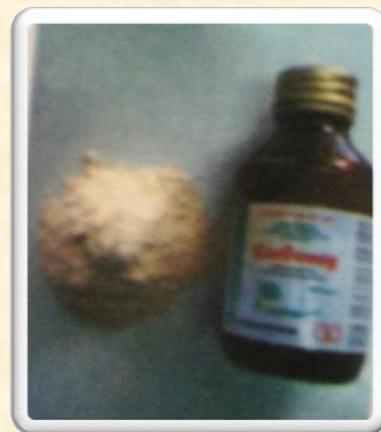


The Ministry of Public Health of Uzbekistan

The Tashkent Pharmaceutical Institute

***Theme : THE COMMON
FORMS OF DRUGS***

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Tashkent-2012

THE COMMON FORMS OF DRUGS

Plan:

1. SOLID MEDICINAL FORMS
2. SEMISOLID MEDICINAL FORMS
3. LIQUID MEDICINAL FORMS



SOLID FORMS OF DRUGS

A lot of drugs manufactured by pharmaceutical industry in a solid state greatly differ in shape, size and colour. They are powders, granules, tablets, lozenges, globules, capsules and pills.

A powder is a finely ground or comminuted mass of free particles formed from a solid substance in the dry state (head-ache powders, powder of ascorbic acid etc.)

A tablet is a compressed solid mass of medicated material usually in the shape of a disk or flat square. A large medicated or sweetened round-shaped tablet is called a lozenge.

A capsule is a small cylindrical or spherical gelatinous container with a dose of medicine inside. Capsules may be of different forms, size and colour.

A pill is a medicinal substance put up in a pellet, convenient for swallowing whole.

Solid medicinal forms are mainly administered internally.



SEMISOLID MEDICINAL FORMS

Semisolid medicinal preparations usually having fatty material as petrolatum, lard, wool fat as a base differ in shapes, consistency and methods of application. They are ointments, salves, liniments, suppositories and plasters.

An ointment is an unctuous preparation of a soft consistence often mixed with some medicament used for application to the skin for medical purposes or as a cosmetic.

A salve is a thick adhesive ointment for local ailment used for healing, soothing or mollifying.

A liniment is a preparation of a consistency thinner than an ointment applied to the skin with friction.

A suppository is a medicinal substance incorporated in a base which melts at body temperature. There are rectal, urethral and vaginal suppositories.

A plaster is a form in which medicinal agents are incorporated in an adhesive base intended for application to the skin.

All semisolids are used externally for local application.



LIQUID MEDICINAL FORMS

An extract is a preparation obtained by evaporating a solution of a drug or fresh juice of a plant. Liquid extracts are preparations of a syrupy consistency and are generally prepared by treating the drug with solvent.

An infusion is a liquid extract obtained by steeping or soaking any substance in water without boiling (infusion of the Lily of the Valley).

A tincture is an alcoholic or hydro-alcoholic solution of nonvolatile drugs of plant or animal origin (tincture of Valerian, tincture of Pot Marry Gold). Tinctures as a medicinal form were introduced by Galen.

A mixture is a preparation for medicinal or other purposes consisting of two or more ingredients mixed together (cough mixture).

A solution is a typically liquid homogenous mixture formed by dissolving (a solution of novocaine , of calcium chlorate etc.) solutions are manufactured in ampoules. An ampoule is a small narrow necked glass vessel hermetically sealed for holding sterile solutions for injections.

A decoction is a liquid preparation made by boiling a medicinal plant with water. Usually 5 parts of a drug are used to 100 parts of water.



NEW WORDS AND EXPRESSIONS

powder –kukun

Granule –granula, donacha

Lozenge –kulcha

Globule –sharcha

Pill –habdori

Capsule –kapsula

Ground –maydalangan

To comminute –tuymoq

Pellet –habdori

Convenient –qulay

Petrolatum –neft

Lard –cho'chqayog'l

Wool –jun

Anodyne –og'riqqoldiruvchi

To incorporate –aralashtirmoq

Ailment –kasallik

To heal –davolamoq, tuzatmoq

To sooth –tinchlantirmoq

To mollify –tinchlantirmoq

The Common forms of drugs

Solids

Greatly differ in shape, size and colour

Powders, granules, tablets, lozenges, globules, capsules and pills

They are administered internally

Semisolids

Usually having fatty material as petrolatum, lard, wool fat as a base differ in shapes, consistency and methods of application

