

Free Chapter: Food, Mood & Attitude

[You can purchase the book [here](#) if you are interested in reading more!]

When your body is strong and healthy you can cope better with stress. Being healthy also improves mental outlook, concentration and mood. These are the very things that will help you day after day in the workplace!

So what can you do to physically feel better and support your mental function and mood? This chapter presents information that I have routinely used to help people during health consultations. This information could transform your health and mental outlook.

Eat at the Right Times

So often I have consulted (and worked!) with people who display certain symptoms when they are hungry. A Director I worked with frequently stated at meetings, “Hurry up, I’m getting irritable,” as lunch times were pushed further back to accommodate lengthy meetings.

If you pay attention you will probably notice that you experience various symptoms if you haven’t eaten for a while such as feeling weak and/or light-headed, headaches, dizziness, irritability, mental “fog”, feeling teary and of course feeling hungry. Such symptoms have typically been described as having low blood sugar levels or hypoglycaemia.

Dr. Joel Fuhrman goes one step further in associating such symptoms with “toxic hunger.” This has to do with the way that food makes you feel after eating it, and the body’s inability to go without food for a few hours. Dr. Fuhrman has developed an amazing and scientifically-verified approach to eating that emphasizes nutrient-dense foods, and helps to eliminate such symptoms when hungry.

If you experience these symptoms when you get hungry, consider the following tips to get you started on the path to more balanced blood sugar levels:

- Eat a healthy and wholesome breakfast each day made from whole-foods. Avoid saturated fats such as those found in bacon and eggs for example. A better breakfast would be oatmeal with fruit.
- Eat morning tea. Have a piece of fruit handy or a small snack to keep you energised until lunch time.
- Plan meals for the working week including snacks. Left-overs from dinner can make a great lunch the next day and help you to avoid visits to a cafeteria or café that may tempt you with unhealthy food choices.
- Avoid eating candy and other sweets that give you quick bursts of energy but leave you feeling flat later. This also applies to soda/soft-drinks (even those that are artificially sweetened which present their own health problems) and energy drinks.
- Be prepared for inconsistent work hours by keeping food at work for when you stay back late or work during lunch time.
- Drink plenty of water each day (preferably filtered water).
- Consider reading Dr Joel Fuhrman's book *Eat to Live* and incorporate some of his recipes for meals, treats and snacks that will help to eliminate "toxic hunger" and help you with improved mental clarity and focus.

More Energy? Yes Please!

So often I have heard the comment, "If only I had more energy..." So here is an often overlooked tip for increasing your energy levels and health. Start consuming green smoothies or fresh juices!

Fresh juices almost everyone has heard of. This is juice that is freshly squeezed or pressed. They are not heated like the juices found on supermarket shelves, so they retain many beneficial nutrients in a form that is highly absorbed by the body.

Juicing has enjoyed a revival in popularity in recent years following the movie "Fat, Sick and Nearly Dead" by Joe Cross. Mr. Cross revolutionized his life and health after embracing fresh juices. His movie is inspirational and worth watching some time.

You might not have heard about green smoothies yet. I have heard green smoothies referred to as "blended salads", "life juices" or "youth elixirs". Essentially, they are a blend of green leafy vegetables with fruits and water or plant milk to make a delicious smoothie.

The act of blending everything together helps to break down the cell walls of the fruits and vegetables so that the nutrients are in a highly absorbable form. By blending it all together the fibre is also retained which helps you to feel full and may help to maintain steady blood sugar levels.

I recently delivered a nutrition presentation and one lady was very interested in green smoothies. She told me that she worked in a hospital and recently had to miss lunch due to work. She began to have an irregular heart beat and felt faint and dizzy, which the nurses later attributed to hypoglycaemia.

She wanted to know if she could make green smoothies at home and take them to work for lunch. The answer was yes! Green smoothies make a great snack, morning or afternoon tea and can also be enjoyed for lunch if you don't have time to eat a meal. The trick is to store the green smoothie in an air-tight container and to keep it refrigerated. The natural fibre in green smoothies also helps to keep them fresh.

Some people will be able to keep a blender at work and make smoothies there. If this is the case you could start a green smoothie trend at work and get other staff involved. We often go out for "drinks" at the end of the working week or share candy, biscuits and chocolate with staff members, but how often do we share healthy food that tastes great and gives us more energy?

