

Learning unit: Pharmacological calculations

Impact of the learning unit:

In clinical practice a doctor often needs to change the dose of a drug, calculate the suitable dose for children, and to calculate the volume of a liquid preparation. In addition to this a doctor may encounter other problems in which further calculations need to be done. Students familiarise themselves with the most common calculations used in clinical practice, and how to effectively apply them to solve clinical problems. Students are recommended to practice dealing with pharmacological calculations regularly.

Relevant terms

individually prepared drug preparations IPP

weight/Volume Percentage Concentration (w/v %)

rate of infusion

daily therapeutic dose

Learning outcomes:

The student is able to logically solve pharmacological problems such as correctly calculating drug dose, concentration, and volume for a given patient. As well as calculating volumes for diluted solutions.

Information sources:

Practicals in Pharmacology (portal.med.muni.cz)

Study materials for courses aVLFA0721p and aVLFA0721c.

Exam questions

General pharmacology: 2. Types of pharmacotherapy, rules of rational and safe pharmacotherapy. The question of drug misuse.