

Professional Diploma in Nutrition

Module 1

Lesson 7: Body & Mind

S

EQF Level 5
Professional Diploma



Malnutrition



Global Look at Malnutrition



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Undernutrition

- Undernutrition indicates a lack of the necessary energy, protein or micronutrients required by the body for good health
- Occurs when people do not eat or absorb enough nutrients to cover their needs for energy and growth or to maintain a healthy immune system
- Most basic kind = Protein-energy malnutrition
- Micronutrient deficiency occur when the body lacks one or more micronutrients resulting in deficiencies which usually affect growth and immunity e.g. anaemia (iron deficiency)



Causes of Undernutrition

- Poor diet
- Lack of info/knowledge
- Fad diets
- Disease and illness
- Poverty/ lack of access to food
- Changes in requirements throughout lifecycle



Signs of Malnutrition

- Unplanned weight loss (usually losing more than 5-10% of your body weight within three to six months)
- Weak muscles and/or loss of muscle
- Feeling tired all the time
- Low mood
- Increase in illnesses or infections
- Slow recovery from illness
- Failure to grow at the expected rate
- Changes in behaviour such as appearing unusually irritable, sluggish or anxious



Undernutrition Facts

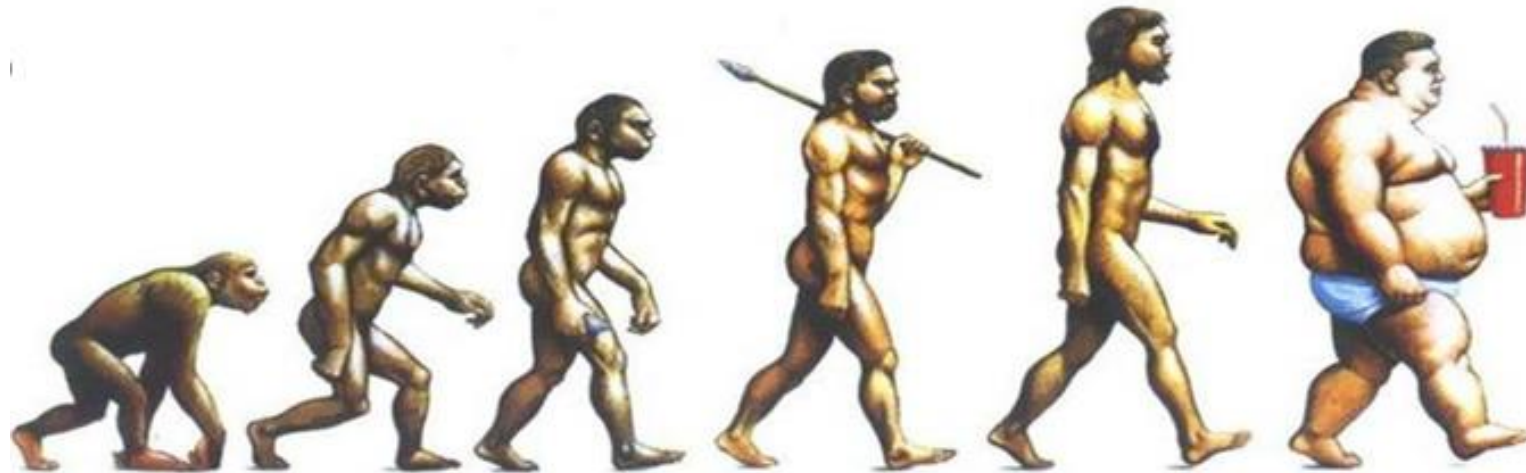
- Prevalent in, but not limited to, developing countries
- 842 million people in the world do not eat enough to be healthy.
- 1 in 8 people on Earth go to bed hungry each night.
- WHO estimate Undernutrition contributes to 1/3 of all child deaths (2010)



