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Nutrition for Stress, Fear and  
Uncertainty

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EMPOWERING WORKPLACE  
MENTAL HEALTH

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With thanks

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## About Christine Bailey

- Qualified Nutritional Therapist (BSc), Chef and Lecturer
- Trained with the Institute of Functional Medicine IFM
- Food & Nutritional Consultant with over 18 years experience in the Industry
- Online Nutrition Clinics and Programmes for health and wellness
- Author of over 14 recipe and health books including the new Brain Boost Diet
- Appear as an expert TV / Radio E.g BBC Truth About Stress, Sky News etc
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# Today's Webinar

Brain Health, Stress & the Role of Nutrition

Anxiety

What to Eat – key foods and nutrients

Preventing weight gain

Practical examples

Self Care Tips

Supplement support

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# Thrive rather than Survive



We are all looking to find ways to cope with the pandemic and the “new normal.”

With entire families home together all day, and schedules disrupted, loss of a daily routine can increase anxiety and disrupt healthy eating.

For others being home alone with little contact with others can pose additional problems of loneliness and anxiety

What (and how much) you eat can influence your mood and overall brain health – **get the brain right and the mind will follow.**

***This is the time to focus on food as a way to support not just immune health but resilience, stress and anxiety.***

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# Uncertainty = Stress = Cortisol



As humans, we've evolved to survive, and the biochemical mechanisms involved are part of our stress response.

Our current reactions, automatic negative thoughts (ANTS) and emotions stem from new uncertainties about the future and the feeling of being out of control.

This triggers our sympathetic nervous system into “fight –flight” mode. This leads to the elevation of adrenaline and cortisol levels (stress hormones).

Chronic stress and elevated cortisol negatively affects your mood, sleep quality, concentration as well as your immune system's ability to fight off disease.

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# Stress, Depression and Anxiety



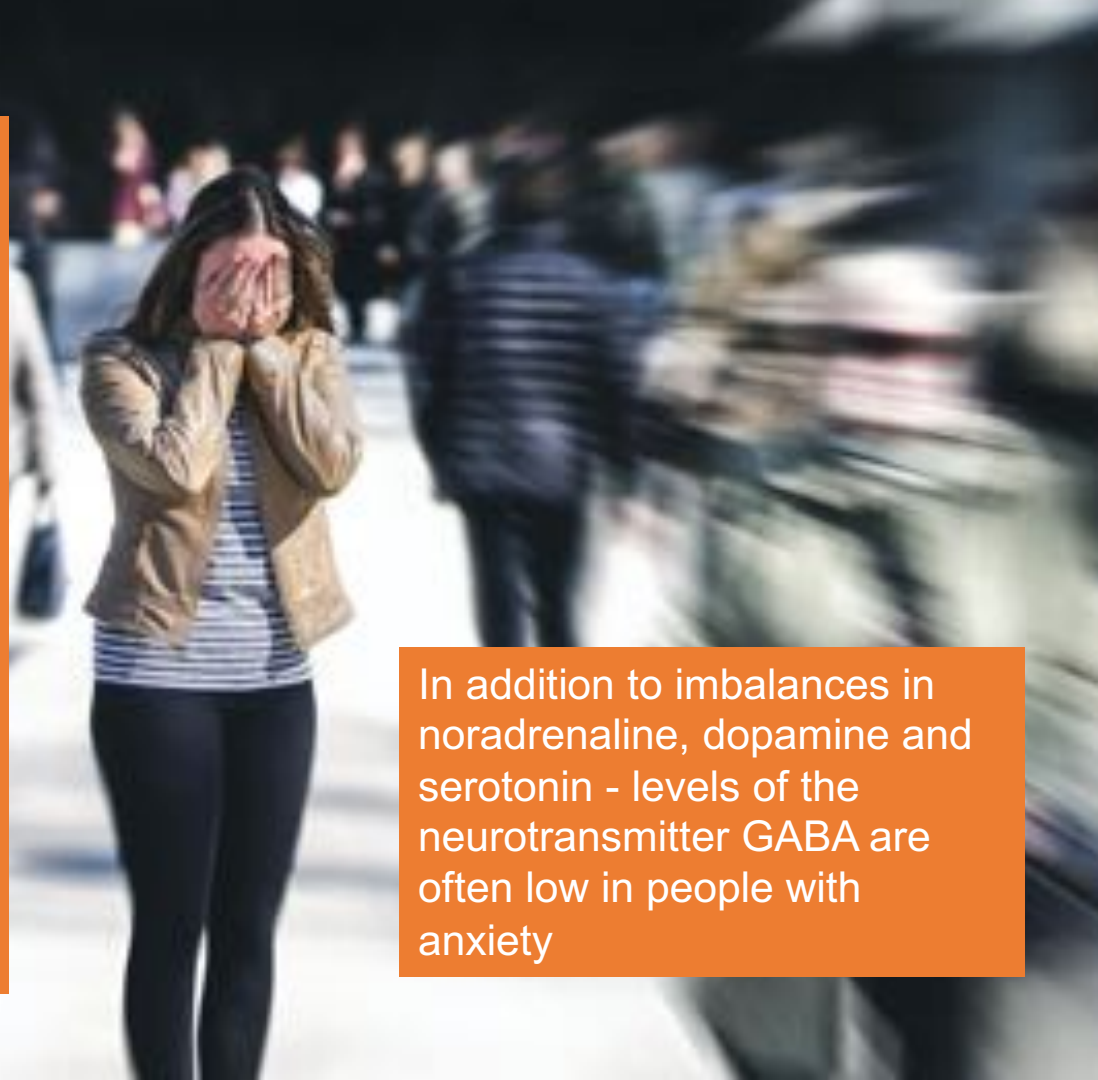
Ongoing stress involves chronic activation of the hypothalamic-pituitary-adrenal axis

