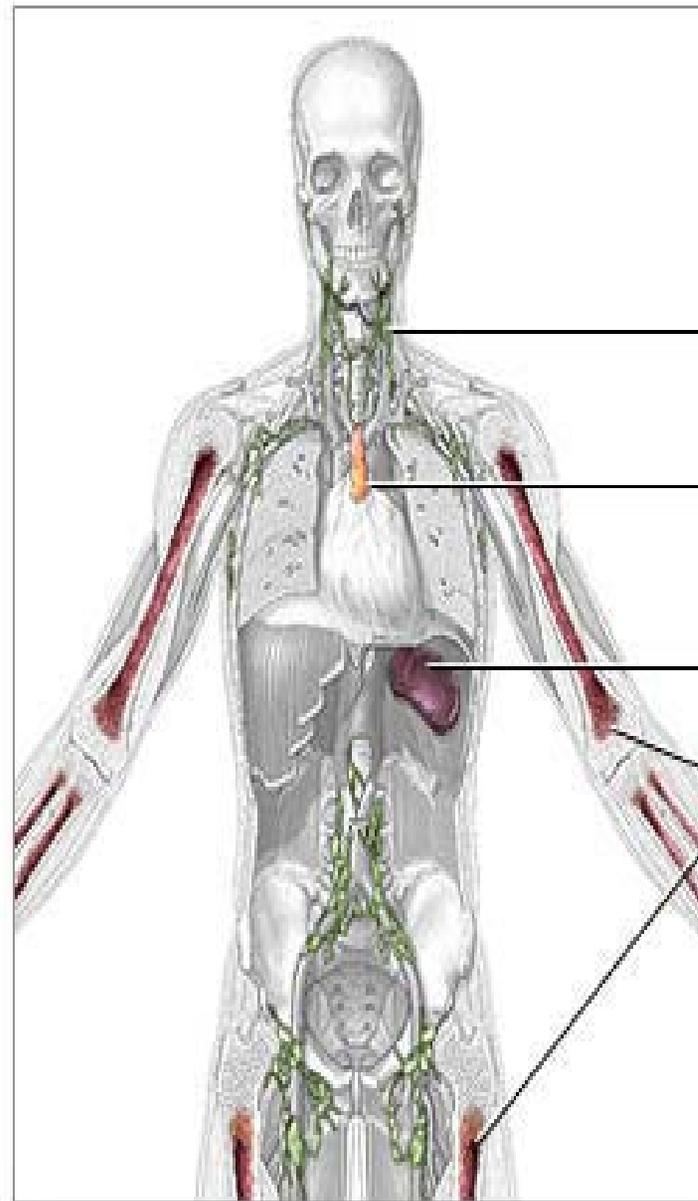
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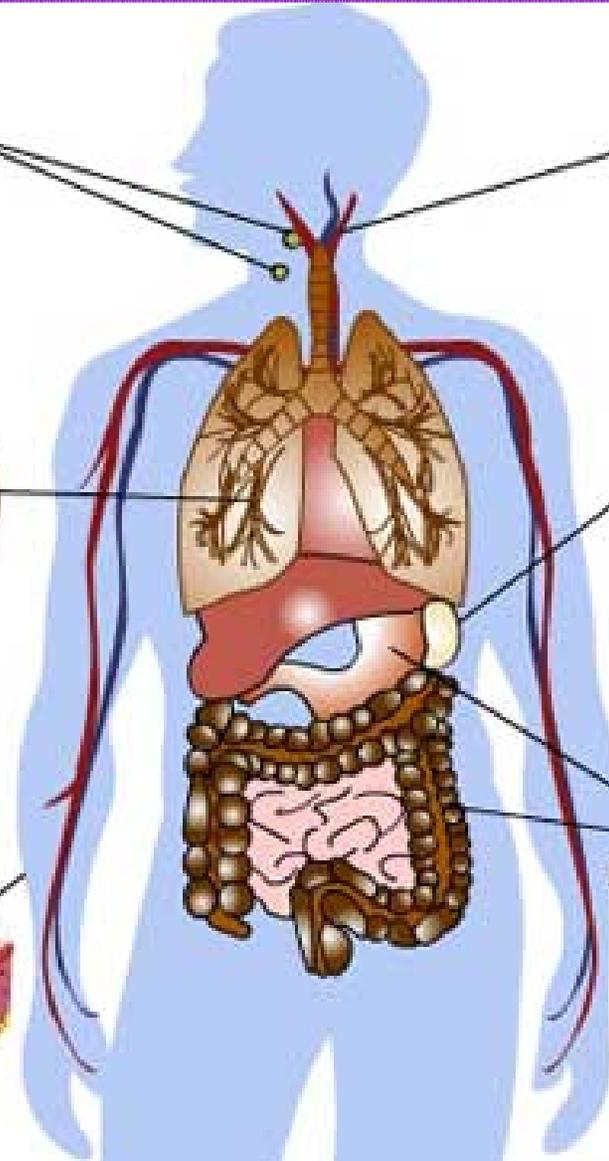
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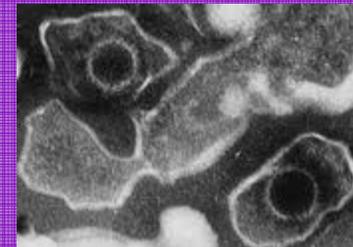
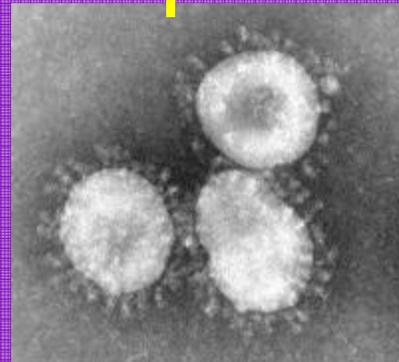
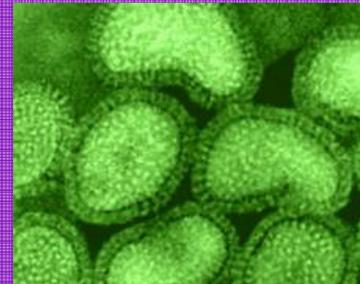
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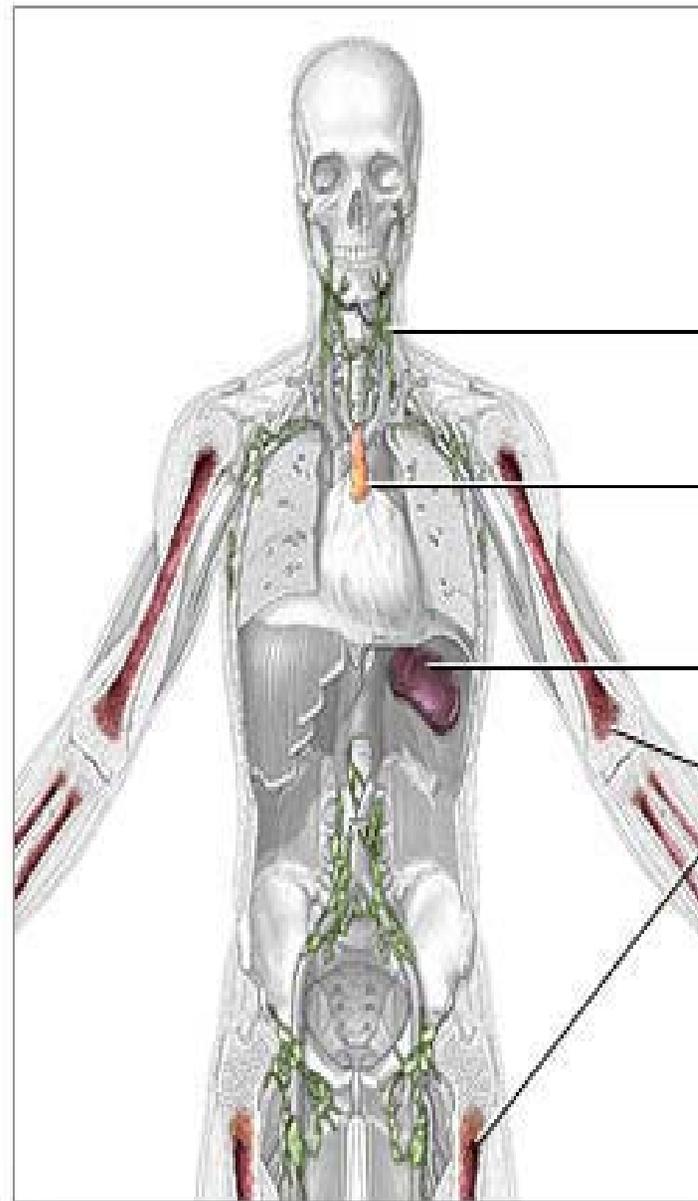
