

# Feeding your Brain



Your brain burns about 1/5 of the calories that you consume so it's important to feed it well! Knowing what foods we should and shouldn't be eating can be really confusing, especially when it feels like the advice changes regularly.

However, evidence suggests that as well as affecting our physical health, what we eat may also affect the way we think, feel and behave. Poor diet can lead to a disruption in brain chemistry resulting in:

- Addictive behaviours
- Starch & sugar cravings – binge eating
- Low pain threshold
- Poor sleep
- Inability to concentrate
- Hyperactivity
- Low mood
- Irritability
- Anxiety
- Slow cognition and poor memory
- Fatigue, apathy and lack of motivation
- Other influences in biochemical imbalance arise from the endocrine, immune or digestive systems

Even our gut bacteria can influence our behaviour and can be disruptive if it is out of balance. (Fetissov & Dechelotte, 2011)

So, improving your diet may help to:

- improve your mood
- give you more energy
- help you think more clearly

## So, what & how should we eat?

It doesn't really matter too much what you eat on any one particular day, health is determined by what we eat most of the time, on most days. There is a vast array of conflicting advice around but the Mediterranean diet, in particular that of the mountainous regions of Crete, is one of the most evidenced based in terms of health and longevity and similar studies suggest that it is profoundly protective against depression too.

The science is really clear that the more we eat foods that derive from plants, including wholegrains, that have had relatively little done to them and the more variety of those foods that we eat the better our bodies seem to be at regulating themselves. As far as possible avoiding processed foods and foods that are high in saturated fat and sugar and following these tips can help:

### Eating regularly

If your blood sugar drops you might feel tired, irritable and depressed. Eating regularly and choosing foods that release energy slowly will help to keep your sugar levels steady. Slow-release energy foods include wholegrain pasta, rice, oats, bread and cereals, nuts and seeds.

- Eating breakfast gets the day off to a good start.
- Instead of eating a large lunch and dinner, try eating smaller portions spaced out more regularly throughout the day.
- Avoid foods which make your blood sugar rise and fall rapidly, such as sweets, biscuits, sugary drinks, and alcohol.

### Staying hydrated

Your brain is about 70% water and we need to top it every day. Dehydration causes tiredness. Just a 2% water loss affects mental functioning so if you don't drink enough fluid, you may find it difficult to concentrate or think clearly. You might also start to feel constipated (which puts no one in a good mood).

- It's recommended that you drink between 6-8 glasses of fluid a day.
- Water is a cheap and healthy option. Cold water hydrates fastest.
- Tea, coffee, juices and smoothies all count towards your intake (but be aware that these may also contain caffeine or sugar).

### Looking after your gut

The importance of the gut-brain axis in regulating stress-related responses has long been appreciated. Sometimes your gut can reflect how you are feeling emotionally. If you're stressed or anxious this can make your gut slow down or speed up. Diet is one of the most important factors for modifying this. For healthy digestion you need to have plenty of fibre, fluid and exercise regularly.

Healthy gut foods include fruits, vegetables and wholegrains, beans, pulses, live yoghurt and other probiotics.

- It might take your gut time to get used to a new eating pattern, so make changes slowly to give yourself time to adjust.
- If you're feeling stressed and you think it is affecting your gut, try some 7-11 breathing.

## Managing caffeine

Caffeine is a stimulant, which means it will give you a quick burst of energy, but if you consume too much of it then it may make you feel anxious and depressed, disturb your sleep (especially if you have it before bed), or give you withdrawal symptoms if you stop suddenly. Moderate caffeine intake, however, is not associated with any recognized health risk. Everyone is different but three 8 oz. cups of coffee (250 milligrams of caffeine) per day is considered a moderate amount of caffeine. Six or more 8 oz. cups of coffee per day is considered excessive intake of caffeine. Interestingly the caffeine in your morning cup of coffee or tea might offer more than just a short-term concentration boost.

In a 2014 study published in *The Journal of Nutrition* participants who consumed caffeine scored better on tests of mental function. Caffeine might also help solidify new memories, according to other research at Johns Hopkins University.

- If your caffeine intake is excessive try replacing some of them with a glass of water or caffeine free drink.
- If you struggle to sleep perhaps try avoiding caffeine after the middle of the day.
- You might feel noticeably better quite quickly if you drink less caffeine or avoid it altogether.

## Getting your 5, 6, 7 or more a day

The World Health Organization (WHO) - and the UK Government's Change4Life campaign - recommend we eat five portions of fruit and vegetables a day. This guidance is partly based on research into the Mediterranean Diet. Other governments recommend higher levels of fruit and vegetables, such as seven or even ten portions daily.

Vegetables and fruit contain a lot of the minerals, vitamins, antioxidants and fibre we need to keep us physically and mentally healthy.

Eating a variety of different coloured fruits and vegetables every day means you'll get a good range of nutrients.

- Maximise your intake of vegetables, peas and beans (legumes), fruits and wholegrain cereals.
- Fresh, frozen, tinned, dried and juiced (one glass) fruits and vegetables all count.
- As a general rule, one portion is about a handful, small bowl or a small glass.

## Getting enough protein

Protein contains amino acids, which make up the chemicals your brain needs to regulate your thoughts and feelings. It also helps keep you feeling fuller for longer.

Protein is in lean meat, fish, eggs, cheese, legumes (peas, beans and lentils), soya products, nuts and seeds.

Red meat can form part of a healthy diet but it may be better to keep it as a treat, such as Sunday dinner, or to make it into a stew or casserole with lots of vegetables. In this way, you are consuming less red meat overall.

## Eating the right fats

Your brain needs fatty acids (such as omega 3) to keep it working well. So rather than avoiding all fats, it's important to eat the right ones.

Healthy fats are found in oily fish, poultry, nuts (especially walnuts and almonds), olive oils, seeds (such as sunflower and pumpkin), avocados, milk, yoghurt, cheese and eggs.

- Try to avoid anything which lists 'trans fats' or 'partially hydrogenated oils' in the list of ingredients (such as some shop-bought cakes and biscuits). They can be tempting when you're feeling low, but this kind of fat isn't good for your mood or your physical health in the long run.

A healthy diet along with regular exercise and good quality sleep will not only improve your wellbeing but also your academic achievement.

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