

HISTOLOGI: PENDAHULUAN



OLEH:
TIM HISTOLOGI

Histologi

- Teori
- Praktikum → prosedur praktikum:
 - Mendaftar + diktat & buku kerja
 - Tata tertib praktikum: jas praktikum, alat tulis (pensil warna).
 - Pretest
 - Nilai: pretes, mid, ujian praktikum, ujian akhir, buku kerja histologi

MATERI

1. Pendahuluan
2. Mikroteknik
3. Sel
4. Jaringan Epitel
5. Jaringan Ikat
6. Jaringan Otot
7. Jaringan Saraf
8. Sistem Pencernaan
9. Sistem Kardiovaskular
10. Sistem Respirasi
11. Sistem Ekskresi

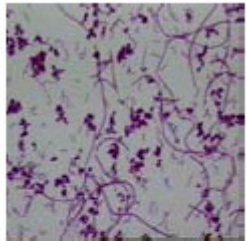
HISTOLOGI

- Ilmu yg mempelajari jaringan tubuh secara mikroskopis
- Mikroanatomi
- Yang dipelajari: sel, jaringan, organ, sistem organ

Organisasi sel, jaringan, organ, sistem organ, & organisme

- Ada 2 tipe sel:
 - Sel Eukaryotic → mempunyai nukleus
 - Sel Prokaryotic → tidak mempunyai nukleus, misal: bakteri
- Tubuh manusia terdiri dari berbagai kelompok sel yg berbeda

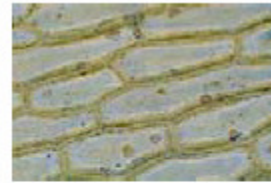
Sel → jaringan → organ → sistem organ → organisme



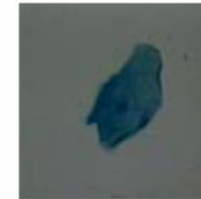
This is a mix of bacteria cells. None of them have a nucleus. They are examples of prokaryotic cells.



These *Paramecia* are unicellular organisms with a nucleus.



These plant cells each have a tiny nucleus.



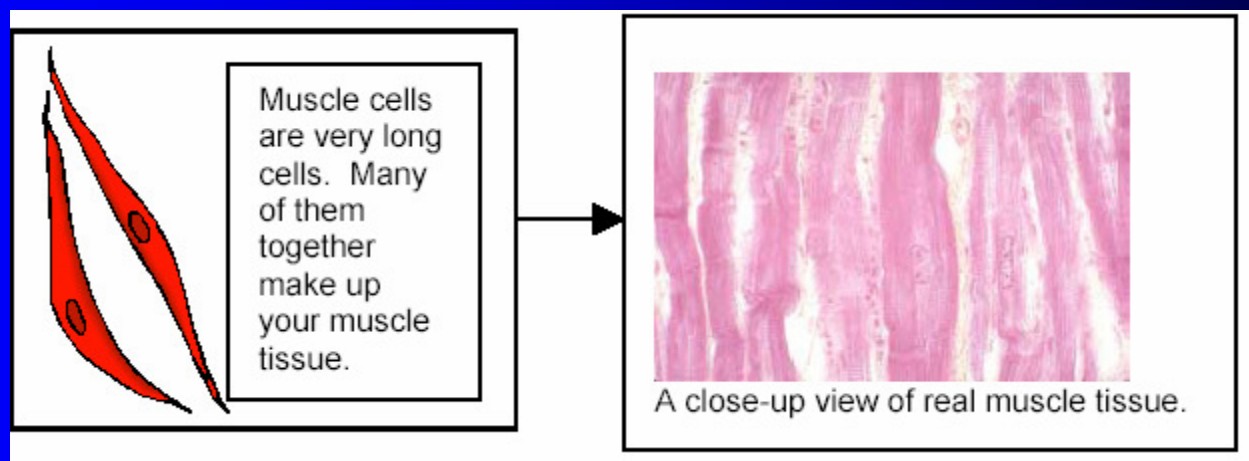
You can see the nucleus in this human cheek cell.



Red blood cells are human cells that do not have a nucleus.