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Functions ISN pg
: 190

1. Microscopic armor that protects the cells of your body from bacteria, viruses, & poisons



Immune system structures

Lymph nodes

Thymus

Spleen

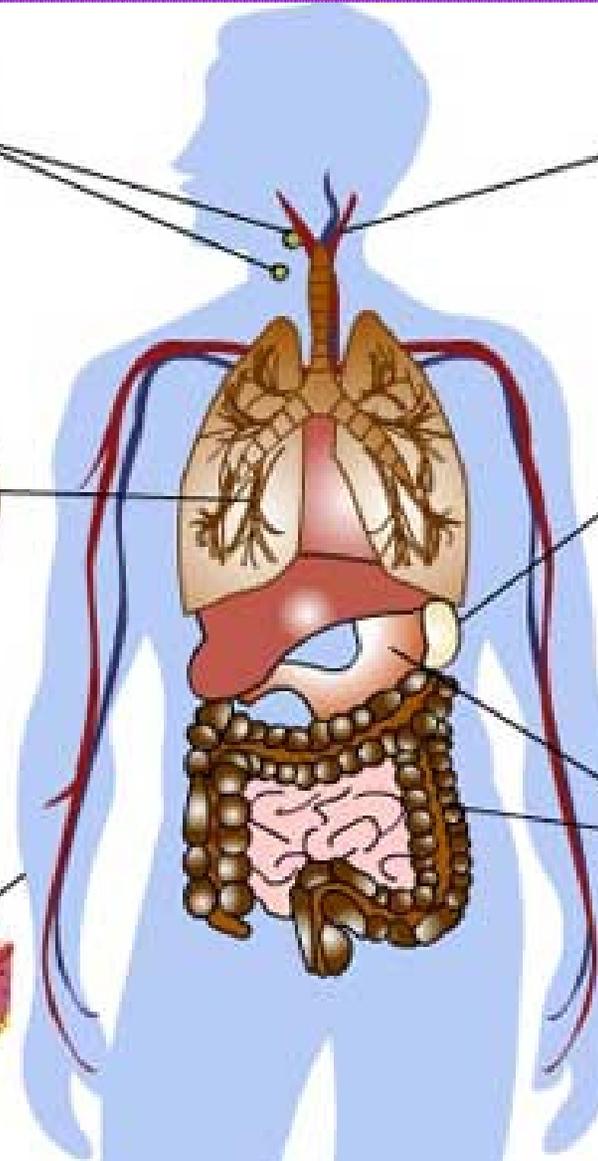
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ISN page 190