Over Nutrition



The shape of things to come

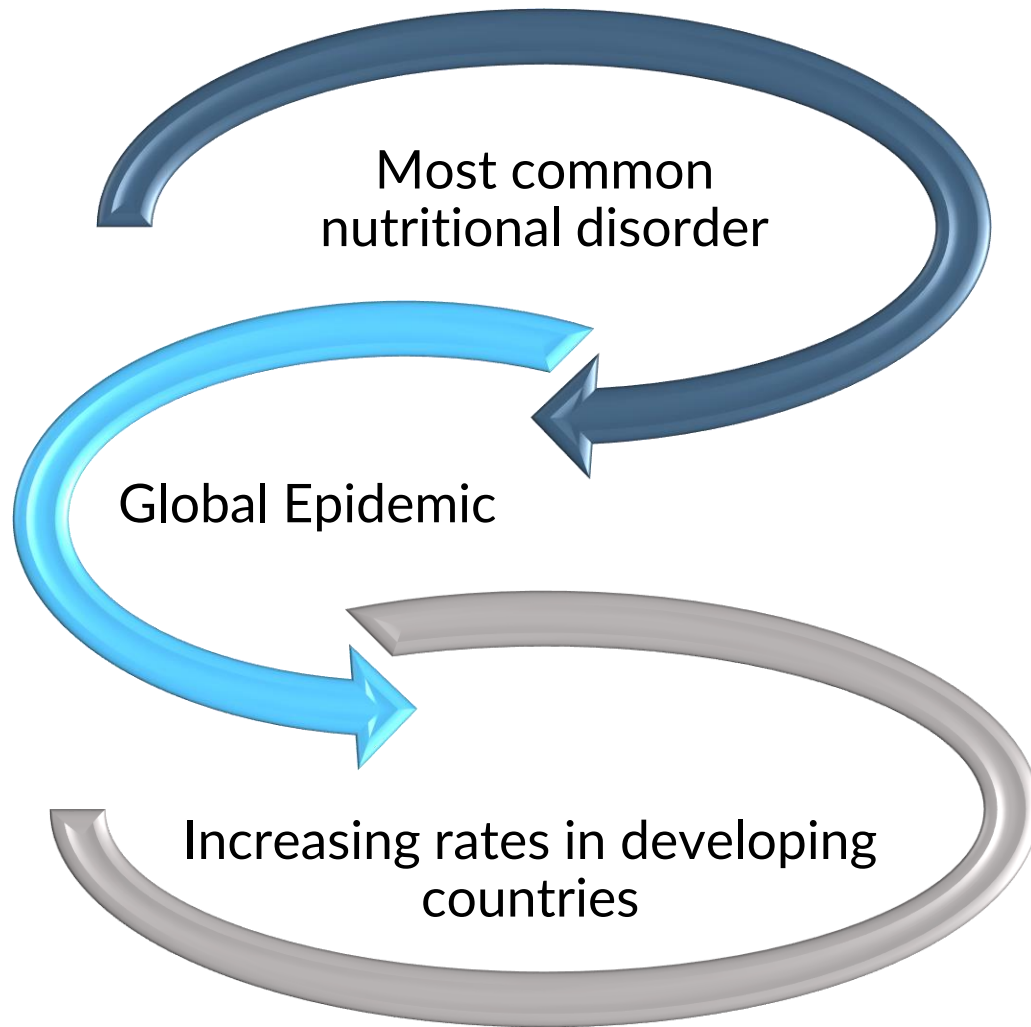


Obesity Facts

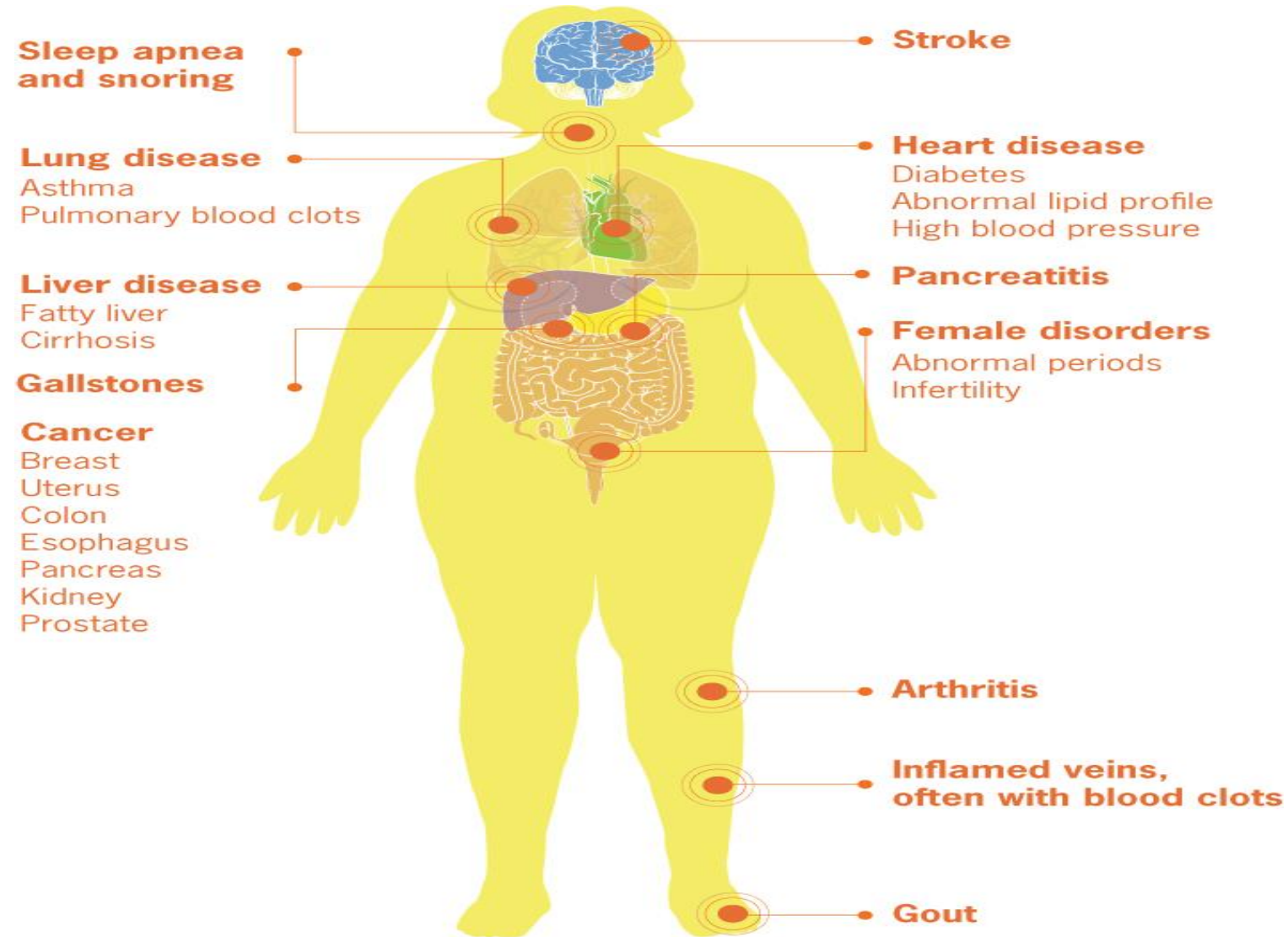
- Worldwide obesity has nearly doubled since 1980
- In 2008, >1.4 billion adults were overweight
- 200million men and nearly 300 million women were obese
- 35% of adults aged 20 and over were overweight in 2008 and 11% were obese
- 65% of the world's population live in countries where overweight and obesity kills more people than underweight
- 42 million children under the age of 5 were overweight or obese in 2013



How Common is Obesity



Implications of Obesity



Stress and Obesity

- Stress can be caused by external stressors such as employment or social strains or by intrinsic stressors such as sleep deprivation.
- In the past 30 years, numerous studies have shown that obesity and other metabolic risk factors are associated with lower socioeconomic status, job strain, sleep deprivation, and depression.
- Depression can both cause and result from stress, which, in turn, may cause you to change your eating and activity habits.



