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Formes galéniques

Chapter 1 General

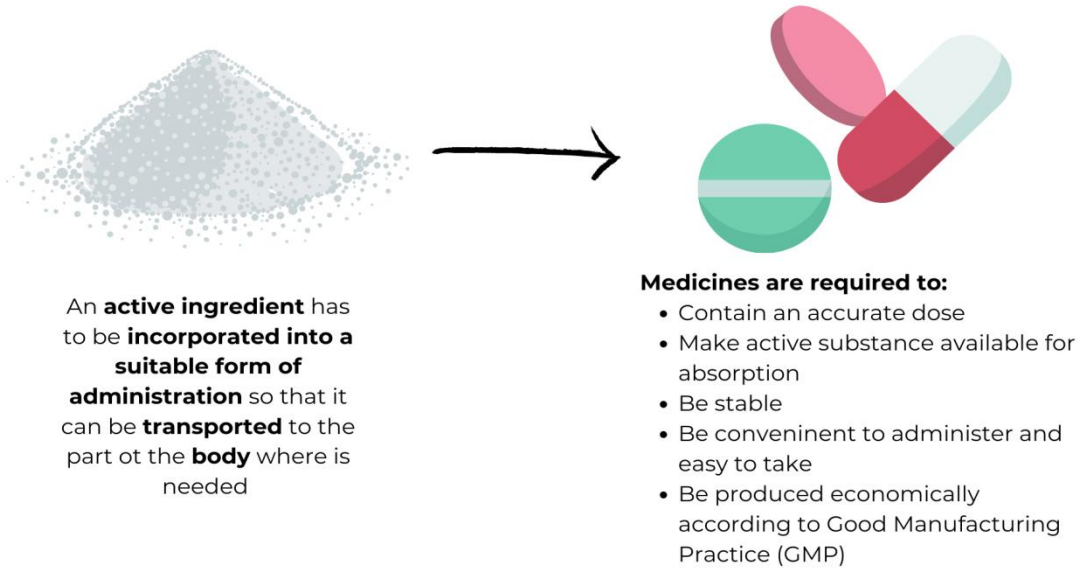
1. Definition:

- In english , the term galenic refers to the preparation and presentation of medications.

- Galenic pharmacy is the branch of pharmacy that deals with the formulation of active ingredients.

-The galenic form, also called a pharmaceutical form, is the final presentation of a medication (such as a tablet, syrup, capsule, or injectable solution). This form is specifically designed to ensure that the active substance reaches the intended body part optimally, effectively, and safely.

-In short, galenic is the art of transforming an active substance into a ready-to-use medication, choosing the most suitable form for its administration and action in the body.



2. Purpose:

-The purpose of the dosage form (or pharmaceutical form) is to allow the active substance to reach its site of action in the body as efficiently and quickly as possible, while ensuring its stability, safety, and facilitating its administration to the patient. It adapts the medicinal substance to a specific form (tablet, capsule, cream, etc.) that is suitable for its use.

Key points of the purpose of a dosage form:

- Reach the target organ:

It must transport the active ingredient to its biological target in the body.

- Efficacy and speed of action:

The dosage form must allow for rapid and optimal action of the drug.

- Stability and safety:

It protects the active substance and ensures its safety of use and tolerance. Ease of administration:

The form must be adapted to the patient and the context of its use (e.g., child or adult, preferred route of administration).

- Adaptation to the active substance:

The dosage form takes into account the properties of the active substance to select the best form for its release.

- Suitability for the route of administration:

It is chosen based on the desired route of administration (oral, injectable, cutaneous, etc.).

- In summary, the dosage form is the aspect of the medication that makes it effective, safe, and administrable, by optimizing the release of the active ingredient and taking into account the patient's specific needs and condition.

3. Dosage formula:

- A dosage formula, or "dosage form,"

is the way in which an active ingredient is prepared for administration to the patient, thus transforming the active substance into a ready-to-use medication. The choice of this form, such as a tablet, syrup, or patch, is crucial because it determines the absorption, stability, and effectiveness of the active ingredient in the body.

The galenic formulation involves mixing the active ingredient with excipients (inactive ingredients) and choosing appropriate packaging.

4. Drug Composition:

A drug's composition always includes at least one active substance (or active ingredient), responsible for its therapeutic effect, and excipients, inactive substances that facilitate its administration, preservation, or absorption.

- The Active Ingredient (API)

This is the substance that possesses curative or preventive properties.

It is the main component of the drug, although it may be present in small quantities.

It acts on the body to treat a disease, relieve symptoms, or modify a physiological function.

- Excipients

These are substances that have no therapeutic activity.

Their role is to facilitate the formulation and administration of the active ingredient.

They can provide a specific consistency, taste, color, or even shape to the drug.

There are excipients known to have "known effects," which can cause adverse reactions in some people (for example, lactose or peanut oil).

5. Excipients with known effects:

- An excipient with known effects is any excipient whose presence may require precautions for use for certain specific categories of patients.

- Consequently, in order to guarantee the best level of safety, it is useful to take into account excipients with known effects when prescribing, dispensing, or even advising on any medication containing them.

Examples of excipients with known effects

- Boric acid and salts Contraindicated in children under 3 years of age

- Benzoic acid and benzoate Risk of skin, mucous membrane, and eye irritation (topical application), risk of jaundice in newborns (injections)

- Sorbic acid and salts Risk of hives (topical application)

- Benzyl alcohol Contraindicated in children under 3 years of age

- Castor oil and derivatives Digestive disorders

Eczema (topical application)

Hot flashes, difficulty breathing, drop in blood pressure (injections)

Not recommended for children under 3 years of age

- Soybean oil and derivatives Allergic reactions

- Sesame oil Allergic reactions

- Lactose Digestive disorders (in case of intolerance). Caloric Intake

6. Conclusion:

PA –ACTIVE INGREDIENT-

+

EXCIPIENT

=

Dose Form

Easy to administer

Effective and safe

Stable

With complete safety