Communicable Disease

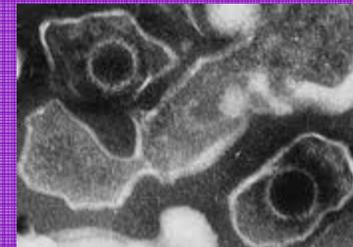
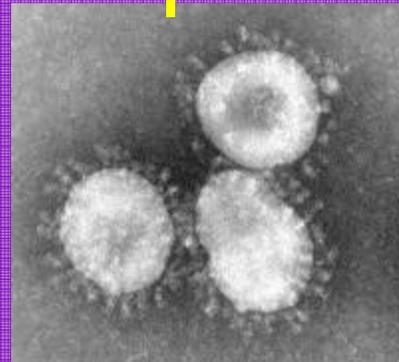
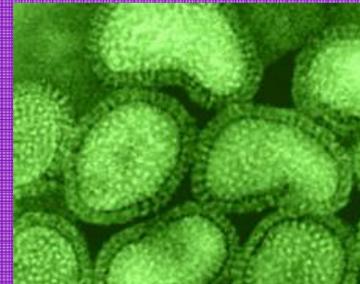
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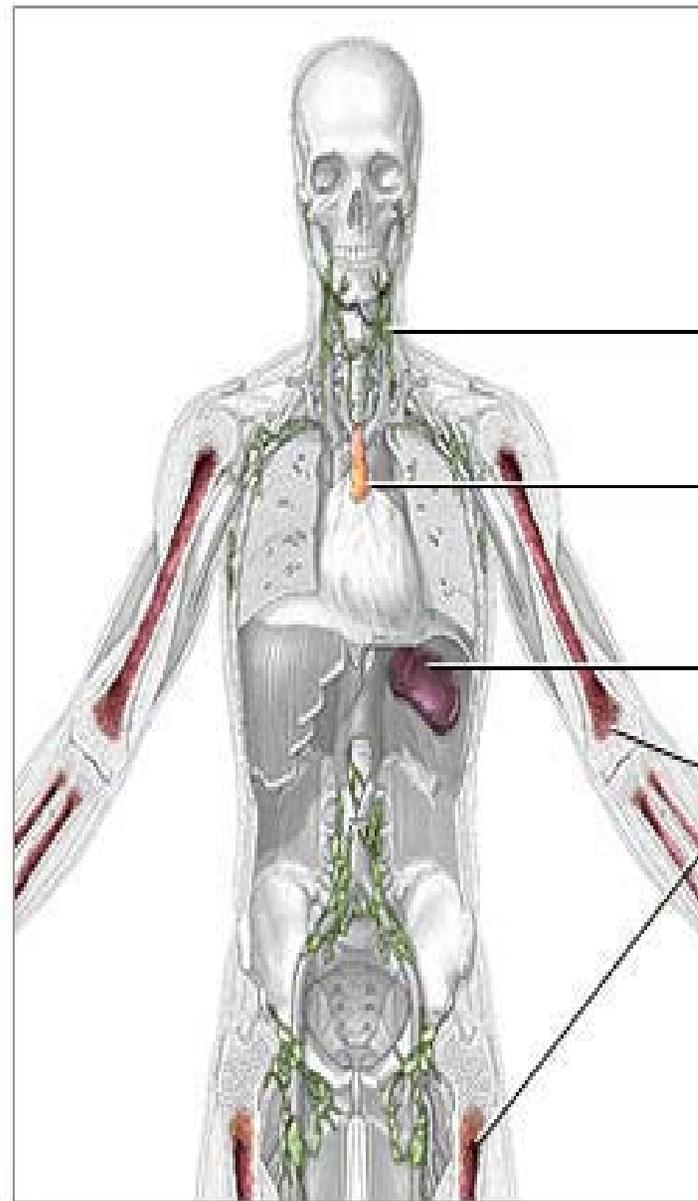
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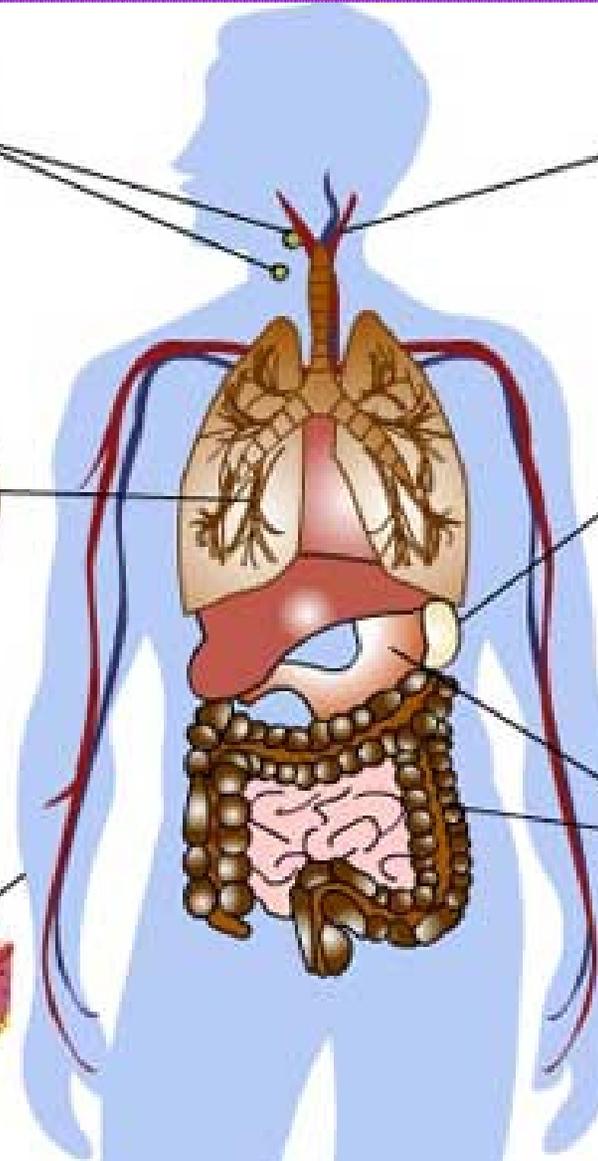
