

# Measuring Microbial Growth

Direct (counting cells)

Indirect <sup>not count</sup> cell

turbidity (cloudiness)

amount of light passes through culture  
cells living or dead  
does not require incubation

quick count tell living or dead  
hard to count motile

microscopic count

microscope slide

quick

membrane filtration

sample size is low/dilute (stream, lake)

counting live cells

incubation take time

serial dilution  
plate count

population size is large (fecal sample)

counting live cells

incubation take time