Stress and Obesity

Hormones:

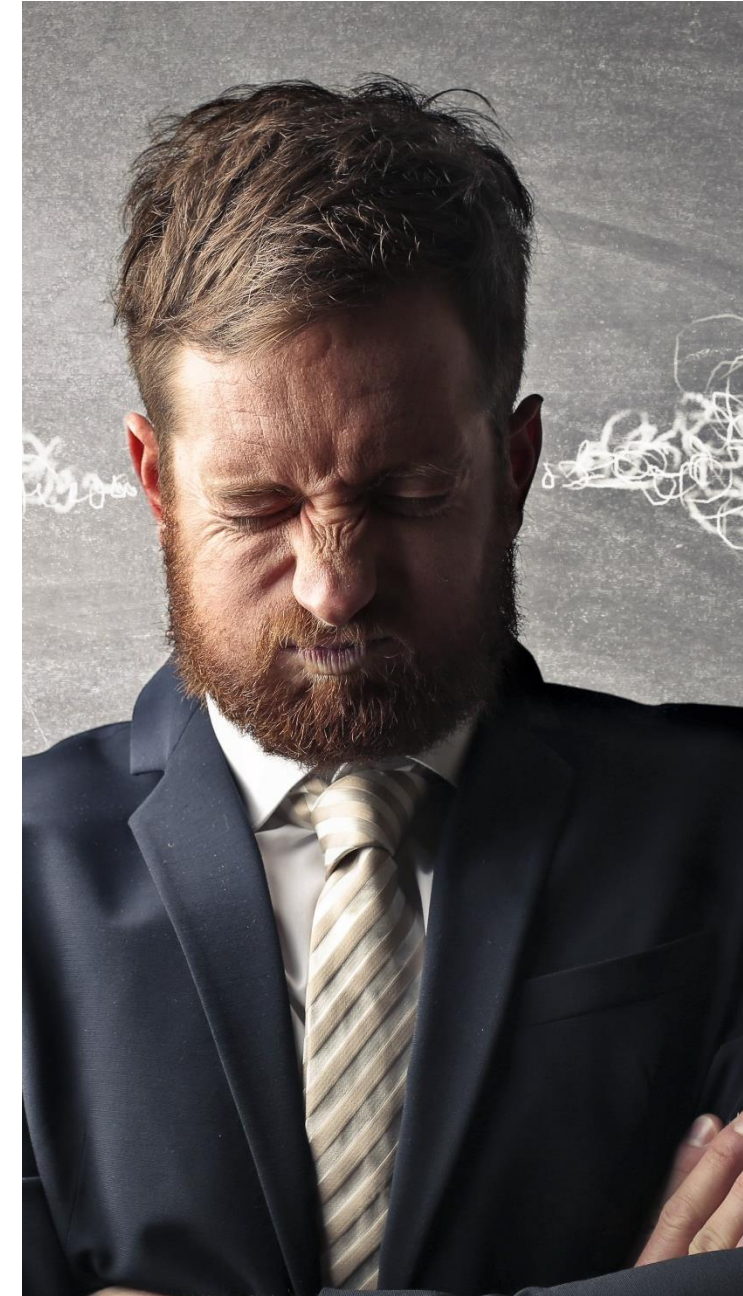
- Cortisol - signals body to replenish food supply after a “threat”
- Sedentary lifestyle - we do not need the extra fuel.

Central obesity

- Stress causes increase in visceral fat
- Fat releases chemicals triggering inflammation- increases likelihood of developing diabetes or disease
- Excess cortisol slows down metabolism- body wants to maintain a supply of glucose

Anxiety:

- Caused by release of adrenaline can trigger binge eating
- Causes mindless eating
- Cravings: crave comfort foods - highly processed, high in fat, sugar or salt
- Cortisol can cause you to crave fat and sugar
- Stress reduces likelihood of cooking - more fast food



Stress, Sleep and Obesity

- Affects food preference : crave high GI carbs when we are tired
- High insulin levels associated with weight gain
- Fat and sugar filled foods seem to have a feedback effect that inhibits activity in the part of the brain that produce and process stress and related emotions- creating “comfort”
- Stressed people sleep less, exercise less and drink more alcohol
- Sleep deprivation has consistently been linked to weight increase



Stress, Sleep and Obesity

- Short-term, stress can stunt appetite-hypothalamus produces corticotropin - releasing hormone which suppresses appetite
- Persistent stress- release of cortisol
- Cortisol increases appetite and may increase motivation to eat
- Stress is a major cause of insomnia
- Minds are overactive and don't switch off
- Stress can cause decreased blood sugars which causes fatigue
- Lack of sleep can disrupt functioning of ghrelin and leptin- control appetite



Obesity and Depression

- Obesity and depression are inter-linked
- Which comes first is less clear
- Increased appetite, reduced activity and weight gain can be symptoms of depression
- People with depression are more likely to binge eat
- Less likely to exercise regularly
- Obesity and depression have strong genetic links
- 1 study found obese individuals have a 20% increased risk of depression
- Specifically Caucasian college educated people with obesity
- Depression risk rises to as high as 44%



Obesity and Depression

Childhood obesity:

- Painful ridicule, exclusion from peer activities
- Problems with body image
- Social isolation
- Low self-esteem

- Being overweight - major source of dissatisfaction, sadness and frustration
- Overweight- pain on joints - less able to get around and enjoy life
- Serious illness - diabetes, hypertension, sleep apnoea can worsen depression

