Drop Rates & Infusion Rates

\[
\text{Rate (ml/min)} = \frac{\text{Volume (ml)}}{\text{Time (min)}}
\]

\[
\frac{\text{Rate (ml/min)}}{\text{Volume (ml)}} = \frac{\text{Time (min)}}{1}
\]

\[
\frac{\text{Time (min)}}{\text{Volume (ml)}} = \frac{\text{Rate (ml/min)}}{1}
\]

Units

\[
\begin{align*}
1 \text{ kg} & = 1000 \text{ g} \\
1 \text{ g} & = 1000 \text{ mg} \\
1 \text{ mg} & = 1000 \text{ mcg} \\
1 \text{ litre} & = 1000 \text{ ml}
\end{align*}
\]

Concentration

Weight in volume (w/v) – solid dissolved in liquid,

- e.g., glucose 5%(w/v) = 5g glucose in every 100 ml

- e.g., 1:100 means 1g in 100ml

- 1:something (one in something) concentration

- Percentages

- mgc

Dose

\[
\text{Dose} = \frac{\text{GOl WANT}}{\times \text{ IN}}
\]

Nursing Medication Calculation Formulae

- Right Patient
- Right Time/Frequency
- Right Dose
- Right Route
- Right Drug

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BMI = \( \frac{\text{Weight (kg)}}{\text{Height}^2 (m^2)} \)

<table>
<thead>
<tr>
<th>BMI</th>
<th>Weight Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 18.5</td>
<td>Underweight</td>
</tr>
<tr>
<td>18.5 – 24.9</td>
<td>Normal</td>
</tr>
<tr>
<td>25 – 29.9</td>
<td>Overweight</td>
</tr>
<tr>
<td>30 &amp; above</td>
<td>Obese</td>
</tr>
</tbody>
</table>

**Standard Drop Rates**

<table>
<thead>
<tr>
<th>Blood</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 drops/ml</td>
<td>20 drops/ml</td>
</tr>
</tbody>
</table>

**Notes**