



FACULTY OF ENGINEERING & TECHNOLOGY
DEPARTMENT OF BIOTECHNOLOGY

Antibiotics from microbes

- ❖ Microbial are rich sources from which several broad spectrum as well as narrow spectrum antimicrobial compounds can be produced.
 - ❖ Microbes are grown in suitable culture medium for suitable length of time favoring production of high value microbial metabolites.
 - ❖ These microbial metabolites are used to treat disease caused by bacteria by killing them.
 - ❖ These antimicrobial metabolites are called as antibiotics. Eg. Tetracycline, Chloramphenicol, Streptomycin, Penicillin, Cephalosporin etc.
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Table 35.2 Microbial Sources of Some Antibiotics

Microorganism	Antibiotic
Bacteria	
<i>Streptomyces</i> spp.	Amphotericin B Chloramphenicol (also synthetic) Erythromycin Kanamycin Neomycin Nystatin Rifampin Streptomycin Tetracyclines Vancomycin
<i>Micromonospora</i> spp.	Gentamicin
<i>Bacillus</i> spp.	Bacitracin Polymyxins
Fungi	
<i>Penicillium</i> spp.	Griseofulvin Penicillin
<i>Cephalosporium</i> spp.	Cephalosporins