

Method of drug adulteration

EVALUATION OF DRUG

- Evaluation of a drug means confirmation of its identity and determination of its quality and purity. If adulterated, it also includes the detection of the nature of adulteration in the crude drug. Several methods are employed in detecting adulteration in genuine drugs.
- The form of drug provides a clue for the method of detection of adulteration to be followed. In raw form drug, the morphological characters may help, in case of powdered drugs, the microscopic characters may provide better information, while in case of liquid drug chemical tests are preferred. The physical standards such as specific gravity, optical rotation, solubility etc., may be helpful in detection of adulteration.
- Over the years, the nature and degree of evaluation of crude drugs has undergone a systematic change.
- Initially, the crude drugs were identified by comparison with standard description available.
- Due to advancement in chemical knowledge of crude drugs, the evaluation also includes the method of estimating the active constituent present in crude drug, in addition to its morphological and microscopic analysis.
- Depending upon the variation in source of crude drugs and their chemical nature, they are standardized by different techniques.

The crude drugs can be identified on the basis of their morphological, histological and chemical studies. The different techniques involved in standardization of crude drugs are as follows.

- 1. ORGANOLEPTIC (MORPHOLOGICAL) EVALUATION**
- 2. MICROSCOPIC EVALUATION**
- 3. PHYSICAL EVALUATION**
- 4. CHEMICAL EVALUATION**
- 5. BIOLOGICAL EVALUATION**