



Learning Liquid Medicine Forms and Writing Prescriptions for Medical School Students

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Abstract: General information about liquid medicine forms and the rules of writing a prescription for them, a perfect study of the Latin spelling of plants and the correct use of the Latin abbreviations of the prescription.

Key words: infusion, decoction, infusion, emulsion, extract, novogalen.

Received 2nd Jul 2022,
Accepted 3rd Aug 2022,
Online 7th Sep 2022

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Distillation - singular singular singular - infusum, indicative singular singular - infusi, abbreviated - inf. Decoction - singular singular singular - decoctum, indicative singular singular - decocti, abbreviated - dec. Medicinal plant raw materials (leaves, herbs, roots, etc.) when treated with water at a temperature of +1000 C for a certain time in a water bath, the active substances of medicinal plants are released. Such separations obtained from plant raw materials in water are called tinctures and decoctions. Tinctures are often prepared from the soft parts of the plant: leaves (folia), flowers (flores), herbs (herbae), and sometimes from the hard part. Decoctions are usually prepared from somewhat coarse, hard parts of plants (roots - radix, bark - cortex, rhizome - rhizome), and in some cases from soft parts. Decoctions are boiled for 15 minutes and filtered after cooling completely. Decoctions are boiled for 20-30 minutes and filtered while boiling (if it cools down, a slimy mass is formed). Since tinctures and decoctions are perishable, they are prepared in the pharmacies themselves in the necessary amount, so that they last for a maximum of 3-4 days before giving directly to the patient, and in this case, of course, the instructions about which part of the plant should be prepared from which they should be prepared. They are often prescribed to drink in tablespoons (sometimes dessert and teaspoons). There is a single (abbreviated) form of prescribing tinctures and decoctions. The following standard concentrations of plants are adopted for the preparation of tinctures and decoctions:

1. For plants containing toxic substances - 1:400 ratio. This group includes the following plants:
 - a) Angishvonagul leaf - Folium Digitalis
 - b) Ipecacuanha root - Radix Ipecacuanhae
 - c) Mouse grass (or thermopsis grass) - Herba Thermopsidis

2. For plants containing strong active ingredients - 1:30 ratio. This group includes:

- a) Pearl flower herb - Herba Convallaria
- b) Valerian root - Radix Valerianae
- c) Spring adonis grass - Herba Adonis vernalis
- g) Senna root - Radix Sennae
- d) Kingfisher fungus - Secale cornutum

3. For all other plants (which do not contain toxic and strong substances) - 1:10 ratio.

Summarizing the above opinions, the following should be followed when writing a recipe for tinctures and decoctions: 1) the recipe is written only in abbreviated form; 2) tinctures and decoctions are given 12 times a day (in the amount of 180-200 ml); -3) plants the ratio of the amount to the solvent is calculated based on special standard concentrations; 4) it is dosed only in tablespoons.

Examples:

1. Let's write a recipe for tincture made from thermopsis herb. It is recommended to drink 1 tablespoon 3 times a day.

Calculation: 1) water 15 ml x 12 times = 180 ml, for easy calculation it can be 200 ml;

2) 1:400 400 ml – 1 g

200 ml – x

Rp.: Infusi herbae Thermopsidis 0,5 – 200 ml

D.S. Drink 1 tablespoon 3 times a day

2. Write a recipe for a decoction made from ayykkulok leaf. It is recommended to drink 1 tablespoon 3 times a day.

Calculate:

1) water 15 ml x 12 times = 180 ml;

2) 1:10 10 ml – 1 g

180 ml – x

Rp.: Decocti folii uvae Ursi 18.0 – 180 ml

D.S. Drink 1 tablespoon 3 times a day

Note: Only their total amount can be indicated when writing tinctures and decoctions prepared in a ratio of 1:10.

Emulsions - the main singular singular is emulsum, the indicative singular singular is emulsi, abbreviated as emuls. Emulsion is a form of liquid drug in which water-insoluble liquids (for example, liquid oils) are suspended in water in the form of small particles. Emulsions resemble milk in appearance. Emulsions are divided into 2 groups depending on their preparation: nut and oil emulsions. Nut emulsions are made from almonds, pumpkin seeds and peanuts. Oil emulsions are liquid oils: sesame oil made from almond oil, fish oil, etc. During the preparation of oil emulsion, special emulsifiers (glue arabic, apricot glue, gelatose) are added to turn the oil into an emulsion, but their name and amount are not mentioned in the recipe. Emulsions are often prepared in a standard ratio (1:10). Emulsions are written in abbreviated form in the recipe, dosed in tablespoons and given

for 12 days (in the amount of 180-200 ml). Examples: 1. Write a recipe for 200 ml emulsion made from almond seeds..

Rp.: Emulsi semenis Amygdali dulcis 20,0 – 200 ml

D.S. Drink 1 tablespoon every hour

2. Write a recipe for 180 ml emulsion made from sesame oil (Oleum Ricini).

Rp.: Emulsi olei Ricini 18,0 – 180 ml

D.S. Drink 1 tablespoon every hour

Medicinal compounds - Species - is a mixture of several types of medicinal plant raw materials. They are used for drinking in the form of tinctures and decoctions, for inhaling (smoking) the smoke produced by burning them (smoking kits), for use on the surface (rinse, bath, primochka). Medicinal preparations are divided into parts (dosed) and undivided (non-dosed). Medicinal preparations divided into parts contain toxic and powerful substances. For example. Write a prescription for a 10-dose medicinal kit containing 2.0 g of spring adonis herb and 1.5 g of valerian root. It is recommended to infuse 1 dose of the medicinal composition in 1 glass of boiling water, let it rest for 30 minutes, filter it and drink 1 tablespoon 3 times a day.