Ointments, salves, liniments, suppositories and plasters

They are used externally for local application

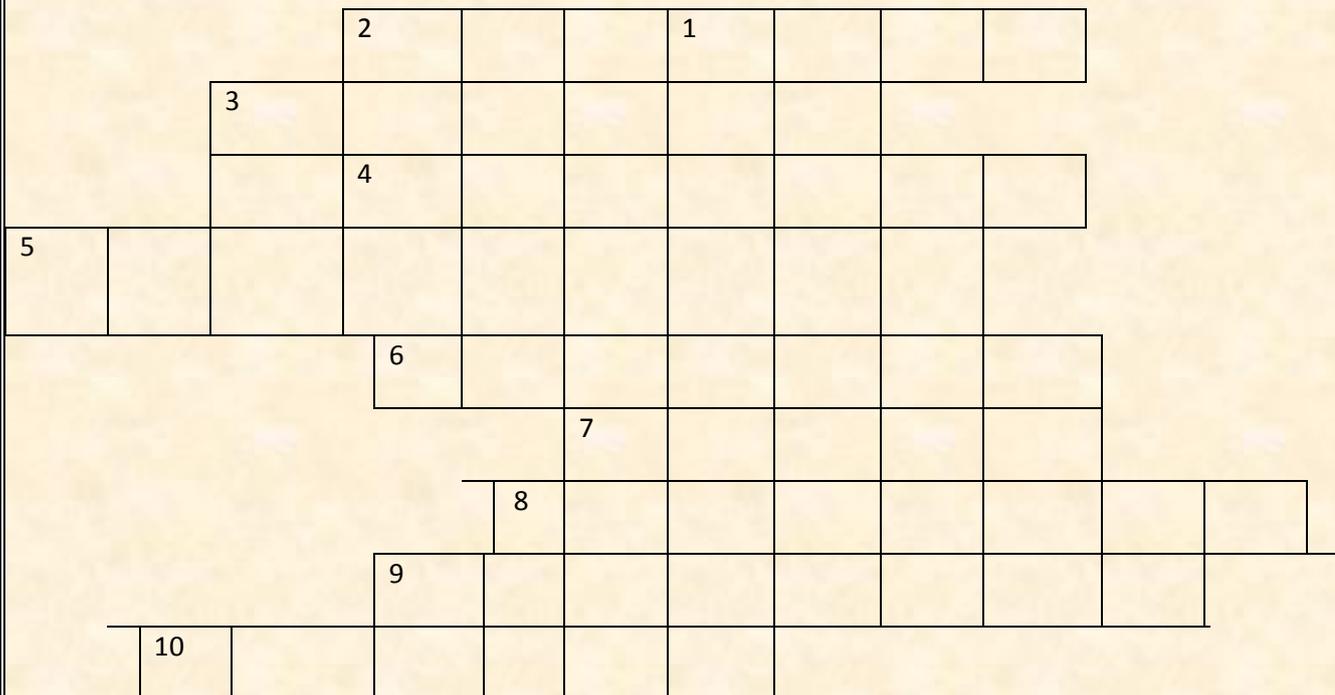
Liquids

Infusion, decoction, tincture, mixture and solution

They are administered internally and externally

Task 2.

THE COMMON FORMS OF DRUGS



Down 1. The form of drugs.

Horizontal 2. A small cylindrical or spherical gelatinous container with a dose of medicine inside.