SEL

- Unit dasar kehidupan
- Organisme uniselular: hanya terdiri dari satu sel, contoh: bakteri
- Organisme multiselular: terdiri dari berbagai macam sel, contoh: manusia



JARINGAN

- Definisi: sekelompok sel yang struktur & fungsinya sama
- Ada 4 jaringan dasar: jaringan epitel, jaringan ikat, jaringan otot, & jaringan saraf
- Contoh: kumpulan sel-sel otot membentuk jaringan otot

4 Jaringan Dasar

The Four Primary Tissue Types		
Type	Characteristics	Location
Jar. epitel	•Jar. yg melapisi organ (di permukaan luar / permukaan dalam)	•Skin surface •Organ surfaces •Interior linings
Jar. Otot	•Jar. Tersusun atas sel-sel yg memanjang, tersusun rapat	•Skeletal muscle •Heart muscle •Smooth muscle
Jar. Ikat	•Jar. Terdiri atas sel-sel yg tersusun longgar, ada matriks, fungsi: mengikat, meyokong, melindungi jar & organ	•Ligaments, tendons •Bone, cartilage •Blood
Jar. Saraf	•Jar. Terdiri atas sel-sel eksitabel, fungsi: mengirim sinyal listrik & menyimpan informasi	•Brain •Spinal cord, nerves

ORGAN

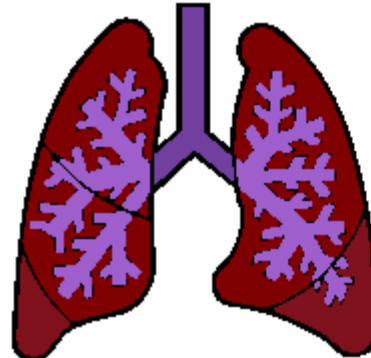
- Sekelompok jaringan yg bekerjasama membentuk fungsi khusus dalam tubuh
- Contoh: jantung, paru-paru, mata, otak, lambung



The heart is the muscular organ in the body that pumps blood.



The brain is the organ that controls the body.



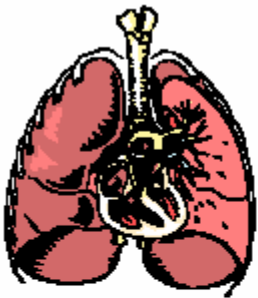
When you breathe in air, it goes into the organ called the lungs.



The stomach is the organ that holds acid in it to help digest food.

SISTEM ORGAN

- Berbagai organ bekerjasama membentuk sistem organ sehingga kehidupan organisme dapat berlangsung



The lungs, blood, heart, arteries, capillaries, and veins make up the circulatory system. They carry oxygen to every part of the body.