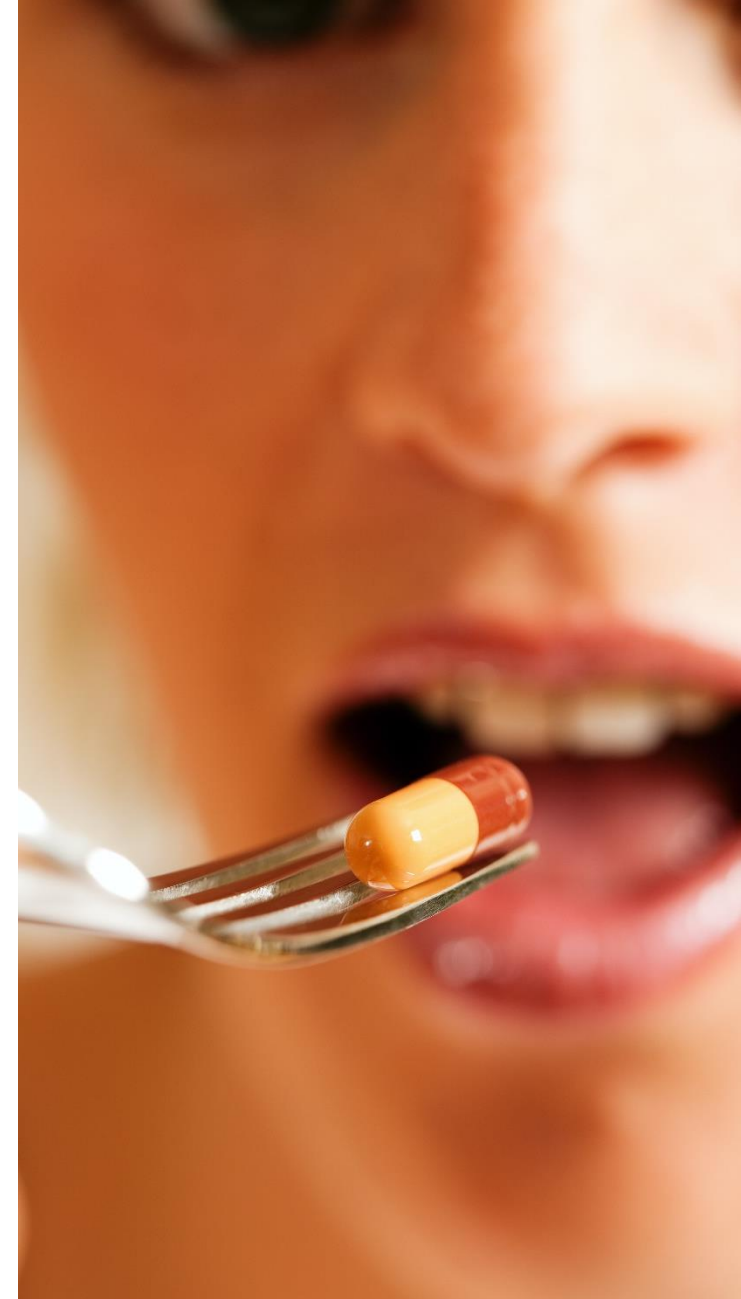
- Overweight people discriminated against, stereotyped- airlines, department stores, insurance companies, doctors.

- Several studies found significant improvements in depression following major weight-loss



