

## ***Health is not simply the absence of sickness*** — Hannah Green

It has often been stated, ‘You are what you eat’ and the connection between diet and physical health is well established. However, what role does diet play when it comes to the state of your mental health?

Most of us know what it’s like to treat ourselves to something sweet or fatty for a pep-up when we’re feeling low. Our mood may improve and we may feel slightly energised briefly, but these feelings quickly fade and we can often end up with guilt.

So, does this indicate that a less than perfect diet can affect a person’s mental health? The science and available evidence suggests that someone who eats an overall healthy diet (one that includes generous amounts of fresh, unprocessed and nutrient-heavy foods) tends to have greater mental health. Research also indicates that, in particular, dementia and depression are affected by the quality of an individual’s diet during their lifespan.

## **How the food a person eats affects how they feel**

Serotonin is a neurotransmitter that assists in regulating sleep, appetite, moods and inhibiting pain. About 95% of a person’s serotonin is produced in the gastrointestinal tract which is lined with a hundred-million nerve cells, or neurons. It makes logical sense that the inner workings of the digestive system doesn’t just assist in assimilating food, it also helps guide our emotions.

Furthermore, the function of these neurons, and the generation of neurotransmitters like serotonin are highly influenced by the billions of “good” bacteria that make up a person’s intestinal microbiome (a collection of microbes that inhabit an environment). Good bacteria plays a crucial role in our health by protecting the intestinal lining and providing a sturdy barrier against toxins and ‘bad’ bacteria. They also limit inflammation, improve the efficiency of nutrient absorption, and activate neural pathways between the gut and the brain.

Studies have shown that a person taking probiotics (supplements containing ‘good’ bacteria) has improved perceptions of stress, anxiety levels and mental outlook, compared with individuals not taking probiotics.

Comparison studies of traditional diets (e.g. a Japanese or Mediterranean diet) have shown the risk of depression is 25-35% lower for individuals consuming traditional foods, as opposed to a typical Western diet. Experts account for the variation because traditional diets tend to be higher in fruits, unprocessed grains, vegetables, fish and seafood with smaller amounts of dairy and lean meats. Generally, traditional diets are free of processed foods and refined sugars — the staples of a Western diet.

Many unprocessed foods are fermented, therefore performing the function of a natural probiotic. In food, fermentation utilises yeast and bacteria to convert sugar into carbon dioxide, lactic acid and alcohol. It is used to protect food from spoiling, contributing a pleasant texture and taste.

## **What foods are bad for good mental health?**

**Refined sugars** — a chocolate bar may taste nice going down and can supply a person with a pleasant surge of energy for about 20 minutes. However that tasty “goodie” and refined sugar in general causes a person’s blood glucose level to drop, resulting in a sugar “hangover” that interferes with a person’s mood, depletes their energy and is connected to sleep disorders. A can of soft drink has about 40g of sugar — around 15 teaspoons!

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**Artificial sweeteners** – Aspartame is not pleasant stuff, particularly if a person is prone to depression. It impedes production of the neurotransmitter serotonin and causes headaches, mood dips, and insomnia. Other artificial sweeteners including Equal and NutraSweet can also be less than beneficial for a person. If you really feel the need for a soft drink fix, it is better to go for the “full strength” kind, **the refined sugar is not a health food**, however, it is better for a person than the fake sugar.

**Processed foods** – Eating refined or processed carbohydrates including white bread, pasta, cereal or snack foods is going to cause the same impact on a person’s blood sugar level as consuming a basket of jelly babies. For instance a bagel is processed the same way donuts are, after the initial insulin rush, a person will end up irritated, fatigued and feeling “blue”.

**Hydrogenated oils** – Foods that are cooked using hydrogenated oils (including fried chicken, French fries, fried calamari, etc.) and contains trans fats, may potentially contribute to feelings of depression. Vegetable oils such as canola, sunflower etc should also be avoided. Replace them with ‘good’ fats and oils such as avocado and cold pressed olive oil.

