

**Independent**: concentration of enzyme

**Dependent**: time taken for enzyme to break down substrate

**Controls**

- Temperature
- Volume of enzyme
- Volume of substrate
- Concentration of substrate
  - pH

**Risks/issues**- Trypsin solution at concentrations from 1% to 5% is an irritant. Wash splashes from the skin as quickly as possible. Wear eye protection. Ensure students inform you if any trypsin gets in their eyes.

Ethical issues involve using animal products of gelatine, so make sure participants know there is gelatine involved.

| Concentration of enzyme % | Time to see "X" ( m:s) |
|---------------------------|------------------------|
| 0.5                       | 8.08                   |
| 0.4                       | 8.32                   |
| 0.3                       | 8.43                   |
| 0.2                       | 9.39                   |
| 0.1                       | 10.02                  |
| 0                         | ---                    |

