

NEVER LET MONKEYS EAT BANANAS

A quick guide to White Blood Cells



Neutrophils

- Multilobed nucleus
- Light purple
- High numbers during bacterial infections



The police: they patrol the blood so no harmful bacteria can live in there



Lymphocytes

- Can live for months; memory cells can live for years
- Large round purple nucleus, no visible granules
- 3 main types, all morphologically indistinguishable:

T cells

- Kill virus-infected and cancerous cells
- Responsible for cell-mediated immunity

B cells

- Derivatives produce and secrete antibodies
- Responsible for humoral (antibody) mediated immunity

Natural killer cells

- Kill a variety of cancer cells and virus infected cells
- Not as specific as T cells or B cells



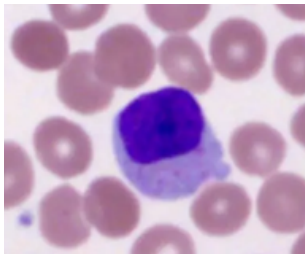
The soldiers: they send them to finish cells



The note takers: they remember the event so it doesn't happen again.



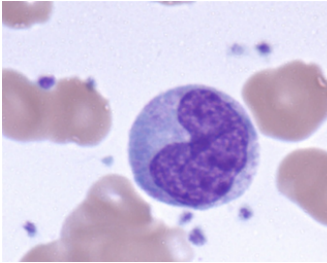
These guys: They get rid of the problem beforehand



They all look like this

Monocytes

- Very large, horseshoe-shaped nucleus
- Phagocytosis
- Move from the blood to any tissues and become macrophages (active phagocytes)



The tanks: they come to the rescue if the problem is too strong

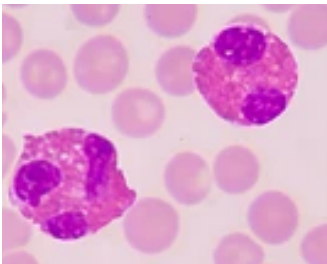


Will eat the bad guys



Eosinophils

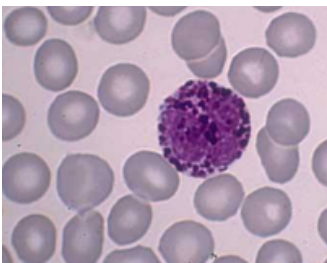
- Bilobed nucleus
- Pink
- Present in parasitic infections and allergy



The agent: will be deployed during special cases (infections and viruses)

Basophils

- Highly granular, nucleus (bilobed) obscured
- Very dark purple
- Present in response to allergies



The guards: they defend well, but they don't really do much for your body (they'll let the fortress be destroyed if it means the elimination of the enemy)

