**Objective i.) Acute Mechanisms**

- Altered Behavioural Response
  - ↑ Ghrelin, ↓ PYY & ↓ CCK
  - ↑ Energy Intake (Appetite)

- Extended Daily Fasting
  - ↓ Thyroid Hormones

- Positive Energy Balance
  - ↓ Resting Energy Expenditure

**Objective ii.) Chronic Adaptations**

- Adapted Behavioural Response
  - ↓ Physical Activity & ↑ Appetite

- Increased Adiposity
  - Leptin & Adiponectin
  - ↑ Resistin, AMPKα & ↑ RBP-4

- Altered Gene Expression
  - TNF-α & ↑ Interleukin-6

- Insulin Resistance
  - Glycaemic Control
  - ↑ CRP & ↑ Cytokine Response

- Chronic Inflammatory Response

**Objective iii.) Health Outcomes**

- Cardio-Vascular Disease