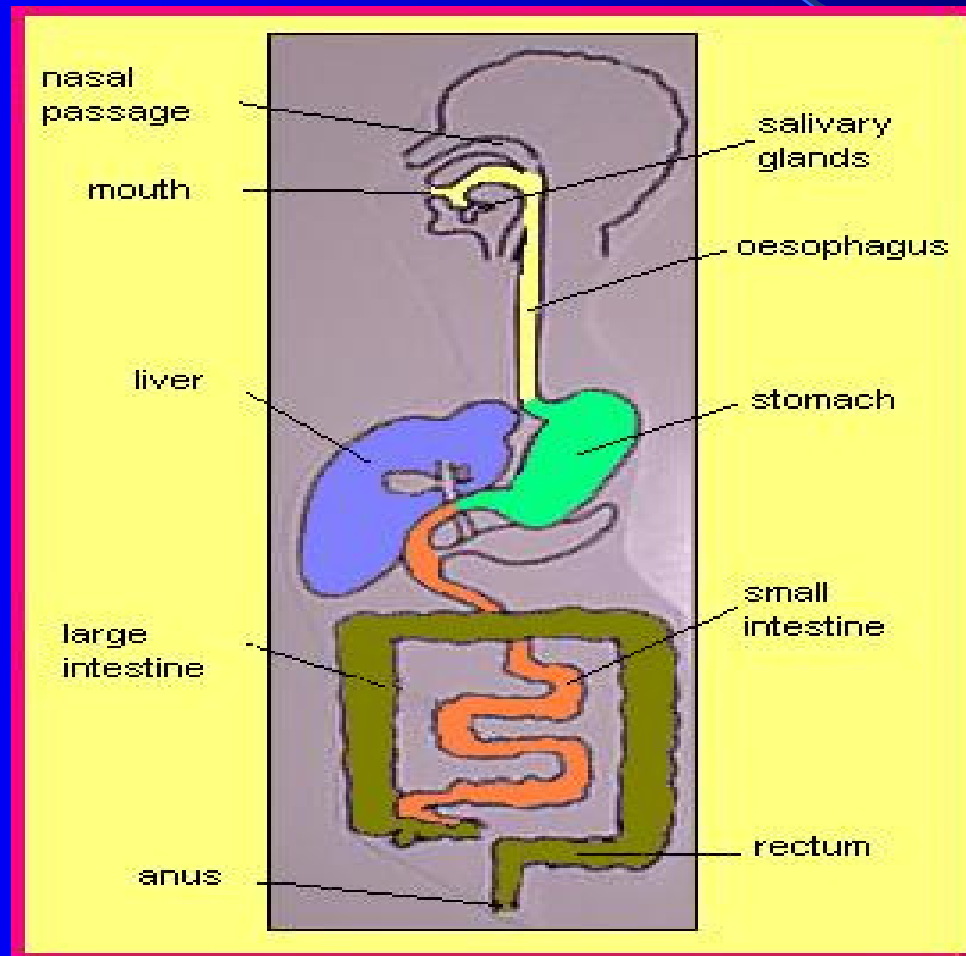


The skeletal system is made up of all of the bones in your body. It gives the body support and it protects the organs from getting

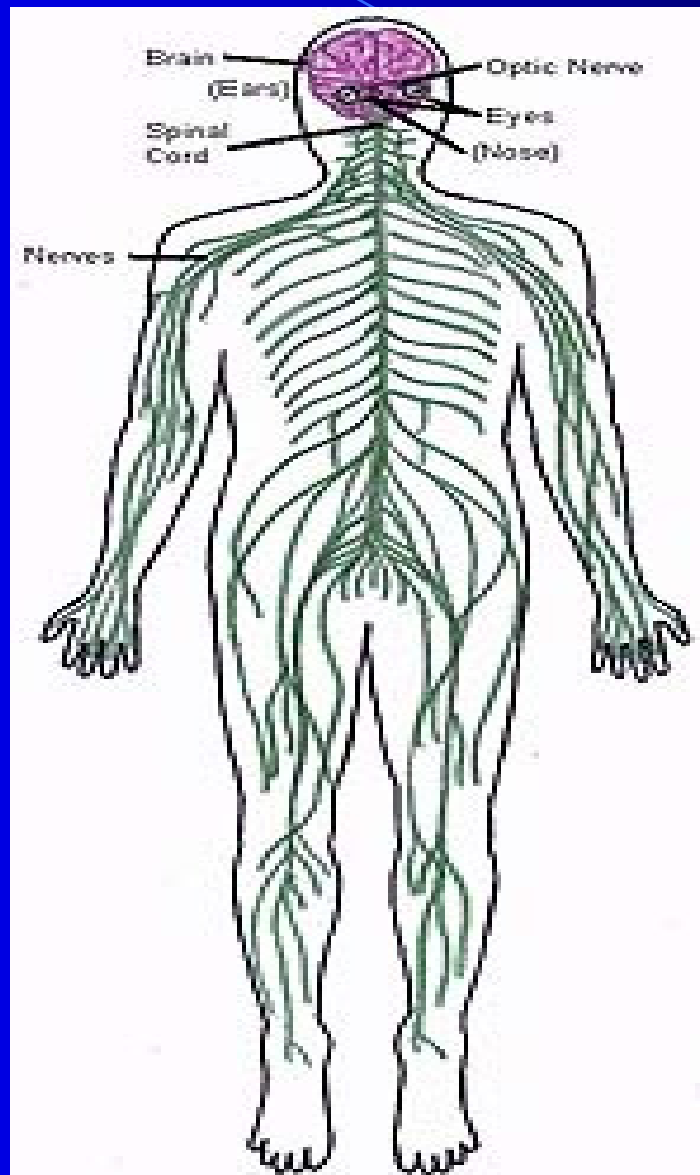


The digestive system is used to digest and absorb food.

