SUMMARY:

Pure culture of microorganisms that form discrete colonies on solid mediamay be most commonly obtained by simpler plating methods such as spread plate,streak plate and pour plate method. The purpose of plating methods is to isolate individual bacterial cells (colony-forming units) on a nutrient medium. All these methods require understanding of the aseptic technique.But, the microbes that have not yet been successfully cultivated on solid media and are cultivable only in liquid media are generally isolated by serial dilution method.

Microorganisms may show distinguishing gross morphologies when cultured on different media. This macroscopic appearance of bacteria (characteristic growth patterns which can be observed with the naked eye) is often used in their identification.After incubation, in a nutrient broth, bacteria may exhibit a particular form of growth. In a liquid media, some bacteria grow diffusely causing a uniform clouding, whereas others look granular. Layering of growth or accumulation of cells at the top, center or bottom of the broth. Sometimes bacterial aggregations are formed and the bacterial growth appears as small puff balls floating in the broth.