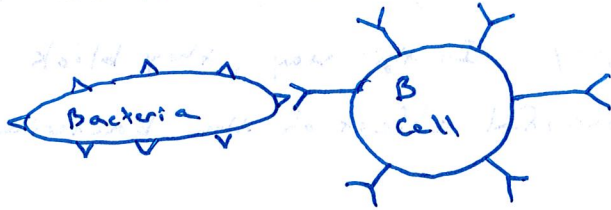


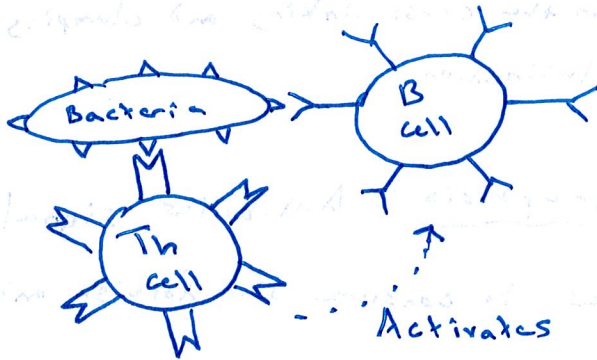
# B Cell Function

Dr. Kelly

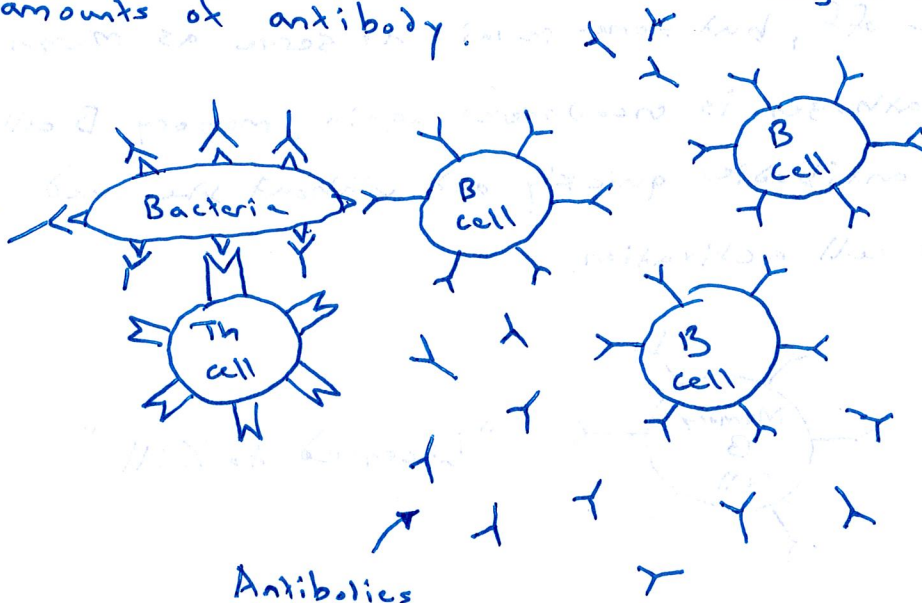
1. B cell recognizes the foreign pathogen.



2. T helper cell also recognizes the pathogen and activates the B cell.



3. The activated B cell multiplies and begins to produce large amounts of antibody.



(over)

#### 4. Antibodies function in 3 ways.

1. Neutralization: occurs when antibodies bind to specific sites on bacteria, toxins, or viruses that can cause cell injury. In this way, they block or neutralize the harmful effect of the bacteria, toxin, or virus.

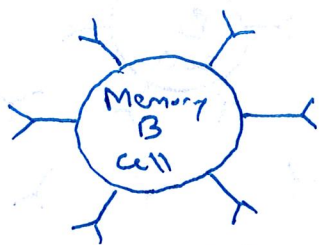
2. Agglutination (clumping): Antibodies have 2 antigen binding sites, so they can bind more than one antigen at a time. This results in the cross-linking and clumping of antigens called agglutination.

3. Enhanced phagocytosis: Antibodies signal the body's phagocytes to consume the foreign antigen.

#### Memory B cells

5. When the pathogen is defeated most of the multiplied B cells die off, but some remain to serve as memory B cells.

If the pathogen is encountered again, memory B cells will generate antibodies quickly and without the need for T helper cell activation.



"Licensed to Kill"