



STOMACH

Rent: 180

With 5X colony: 200

With 10X colony: 260

With 15X colony: 320

Assists in digestion by mixing gastric juices



SMALL INTESTINE

Rent: 210

With 5X colony: 240

With 10X colony: 290

With 15X colony: 350

Absorption of food takes place here



PANCREAS

Rent: 180

With 5X colony: 200

With 10X colony: 240

With 15X colony: 300

Releases enzymes for food digestion (exocrine)
and hormones for homeostasis (endocrine)



SPINAL CORD

Rent: 260

With 5X colony: 330

With 10X colony: 400

With 15X colony: 460

Connects brain to other organs for motor and sensory functions



BRAIN

Rent: 260

With 5X colony: 330

With 10X colony: 400

With 15X colony: 460

Complex organ which controls and regulates every processes



LUNGS

Rent: 240

With 5X colony: 300

With 10X colony: 350

With 15X colony: 400

Site of gaseous exchange by expanding and contracting



HEART

Rent: 200

With 5X colony: 250

With 10X colony: 300

With 15X colony: 360

Four chambered organ that pumps blood throughout the body



URINARY BLADDER

Rent: 120

With 5X colony: 160

With 10X colony: 210

With 15X colony: 270

Stores urine temporarily



Adrenal Glands

Rent: 120

With 5X colony: 160

With 10X colony: 210

With 15X colony: 270

produce hormones that help regulate your metabolism, immune system, blood pressure, response to stress



KIDNEY

Rent: 140

With 5X colony: 180

With 10X colony: 230

With 15X colony: 290

Site of filtration of blood and osmoregulation



RBC

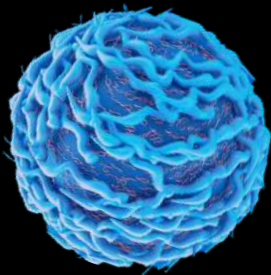
Rent: 190

With 5X colony: 220

With 10X colony: 280

With 15X colony: 340

Transports oxygen throughout the human body



WBC

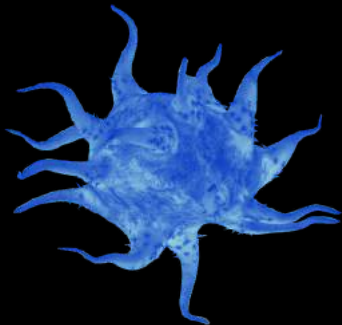
Rent: 350

With 5X colony: 400

With 10X colony: 450

With 15X colony: 500

Help body with fight infection



PLATELETS

Rent: 350

With 5X colony: 400

With 10X colony: 450

With 15X colony: 500

cell fragments in that form clots
and stop or prevent bleeding



LIVER

Rent: 140

With 5X colony: 180

With 10X colony: 240

With 15X colony: 290

**Cleansing and detoxification of blood takes
place here**



GAL BLADDER

Rent: 220

With 5X colony: 250

With 10X colony: 300

With 15X colony: 360

**bile is stored after secretion by the liver and
before release into the intestine.**



Thymus

Rent: 110

With 5X colony: 150

With 10X colony: 190

With 15X colony: 240

It makes white blood cells, called lymphocytes, which protect the body against infections.



SPLEEN

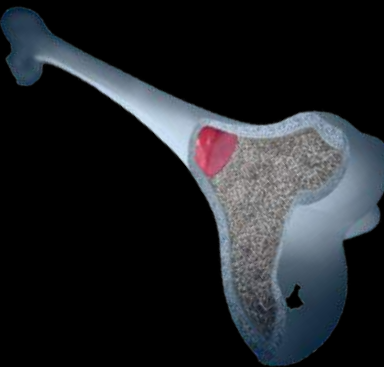
Rent: 160

With 5X colony: 180

With 10X colony: 230

With 15X colony: 370

Site of filtration of blood for cellular debris



BONE MARROW

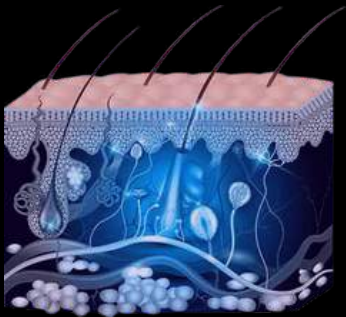
Rent: 160

With 5X colony: 180

With 10X colony: 250

With 15X colony: 290

Special type of cells that can differentiate into
different types of blood cells



SKIN

Rent: 100

With 5X colony: 140

With 10X colony: 180

With 15X colony: 230

Outermost layer of human body acting as a first
line of defense



MUSCLES

Rent: 100

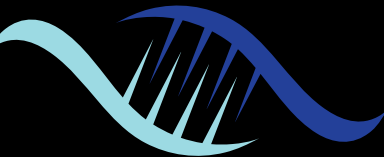
With 5X colony: 140

With 10X colony: 180

With 15X colony: 230

Consist of contractile proteins which help in mechanical functions

Conjugation is the method of transfer of genetic material from one bacteria to another placed in contact. This method was proposed by Lederberg and Tatum. During conjugation the F-factor can move between E.coli cells and results in gene transfer. This process requires energy from the host bacteria.



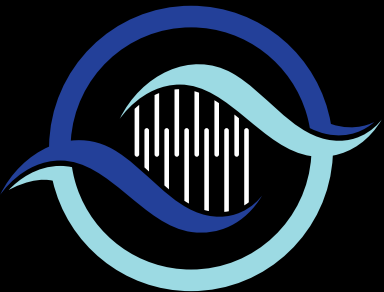
CONJUGATION

**YOU EXPEND 70 UNITS OF
PROTEIN**

Transduction is the process of transfer of genes from the recipient to the donor through bacteriophage.

Transduction is of two types:
Generalized Transduction
and Specialized
Transduction.

The process requires energy from the host bacteria.



TRANSDUCTION

**YOU EXPEND 100 UNITS OF
PROTEIN**

Transformation is the process of DNA uptake by the bacteria from the surrounding environment. The cells that have the ability to uptake DNA are known as competent cells. This process was first reported in *Streptococcus pneumoniae* by Griffith.

The process requires energy from the host bacteria.



TRANSFORMATION

**YOU EXPEND 120 UNITS OF
PROTEIN**