If you don't like eating breakfast in the morning then green smoothies can be a great alternative. You can add some nuts and seeds to keep you feeling full for longer. Nuts and seeds will add more minerals and good fats to your green smoothie. And you can have more than one glass to really fill you up. When compared to fresh juices, green smoothies will keep you feeling full for longer than juices due to the fibre being present.

Other benefits attributed to fresh juices and green smoothies may include: weight loss, increased energy, better mental clarity and focus, a decrease or elimination of food cravings (especially junk food!), improved body odor, no more constipation, and a more positive mental outlook.

Green smoothies can also be a great source of calcium and magnesium. Many green leafy vegetables contain calcium that is in a highly absorbable form – much more absorbable than the calcium in dairy milk!^{i,ii} They are also a great source of folic acid and a range of phytochemicals. Kale is a great low-oxalate green leafy vegetable to use.

Phytochemicals are plant compounds that have many different benefits to the body. There are thousands of phytochemicals in fruits and vegetables! For example, the green leafy vegetables kale and Bok choy contain glucosinolates which are precursors to anti-cancer compounds, and blueberries contain anthocyanins which may improve good cholesterol, lower bad cholesterol, and are good for eyesight.

What's more, a recent study looked at the association between mental wellbeing and the amount of fruit and vegetables eaten each day. They found the "existence of a positive association between well-being and fruit-and-vegetable consumption."ⁱⁱⁱ

In other words, the more fruit and vegetables that the people ate the higher levels of well-being they were found to have. Green smoothies are an easy and tasty way to include more fruit and vegetables in your diet.



Green Smoothie Recipes

So why not try making a green smoothie? For each of the recipes below, simply place the ingredients into a blender, blend until smooth and serve. Note – high speed blenders work best in creating a smooth consistency. As you drink more green smoothies try adding more greens for increased nutrients.

Sweet Summer Magic

- 8 kale or Bok choy leaves (no stems)
- 1 peeled banana
- 2 nectarines (seeds removed)
- 2 cups of water

Tropical Delight

- 1 – 1.5 cups of frozen mango (without the skin)
- 1 peeled banana
- 1 peeled orange
- 2 cups of baby spinach leaves or English spinach leaves
- 1 cup of organic soy milk

Berry Delicious

- 1 cup frozen blueberries
- ¼ cup pomegranate juice (or the seeds of 1/2 pomegranate)
- 2 bananas
- 2 cups of English spinach leaves (or kale for low oxalates)
- 2 cups of water
- Optional – 1 tsp of chia seeds

Iron Booster

- 1 bunch of parsley
- 1 peeled kiwi fruit
- 2 granny smith apples
- 2 cups water

- ½ lemon

Juice Recipes

Many juice bars provide freshly squeezed or fresh pressed juices. This can be a convenient way to include juices in your diet. If making your own fresh juices (or green smoothies) try to use organic produce wherever possible. Shopping at the Farmers Markets can be a way to buy produce that is not sprayed with chemicals at a low price. In my experience Farmers Market produce is usually fresher and tastier than grocery store produce. It usually lasts for longer in the fridge too. Juicing is also a convenient way to use produce before it goes off in the fridge!

Below are some juice recipes in case you love juicing or want to get started:

Orange and Green Recipe: 5 apples, 2 celery stalks and 2 oranges

A Splash of Pink Recipe: 6 carrots, 2 celery stalks, 3 apples, 1 beetroot

Very Veggie Recipe: 6 carrots, 1 small beetroot, 5 tomatoes, 4 stalks celery, fresh parsley, English spinach, 1 cucumber

And one final bit of information – green smoothies and fresh juices can have a slight detoxification effect on the body. If you don't usually consume many fruit or vegetables you may initially have to go to the bathroom a few times and with more urgency than usual.

Specific “Better Mood” Nutrients

There are specific nutrients that may help to promote a happier and more stable mood. These include:

Vitamin D

You may have begun to hear more about this often-overlooked vitamin. Vitamin D is often called the sunshine vitamin because our bodies can make vitamin D after sun exposure. While it is important for building strong bones, vitamin D can also be beneficial in mood regulation.