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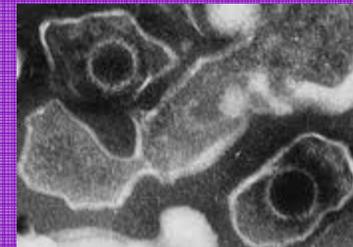
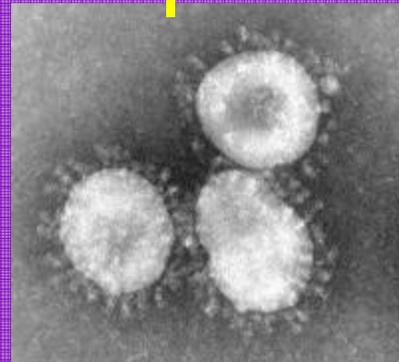
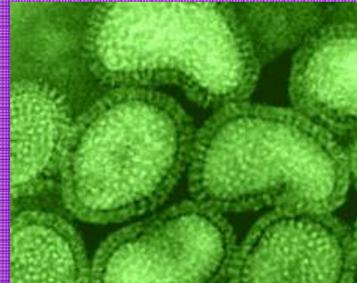
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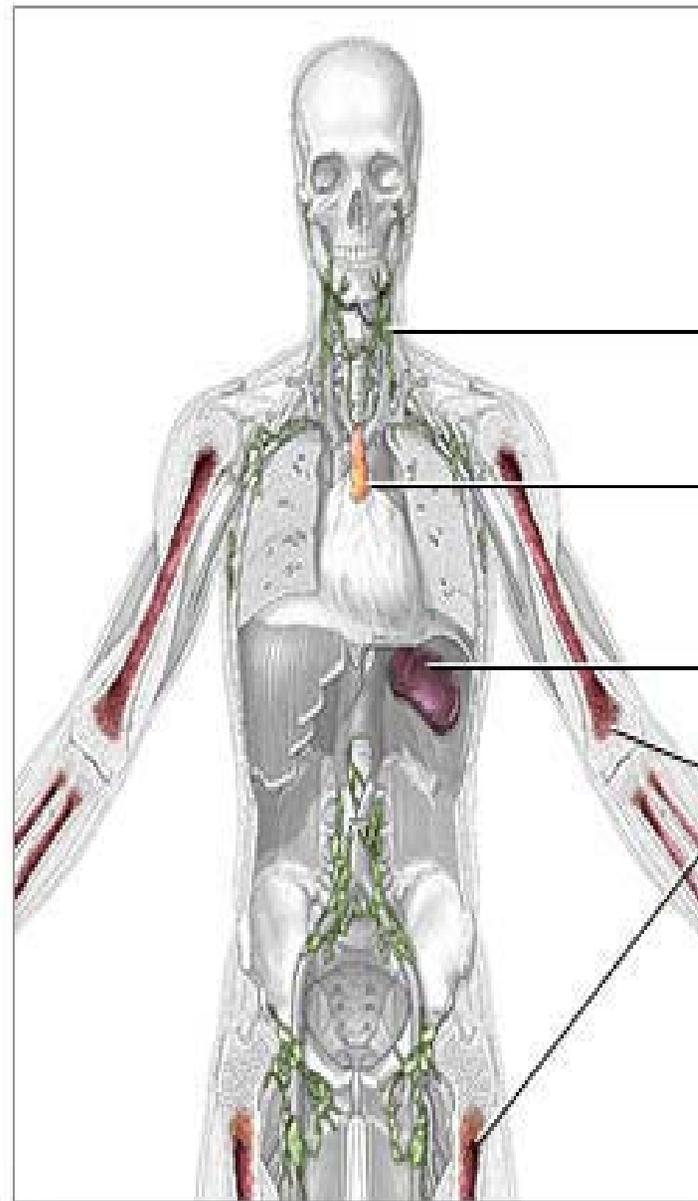
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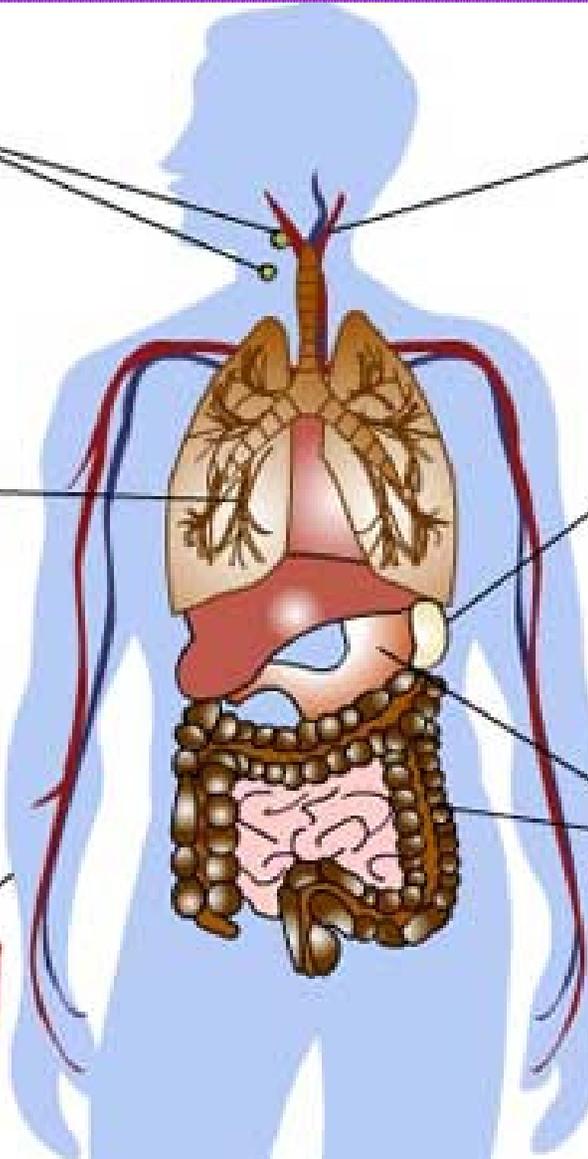