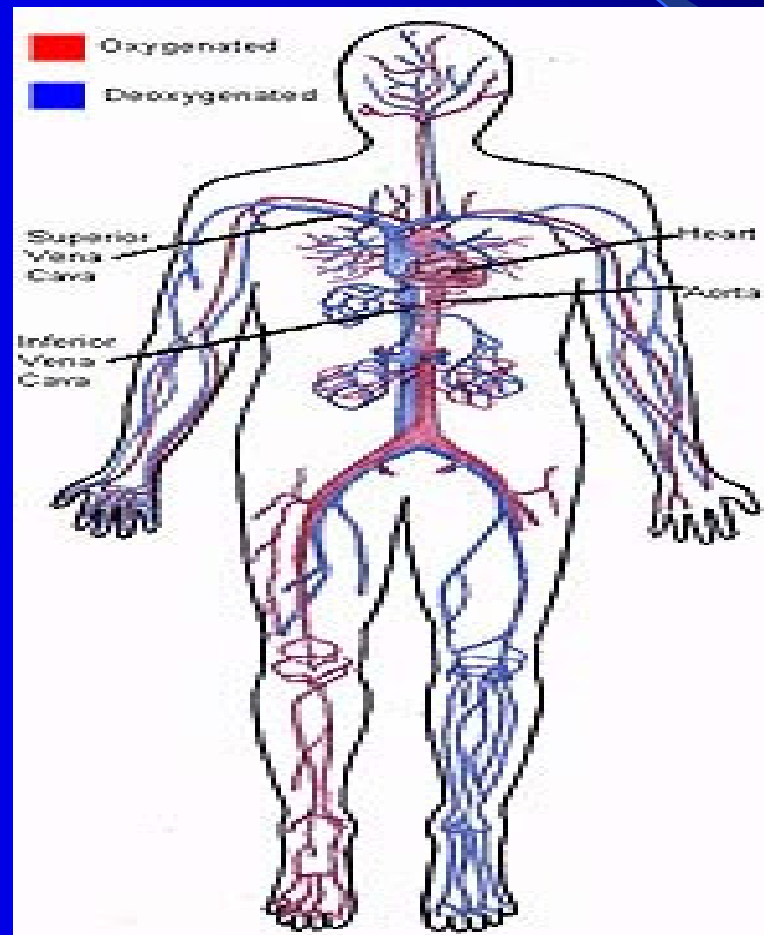
SISTEM PENCERNAAN



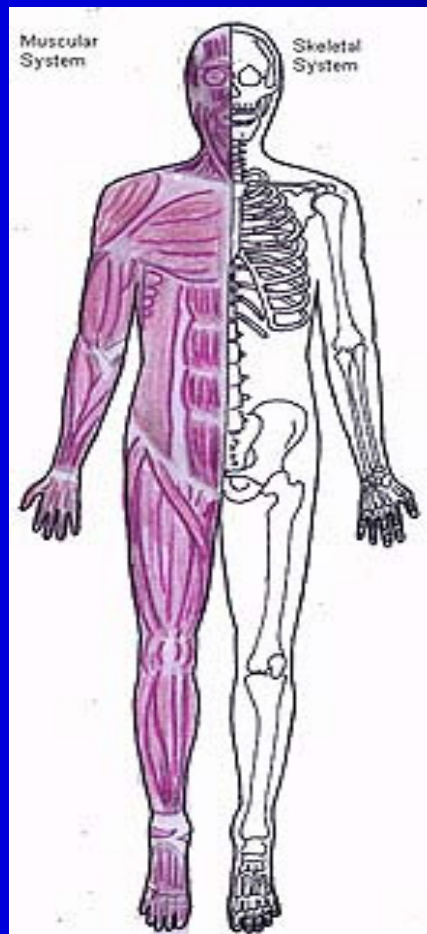