Chronic exposure to stress hormones has a direct effect on brain signaling and production of brain chemicals that affect how we think and feel

Stress hormones blunt the brain's sensitivity to **serotonin**, the mood-regulating neurotransmitter, **Noradrenaline** and **Dopamine** levels influencing motivation, pleasure and mood.

## Signs Of Anxiety

- Difficulty concentrating
- Irritability
- Tense muscles
- Sleep disturbances
- Difficulty overcoming worries
- Symptoms of different kinds of anxiety disorders can vary, and may include panic attacks, compulsive behaviour, dread of social interactions, and re-experiencing traumatic events



In addition to imbalances in noradrenaline, dopamine and serotonin - levels of the neurotransmitter GABA are often low in people with anxiety



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## Key Areas for Self Care



- Daily Dietary patterns – importance of food
- Specific nutrient support for stress and anxiety
- Sleep
- Movement and exercise
- Social connection
- Mindful behaviours



## Food, what to eat

1. Feed the brain with the key nutrients for healthy neurotransmitter activity which influence resilience and mental wellness
2. Remove foods that actually harm brain function or aggravate the stress response and disrupt sleep
3. Focus on nutrients known to support immune function

## Eat Healthy Fats



- The human brain needs essential fatty acids and phospholipids to function optimally.
- Optimal levels of omega-3 fats have been shown to improve stress response, lower anxiety and improve brain function.
- Key foods - oily fish (salmon, mackerel etc), flaxseed, chia seed, walnuts etc
- Phospholipids – eggs, seafood, soy, chicken, sunflower

**TIP : Aim to eat at least 2 portions (around 140g, that's about 170g before cooking ) of fish each week (including one portion of oily fish) and/or 2tbsp mixed seeds daily.**

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## Easy Ways To Include More Seafood



- **Breakfast**

- Smoked salmon and scrambled eggs with oat cakes
- Rye bread topped with cooked prawns and cottage cheese
- Toasted wholegrain bagel topped with low-fat soft cheese and smoked salmon.
- Smoked mackerel pate with seeded crackers

- **Lunch / Dinner**

- Wholemeal wrap or pitta filled with avocado, tomato, lettuce and crayfish.
- Large mixed salad with hot smoked mackerel fillets
- Fish / Shellfish tagine
- Baked fish with new potatoes and steamed vegetables
- Fish curries / stir fries

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## Have Protein At Each Meal



- Neurotransmitters involved in mental wellness require amino acids (from protein) for their production.
- Protein also helps stabilise your blood sugar. Blood sugar highs and lows can lead to changes in mood and influence focus and concentration.
- Insufficient intakes of L-tryptophan, L-phenylalanine, or L-tyrosine are associated with increased symptoms of anxiety / depression.