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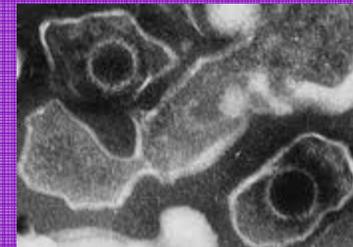
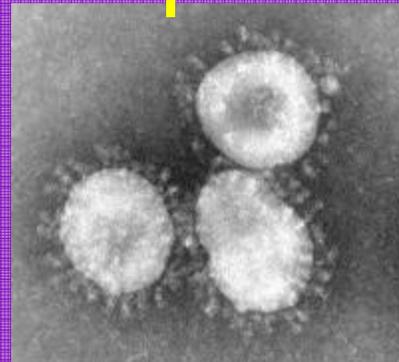
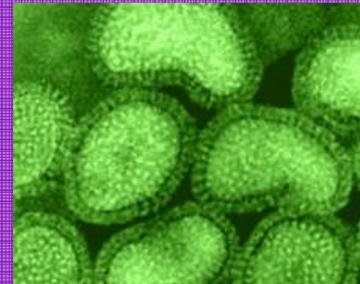
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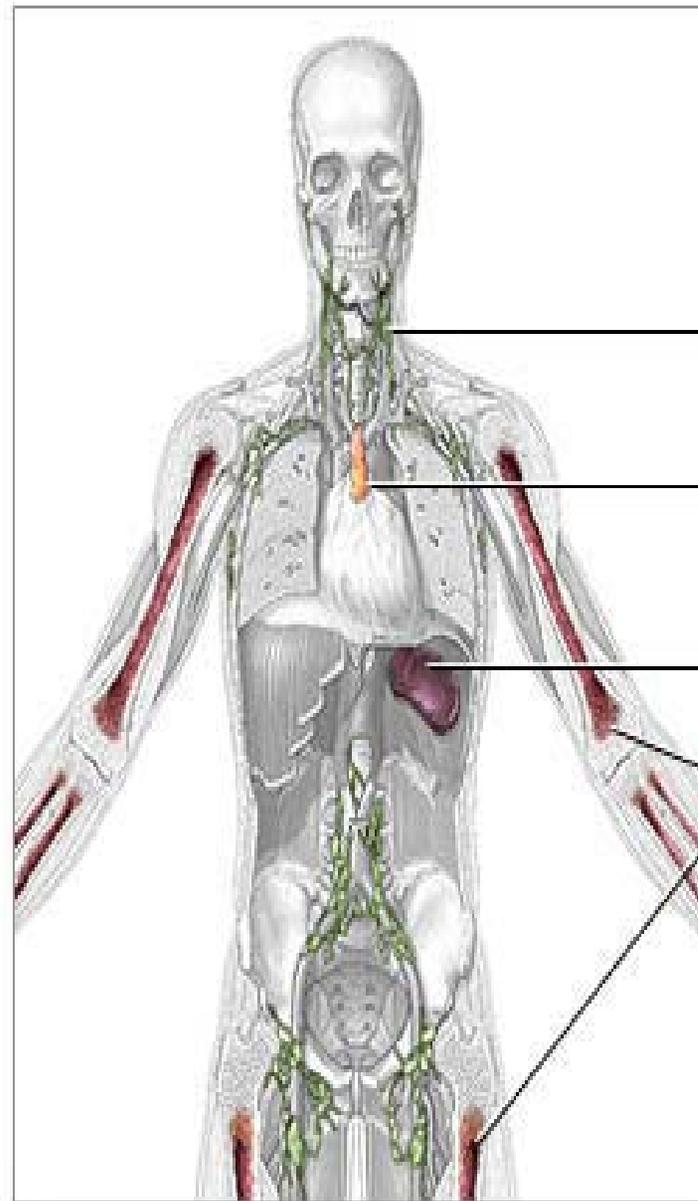
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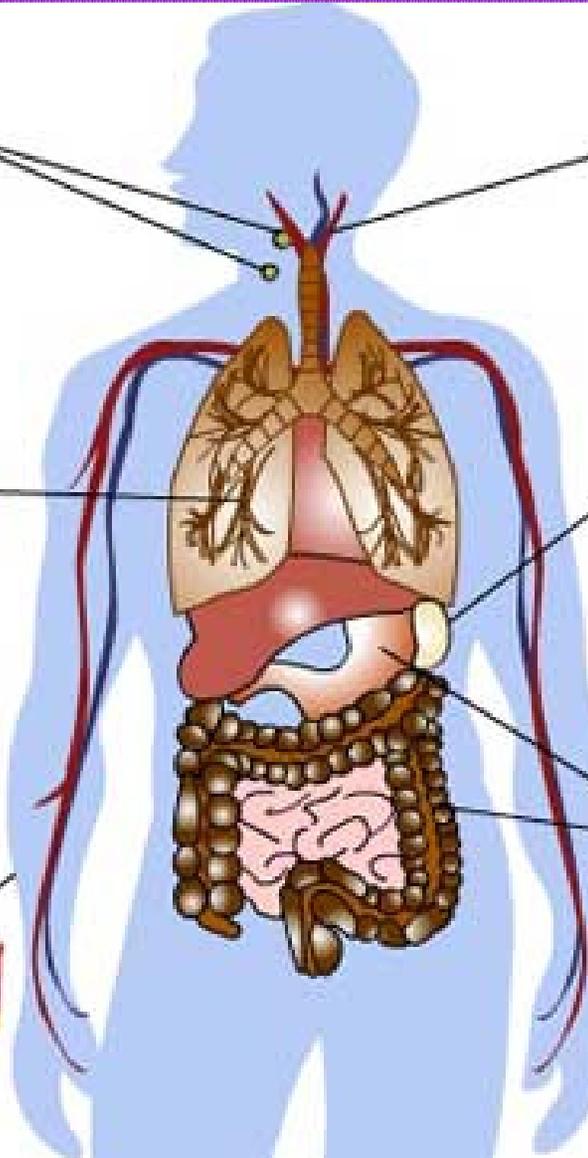