Rp.: Herbae Adonidis vernalis 2,0

Radicis Valerianae 1,5

M.f. species

D.t. d. N. 10

S. Dilute 1 dose of the medicinal mixture in 1 glass of boiling water, let it rest for 30 minutes, strain and drink 1 tablespoon 3 times a day.

Tincture - primary singular singular - tinctura, indicative singular plural - tincturae, abbreviated as t-rae or tinc. Tinctures are clear and colored extracts obtained from raw plant materials, often with alcohol. This is where the name comes from (tinctio means dyed). They are prepared in pharmaceutical factories in accordance with certain technological rules. All tinctures are official. Compared to tinctures and decoctions, they are stable and stored for a long time at normal temperature, in glass containers with well-closed mouths and in a dark place. When writing tinctures, the prescription begins with the name of the medicinal form - Tincturee, then the name of the plant and the amount of tincture are indicated. Tinctures are dosed with drops and given so that they can be taken 20-40 times. Example: write a prescription for 20 ml of valerian tincture (td - 20 drops). Order to drink 20 drops 3 times a day.

Rp.: Tincturae Valerianae 20 ml

D.S. Drink 20 drops 3 times a day

It is also possible to mix the ingredients and write them in 1 recipe. In this case, the amount of their total drops to be drunk once is added and indicated in the signature. Example: write a recipe for valerian tincture with td=20 ml and mother-of-pearl tincture with td=10 ml.

Rp.: Tincturae Valerianae 20 ml

Tincturae Convallariae 10 ml

M.D.S. Drink 30 drops 2 times a day

Extract - in the singular - extractum, in the indicative singular - extracti, abbreviated - extr. Extract - when medicinal plant materials are concentrated in one place, form medicinal liquid medicine for internal and external use.

They are divided into:

- 1) liquid extracts (extracta fluida);
- 2) dark extracts (extracta spissa);
- 3) dry extracts (extracta sicca).

Liquid extracts – (Extractum fluidum) are concentrated extracts obtained from plant raw materials mainly with alcohol. The technology of their preparation is similar to that of tinctures, they are also dosed in drops, and when writing a recipe, the type of extract (liquid - fluidum) must be indicated after the name of the plant, and then its amount is determined.

An example. Write a prescription for 30 ml of the liquid extract of Frangula. 30 drops to drink 3 times a day.

Rp.: Extracti Frangulae fluidi 30 ml

D.S. Drink 30 drops 3 times a day

The name of the medicinal form is followed by the name of the plant in the singular (Exrtacti) with an initial letter, the nature of the extract (spissi) and its amount in grams. Thick extracts in tablets, capsules or suppositories are prescribed according to the instructions for the appropriate dosage form.

Rp .: Exrtacti Filicis maris spissi 0.5

D . t . d . N.12 in caps.

S . Take 1 capsule 30 minutes before meals

Rp .: Belladonnae spissi 0.015

D . t . d . N. 10 in supp.

S . 1 suppository in the rectum 3 times a day.

Dry extracts are granular masses with a moisture content of no more than 5%. For proper dosing, they are available in capsules, tablets, powders or suppositories.

The name of the medicinal form is followed by the singular (Exrtacti) with the initial of the name of the plant, the nature of the extract (sicci) and its amount in grams. Dry extracts in tablets, powders, capsules or suppositories are determined according to the rules for taking the appropriate dosage form.

Rp .: Extracti Adonidis vernalis sicci 0,25

S . 1 powder 3 times a day.

Novogalen preparations

This is a water-alcohol or chloroform alcohol extract obtained from herbal medicinal raw materials obtained as a result of special processing. It is produced in official form as a liquid drug, administered orally and parenterally. Each novogalen newgalenic drug has a separate name. Novogalenovy preparations used for injection are available in ampoules, and in this case are dosed drugs. Novogalenovy preparations are highly distinguished from galenic preparations by ballast substances. The second way is D. S. and signature. Novogalenovye preparations are given in the form of drops.

Rp .:Valerianae 15 ml

D . S . Kuniga 3 marta 15 tomchi.

SUSPENSION (SUSPENSIO)

A liquid drug is a solid drug that does not dissolve in water. These are intended for external and internal use or injection. As an injection, suspensions can be administered intramuscularly or intramuscularly. Suspensions can be official and trunk. Suspensions are prescribed in the form of a shortened and extended prescription.

A. The abbreviated registration form is written as follows:

- 1) suspensions prepared in water;
- 2) official suspensions.

The prescription begins with the letter that begins with the name of the dosage form (Suspensionis), then the medicinal substance in the genitive state with a capital letter, the concentration in percent and the amount in ml through dill. Followed by D. S. and signature. The signature should be noted: "Shake before use."

Rp .: Suspensionis Hydrocortisoni aetatis 0,5% - 10 ml

D . S . 2 drops in the eye 4 times a day. Shake well before use.

The extended form of the recipe prescribes trunk suspensions prepared not in water, but in other formative substances (glycerin, petroleum jelly, etc.), after showing Rp:. Capitalize the genitive letter and indicate the drug substance with its quantity. The second line shows the amount of liquid formant, the initial letter and the required number of ml in a large volume. In the third row - M. f. suspensio (mix to suspend). Then - D. S. and signature.

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