Low Vitamin D levels have been associated with depression^{iv} and Seasonal Affective Disorder (SAD). SAD is a type of depression that occurs during the colder months of the year. Some people may not experience fully blown depression. For example, as Winter rolls around some people feel unmotivated, “flat”, a bit despondent, a bit “down” and less energetic.

The good news is that Vitamin D may assist with overcoming these symptoms and may help you to achieve a more positive mood!^{v,vi, vii}

There is a good chance that your Vitamin D level may be low. In Australia, Vitamin D deficiency has been estimated to affect nearly one third of adults^{viii} and in the USA three quarters of the population are thought to be Vitamin D deficient.^{ix}

The only certain way to know if you are Vitamin D deficient is to visit your doctor and request a blood test.

When buying a Vitamin D3 supplement, it is best to purchase one that is made from algae (seaweed). These smell better and are environmentally sustainable. A lady once saw me for a consultation and complained that she had been prescribed Vitamin D by her doctor but that she couldn't take it because of the smell! So I opened up the bottle and smelled the capsules and we agreed that it smelled like a barnyard.

With the exception of algae-derived Vitamin D3, supplements are synthetically made from sheep lanolin (sheep wool fat). But nobody has ever reported a bad odor from algae-derived Vitamin D to me.

Many people that I have consulted for have not wanted to take vitamin D3 from sheep lanolin because of other concerns such as mulesing,^x and the concern of sheep dip and other compounds that might find their way into lanolin-derived D3.^{xi}

So, opt for algae-derived Vitamin D3 for an odorless, environmentally friendly, and toxin-free supplement. At the time of writing there are various brands. The dosage that you take will be guided by your Health Care Provider, and follow up blood tests will be able to show if your Vitamin D levels have been improving.

Magnesium

Magnesium has been dubbed the most important mineral for stress! Magnesium is found in over 300 enzymes in the human body, including those that help to synthesize energy.^{xii}

People have reported that magnesium has helped them in various ways including: muscle relaxation (think of how your neck and shoulders can tense up when you are stressed), increased ability to cope with stress, better sleep at night, waking up feeling more refreshed in the morning, calming eye twitches, calming leg twitches when going to sleep at night and assisting in more stable blood sugar levels.

For an easy way to remember which foods contain magnesium, think green leafy vegetables. Green leafy vegetables contain chlorophyll and it is this chlorophyll that contains magnesium. So when Popeye ate his spinach he was getting his supply of magnesium! In fact the name of recently discovered magnesium binding sites sounds like a super hero itself – “magnesome.”

Researchers have found some interesting information relating to magnesium deficiencies and supplementation including:

- Magnesium deficiency has been found to create “tetany syndrome.” Symptoms include muscle spasms, cramps, hyperarousal (a state with increased mental and physical tension) and can bring about reduced pain tolerance, anxiety, insomnia, fatigue, hyperventilation and general weakness or lack of strength (asthenia).^{xiii}
- In type 2 diabetics magnesium supplementation has been shown to reduce fasting glucose levels^{xiv} and to improve insulin sensitivity and metabolic control.^{xv}

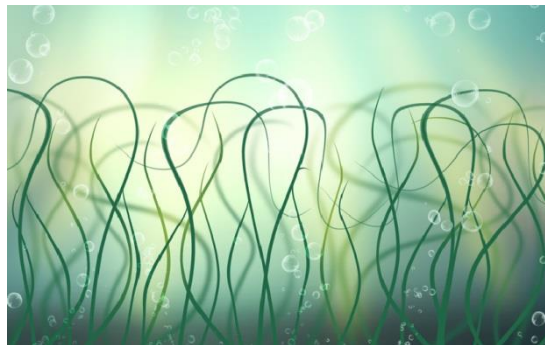
- Magnesium has been found to be helpful with Premenstrual Syndrome (PMS) symptoms such as fluid retention.^{xvi} Premenstrual anxiety has also been found to improve with a combination of magnesium and vitamin B6 supplementation.^{xvii}
- Low magnesium levels have been linked to constipation.^{xviii}
- High blood pressure has been associated with low magnesium levels.^{xix}

In short, to reap the benefits of magnesium it is important to include magnesium rich foods in your diet! The great news is that a green smoothie will supply magnesium in a highly absorbable form.

