WHAT WE EAT MATTERS
THE FOOD-MOOD CONNECTION

CREATING A FRIENDLY, POSITIVE, INCLUSIVE AND SUPPORTIVE ENVIRONMENT

Student Wellbeing Team
www.brighton.ac.uk/wellbeing
Eating well – what does it mean?

This can actually mean a lot of different things to different people. Broadly speaking it means eating in a way so that:

• Our weight remains normal/stable – not too low and not too high
• All necessary food groups and vitamins are available
• Eating becomes and remains an enjoyable experience.

Why is eating well important?

Eating well helps us to prevent many diseases which are linked with being overweight and also helps maintain blood sugar levels which regulate our moods. Eating well makes us feel emotionally well.

Can a poor diet affect my mental health?

The food you eat affects your body. Cutting back on fast food and choosing healthier options helps you maintain a healthy heart, strong muscles and an appropriate weight. Your mood also is affected by what you eat. For example, have you ever felt down after eating a lot of fast food? Do you have a more positive outlook after eating a green salad or some stir-fry vegetables?

Medical researchers are studying the effects of dietary choices on mood and mental health. This is sometimes called the ‘food-mood connection.’ There are many questions that haven’t yet been answered. For example, do vitamin deficiencies make people feel more depressed? Do dietary supplements only improve the emotional wellbeing of people who have nutritional deficiencies? What amount of a certain supplement will improve a person’s mental health? However, evidence suggests that certain nutrients may support emotional wellbeing. Proper nutrition is likely to keep you feeling better physically and emotionally.

Regular meals

Eat regular meals throughout the day to maintain blood sugar levels. The blood sugar concentration or blood glucose level is the amount of glucose (sugar) present in your blood. The body naturally regulates blood sugar levels as a part of metabolic homeostasis (internal regulation). Glucose is the primary source of energy for the body’s cells.

Make sure you eat at least three meals each day. Missing meals, especially breakfast, leads to low blood sugar which causes low mood, irritability and fatigue. If you feel hungry between meals you may need to include a healthy snack eg fruit, nuts or a cereal bar.

Refined foods

Sugary foods are absorbed quickly into the bloodstream. This may cause an initial ‘high’ or surge of energy that soon wears off as the body increases its insulin production, leaving you feeling tired and low.

Wholegrain cereals, pulses (lentils, beans and peas ie chickpeas) fruit and vegetables are more filling and because the sugar in these foods is absorbed more slowly and thus don’t cause mood swings.

These foods are more nutritious as they contain thiamine (B1) a vitamin that has been associated with control of mood and folate (folic acid) and zinc. Supplements of these nutrients can help to improve the mood of people with depression.

Aim to eat at least five portions of fruit and vegetables a day eg one glass of orange juice or half a grapefruit for breakfast, a banana or apple for a mid morning snack, salad at lunchtime and then two types of vegetable (a portion is roughly two serving spoons) and piece of fresh or baked fruit for your evening meal.

Green vegetables should be steamed or boiled in a little water and should not be overcooked or you will lose most of the vitamin content.

Avoid sugar and sugary drinks, cakes, sweets and puddings. These are loaded with calories and have little nutritional value and may trigger mood swings because of their sugar content.

Brain food!

Protein

Protein is formed from amino acids and used for growth and repair around the body. Chemical messengers mainly formed from amino acids are used to transport information to other parts of the brain including signals about mood. Whilst the body can produce some of these amino acids itself, some must come from food.

Main sources of protein include milk and cheese, eggs, meat and fish, lentils and pulses.

It is important that those on a vegetarian or vegan diet substitute dairy products, meat and fish for alternatives containing protein.

Fats

Whilst it is important not to consume too many fats, a certain amount is required to function well. Nerve cells in the brain are made up of fat and need it to be flexible and work quickly.
Main sources of fat include: oily fish (mackerel, tuna, salmon, anchovies), nuts, avocado and oils (olive, sunflower, vegetable)

The body and brain run on glucose which is found in carbohydrates. However, there are good and bad sources of carbohydrates. Good sources will release energy over time helping you feel full longer.

**Carbohydrates**
Carbohydrates are essentially made up of sugars – simple carbohydrates (ie sugar, jam, honey, sweets) which are broken down easily in the body and give an instant but short term effect and complex carbohydrates (vegetables, fruits, grains) which take longer to break down but have a longer effect.

Carbohydrates are the main fuel of the body. Muscles work most effectively on glucose although they can also burn fat. The brain can only operate on glucose and does not use fat or proteins as fuel.

Good carbohydrates: wholegrain and granary bread, cereals, rice, oat cakes, potatoes - boiled in their skins or mashed or jacket potatoes.

**Fluid intake**
Maintain adequate fluid intake. Not drinking enough fluid has significant implications for mental health. The early effects of even mild dehydration can affect our feelings and behaviours.

An adult loses approx 2.5 litres of water daily through the lungs as water vapour, through the skin as perspiration and through the kidneys as urine. If you don’t drink enough fluids to replace this loss then you will get symptoms of dehydration including irritability, loss of concentration and reduced mental functioning.

Coffee, colas, some energy drinks and tea all contain caffeine which some people use to boost energy levels. However, in large quantities (more than four cups a day) caffeine can increase blood pressure, anxiety, depressive symptoms and sleep problems.

Caffeine also has a diuretic effect on the body - it encourages the production of urine and therefore leads to dehydration. For this reason you should not rely solely on caffeine-based fluids. Chocolate also contains caffeine.
Alcohol intake

Alcohol has a depressant effect on the brain and can result in a rapid worsening of your mood. It is also a toxin that has to be deactivated by the liver. During this detoxification process the body uses thiamine, zinc and other nutrients and this can deplete your reserves especially if your diet is poor.

Thiamine and other vitamin deficiencies are common in heavy drinkers and can cause low mood, irritability and/or aggressive behaviour as well as more serious and long-term mental health problems.

Because the body uses important nutrients to process alcohol, people who experience depression should consider avoiding alcohol until they have recovered. Even then, because of alcohol’s depressant effects, they should consider drinking only small amounts – no more than once a week.

Exercise regularly

Exercise leads to the release of endorphins – feel-good chemicals in the brain that help us to relax and to feel happy. Exercise is particularly important for people with depression as it also gives structure and purpose to the day. Outdoor exercise that exposes us to sunlight is especially valuable as it affects the pineal gland which produces the serotonin derivative melatonin, a hormone that affects the modulation of wake/sleep patterns and seasonal functions. It directly boosts mood.

Exercise has other advantages if you are trying to control your weight. For example the more you exercise, the less you need to cut down on your calorie intake to control your weight. It is also beneficial for heart health and it ensures that you replace fat with muscle, resulting in a more toned body. Exercise also prevents bone mass loss and the increased risk of osteoporosis that can occur if you diet but don’t exercise.

Walking is the easiest, cheapest and best form of exercise and it can be built up as your fitness level increases. Swimming is good for people with joint problems who find weight bearing exercise difficult. Cycling is also excellent. Whatever kind of exercise you choose, start with 20 minutes at least three times a week and increase this as your fitness improves.

Suggested reading

- The food-mood solution: all natural ways to banish anxiety, depression, anger, stress, overeating and alcohol and drug problems – and feel good again, Jack Challem
- In the mood for food, Jo Pratt
- The Food Doctor: Healing foods for Mind and Body, Vicki Edgson and Ian Marber

Mental Health Foundation
Diet and Mental health. https://www.mentalhealth.org.uk/a-to-z/d/diet-and-mental-health

Mind: Food and Mood project
www.mind.org.uk/information-support/tips-for-everyday-living/food-and-mood