

HBS110 Summary

Topic 1 Accessing your health

Models of Health

- Medical model: a view of health that focuses primarily on the individual and a biological or diseased organ perspective; focuses on individual's physical health
- Public health model: views diseases and other negative health events as a result of an individual's interaction with his or her social and physical environment.

Factors affecting change

- Self-efficacy: an individual's belief that he or she is capable of achieving certain goals or performing at a level that may influence events in life
- Shaping: uses a series of small steps to gradually achieve goal
- Visualisation: uses imagined rehearsal to mentally practice the planned action ahead of time to become better able to perform an event in actuality
- Modelling: learning specific behaviours by watching others perform them
- Changing self-talk: rational emotive therapy, blocking/thought stopping
- Countering: substituting a desired behaviour for an undesirable one
- Situational inducement: influencing a behaviour through seeking out antecedents that support behaviour change and avoiding antecedents that derail change
- Positive reinforcement: rewarding yourself

Models

- Health belief model: Explains when beliefs are likely to affect behaviour change
 - Perceived seriousness of health problem
 - Perceived susceptibility to health problems
 - Perceived benefits and barriers
 - Cues to action
- Transtheoretical model: main focus is readiness to change
 - Pre-contemplation: no current thought or intention of changing
 - Contemplation: recognise problems and thinking about change
 - Preparation: close to taking action, specific plans to change
 - Action: makes active attempt to change
 - Maintenance: continuous, sustainable action; habit
- Social cognitive model: emphasises the role of social factors and cognitive processes in behaviour change. 3 factors:
 - Social environment in which we live
 - Our inner thoughts and feelings
 - Our behaviours

Topic 2 Physical fitness

- Physical activity: refers to all body movements produced by skeletal muscles resulting in substantial increase in energy expenditure
 - Intensities: vigorous, moderate and light
- Exercise: subset of PA; planned, structured and repetitive bodily movements done to improve or maintain one or more components of physical fitness

- Physical fitness: set of attributes that allow you to perform moderate to vigorous intensity physical activities on a regular basis without getting too tired, and with energy left over to handle physical or mental emergencies

Benefits

- Decreased risk of CVD, metabolic syndrome, type 2 diabetes and cancer
- Increased bone mass, improved weight management, immunity, mental health, stress management and life span
- Brain
 - Reduces stress, depression and anxiety risk
 - Improves mood, concentration and increases oxygen and nutrients to brain
- Breasts
 - Decreases risk of breast cancer
- Lungs
 - Improves respiratory capacity: how well our lungs put oxygen into the blood and ability to use it
- Heart
 - Decreases risk of heart disease
 - Strengthens the heart; increases volume of blood pumped to body
- Bones
 - Increases bone density, strengthens bones
 - Decreases risk of osteoporosis
- Liver and pancreas
 - Increased rate of metabolism
 - Decreased risk of type 2 diabetes
- Colon
 - Decreases risk of colon cancer
- Blood vessels
 - Increases levels of HDL
 - Lowers resting BP
 - Decreases risk of atherosclerosis
 - Improves circulation
 - Keeps vessels elastic (not stiff)
- Joints
 - Increases ROM
 - Reduces pain and swelling of arthritis
- Muscles
 - Increases muscle strength and tone
 - Improves muscle endurance and coordination

Skill related components of fitness

- Agility: ability to change direction quickly, move with speed
- Balance
- Coordination: complete specific movements successfully
- Power: ability to exert max. force as quickly as possible
- Speed: acceleration
- Reaction time: to a stimuli ie diving off a board.

Health related components of physical fitness

- Cardiorespiratory fitness
 - Ability of our heart, lungs and blood vessels to take up O₂ and supply it to skeletal muscles during sustained PA
 - Aerobic capacity: volume of O₂ muscles consume during exercise
 - Aerobic exercise: any activity that requires O₂
- Muscular strength
 - Amount of force a muscle is capable of exerting in one contraction (largest amount of weight you can lift in 1 rep max)
- Muscular endurance
 - ability to perform high muscular contractions repetitively without fatiguing
- Flexibility
 - Ability to move joints freely through their full ROM
- Body composition
 - Relative proportions and distributions of fat and fat free mass (muscle, bones, organs, water) in the body

Principles of fitness training (FIIT)

- Frequency – how many times per week a person should exercise to improve a parameter of physical fitness
- Intensity – how hard or how much effort is needed when a person exercises to improve a parameter of physical fitness
- Time – how long a person needs to exercise each time to improve a parameter or physical fitness
- Type – what kind of exercises a person needs to do to improve physical fitness
 - Target heart rate: HR that leads to improved cardiorespiratory fitness
 - Specificity principle: the effects of respiratory training are specific to the muscles exercised

Current trends in health and fitness

- High Intensity Interval Training (HIIT)
 - Brief, intermittent bursts of vigorous activity, interspersed by periods of rest or low-intensity exercise
- Wearable technology
 - Pros: motivation to achieve goals, can often track additional health behaviours
 - Cons: questionable accuracy, pressure to achieve goals can become a de-motivator