Other sources of magnesium include: Cocoa and cacao (great for making healthy chocolate smoothies and desserts), dark green leafy vegetables, nuts and seeds (especially pumpkin seeds/pepitas), brown rice, avocado, legumes, and whole grains.

If you feel that you need supplementation a health expert such as a Naturopath or Nutritionist will be able to guide you about the type and dosage that is best suited to you.

And remember that you can also soak in Epsom salt baths which are high in magnesium.



Omega 3 Fatty Acids

There are two omega 3 fats that we hear a lot about. One is called EPA (short for eicosapentaenoic acid) and the other is DHA (short for docosahexaenoic acid).

Research has found that these fatty acids are: protective against heart disease; beneficial during breastfeeding for the development of the baby's brain, eyes and central nervous system; beneficial for inflammatory disorders such as arthritis, and they are thought to improve children's brain function and concentration.

DHA and EPA have also been shown to affect our mental outlook. Low DHA levels have been associated with depression, anxiety, hyperactivity, schizophrenia, dyslexia and allergies.^{xx} And EPA has been found to help with symptoms of depression.^{xxi,xxii}

So we can see that it is important to get EPA and DHA in our diets. Our bodies can make these fatty acids from eating foods with omega 3 fats such as walnuts, flaxseed/linseed, chia seeds, pumpkin seeds and tofu. (The more refined oils that we have in our diet, the less efficiently we convert these fatty acids into EPA and DHA. This is where it's helpful to follow a whole food plant-based diet).

Many people mistakenly think that EPA and DHA can only be found in fish or krill, but EPA and DHA are found in seaweed – which is precisely where the fish obtain it! If you do take an EPA/DHA supplement, just be aware that they are extracted using vegetable oils, so if you are excluding oil from your diet for health reasons, it may be best to stick to whole foods high in omega 3 fats rather than use an EPA/DHA supplement. Please be sure to ask your healthcare provider for what is best for you.

Please note that seafood should NOT be relied upon for EPA and DHA due to toxicity and other concerns.

More and more manufacturers are providing algae-derived EPA/DHA. Algae does not contain the contaminants found in fish and seafood that affect our health, nervous system and mental ability. It is ironic that some of the contaminants in seafood are actually detrimental to our mental ability - yet many people eat seafood believing that it will help their brain.

Let's take a look at some of the contaminants found in fish and seafood and how they can affect the brain...

Mercury

Mercury is a heavy metal. All fish contain at least small amounts of methylmercury which is the most toxic form of mercury.^{xxiii} Contaminated fish is the major source of mercury exposure in humans.

Methylmercury has negative health effects – especially on the nervous system and development as outlined below:

- One study found that the negative effects of mercury on children's IQ actually outweighed the beneficial effects of the DHA from the seafood!^{xxiv} Children exposed to methylmercury in the womb have experienced negative impacts on memory, attention, cognitive thinking, fine motor skills, language and visual spatial skills.^{xxv}
- Another study found that amongst Mother's with high levels of Mercury, their newborn's brain had smaller cerebellums than that of women with lower mercury levels.^{xxvi} The researchers concluded that in pregnant women, exposure to low levels of methylmercury influences brain development of the foetus.
- Researchers suggest that women should not eat polluted fish for a period of 1 year before falling pregnant, and also during the pregnancy in order to give the body enough time to eliminate the mercury in their body.^{xxvii}
- The average 9-year-old child would exceed the U.S. Environmental Protection Agency's mercury limit if they ate canned tuna more than once every 43 days!²⁶
- Other health effects for adults (besides central nervous system damage) may include hearing loss, diminished vision, declined co-ordination and paraesthesia (abnormal sensations – often a tingling, pricking or “pins and needles” sensation).
- Studies about canned tuna show that the methylmercury level is getting worse. Fifty five percent of all tuna examined by the U.S. Environmental Protection Agency was above the human consumption safety level.^{xxviii}

PCBs (Polychlorinated Biphenyls)

PCBs are chemicals that were banned from use in the USA in 1979 due to concerns about its impacts on both human and environmental health.^{xxix} PCBs are found in fish. They build up in our bodies and can remain there for many decades and they are passed onto infants through breast milk. Research in humans has linked PCBs to:

