NTR10001- Intro to Nutrition (sample)

Introduction

Nutrition- science of food, the nutrients, their action, interaction and balance in relation to health and disease

Nutrients- water, carbohydrates (17 kJ per gram), lipids (37 kJ per gram), proteins (17 kJ per gram), vitamins, minerals

Recommendations, NHMRC- carbohydrate: 45%–65% dietary energy; protein: 15%–25% dietary energy; fat: 20%–35% dietary energy

Essential nutrients- cannot be made by the body sufficiently to meet demands

Phytochemicals- in plants, not essential but beneficial

Satiety- feeling full, regulated by hypothalamus

Leptin- made by adipose tissue travels to hypothalamus and signals enough fat (more body fat means more leptin in fat cells, proper leptin signalling is disrupted, the brain thinks you're starving, which makes you want to eat more)

Ghrelen- regulates hunger, made in stomach and travels to hypothalamus and signals hunger

Adiponectin- Lean people have higher amounts than obese- also protects against CVD and diabetes

Nutrient reference values

EAR (estimated average requirements)- average amount, sufficient for half the population

RDI (recommended daily intake)- for individuals, above EAR so sufficient for entire population

AI (adequate intake)- not enough info for an EAR, average amount of nutrient for a healthy person

UL (upper limit)- in excess risks toxicity

EER (estimated energy requirement)- average for person of healthy weight and sufficient exercise