SISTEM SARAF



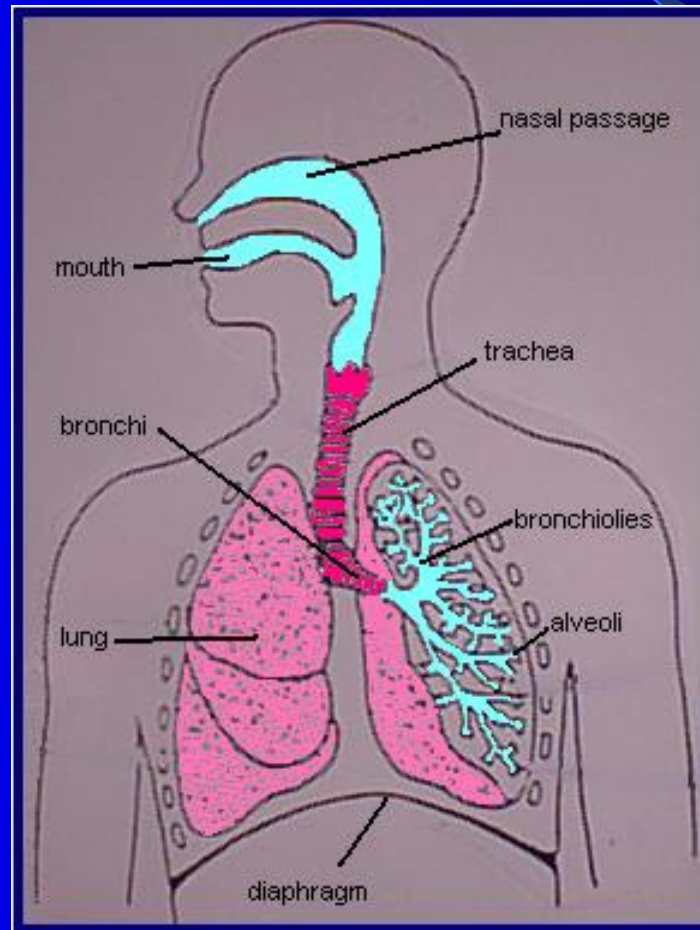
SISTEM SIRKULASI (KARDIOVASKULAR)