- Fibrosis (thickening of connective tissue)^{xxx}
- Diabetes^{xxxix,xxxii}
- Cancer^{xxxiii}
- Reproductive health problems: Endometriosis,^{xxxiv} thought to play a role in reduced sperm count, premature puberty, changing normal levels of oestrogens and testosterone.^{xxxv}
- Disrupted immune system function. One study on Dutch children linked PCB levels to increased ear infections, chicken pox and lower immune function overall.^{xxxvi}
- In children and babies: low birth weight^{xxxvii} and negative effects on cognitive and neurological development.^{xxxviii}
- May affect the endocrine system – thyroid hormones have found to be affected.^{xxxix}

Dioxins: Dioxins are a highly toxic chemical and more than 90% of human exposure is through food. They stay in the human body for 7 – 11 years.^{xl} Dioxins have been associated with:

- Cancer⁸⁹
- Chloracne (a skin disease that looks like severe acne)⁸⁹
- Liver damage - including increased rates of liver cancer, gallbladder cancer and biliary tract cancer⁸⁹
- Impaired immune system⁸⁹
- Impaired endocrine system^{xli}
- Reproductive health problems. May promote the development of endometriosis.^{xlii}

Other contaminants found in fish and seafood include chlordane and DDT which are pesticides that are now banned from use in the USA.

So for healthy sources of omega 3 fatty acids try including more chia seeds, flaxseed, walnuts, green leafy vegetables and pumpkin seeds in your diet and avoid seafood. And if you take EPA and DHA supplements, take supplements derived from algae instead of fish oil or krill oil.

Vitamin B Complex

There are various B vitamins and as a group, the B vitamins are called the “B-complex.” The B-complex vitamins are known for many actions including energy production and stress support (supporting nerve and brain function).

The B vitamins can be found in various foods. If people are low in folic acid then they are probably not eating enough vegetables!

One study looked at B-complex vitamin supplementation and how it affected work place stress. They found that the group taking the B-complex vitamins for 90 days reported significantly lower personal strain, reduced confusion and less depressive or dejected moods.

The researchers concluded that, “Given the direct and indirect costs of workplace stress, these findings point to the utility of a cost-effective treatment for the mood and psychological strain effects of occupational stress. These findings may have important personal health, organizational and societal outcomes given the rising cost and incidence of workplace stress.”^{xliii}

Vitamin B12 in particular is an important and often-overlooked vitamin. It used to be thought that people over the age of 50 and vegetarians were most prone to low B12 levels, but recent research has found that the general population is often low in B12 unless taking supplements or eating fortified foods.^{xliv} All natural B12 is of microbial origin.^{xlv} It has been suggested that the Recommended Dietary Allowance should be higher than the current 2.4 mcg in America even amongst a “healthy population between 18 and 50” years of age.^{xlvi}

A deficiency in B12 may cause symptoms such as depression,^{xlvii} confusion, fatigue, nerve damage, digestive issues and brain wastage.^{xlviii} It is also interesting to note that there are a few forms of dementia that are reversible with vitamin B12 therapy.^{xlix} Other conditions that have shown improvement with B12 include Bell’s Palsy, diabetic neuropathy, homocysteinemia, male impotence and sleep disturbances. It is also thought to have a balancing effect on the nervous system.^l

To test your B12 levels you can get a blood test or urine test. Ensure that functional B12 is being measured.^{li}

When taking a B12 supplement it is best to take methylcobalamin or hydroxycobalamin as a sublingual tablet or lozenge – these are tablets that you place under the tongue and dissolve in the mouth.^{lii}

Vitamin C

Most people think of coughs and colds when they think of vitamin C, but there is so much more to this vitamin!

Vitamin C has been shown to help lower cortisol (a stress hormone) built up from physical and mental stress. In a study on marathon runners researchers found that those who took 1,500mg of vitamin C per day had significantly lower cortisol levels after racing.^{liii} In another study on vitamin C and psychological stress the participants who took 3,000mg of vitamin C daily had lower blood pressure, lower cortisol levels and lower subjective levels of stress as compared to the placebo group.^{liv}

Vitamin C is in a range of foods such as oranges, lemons, lime, kiwi fruit, pineapple, strawberries, bell peppers/capsicum, guava, cherries, mango, watermelon etc. So adding more of these foods into your diet will increase your vitamin C intake.