3. A compressed solid mass of medicated material usually in the shape of a disk or flat square.

4. An unctuous preparation of a soft consistence, used for application to the skin for medical purposes or a cosmetic.

5. A liquid preparation made by boiling a medicinal plant with water.

6. A medicinal agents are incorporated in an adhesive base intended for application to the skin.

7. A finely ground or comminuted mass of free particles formed from a solid substance in the dry state.

8. A typically liquid homogenous mixture formed by dissolving.

9. A preparation of a consistency thinner than an ointment applied to the skin with friction.

10. The form of drugs.

THE COMMON FORMS OF DRUGS

c a p s u l e

t a b l e t

o i n m e n t

d e c o c t i o n

p l a s t e r

p o w d e r

s o l u t i o n

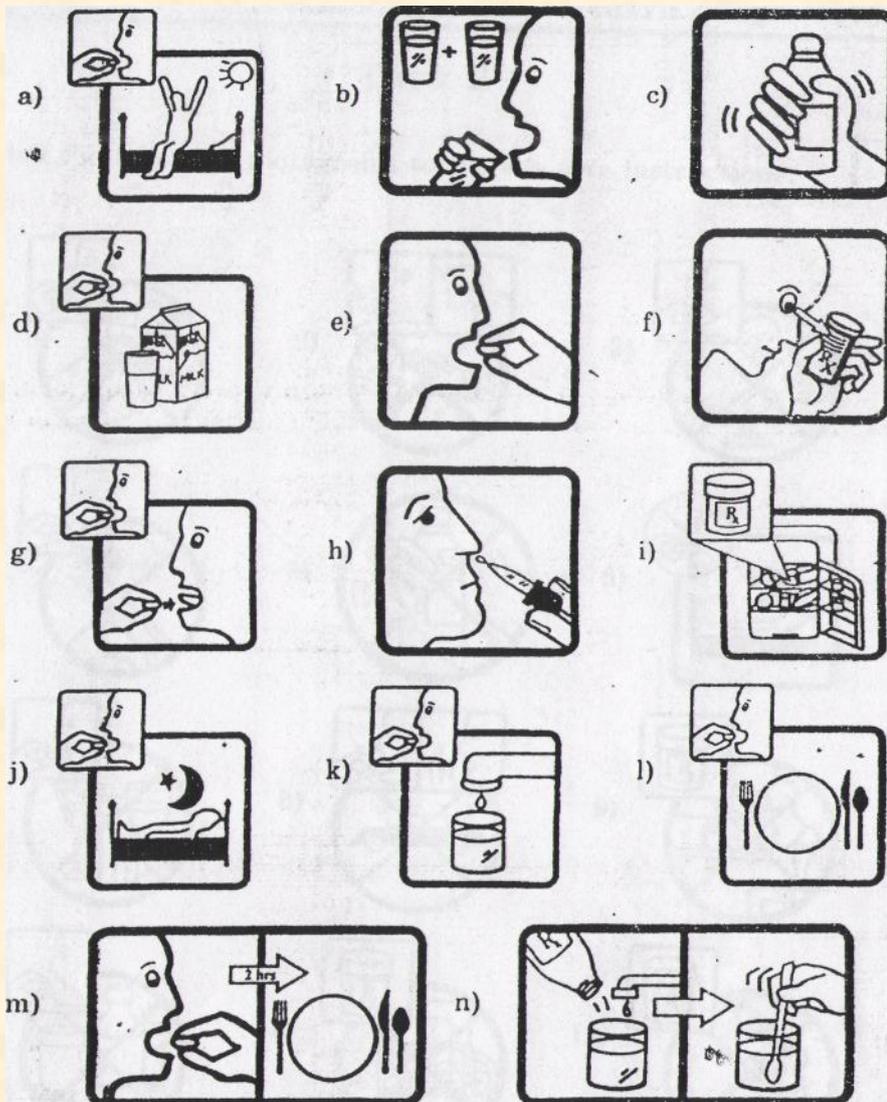
l i n i m e n t

l i q u i d

T.3. ARE YOU A GOOD PHARMACIST?

Match the following commonly used directions for appropriate drug use to the pictograms.

- 1) Read the label.
- 2) Shake well.
- 3) Store in refrigerator.
- 4) Take by mouth.
- 5) Take with glass of water.
- 6) Take with milk.
- 7) Take with meals.
- 8) Take in the morning.
- 9) Take at bedtime.
- 10) Take two hours before meals.
- 11) Dilute with water.
- 12) Drink additional water.
- 13) Dissolve under the tongue.
- 14) Place drops in nose.



Task 4.

Write these words in the correct place:

Powder, tablet, infusion, ointment, salve, capsule, solution, globule, tincture, pluster, decoction, pill, mixture, granule, lozenge, liniment, suppository, extract.

Solid medicinal forms	
Semisolid medicinal forms	
Liquid medicinal forms	

Task 5.

Answer the questions :

1. What solid medicinal forms do you know?
2. How are they differ with each other?
3. How are solid medicinal forms administered?
4. What semisolid medicinal forms do you know?
5. What fatty materials are used as a base of semisolid medicinal forms?
6. How are semisolid medicinal forms used?
7. What is an ointment?
8. By means of what are liquid extracts prepared?
9. What is a decoction?
10. A tincture is an alcoholic or hydro- alcoholic solution?

Forms of drugs

Variant 1

1. Translate the word-combinations into Uzbek (Russian).

The common forms of drugs, the precise form, the individual case, multiple diseases, for instance, as a rule, the prescribed instructions, should be taken one half hour to one hour, non-acid-resisting antibiotics, with acidic juices

2. Arrange the following words in pairs of synonyms.

Medicine, physician, now, ailment, doctor, pain, drug, disease, at present, ache.