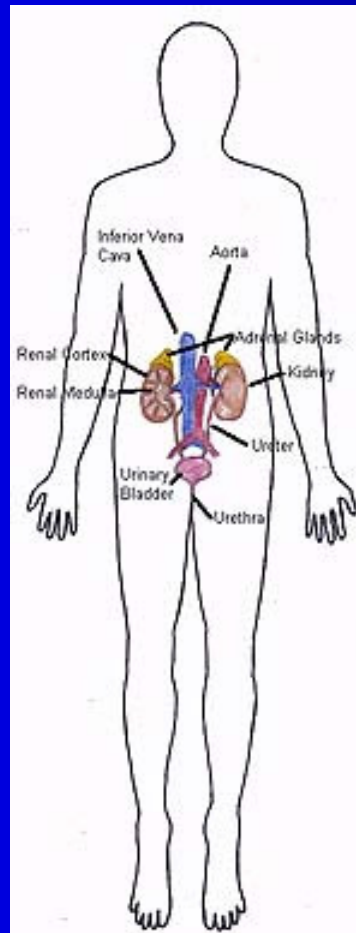
SISTEM MUSKULOSKELETAL



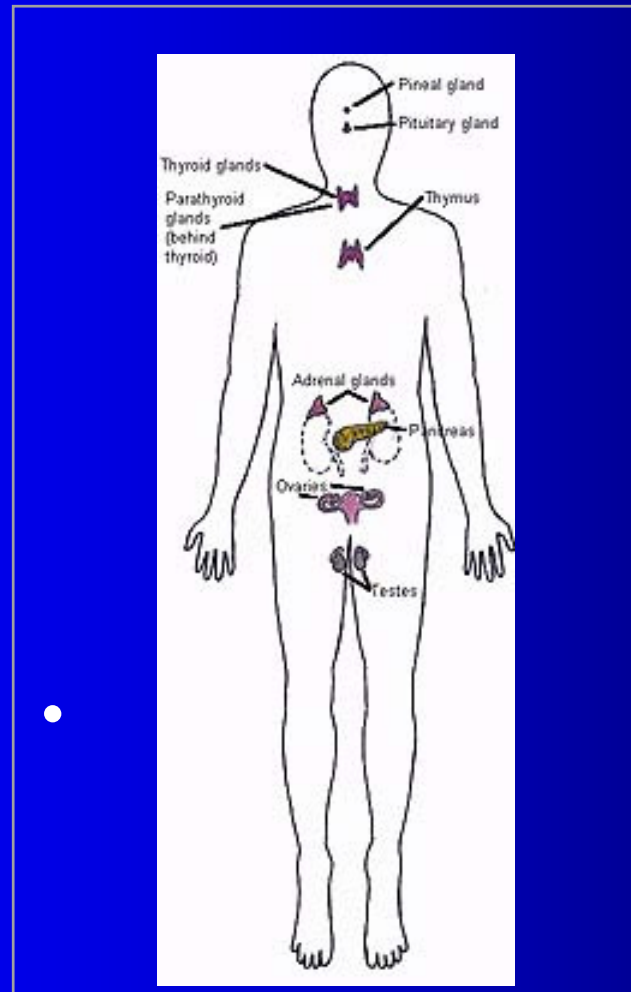
SISTEM RESPIRASI



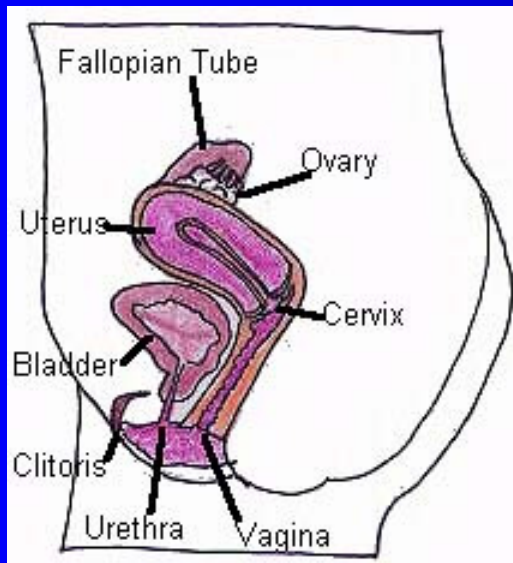
SISTEM EKSKRESI



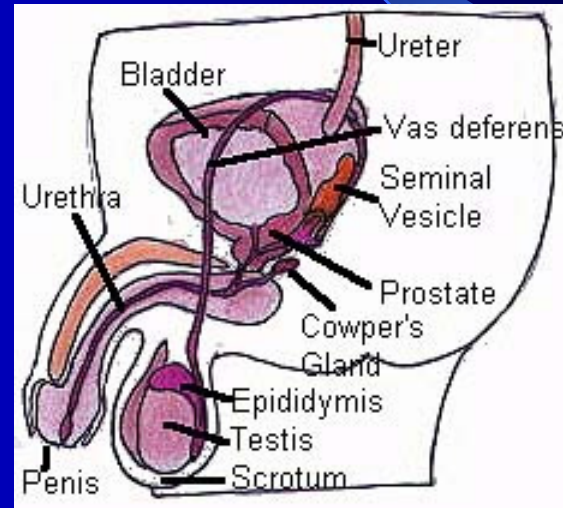
SISTEM ENDOKRIN



SISTEM REPRODUKSI



WANITA



PRIA

The image features a blue gradient background that transitions from a lighter blue on the left to a darker blue on the right. A white, horizontally-oriented oval is centered in the middle of the frame. Inside this oval, the Indonesian phrase "TERIMA KASIH" is written in a bold, black, serif font. The text is centered within the oval and is the primary focus of the image.

TERIMA KASIH