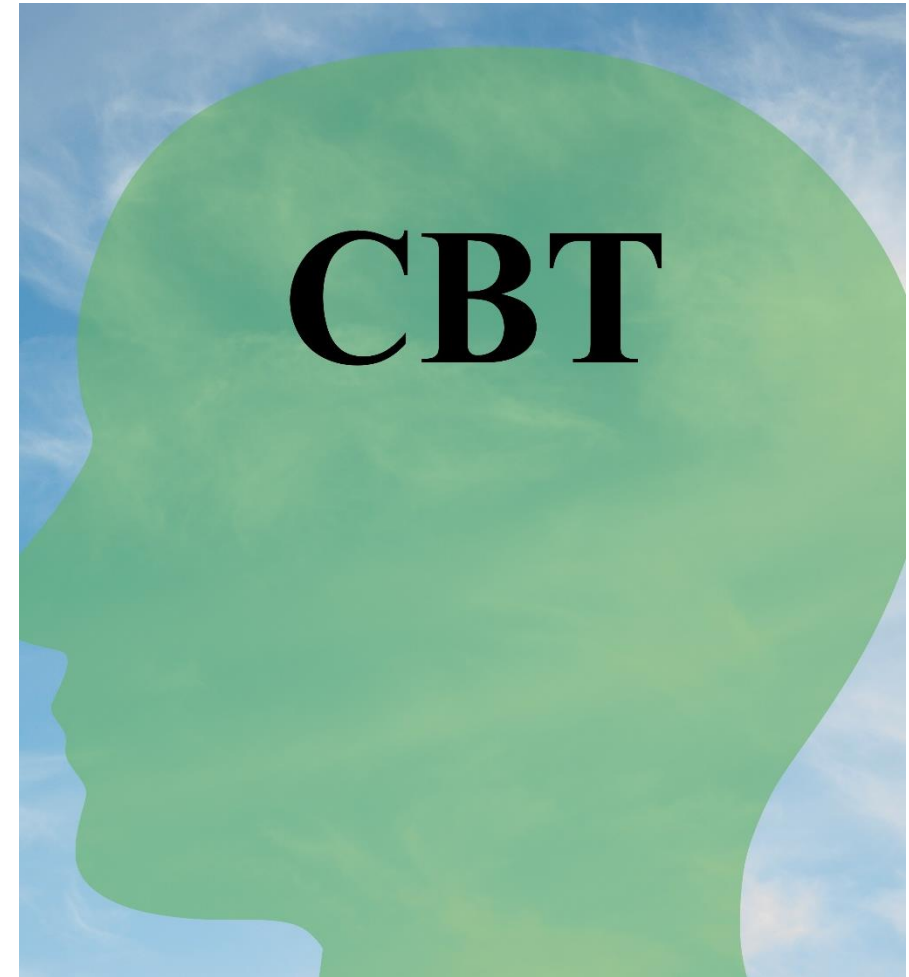
Depression and Nutritional Deficiency

- People are often deficient in nutrients.
- As reported in several studies, the amino acids tryptophan, tyrosine, phenylalanine, and methionine are often helpful in treating many mood disorders including depression
- Tryptophan, a precursor of serotonin, is usually converted to serotonin- can induce sleep and tranquillity
- Tyrosine and sometimes its precursor phenylalanine are converted into dopamine and norepinephrine.
- The two omega-3 fatty acids, EPA which the body converts into DHA, found in fish oil, have been found to elicit antidepressant effects in human



Cognitive Behavioural Therapy (CBT)

- Help facilitate change
- Achieve goals
- All aspects of diet & lifestyle
- Change thought process





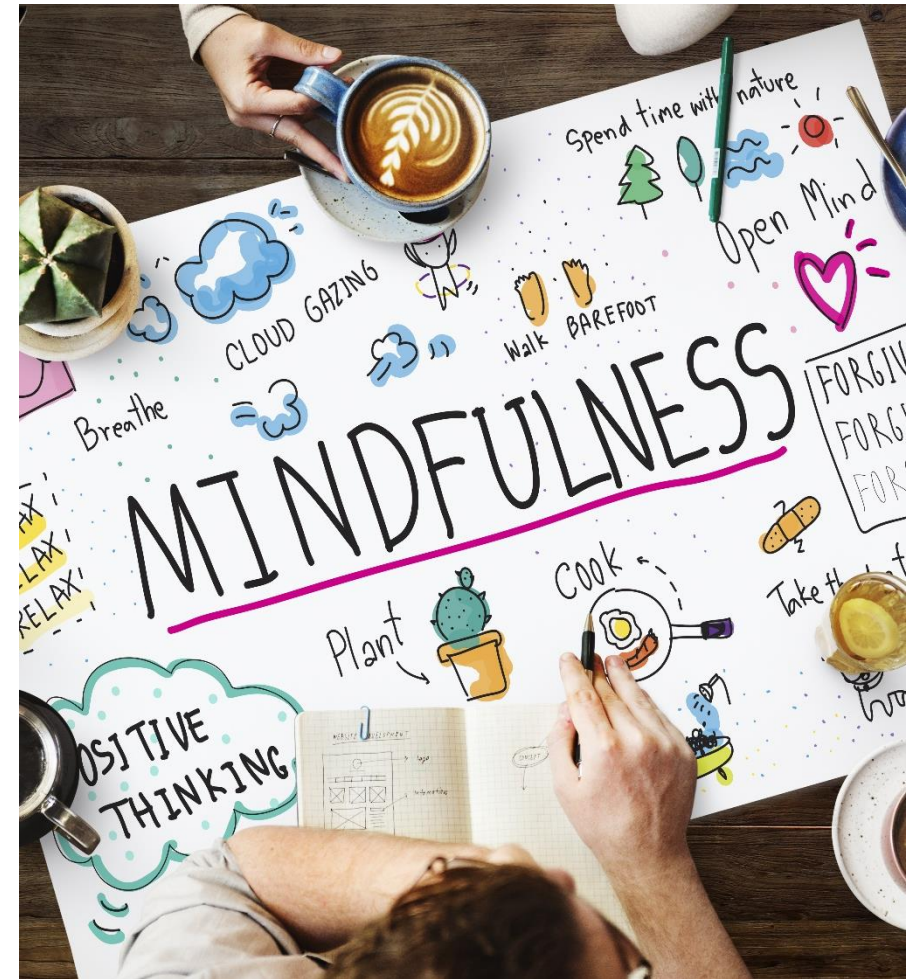
What is CBT?

- Allow you to think and talk about your thoughts and behaviours
- How do your thoughts make you feel?
- Helps to create a more helpful and realistic way of thinking
- Positive management of harmful behaviours
- Helps to manage thoughts
- How we think affects our behaviour
- Change our actions
- Talking therapy

How is CBT used?

