



## Research Article

### DETERMINATION OF BIOLOGICALLY ACTIVE SUBSTANCES BY MODERN METHODS

**Submission Date:** January 20, 2022, **Accepted Date:** February 08, 2022,

**Published Date:** February 23, 2022 |

**Crossref doi:** <https://doi.org/10.37547/tajet/Volume04Issue02-02>

**Journal Website:**  
<https://theamericanjournals.com/index.php/tajet>

**Yodgorova M.O.**

Assistant, Bukhara MTI, Uzbekistan

**Copyright:** Original content from this work may be used under the terms of the creative commons attributes 4.0 licence.

#### ABSTRACT

The most convenient way to assess the quality of a drug substance is to determine the melting rate of the drug. The solubility of a solid drug is defined as the percentage of the drug that passes into the solution over a period of time. It is convenient to evaluate the solubility of drugs to compare different forms of the drug and to control the quality during the production process. Many methods and devices have been developed to determine the rate of melting.

#### KEYWORDS

Relatively little, and in most cases, pharmacological and technological parameters.

#### INTRODUCTION

Bioavailability (BS) is the amount of a drug that enters the bloodstream when administered orally, by injection, inhalation, or otherwise. We know that when administered intravenously, BS enters the bloodstream 100%, in other ways (oral, rectal,

intramuscular, etc.), relatively little, and in most cases less than 100%. The biological effectiveness of drugs (DP) depends on their breakdown, dissolution and separation of drugs (DV) from the drug, so it is necessary to evaluate the above pharmacological and

technological parameters in the development of drugs. Also, in assessing their quality in industrial production, it is necessary to assess whether these indicators meet the requirements. Determining the breakdown of solid dosage forms does not allow a complete conclusion to be drawn about the release of the drug from them, so it is not appropriate to assess their bioavailability.

The most convenient way to assess the quality of a drug substance is to determine the melting rate of the drug. The solubility of a solid drug is defined as the percentage of the drug that passes into the solution over a period of time. It is convenient to evaluate the solubility of drugs to compare different forms of the drug and to control the quality during the production process. Many methods and devices have been developed to determine the rate of melting.

Devices and methods must meet the following conditions:

- Know the exact dimensions of the appearance of each part of the device;
- The device is relatively simple, easy to use, and experimental

It must be appropriate when circumstances change, and it must produce the same results;

- The melting process in the device is adapted to the absorption process in vivo;
- The device must be controllable, be able to change speed, provide a smooth non-turbulent mixing;
- The samples can be immersed in the solvent even during the operation of the device.

During the melting process, the sample should not be affected by any mechanical particles;

- The melting vessel must be closed and visible to monitor the melting process. Standard of solvent

must be;

Disk method

This method is necessary to determine the true rate of melting. The shape of this method has changed several times, depending on the speed of rotation, the setting of the sample, and the appearance of the handle to control the movement of the solvent.

In this method, the tablet is attached to the acrylic holder (disc) using paraffin, and only the top of the tablet touches the solvent. The sample holder is circulated in a 200 ml solvent container at 37 ° C. The number of revolutions is 300 or 400.

The method used in the laboratory glass. This method uses 250ml of solvent heated to a temperature of  $37 \pm 0.5^{\circ}\text{C}$ . Mixing is done with a propeller mixer in the middle. The number of revolutions is 1min / 60. In this method, the method of mixing the sample is critically evaluated. It is recommended to prevent the rotation of the sample from the bottom hemisphere round container.

An improvement that solves this problem is to put the sample in a basket or holder. The fixed position of the basket on the iron base is achieved by means of a magnet placed at the bottom of the basket. Fixation of another type of these devices is done by means of plates. The plate capsules are made of organic glass or Teflon, which allows you to insert many capsules and tablets. There is no difficulty in evaluating capsules when using such a device. The solvent circulation in front of the samples is also regular.

In the past, taking natural medicines has been done on several approaches, including: in heart disease from eye medications in cardiac eye diseases consumed, all toxins in certain amounts used as a medicine.

Aspirin was released 330 years ago. It has been poisonous for years has been showing a negative rather than a positive effect throughout. So far, scientists have been working to reduce the toxic effects of aspirin are working on. Of course, poisons are drugs in small quantities plays a role. Some scientists believe that by consuming small amounts of poison, they hardened their bodies. lion venom little by little. The body hardens even when consumed. Do not use some inhibitors as a medicine at this time measures are being taken. Mercury is a very strong poison, but in Karakalpak Stan it is used as a medicine. It is in a certain dose kills microorganisms, but has a strong effect on the body shows. Recent use of metabolites as drugs established. Palavering and in lowering human blood pressure uses drugs such as diazole. These drugs lower blood pressure only for a certain period of time, but if they are produced in associations, they can be obtained by genetic engineering.

Work to get any medication or metabolite should start with the selection of raw materials in the first place.

There are several types of raw materials to choose from.

The right choice is very important. These are biological raw materials are of great importance. Biological raw materials are also available respectively divided into three groups: animal, microorganism and plant. Human and animal organs are very rich in raw materials.

For example, obtaining albumin, globulin and other substances from them possible. It is different from the glands present in animal raw materials different hormones are obtained. These include the pancreas and gonads can be an example. The adrenal glands are a source of hormones. In microorganisms, the adaptation process goes very well. Enhancing the synthesis of ascorbic acid by growing the in a sorbent

possible. Penicillin, ampicillin and organic from microorganisms acids are obtained. The field of biotechnology is a new direction in science, technology in the laboratory and in the enterprise environment to the problem of drug deficiency, creating the possibility of obtaining substances helps put a check.

Especially the drug in a biological way using nasal engineering by transferring the offspring to a microorganism or plant for preparation, certain conditions are created for tissue development. The hormones interferon, riboflavin, insulin and somatotropin are obtained using engineering. Plants like Jenshen are being propagated.

Fungi are propagated in this way, and from them are home remedies (arachic acid, semi-saturated aromatic fatty acids, etc.) Being taken. Obtained by biotechnology in the late twentieth century total pharmaceuticals with a product volume of \$ 28.9 billion 8.5 mid. dollars. Amino acids in the Japanese world, is the largest state in terms of obtaining antibiotics, alcohols and stabilized enzymes.

### CONCLUSION

Raw materials of medicinal plants and medicines derived from them Drugs play an important role in providing the population of the republic with medicines. Contains all medicinal plants there are different compounds.

### REFERENCES

1. Formation of UUD in basic school: from action to thought. Task system: teacher's manual / edited by A.G. Asmolov.-2nd ed. - M.: Education, 2011;
2. Arzhanovsky D.A. Methods of teaching physical culture in the framework of the implementation of the Federal State Educational Standard. - M.: Phoenix, 2011. - 922 p.



3. Bukhanova L.I. Methods of teaching physical culture. – M.: Bustard, 2011. – 1001 p.
4. Bukhanova L.I. Methods of teaching physical culture in basic school. – M.: Bustard, 2012. – 984 p.
5. Latypov A.A. Methods of teaching physical culture. - Kazan: Progress, 2012. - 956 p.
6. Matveev A.P. Physical education. Work programs. M.: Education, 2012;
7. Exemplary programs for academic subjects. Physical education. Grades 1-4: project.-2nd ed., finalized. - M.: Education, 2010;

