**Supplies Required:**

**1. (7) 180 cc cups**

**2. (7) 5% sheep blood agar plates**

**3. normal saline solution**

**4. sterile syringes**

**5. gloves and apron**

**6. metal inoculating loop**

**7. sterile cotton swabs**

**8. incubator w/thermometer**

**9. bacitracin discs and SXT discs**

**10. known pure culture of Beta-Strep Group A**

**11. 6 antibiotics: Amoxil, Vantin, Biaxin, Cefzil, Duricef, and Bactrim**

**Procedure:**

**1. Before starting the experiment it is important to wear gloves and an apron for safety reasons.**

**2. Acquire a known pure culture of Beta-Strep Group A from a bacteriology laboratory.**

**3. Collect the following antibiotics: Amoxil, Biaxin, Cefzil, Duricef, Vantin, and Bactrim.**

**4. Using a sterile syringe measure 10 cc of normal saline solution in each of 7 180 cc cups.**

**5. Measure 1 tsp. of each of the 6 different antibiotics listed in step 3 into six different cups. (Each cup should have a different antibiotic). The seventh cup will be the control and will not contain antibiotic.** **Note: It is important to label the cups according to the antibiotic that they contain.**

**6. Transfer the Beta-Strep Group A from a pure culture using the tip of a sterile swab. With the same swab mix the solution in cup 1. Then discard the cotton swab.**

**7. Repeat Step 6 with cups 2-6, making sure to use a different sterile swab each time.**

**8. Using 7 more sterile cotton swabs collect a sample of each solution and streak each of (7) 5% sheep blood agar plates with a solution from each cup. Each agar should be streaked with a different solution. Note: Streak only half of the plate.**

**9. Place a Bacitracin and SXT disc on each of the seven plates at least a centimeter apart. Make sure to place the discs on the side streaked.**

**10. Using a heated metal inoculating loop, make several horizontal cuts into the agar.**

**11. Label the seven plates and place them in an upside-down coffee can. Before closing the lid light a candle on top of the stack of plates.**

**12. Place the upside-down coffee can into the incubator and set the incubator to 35 degrees celsius.**

**13. After 24 hours remove the 7 labeled plates and examine them for hemolysis.**

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*This Web Site is Best viewed with 256 or more colors.*

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