

Drug Coatings



Pacemaker (t)

A **drug** is a substance, such as a pharmaceutical product, used in or on the surface of the body to diagnose, cure, mitigate, treat, or prevent disease, or to otherwise affect the structure or function of the body. It is usually synthesized outside of an organism, but introduced into an organism to produce its action. That is, when taken into the organisms body, it will produce some effects or alter some bodily functions (such as relieving symptoms, curing diseases or used as [preventive medicine](#) or any other purposes).

Note that natural [endogenous](#) biochemicals (such as [hormones](#)) can bind to the same receptor in the cell, producing the same effect as a drug. Thus, drug is merely an artificial definition that distinguishes whether that molecule is synthesized within an organism or outside an organism. For instance, [insulin](#) is a hormone that is synthesized in the body; it is considered as a hormone when it is synthesized by the pancreas inside the body, but if it is introduced into the body from outside, it is considered as a drug.

It is a substance which is not [food](#),^[1] and which, when ingested, affects the functioning of the [mind](#), or the [body](#), or both. However, under the philosophy of [Chinese medicine](#), food is also considered a drug as it affects particular parts of body and cures some diseases. Thus, *food* does satisfy the above definition of drug so long as ingestion of it would alter some bodily functions.

Many times drugs are encapsulated with polymers or sugars which serve as a biodegradable mechanisms that allows them to dissolve at specific parts of the digestive track.

More information at: <http://en.wikipedia.org/wiki/Drug>