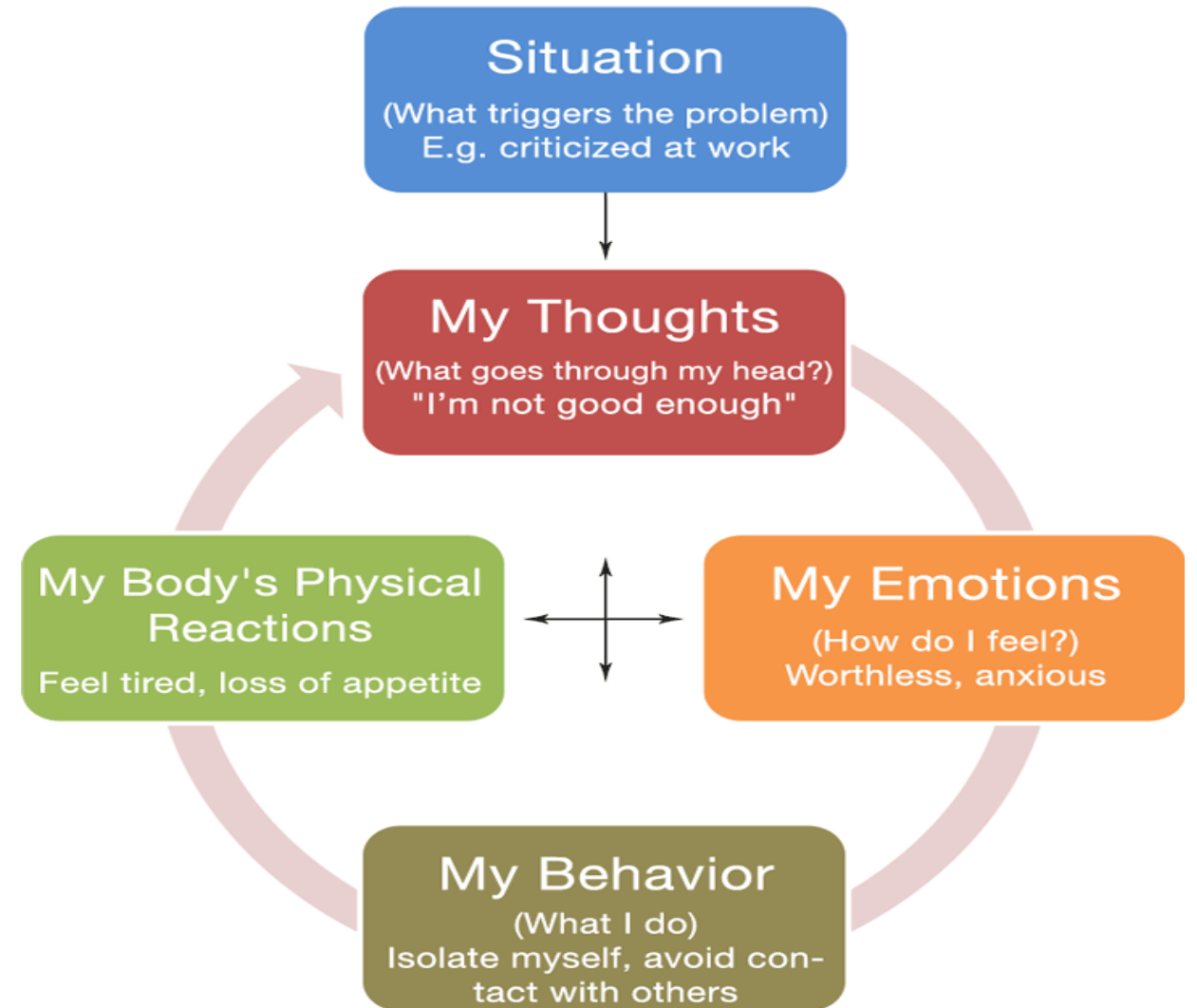
Helps to tackle problems such as:

- Depression, eating disorders
- Weight Loss
- Drug Addiction
- Deals with current problems
- Provides practical ways to improve state of mind on a daily basis



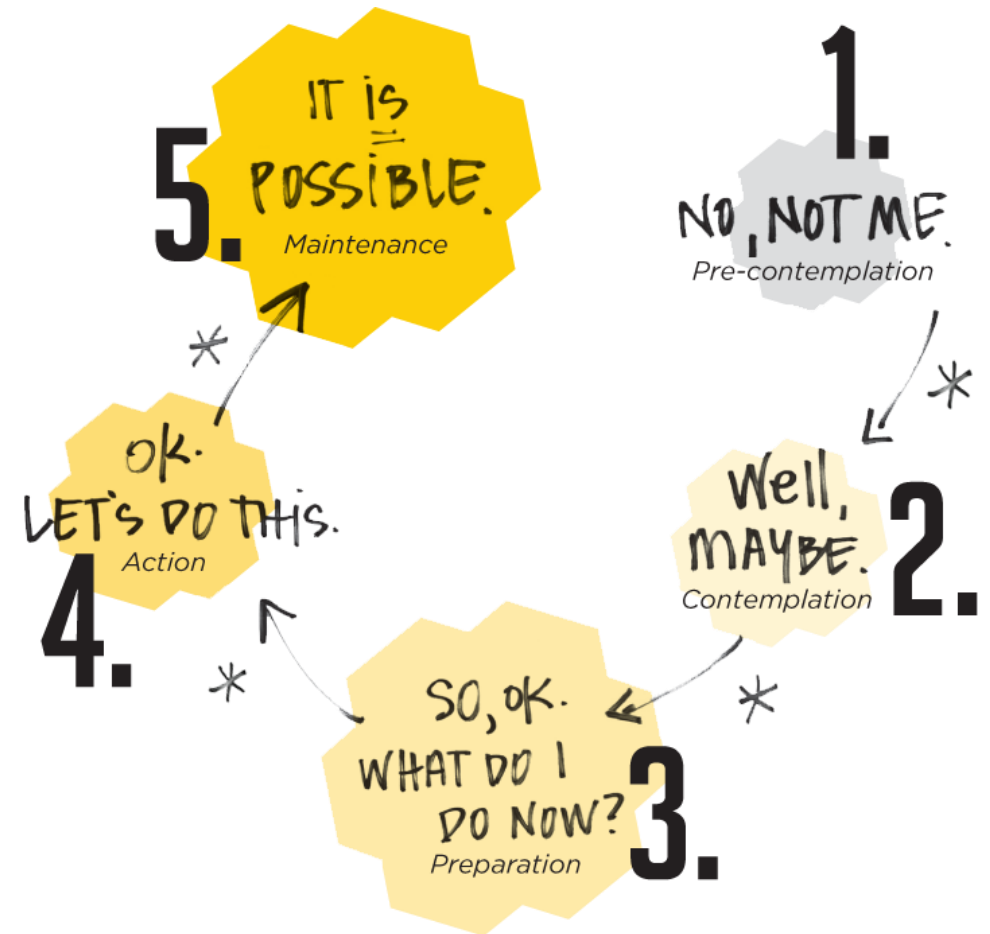
How does CBT work?

