

# CONVERSION OF METRIC

**Metric System:** It is the international system of weights and measures based on meter and gram. It was introduced by Talleyrand. Later it was modified to include meter, kilogram, second (time) and ampere (electricity). Units of metric system are related and rationally derived. It is simpler easier and more accurate to use. Therefore metric system is the most commonly used and widely accepted system of weights and measures. In metric system, the standard unit of measuring weight or mass is kilogram (kg).

When it is needed to use the decimal, it is necessary to be careful so that no mistake is made. Therefore smaller units may be used to avoid decimal. Example: 200mg instead of 0.2 gm.

**Units of Capacity (Volume):** The standard unit of measuring volume is liter.

**Domestic measure:** These measures are used to measure the doses of liquids at home. Common domestic measures and their accepted equivalents are teaspoonful, tablespoon, drops and ml.

**Imperial system:** Imperial system is an old system and is based on units which are not related. It is divided into 2 systems:

1. Avoirdupois system: the standard unit of this system is pound
2. Apothecaries system: also known as troy system is grain.

**Percentage solutions and calculations:** Percentage solution is the solution in which specific quantity of solute is dissolved in a definite volume of solvent to obtain a solution of definite strength and percentage.

**Converting metric units:**

<b>Unit</b>	<b>Equivalents</b>
1 mg	1000 mcg
1 gram	1000 mg
1 kg	1000 g
1 litre	1000 ml
1 tsp	5 ml
1 tbsp	15 ml
1 kg	2.2 lbs
1 oz	2 tbsp
Macro set : 10-15 drops/ml (gtts/ml)	1 ml
Micro set : 60 drops/ml (gtts/ml)	1 ml