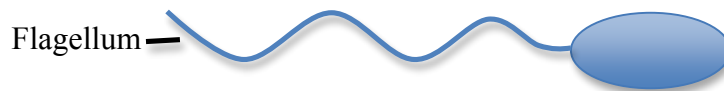




Bacterial Motility

Although they are composed of only a single cell, bacteria are still capable of movement. Motility allows the bacteria to move through their environment. Because it can be achieved by the cell many different ways, bacterial motility is an important characteristic used in differentiating between types of bacteria. Bacterial motility is most often achieved through a swimming motion through a liquid medium. The use of a flagellum, or multiple flagella allows bacteria to propel themselves through their liquid environment. The use of a semisolid media allows us to visualize bacterial movement.



Materials

Sterile sticks
Sharpies
Rulers
Motility Agar plates
Environmental Isolate

Protocol

1. Label your plate
2. Take a fresh wooden stick and touch it to a bacterial colony.
3. Center the stick in the middle of the plate, push the wooden stick with the bacteria to the bottom of the plate through the agar.
4. Incubate the plate overnight at 37° C, **agar side down**.
5. Next day, measure and record the distance each sample has moved throughout the agar overnight.