- Make sense of overwhelming problems
- Interconnected
 - Thoughts
 - Feelings
 - Physical sensations
 - Actions
- Stop negative thought cycle
- Change negative patterns to improve how you feel



Stages of CBT

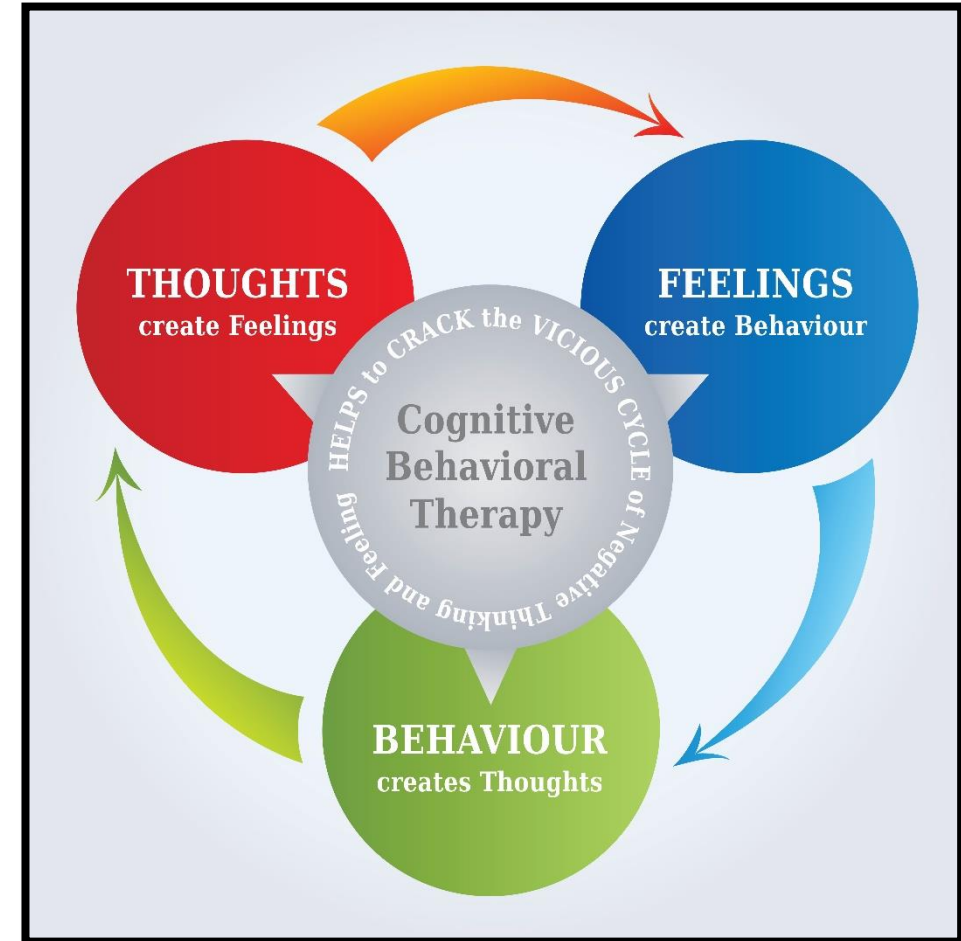
1. Precontemplation
2. Contemplation
3. Preparation
4. Action
5. Maintenance



Stage	How to Recognise	How to Move on
1. Pre-contemplation Resisting change	Avoiding the subject Not taking responsibility Denial Rationalisation Intellectualisation Projection Displacement	Think about the subject Become well-informed Take responsibility Become aware of your defences Concentrate on problem Empathy Sublimation
2. Contemplation Change on Horizon	Thinking seriously May procrastinate about change	Vividly imagine your problem Make the decision
3. Preparation Getting Ready	You have decided on action & making the steps necessary to prepare you for action	Commit to change – make it a priority
4. Action Time to Move	You are taking the steps required to change	Exercise and relax Control your environment Reward yourself Get others to help you
5. Maintenance Staying There	After several months you enter this stage	Review a list of negative aspects regularly Avoid people & places that can compromise

