

Isolation of individual colonies essay sample

[Art & Culture](#)



**ASSIGN
BUSTER**

A. Enriched, complex and synthetic media are microbiological media.

Enriched media is a medium containing growth factors. Complex media is composed of unknown quantities of proteins and extracts. Synthetic media is composed of a known quantity of chemicals used. They provide different environments for bacterial growth.

1. Enriched media can be used to grow fastidious organisms, which will benefit greatly from growth factors. Complex media can be used to grow unsophisticated and less fastidious microbes. Complex media is the most general growth environment of the 3. Synthetic media is used to provide the purest and most consistent growth environment due to the exact chemicals used.

B. Selective media contains ingredients that inhibit the growth of certain types of bacteria while allowing others to grow. Differential media is used to separate microbes and allow them to be distinguished from one another.

1. Selective media will be used when specific types of bacteria are to be cultivated. Differential media will be used to differentiate bacterial strains from one another.

C. It is necessary to use solid media to obtain a pure culture because a pure culture contains only one strain of bacteria therefore preventing contamination of unwanted bacterial organisms.

D. The streak-plate method had better growth than the pour-plate method. This maybe because an inoculated loop was used that lessened the possibility of contamination in comparison to pouring. The pour plates

still had growth. The *L. acidophilus* appears more as individual colonies than grouped. It is easier to count the microbes than the *S. epidermidis*.

E. The *S. epidermidis* has large, round, raised and opaque colonies.

References

Hands-on-Labs. (2012). A Laboratory Manual of Small-Scale Experiments for the Independent Study of Microbiology. Englewood, CO. Available from www.labpaq.com