

DRUG NAMES


- Every drug has at least three names—a chemical name, a generic (nonproprietary or official) name, and a trade (proprietary or brand) name.
- The **chemical name** describes the atomic or molecular structure of the drug. This name is usually too complex and cumbersome for general use.

- So an official body assigns a **generic name** to a drug. The generic names for drugs of a particular type (class) usually have the same ending. For example, the names of all beta-blockers, which are used to treat such disorders as high blood pressure, end in "lol."

- The **trade name/proprietary name** is chosen by the pharmaceutical company that manufactures or distributes the drug. Patented drugs are usually sold under a trade name. Generic versions of trade-name drugs—manufactured after expiration of the pharmaceutical company's patent—may be sold under the generic name (for example, ibuprofen) or under the manufacturer's own trade name (for example, Advil).

DRUG GROUPS

- Understanding what group a drug belongs to is also useful.
- Broadly, drugs are classified by therapeutic group—that is, by what disorder or symptom they are used to treat.
- For example, drugs used to treat
 - ✓ high blood pressure are called antihypertensive, and
 - ✓ drugs used to treat nausea are called antiemetic (emesis is the medical term for vomiting).

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- Within each therapeutic group, drugs are categorized by classes. Some classes are based on **how the drugs work** in the body to produce their effect.
 - For example, diuretics, calcium channel blockers, beta-blockers, and angiotensin-converting enzyme (ACE) inhibitors are all classes of antihypertensives that work differently.

DRUG USAGES

- Drugs have 3 medical uses.
- **Therapeutic use:** Drugs are used to control, improve or cure symptoms, conditions or diseases of a physiological or psychological nature. E.g of the therapeutic use of drugs include the following:
 - Antibiotics to kill the bacteria that cause an infection
 - Analgesics to control the pain and inflammation of arthritis
 - Hormone replacement therapy for the symptoms of menopause



Sources of drugs.

- Drugs are obtained from various sources. According to sources they are:-

1. Natural drugs

A/ Plants

E.g. .Digoxin from *Digitalis purpurea*

.Atropine from *Atropa belladonna*

.Quinine from *Cinchona officinalis*

B/ Animals

E.g.. Insulin from pig

.Cod liver oil from Cod fish liver.

C/ Minerals

E.g.. Iron, Iodine, Potassium salts.

D/ Micro – organisms

E.g. .Penicillin from penicillium notatum.

.Chloramphenicol from Streptomyces venezuelae (Actinomycetes).

2. Synthetic drugs

- prepared by chemical synthesis in pharmaceutical laboratories

E.g.. Sulphonamides, quinolones, barbiturates

3. Semisynthetic drugs

- prepared by chemical modification of natural drugs.

E.g.. Ampicillin from penicillin G.

.Dihydroergotamine from ergotamine.

4. Biosynthetic drugs

- prepared by cloning of human DNA in to the bacteria like E.coli.

E.g.. Human insulin.