Steps of CBT

- Motivators
- Barriers
- Action Plan
- Goals
- Reward system



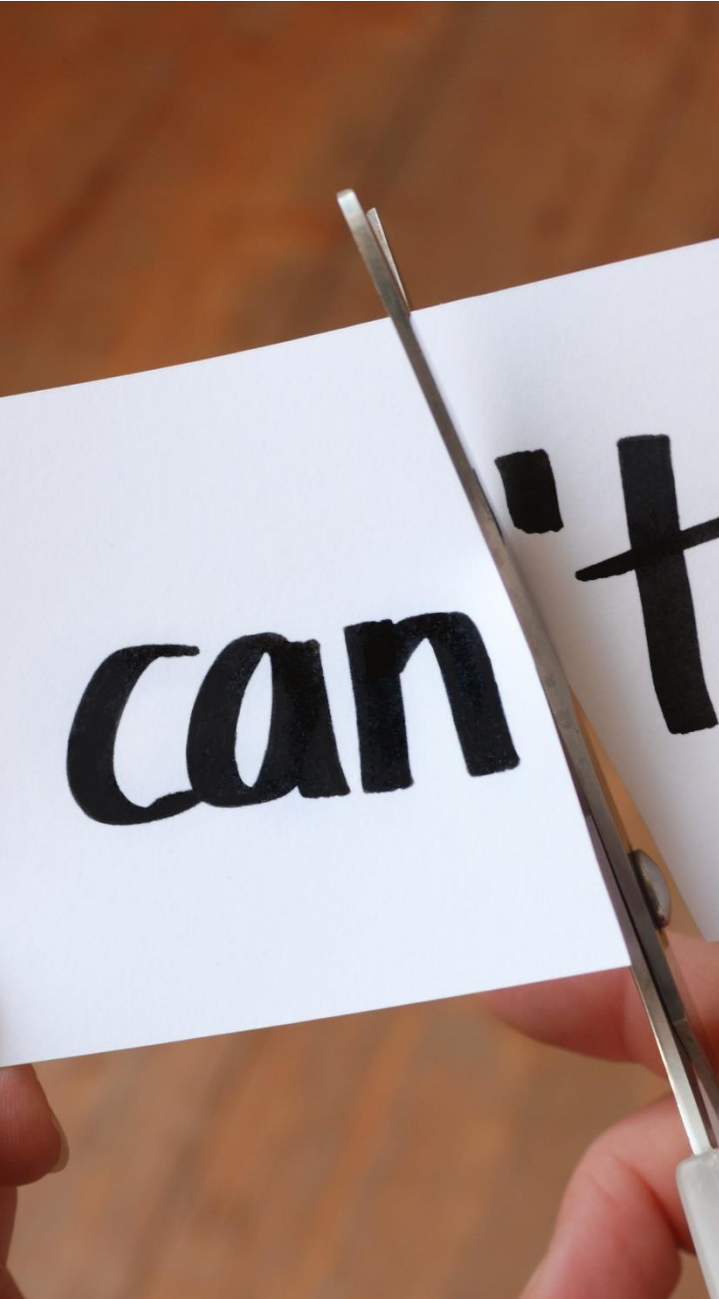
Find Your Motivation

What drives you?

Why do you want to change

Examples

- ✓ Look & Feel better
- ✓ Clothes fit better
- ✓ Improve Health
- ✓ Self confidence



Identify Your Barriers



Common barriers:

- Lack of time
- Lack of knowledge
- Lack of preparation
- Bad habits
- Lack of motivation
- Emotional eating

Identify what is stopping you and then make an action plan to overcome it



Make an Action Plan

1. Identify barrier/negative behavior
e.g. I eat sugary foods when I am stressed or tired
2. Replace negative behavior with a positive behavior
e.g. When I am tired I take a relaxing bath or go for a walk to get some fresh air
3. Have a list of actions ready to replace bad eating habits



Control Emotional Triggers

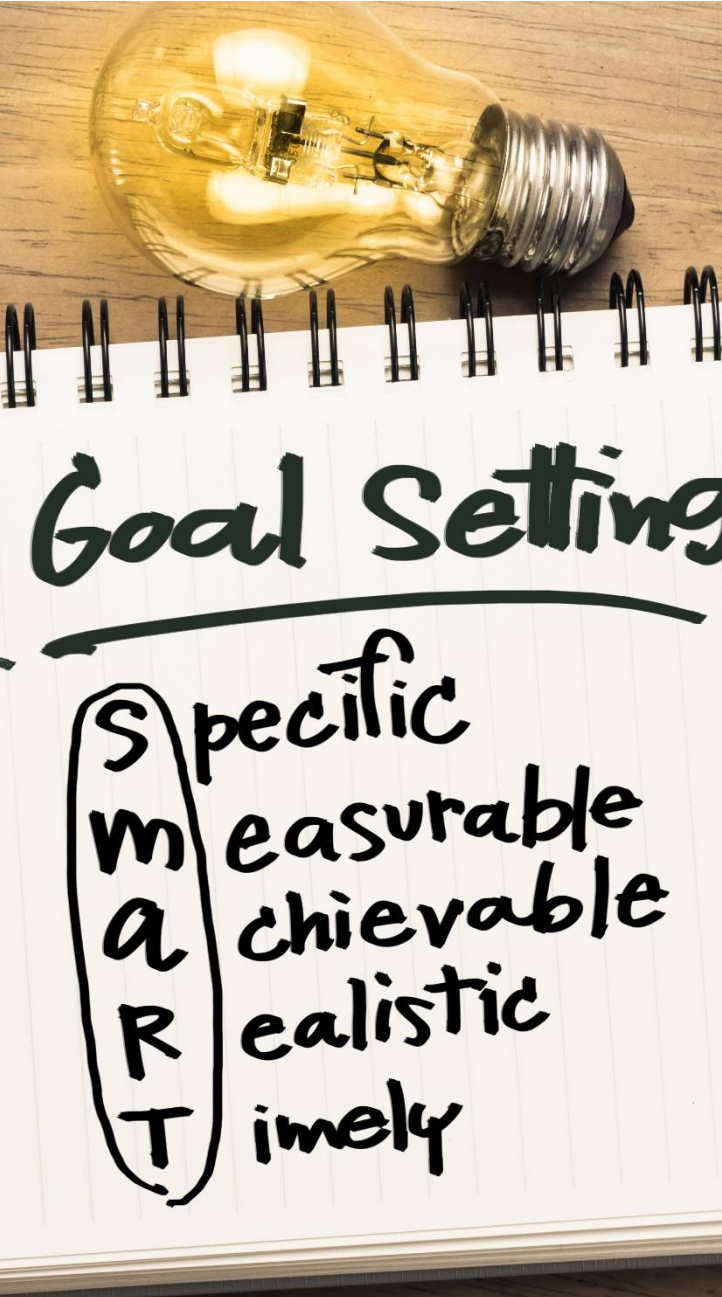
Do you eat when you are:

- Stressed
- Bored
- Anxious
- Sad

Identify your triggers - using food diary (record emotions if you overeat or binge)

Replace eating with a more positive activity:

- Stressed? Go running
- Bored? Meet a friend for a walk
- Anxious? Listen to relaxing music
- Sad? Watch a funny movie



Goal Setting

- S**pecific Clear, well defined
- M**easurable How is the goal achieved?
- A**chievable Is it possible to do?
- R**ealistic Within available time, knowledge and resources
- T**ime Enough time to achieve the goal

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Module 1

Q&A

See You Back For Lesson 8