***Tip: Aim to include a portion of protein (palm size portion or around 2-3 eggs) at each meal including breakfast. Good protein foods include lean red meat, poultry, eggs, fish and shellfish, soy, beans, pulses, nuts, seeds and dairy.***

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## Ditch the Sugar



Sugar and refined processed foods can promote inflammation throughout the body and brain, which may contribute to mood disorders, including anxiety and depression.

Imbalances in blood sugar levels can also make us feel 'hangry' and irritable. Our brain is a energy demanding organ (20-30%) but needs a balanced blood sugar through the day.

Avoid refined carbohydrates (white rice and pasta, white breads, cakes, cookies) and sugars (including sugary drinks, juices and alcohol).

Switch to slow releasing carbohydrates: wholegrain rice and pasta, oats, quinoa, buckwheat, sweet potato, carrots, swede, parsnip, butternut squash, baked potato, peas, beans and lentils.

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## Watch the Caffeine

- Being in lockdown may tempt you to drink more coffee and tea
- Caffeine is a well-known stimulant – while a little can support cognitive health, too much or drinking too late in the day can upset blood sugar, spike your stress hormones, which can increase anxiety and interfere with sleep patterns.



***TIP: Stock up on alternatives such as herbal teas, green tea or redbush tea. Drink plenty of water through the day. The brain is so sensitive to dehydration that even a minimal loss can cause symptoms such as brain fog, fatigue, dizziness and poor concentration.***

| ITEM                         | AVERAGE AMOUNT OF<br>MILLIGRAMS OF CAFFEINE |
|------------------------------|---|
| Coffee Brewed 8 oz           | 96  |
| Instant Coffee               | 62.4  |
| Decaffeinated                | 2.4   |
| Espresso 1 oz                | 63.6  |
| Cappuccino 8 oz              | 86.4  |
| Latte 8 oz                   | 86.4  |
| Black Tea 8 oz               | 48  |
| Green Tea                    | 28.8  |
| Instant Tea                  | 12  |
| Iced Tea                     | 22.3  |
| Herbal Tea                   | 0   |
| Soft Drink Cola 12 oz        | 33.5  |
| Soft Drink Citrus            | 53.3  |
| Energy Drink 8 oz            | 72-77                                       |
| Energy Shots 2 oz            | 200   |
| Cocoa Beverage 8 oz          | 5   |
| Chocolate Milk Beverage 8 oz | 2.5   |
| Solid Milk Chocolate 1 oz    | 5.6   |
| Solid Dark Chocolate 1 oz    | 15.9  |

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Half life of caffeine is  
around 5-6 hours

Three 8 oz. cups of coffee  
(250 milligrams of caffeine)  
per day is considered a  
moderate amount of  
caffeine.

**Everyone responds  
differently to caffeine**



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## Hold the Drink

- It may be tempting to open a bottle of wine to try and unwind... however
- Alcohol can cause imbalances in blood sugar, disruption of neurotransmitters that affect mood and thinking.
- It is also relatively high in calories if you watching your weight
- Drinking alcohol before bed is linked with more slow-wave sleep patterns called delta activity but also switches on alpha activity **which inhibit restorative sleep**. Alcohol blocks REM sleep. So even if you fall asleep faster you are more likely to wake up in the night.



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## Look after your Gut

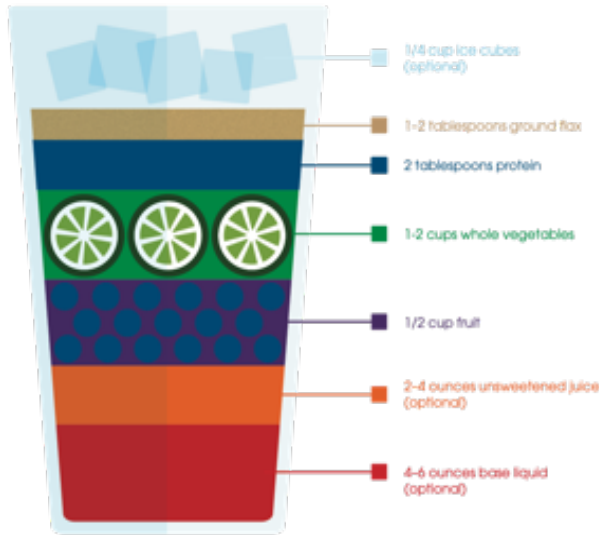
- A growing body of research is indicating how our gut microbiome supports positive mood and emotional well-being.
- This bi-directional relationship is influenced by the gut–brain axis, that links the central nervous system, which houses the brain and spinal cord, with the enteric nervous system and bacteria in the gut.
- Diet, lifestyle, medications etc can all influence our gut flora – when disrupted this can have an effect on mood

