



## Food and mood



Food intake & eating patterns will affect how someone feels



Mood & feelings can affect someone's food intake & eating patterns



### Why would food and mood be so closely related?

The brain is made up of living nerve cells, and needs energy and nutrients from food to function. When we do not give the brain enough food, or the right kind of foods, we may:

- have difficulty concentrating
- develop mood swings
- become more depressed or anxious
- be irritable, sometimes angry and snappy
- have trouble thinking, our thoughts can slow, or may go around in circles becoming obsessed with food or other tasks
- feel dizzy
- feel very tired and run down

Following a diet that is high in fruit, vegetables, nuts and wholegrains and limiting intake of processed meats, fast foods and alcohol may reduce risk of depressive symptoms. Exciting new studies show that people who increased their intake of fruit, vegetables, nuts and wholegrains improved their symptoms of depression more than people who focused on only social support.

### The impact of food on mood

Our brains require a variety of nutrients to function well. A poorly balanced diet can impact the way we think and feel.

For example:

- The levels of serotonin in the brain (a chemical important for mood) are affected by protein and carbohydrate
- The regeneration of nerve cells, the ability of nerve cells to make strong connections and to send messages to each other, is affected by nutrients such as omega-3 fatty acids, folate, magnesium and zinc

### The impact of mood on food

When our moods are low our eating patterns can vary. Many people find it hard to eat when their mood is low, whilst others tend to comfort eat, overeat or binge. Trying to maintain a balance in your eating can be harder to do when you aren't feeling on top of things, but it can result in feeling better in the long run. Increasing the variety in your diet can help stimulate interest in food when appetite is poor.

Additionally food is an important part of our social lives, relationships and culture. Poor mood and a difficult relationship with food can make it hard to connect socially.

## How can I eat to improve my mood?

### Eat enough food from all the food groups

Make sure you eat enough food to get enough energy and all the nutrients your brain needs. Eating a wide variety of foods and the right balance of food groups will ensure you get all the different nutrients, vitamins and minerals your body needs. Your Accredited Practising Dietitian can help you find the right balance of foods for you.

### Eat regularly through the day & eat breakfast

Eating a substantial breakfast each day has a positive effect on mood, concentration and creativity. The brain then needs regular nutrient boosts throughout the day to keep up performance.

### Eat carbohydrate at each meal

Carbohydrates (such as wholegrain breads, cereals, starchy vegetables and sugars- including sugars naturally found in fruit, dairy, honey and cane sugar) are the main source of fuel for our brain. Low GI carbohydrates release their energy slowly. Including these foods at every meal can help keep blood sugar levels stable, which can lead to improved, longer lasting energy, improved ability to concentrate and reduced mood swings. Carbohydrates that are particularly beneficial include wholegrains, legumes, milk, yoghurt, custard, sweet potato and many fruits. These foods are nutritionally rich, containing Thiamine (B1), Folate and zinc, which have been associated with effective mood management. Wholegrain cereals are also good sources of fibre. Eating high fibre foods daily and drinking plenty of water helps prevent constipation, a side-effect of some antidepressant medications

### Include fats in your meals, especially omega 3 fats

The brain is made up of 60% fat, so it is no surprise that healthy fats are important for optimal brain function. There are many studies that show omega-3 fatty acids are effective in preventing depression and also in improving

treatments for depression such as medication and psychological therapies. Omega-3 fatty acids are found in oily fish such as salmon, sardines, mackerel, tuna, as well as flaxseed, canola oil and eggs.

### Ensure adequate intake of protein foods, rich in zinc and iron

**Zinc** and **iron** are found in many protein foods especially red meats and to a lesser degree fish, chicken, pork, eggs, legumes and nuts. **Zinc** is a key structural component of many body proteins and also helps activate chemical pathways in the brain. Low levels of **zinc** have been found in people suffering depression. Iron has the important role of transporting oxygen around the body, to the cells, which need oxygen to operate. Low iron levels may result in feeling tired and run down, which can negatively impact mood.

### Eat plenty of vegetables and fruit

A high intake of fruit and vegetables, as part of a balanced diet, has been shown to be associated with a decreased risk of depression. Fruit and vegetables contain many vitamin and minerals that are important for bodily functions. **Folate**, which is found green leafy vegetables, some fruits and wholegrain cereals, has been shown to be low in those suffering with depression. Folate is thought to be involved in metabolic pathways involved in the production of neurotransmitters (chemical messengers in the brain), and is also involved in cell repair and regeneration.

### Eat foods which are anti-inflammatory and good for gut microbes

You may have seen recent research and documentaries on the importance of healthy gut microbes for many different body functions including the brain. High Fibre foods including fruits, vegetables, nuts, seeds and legumes are essential to creating the right environment in the gut for healthy gut microbes to thrive. There is increasing research showing a good variety of gut microbes are linked to better mood. Food and gut microbes can also influence cell inflammation, which when high, may negatively affect the brain. Foods that are anti-inflammatory include fruits, vegetables and healthy fats such as those found in extra virgin olive oil and avocados.

### Ensure adequate fluid:

Good hydration is important for the whole body. Dehydration can affect mood and cause fatigue, irritability and restlessness. Normal healthy fluid intake ranges from around 1.5 to 2.5 litres per day. Remember – this includes all drinks, not just water, as well as foods with a high fluid content e.g. soups, fruit, jelly. Drinking enough fluid can help manage the side effects of some antidepressants such as constipation and dry mouth. It is possible to over-hydrate, so be careful not to overdo it.

### Avoid excessive alcohol:

Too much alcohol will lower mood as well as having negative impacts on many other body functions.

### References

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