**Foods high in sodium** – ‘Fat free’ products are often packed full of unhealthy additives. Excess sodium in these products may disrupt a person’s neurological network, adding to depression and can impede a person’s immune system response, causing fatigue. An excess of salt also leads to bloating and fluid retention.

**Alcohol** – Alcohol is a central nervous system depressant, if a person has a history of mood disorders it is important for them to reconsider using alcohol. A person’s central nervous system is responsible for taking in information through their senses, handling motor function, as well as understanding, thinking and reasoning. Alcohol retards these processes, exacerbating the symptoms that are associated with depression.

**Caffeine** – According to certain experts, even a small amount of caffeine can contribute to anxiety and depression, caffeine interrupts sleep, making it harder to fall asleep, and to remain asleep, these disturbances contribute to affecting a person’s mood. Caffeine can also cause tremors, agitation and nervousness. So called “energy drinks” are less than beneficial for a person’s wellbeing as some of them contain the caffeine equivalent of 14 cans of soft drink.

Women in particular can experience iron deficiencies, sometimes linked to their menstrual cycle. This can lead to high levels of fatigue and low moods. Ensure that you are consuming enough iron through leafy greens and red meats, alternatively you may speak to your doctor or naturopath about iron supplements.

## What foods are beneficial for improved mental health?

**Fatty Fish** – foods high in Omega 3 fatty acids, including cold-water fish, salmon, herring, mackerel, sardines, seaweed, chicken fed on walnuts and flaxseed have been seen to reduce symptoms of depression, attention deficit hyperactivity disorder, schizophrenia and other mental health disorders. This is probable because of the impact Omega 3s have on the generation of neurotransmitters (the brain chemicals responsible for a person’s moods) including serotonin and dopamine. In supporting the synapses in the brain, Omega 3s also increase memory and learning.

**Whole Grains** – whole-wheat products, bulgur, oats, wild rice, barley and beans. The main source of energy for the brain is glucose, which comes from carbohydrates, simple carbohydrates worsen low mood by engineering spikes in blood sugar and have been seen to have an effect on the brain akin to drugs of abuse. In contrast, complex carbs let glucose go gradually, assisting a person to feel full longer, and providing a steady supply of fuel for the body and brain.

# Nutrition & Mental Health

**Lean Protein** – For example lean meats, sirloin steak, rump roast, top loin. Foods we consume are separated into substances that are used to engineer neurotransmitters and other chemicals that permit various segments of the nervous system to communicate competently with each other and the remainder of the body. Besides carbohydrates, protein is the most plentiful substance in the body. Tryptophan an amino acid that is a building block of protein influences mood by generating the neurotransmitter serotonin.

**Leafy Greens** – romaine, spinach, turnip, mustard greens and broccoli are great in folic acid, so are lentils and beets. Deficiencies in Vitamin B and folic acid have been connected with higher rates of fatigue, insomnia and depression. Broccoli contains selenium, a trace mineral that has a crucial role in a person's immune system functioning, thyroid hormone metabolism and reproduction. Varying sources of selenium include onions, seafood, chicken, brazil nuts, walnuts, and whole grain consumables.

**Yoghurt with Active Cultures** – fermented foods including yoghurt with active cultures, kimchi, tempeh, kefir and particular pickled vegetables , contain probiotics (healthy bacteria) which have demonstrated in studies to reduce anxiety and stress hormones and affect the neurotransmitter GABA (an inhibitory neurotransmitter that is widely spread in the neurons of the cortex and contributes to vision, motor control and regulating anxiety). In contrast eating too much processed food stuffs may compromise the delicate balance of unhealthy and healthy bacteria that is to be found in the gut.

If you are stressed or have poor gut health you may not be absorbing the nutritional benefits of the foods that you are consuming, no matter how well you eat. Working with a naturopath or nutritionist can support you on improving gut health through diet, lifestyle and supplements.