

NUTRITION FOR MENTAL WELLBEING

The gut is called the second brain and it has the **enteric nervous system** which directly communicates with the central nervous system. It has been found that unhealthy gut flora causes toxins in the stomach that cross the blood/brain divide and affect mental health. Probiotic cultures help promote healthy gut flora, which has been found to actually make neuro-receptors and therefore decrease stress and improve mental health; probiotics also ensure optimum absorption of nutrients from the gut.

Probiotic foods ~ Yogurt, probiotic drinks, apple cider vinegar, brine-cured olives, pickled gherkins, sauerkraut.

Tryptophan is an important amino acid that is used to make Serotonin (mood booster) in the brain. Serotonin is a neurotransmitter, which supports cognition: improving memory loss and also regulates appetite, and sleep; through producing melatonin. When you are stressed the body uses the tryptophan from your brain to keep your cells alive and so there is not so much serotonin in your brain and you do not feel so happy. Serotonin is increased by exercise, sunshine and having a positive outlook on life; your brain doesn't know the difference between a real or imagined situation, so tell it good things and it will believe you!

Foods with tryptophan ~ Eggs, cheese, pineapple, salmon, nuts and turkey.

Tyrosine is also an important amino acid, used to make the neurotransmitter Dopamine (reward and pleasure), which is important for motivation, focus and concentration ~ basically your zest for life! Low dopamine is linked to fatigue, addictive behaviour, mood swings and memory loss. Dopamine is released when you eat, drink, have sex or make money. Some drugs release loads of dopamine: all of which can lead to addictive behaviour. However alcohol and drugs give un-natural highs and suppress the nervous system, when the high has gone the levels of dopamine are lower than before and the central nervous system feels even worse than before. Healthy ways of increasing Dopamine include sunlight, exercise, yoga, meditation, meditation, massage, cold showers and achievement of goals 😊

Foods to boost dopamine ~ All animal products, bananas, almonds, avocados, chocolate, oatmeal, watermelon, peanuts, chickpeas, watermelon and apples.

Gamma amino butyric acid (GABA) is an amino acid that inhibits the excitability of cells to neurotransmitters, by blocking the receptor sites. In times of prolonged stress GABA is used up and the excitory neurotransmitters are not inhibited, causing anxiety or fear and making it difficult to concentrate or reason; this might progress into breathing difficulties, panic attacks or depression. GABA is increased by theanine, which also helps with concentration and learning, and reducing anxiety.

Foods to boost GABA ~ Fermented foods, sweet potatoes, corn, carrots, beans, tomatoes, broccoli, and oatmeal. Also foods with flavonoids; berries; citrus fruits; apples; cocoa and wine. Foods with theanine; Green tea and black tea.

Acetylcholine is a very important neurotransmitter, which is used more than the other neurotransmitters. It contributes to memory recall, focus and concentration and also inhibits fear, anger and aggression; keeping a good flow of oxygen to the brain and ensuring that there isn't a heightened response to low stimulus situations.

Foods to boost Acetylcholine ~ Egg yolk, fatty cheese, fish and meat, avocado, almonds and cream.

Magnesium has been called the ultimate chill pill and the modern diet is sadly lacking in this mineral. Its benefits are that it restricts the release of stress hormones, their effect on the body and it also restricts them passing the blood/brain divide. Magnesium is also anti-inflammatory, so it reduces the need for the body to become stressed over inflammation, which causes a change in brain function; in addition it helps keep blood sugar stable and makes new brain cells! Magnesium is contributory to the production of GABA and is also depleted by stress.

Foods with magnesium are bananas, peanut butter, avocado, almonds, edamame, spinach, sunflower/pumpkin seeds and whole grains.

Zinc has benefits for nerve development, proper brain function and the production of serotonin among other benefits, and is found in every single cell in the body. Kind of important, as lack of zinc has been linked to depression and some symptoms of schizophrenia.

Foods with Zinc are oysters, meat, wholegrains, cashews, beans, peas, seeds and lentils.

Omega 3 is an essential fat which means you can only get it from your diet. It can reduce the symptoms of depression, anxiety and schizophrenia and reduce blood pressure and inflammation in the body.

Omega 3 from oily fish such as mackerel and salmon, also flaxseed oil and walnuts.

Vitamin B's, there are lots of them! They act as co-enzymes for many body processes and each type of Vitamin B is actively taken across the blood brain barrier; which shows how important they are for brain function! All of them are depleted by alcohol, refined sugar, nicotine and caffeine. They have been found to be beneficial in reducing the symptoms of depression, anxiety, stress, tiredness and schizophrenia.

Foods with Vitamin B Eggs, poultry, fish, bread, whole cereal, cheese, green leafy vegetables, nuts and lentils.

Vitamin D is called the sunshine vitamin, as it can be synthesised from sunlight. Vitamin D is important for serotonin production and release, and deficiency has been linked to anxiety, depression and schizophrenia. Vitamin D has also been found to have neuroprotective elements, especially in the developing foetus; the effects of Vitamin D deficiency at this time being carried through to adulthood. Using sun screen reduces the absorption, and it has been suggested to have about 20 -30 minutes of sunshine before putting on sunscreen in the summer and Vitamin D supplements are recommended.

Foods with Vitamin D Salmon, milk, mushrooms, eggs, tuna, cereals, pork, tofu and orange juice.

Reduce sugar intake! Sugar has been found to be more addictive than cocaine; it stimulates the reward pathways in the brain and damages brain function. It is not just calories, sugar has also been found to have negative effects on mental health. By stimulating the release of serotonin (happy hormone) it depletes supplies and increases symptoms of depression and anxiety, by causing an initial sugar rush which interferes with the neurotransmitters that balance mood.

How much sugar?

- In a can of coke there is 39g of sugar or 8.25 teaspoons.
- There are 21g of sugar in Nutella spread.
- A snickers bar has 52.7g
- Old Jamaica Ginger Beer has 13 teaspoons of sugar.
- Cornflakes has 2.4 teaspoons of sugar.
- 1 doughnut has 3.5 teaspoons of sugar
- 1 tablespoon of tomato sauce has 1 teaspoon of sugar

Aspartame is an artificial sweetener that is also a neurotoxin ~ it damages the brain. It also decreases levels of dopamine and serotonin, therefore increasing levels of depression and anxiety.

Inflammation caused by infection or injury stimulates the immune system, and this has been linked to depression, as the stress response system may become more sensitive, and enzymes destroy serotonin.

Anti-inflammatory Nutrients are beginning to be given the importance they deserve, considering the detrimental effect of inflammation on an individual's mental health.

Bromelain, found in pineapple, minimises post-workout inflammation and is good for muscle repair and relieving joint pain.

Monosaturated fat controls cholesterol and helps balance blood sugar levels, reducing inflammation.

Gingerol, is found in ginger and helps with joint and muscle pain, also inflammation in the body.

Curcumin (Turmeric) is an antioxidant and an anti-inflammatory, which means double the benefits for mental health.

Carotenoids are found in all coloured fruit and vegetables, and are antioxidant and anti-inflammatory.

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