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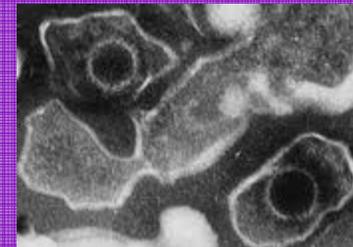
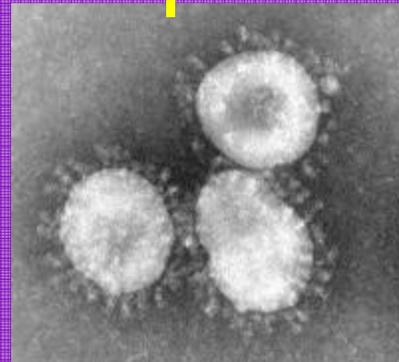
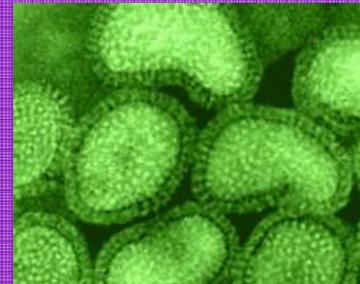
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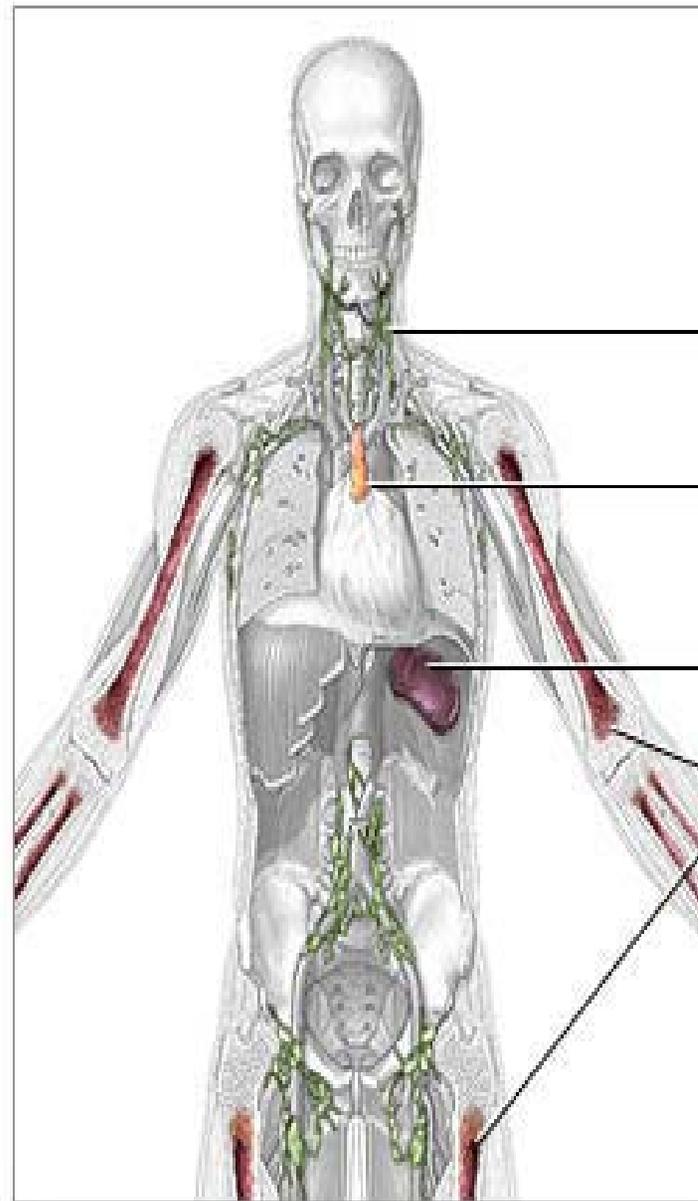
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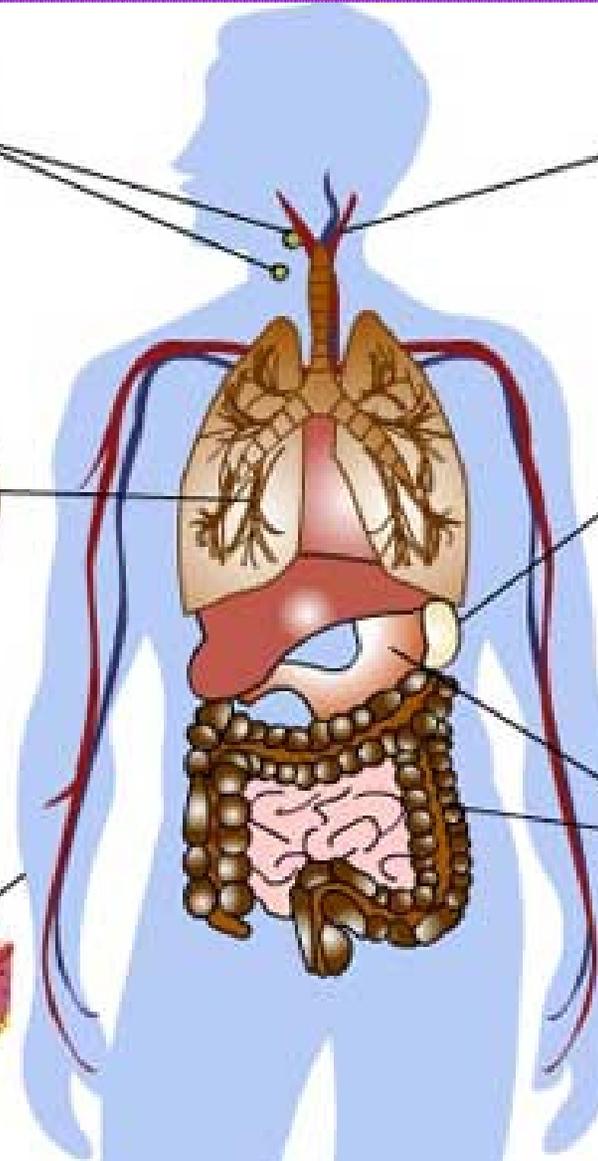