**Tip: *Eat fermented foods daily such as kimchi, sauerkraut, raw pickles, kefir, yogurt, kombucha, tempeh, miso and natto. Ensure sufficient fibre rich foods (wholegrains, vegetables etc) daily***



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Building a better smoothie



## Think Colour



- The Mediterranean style of eating has been associated in research with better mental wellness, resilience
- Every day eat multiple servings of **colourful** fruits and vegetables
- They also provide key antioxidants and nutrients to support the immune system.
- Using bags of frozen fruits and vegetables are nourishing and convenient.

Cram in more fruits and vegetables into smoothies, soups, stews, stir fries etc - include more plant-based meals each week. Ideally aim for 5-7 vegetables with some fruit daily

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## Key Nutrients for Stress & Anxiety

- B vitamins esp B6 (meat, fish, eggs, beans, pulses)
- Magnesium (leafy greens, seeds, beans, seafood)
- Zinc and Selenium (meats, poultry, fish, nuts, seeds, Brazil nuts)
- Iron (meats, fish, beans and pulses)
- Vitamin D (sunshine, oily fish, eggs)
- NAC (protein rich foods)
- Omega 3 fats
- Probiotics



<https://www.ncbi.nlm.nih.gov/pubmed/25879690>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3198864/>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3191260/>

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## Additional Support for Anxiety



- Amino acid: L arginine (supports GABA)
- Herbs e.g lemon balm, hops, chamomile, passionflower, Valerian
- Ginkgo biloba
- Theanine and Green Tea
- CBD oil
- Ashwagandha
- 5HTP

<https://www.ncbi.nlm.nih.gov/pubmed/16808927>  
<https://www.ncbi.nlm.nih.gov/pubmed/22290374>  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3665193/>  
<https://www.ncbi.nlm.nih.gov/pubmed/21178946>  
<https://www.ncbi.nlm.nih.gov/pubmed/21208586>





# Avoiding Weight Gain

## **Stick to a routine**

- Maintaining the same schedule daily (including meal times) will not only limit the possibility of downtime which may lead to boredom eating and reduce the risk of feeling low or anxious.

## **Reduce overall calories**

- Even with a daily walk or run the chances are your activity levels will be lower. To avoid weight gain reduce your calories by 200-300 calories per day (about one mars bar)

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# Meal Planning

- Use your typical commute time to prep vegetables, meals for later in the day
- Batch cook meals (cook once, eat twice), portion and freeze
- Make use of store-cupboard ingredients - cans of tomatoes, beans and lentils, frozen vegetables / fruits / fish and chicken portions for easy dishes
- Stock the fridge with prepared healthy snacks (vegetable sticks, slices cooked chicken, yogurts, hummus) and don't buy processed snacks you would be tempted by.
- If living alone share your meals with friends over social media platforms (zoom etc)
- Keep to regular meal times
- Eat at the table



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## Keeping it Simple – easy options



- **Breakfast Options** – eggs, smoked salmon, plain yogurt with berries, cottage cheese and wholegrain toast, protein shake, porridge with nuts and seeds, baked beans (low sugar) with oat cakes
- **Lunch** – Focus more on colourful salads (or soups) with plenty of protein to improve mental focus in the afternoon (avoid heavy meals and carbs)
- **Dinner** – ½ plate colourful vegetables (2-3 types), ¼ plate protein, ¼ plate slow releasing carbs – sweet potato, new potatoes, beets, carrot, swede, quinoa, brown rice, lentil pastas etc
- **Time Restricted Eating** can help prevent grazing in the evening