If you do supplement with Vitamin C there are various forms to choose from such as calcium ascorbate, ascorbic acid and sodium ascorbate. People with high blood pressure should avoid sodium ascorbate. There are also whole-food vitamin C supplements which contain vitamin C derived from plants like acerola cherries and rosehips. If you have green smoothies or fresh juices these may also serve to boost your dietary vitamin C intake.



High Protein, Low Mood!

Many people that I come across are on some sort of weight loss diet and very often it is a high protein, low carb diet or the Atkins diet itself. Unfortunately, these diets are not conducive to good mood or good health (or even long-term weight loss as many studies have found!).

High protein diets that limit carbohydrate intake can strain the liver and kidneys and lead to increased constipation, bad body odour, worsening of allergies and osteoporosis. Research has been published that confirms that a high protein diet also lowers your lifespan.^{lv}

Now, if you are like me you will find that information to be depressing enough! But there's more. Low carb diets can leave you feeling moody, depressed and unmotivated.

This impact on mood may be partly due to the effects on serotonin. Serotonin is a neurotransmitter that is linked to improved mood and feelings of wellbeing – and we can increase or decrease serotonin in the brain by paying attention to what we eat!

Serotonin is made by converting the amino acid tryptophan. Foods that we often regard as “high protein” (e.g. turkey and other meat- protein sources) contain the amino acid tryptophan. But the problem is that they also contain other amino acids that compete with tryptophan absorption and conversion to serotonin.^{lvi} So what's the solution?

According to Dr. McDougall, “A low-protein, carbohydrate-rich diet (full of starches, vegetables and fruits) results in the highest levels of serotonin in the brain... For you this

means less hyperactivity, anxiety, depression and insomnia – provided you eat that healthier diet.”^{lvii}

For women, eating carbohydrate-rich and lower protein dinners during the week leading up to a period has also been linked to improved mental wellbeing (less tension, anger, depression, sadness and fatigue).^{lviii}

Researchers in New Zealand have found that the more fruit and vegetables people eat, the more positive their mood is. Dr. Connor who led the study is quoted as saying, “After further analysis we demonstrated that young people would need to consume approximately seven to eight total servings of fruits and vegetables per day to notice a meaningful positive change. One serving of fruit or vegetables is approximately the size that could fit in your palm, or half a cup.”^{lix} And fruit and vegetables are great for weight loss!

And now let’s talk more about weight loss. What does the research show here? The research clearly and repeatedly shows that high protein, low carbohydrate diets do not promote long term weight loss. An example of a study that presented these findings involved 103,455 men and 270,348 women in Europe. They found that those who ate the most meat gained the most weight – and this was regardless of their overall calorie intake. The researchers stated, “Our results do not support that a high protein diet prevents obesity or promotes long-term weight loss, contrary to what has been advocated.”^{lx}

Even worse, research has shown that high protein diets are associated with higher mortality (increased death from all causes). One particular study analysed dietary information for over 100,000 participants over a minimum of 20 years. They concluded that a low carbohydrate diet rich in animal foods was associated with higher all-cause mortality (death from all causes), cardiovascular mortality (death due to cardiovascular disease) and cancer mortality (death due to cancer).^{lxi} What price are we willing to pay to try to lose weight?

The lead researcher Dr. Theresa Fung said, “This research indicates that all low carb diets are not the same, and the differences have an indelible impact. One that is based on plant foods is a better choice than one that is based on animal foods.”^{lxii}

So what can you do if you want to feel happy and lose weight? Follow a high nutrient, healthy plant-based diet.

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- ^x Mulesing is a painful process where skin is sliced off the buttocks and tail area of lambs to prevent flystrike
- ^{xi} [Lichen-based vegan vitamin D3 gains momentum as Nordic Naturals introduces new product](#) by Elaine WATSON, 07-Dec-2012. www.nutraingredients-usa.com/Suppliers2/Lichen-based-vegan-vitamin-D3-gains-momentum-as-Nordic-Naturals-introduces-new-product. ESB Developments director Mark Broughton stated that people "are also worried about sheep dip and undesirable compounds getting into lanolin-derived D3."
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