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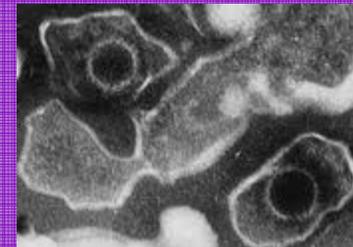
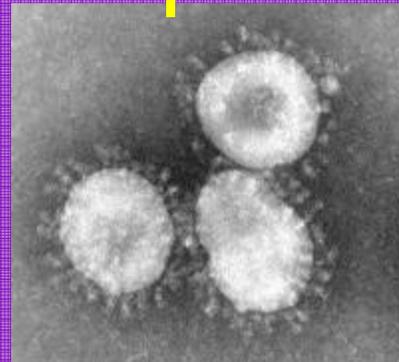
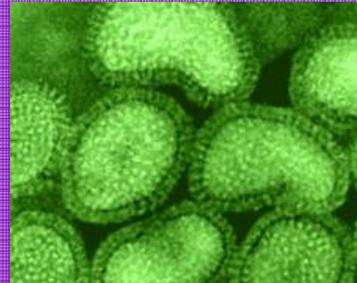
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1. Biological preparation that improves immunity to a particular disease.

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2. The agent stimulates the body's immune system (**B Cells**) to recognize the agent as foreign, destroy it, and "remember" it, so that the immune system can more easily recognize and destroy any of these microorganisms that it later encounters.

Video Clip

Immunity & Vaccines Explained



Jonas Salk in 1955 holds bottles of a culture used to grow polio vaccines