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## Snacking

- Ideally do not snack through the day unless you are really hungry or being very active
- Reach for a glass of water / herbal tea first before food
- Aim to keep snacks to 100-200 calories
- Focus on nutrient rich snacks (protein + healthy fats + slow releasing carbs )

Examples: ***protein shake, peanut butter and oat cakes, cooked chicken slices, handful of nuts, yogurt with berries, Hummus with pre-packaged vegetables, piece of fruit***

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## Movement and Exercise

- Keeping moving and exercising regularly are important contributors to brain health and mood
- Being active boosts your feel good hormones, helps reduce stress, improves cognition
- Moderate-intensity aerobic exercise reduced the time it took to fall asleep and increased the length of sleep of people with chronic insomnia
- Take frequent breaks and do 5 min exercises
- Make use of online / live training videos
- Get outdoors daily (walk, run)

<https://www.sleepfoundation.org/articles/how-does-exercise-help-those-chronic-insomnia>

[https://journals.lww.com/acsm-essr/Fulltext/2002/04000/Exercise Enhances and Protects Brain Function.6.aspx](https://journals.lww.com/acsm-essr/Fulltext/2002/04000/Exercise_Enhances_and_Protects_Brain_Function.6.aspx)



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## Social Connection



Many of the following also stimulate the Vagus Nerve / parasympathetic which can help reduce stress response.

- Start your day with gratitude (focus on positive aspects of your life)
- Reconnect with a friend / call a family member
- Spend time on activities that nourish you to crowd out those that don't (e.g excess news bulletins)
- Support your local community / neighbours
- Focus on your breathing
- Get outdoors (even if it is your balcony)
- Practise mindfulness or meditation

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# Keep your immune system healthy



- There are several steps you can take to reduce your chances of being exposed to respiratory viruses and to boost your immunity in the event of exposure.
- Prevention strategies such as hand washing, self isolation, limiting exposure to other people are clearly important
- The same lifestyle and dietary strategies that help with mental health also support immune function
- There are some key nutrients research to support immune function

# Nutrients to support Immune Function

| KEY NUTRIENT | SOURCES  |
|--------------|--|
| Quercetin    | Quercetin is found in fruits and vegetables and has a wide range of benefits, including Inhibition of viral replication, promotes viral eradication or inactivation  |
| Curcumin     | Curcumin (found in turmeric) has been shown to modulate viral-induced pathological cellular processes: anti-inflammatory activity  |
| Zinc         | Zinc contributes to immune defence by supporting various cellular functions of both the innate and adaptive immune system. There is also evidence that it suppresses viral attachment and replication. (seafood, nuts, seeds, meat, poultry) |
| NAC          | N-acetylcysteine promotes the production of glutathione, a potent antioxidant that supports immune function and plays a protective role (free radical damage) (protein rich foods)   |
| Vitamin D    | Vitamin D enhances immune system function, reduces viral growth, and can reduce upper respiratory infections (oily fish, eggs, fortified foods, sunshine). Test before supplementing   |

References available on request

# Nutrients to support Immune Function

| KEY NUTRIENT                         | SOURCES  |
|--------------------------------------|--|
| Vitamin A                            | Vitamin A is anti-inflammatory, enhances immune function, and supports the health of the respiratory tract (liver, cod liver oil, sweet potato, mango, carrot, green vegetables) |
| Vitamin C                            | Vitamin C contributes to immune defence by supporting various cellular functions of the immune system. Liposomal vitamin C avoids gut distress                                   |
| Resveratrol                          | Resveratrol, a natural compound found in red grapes, has many beneficial health effects including lowering inflammatory response and protecting from free radical damage         |
| Green Tea Extract                    | Green tea enhances the immune response and targets one of the processes involved in viral replication – try drinking 3-4 cups dail   |
| Probiotics / Saccharomyces boulardii | Aim to consume fermented foods daily to support immune function (yogurt, sauerkraut, kimchi, kefir, miso etc)  |

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# Questions



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Our next webinar will take place  
on 14<sup>th</sup> May at 2pm:

**How to deal with your inner critic  
and find your inner champion  
during these times.**

Please register at

<https://www.thiscanhappenevents.com/resources/webinars>