



# Glossary

**Active ingredient**—A substance in a pharmaceutical product that has a therapeutic effect, as opposed to an inert (inactive) ingredient that has no physiologic effect. The substance may have a toxic effect if it is present in too great an amount.

**Addition**—The mathematical process of summing numbers. This word also refers to the process of incorporating ingredients into pharmaceutical products.

**Admixture**—A sterile parenteral product that has various ingredients incorporated (admixed) into it.

**Aliquot**—A fractional part of a whole liquid or solid mixture of active and inert ingredients, which is used to obtain an amount of drug that is less than the sensitivity of a measuring instrument would allow to be measured directly (see also, *Stock Liquid* or *Solid*).

**Alligation**—A mathematical method for mixing substances having two different concentrations of the same drug to obtain an amount of substance with a third concentration of drug.

**Apothecaries' system**—A centuries-old system of weights and measures based on a pound having 12 ounces, an ounce having 8 drams, a dram having 3 scruples, and a scruple having 20 grains. For safety reasons, this system has been replaced in healthcare practice by the metric system of weights and measures.

**Arabic numeral**—The ten digits, 0 through 9, used in mathematics to indicate quantity.

**Atomic weight**—Also known as atomic mass, the weight of an atom, subatomic particle or molecule stated in atomic mass units.

**Body surface area (BSA)**—The surface area of the human body calculated using a mathematical formula to determine drug dosage.

**Cockcroft-Gault equation**—A mathematical formula that estimates a patient's creatinine clearance.

**Common fraction**—A ratio expressing a whole number (the numerator) divided by a whole number (the denominator) that is also defined as a proper fraction if the value of the ratio is less than 1.

**Concentration**—The amount of a chemical ingredient divided by the total weight or volume of a mixture of chemicals.

**Conversions**—The processes of expressing quantities in one system of weights and measures as quantities in another system of weights and measures.

**Creatinine clearance**—An estimate of the body's ability to remove creatinine (a normal product of metabolism) that reflects glomerular filtration rate in the kidney and that also reflects the body's ability to remove many drugs. This calculation is used to estimate the size of a drug dose that replaces the amount of drug removed.

**Cubic centimeter (cc)**—The volume of a cube 1 cm on each edge that is very close to the volume of 1 mL and that, for pure water, is very close to a weight of 1 g at room temperature and atmospheric pressure. This unit of measure has largely been replaced by the milliliter with the adoption of the metric system by healthcare practitioners.

**DEA number**—An alphabet letter/number combination registered to a healthcare practitioner by the U.S. Drug Enforcement Administration that authorizes the prescribing and dispensing of controlled substances for patients.

**Decimal fraction**—See *Common Fraction*. The result of dividing the numerator by the denominator of a common fraction and expressing the result in decimal form. For example,  $\frac{63}{84} = 0.75$ .

**Denominate number**—Also known as a *concrete number*, a number expressing the things counted. A number having both a quantity and the units being counted. For example, 5 g of one drug and 8 g of another drug are in a mixture of drug product.

**Density**—The ratio of the mass of a substance per unit volume of the substance. Density has units of mass/volume (for example, g/mL). It is very similar to the specific gravity of a liquid or solid substance at room temperature and atmospheric pressure; however, there can be a large difference between density and specific gravity of gases under standard conditions (see also, *Specific gravity*).

**Diluent**—Also known as a *vehicle*, an inactive substance added to a drug to either reduce the concentration of the drug in a liquid formulation or to assist in formulating the drug as a solid dosage form such as a tablet or capsule.

**Directions for use**—Regarding a prescription issued for a patient's drug therapy, the instructions provided by the prescriber for how the prescribed drug should be used by the patient.