3. Translate the sentences into English.

- a) Kapsulani birinchi bo'lib Fransuz dorishunoslari Mot va Dyublanlar 1833 yilda taklif qilishgan. (Капсула впервые была предложена французскими фармацевтами Мотом и Дьюбланом в 1833 году).
- b) Shamcha tana haroratida eriydi. (Свеча тает при температуре тела).
- c) Ekstarktlar juda qadimgi preparatlar bo'lib, hozir ham keng qo'llaniladi. (Экстракты – очень древние препараты широко используются и по сей день).

4. Translate the sentences into Uzbek (Russian).

- a) The poisonous nature of the leaves was well known and the drug was recommended by Parkinson in 1640.
- b) Aloe was known to the Greeks as early as the 4th century.
- c) Senna was introduced into European medicine in the 9th or 10th century by the Arabians.

5. Speak on the topic: "Forms of drugs".

Forms of drugs

Variant 2

1. Translate the word-combinations into Uzbek (Russian).

A lot of drugs, with a dose of medicine, in the shape of a disk, in a solid state, for instance, different forms, pharmaceutical industry, convenient for swallowing, free particles

2. Arrange the following words in pairs of antonyms.

Solid, colour, free, large, round, inside, internally, colourless, small, outside, busy, liquid, square, externally

3. Translate the sentences into English.

- a) Tabletka so'zi lotincha "tabula" so'zidan olingan. (Слово таблетка произошло от латинского слова "tabula").
- b) Yumshoq dorilar bolalarni davolashda keng qo'llaniladi. (Мягкие лекарственные формы широко используются для лечения детей).
- c) Ampulani birinchi marta Rus olimi 1885 yilda taklif etgan. (Ампула впервые была предложена русским ученым в 1885).

4. Translate the sentences into Uzbek (Russian).

- a) Pharmacology is a very important subject and we must pay great attention to it at our studies.
- b) It is very important to collect medicinal plants in proper time.
- c) A prescription is usually written for a certain person.

5. Speak on the topic: "Forms of drugs".

Control work

Forms of drugs

Variant 3

1. Translate the word-combinations into Uzbek (Russian).

Fatty material, to differ in shape, methods of application, an unctuous preparation, to melt at body temperature, medicinal agents, pharmaceutical industry, semisolid forms of drugs

2. Arrange the following words in pairs of antonyms.

Different, soft, external, thick, ailment, thin, internal, hard, health, the same

3. Translate the sentences into English.

- a) Malhamlar qadimdan qo'llanilgan dori turidir. (Пластыри издавна применяются при лечении).
- b) Malhamlar tarkibida polimerlar, tabiiy moylar, antioksidantlar va dori moddalari bo'ladi. (В составе пластырей содержатся полимеры, натуральные масла, антиоксиданты и лекарственные вещества).
- c) Yumshoq dori turlari sirtidan ishlatishga mo'ljallangan dori turidir. (Мягкие лекарственные формы используются наружно).

4. Translate the sentences into Uzbek (Russian).

- a) A great variety of shapes and sizes is available among medicinal tablets.
- b) Pharmacy, as an independent branch of medicine, was born in Europe in 1240, when the Emperor of Holy Rome separated pharmacy from medicine.
- c) The students of pharmacy spend several weeks in the Botanical Gardens collecting medicinal herbs.

5. Speak on the topic: "Forms of drugs".

Forms of drugs

Variant 4

1. Translate the word-combinations into Uzbek (Russian).

Fresh juice, animal origin, tincture of Valerian, a medicinal form, hydro-alcoholic solution, for medical purposes, a solution of novocaine, a medicinal plant

2. Arrange the following words in pairs of synonyms.

Drug, to obtain, to produce, to apply, to manufacture, to use, to prepare, preparation

3. Translate the sentences into English.

- a) Ekstraktlar qadimgi preparatlar bo'lib, hozir ham keng qo'llaniladi. (Экстракты известны с давних времен, и сейчас они широко применяются в медицине).
- b) Ampulani birinchi marta Rus olimi 1885 yilda taklif etgan. (Ампула впервые была предложена русским ученым Пелем в 1885 году).
- c) Suyuq dori turlari oddiy va murakkab turlarga bo'linadi. (Жидкие лекарственные формы бывают простыми и сложными).

4. Translate the sentences into Uzbek (Russian).

- a) Syrups are concentrated aqueous solutions containing effective medicinal substances.
- b) Elixirs are hydro-alcoholic solutions of medicated substances with a pleasant taste usually stable for a long period.
- c) White and yellow ointments are relatively stable to normal climatic temperature changes.

5. Speak on the topic: "Forms of drugs".

***Thank you for
attention***