Managing Anxiety and Building Resilience in Kids: How Nutrition Can Help (by Lucinda Miller MGNI MRNI MH) **Author: Lucinda Miller (MGNI MRNI MH)**

 Anxiety used to be seen just as an innate condition of an emotionally fragile child or something triggered by significant life events. But medical science now understands more about the array of underlying physical and chemical imbalances that can trigger excess worry, anxiety and overwhelm.

This post will help you arm yourself with information about some of the life changing links between common nutrient shortfalls and metabolic imbalances, to help your child live a happier, healthier, calmer life whilst also building resilience in the longer term.

Picky Eaters?

If you have a child who is sad, angry or anxious then he or she may also be a picky eater too. If so, this could be a sign of where to focus. It has been well documented that there is a significant relationship between unhealthy dietary patterns and poorer mental health in children and adolescents. So, especially if changes in eating patterns started in the months running up to the mood changes or they have always struggled with eating a healthy diet, then this may well be part of the overall picture.

Sometimes even children with great diets face periods of difficulties with their mental health. This can still sometimes be due to nutritional shortfalls because of specific metabolic needs or due to a compromised ability to digest and extract the optimum nutrition from the food they eat.

For a child (or anyone) to cope with stressful and anxious situations, they need the right store of nutrients to produce the correct balance of neurotransmitters to keep them happy and calm. Ongoing worry and anxiety can in themselves deplete nutritional reserves further, so this is why the right diet and/or food supplement support is crucial.

A Happy Gut A Happy Mind

The scientific and medical communities now understand the importance of our individual gut microbiome and how it can directly change brain activity and behaviour via the microbiota-gut-brain axis (which includes the immune, neuroendocrine, and neural pathways). In turn, this relationship directly influences stress-related and psychiatric issues including anxiety, depression, and OCD.

A very important first step to help your child can be the supplementation of probiotics, particularly if your child has had several courses of antibiotics (recently or in the past), or tummy issues such as gas, constipation, bloating etc.

A healthy, balanced diet full of real food, (fresh natural ingredients), meat and fish, fresh veggies and fruit, healthy fat and minimal refined sugar and processed food will all support a healthy gut.

Does Your Child Have Enough Magnesium?

For centuries, magnesium has been used as a relief for many ailments including mood swings, insecurities, and headaches. Magnesium is crucial for the functioning of the central nervous system and optimisation of your mitochondria (the powerhouse of every cell in our body) and thus essential in the prevention of cell health.

During periods of stress, magnesium is quickly used up by the body, which in turn can create more anxiety, which then has the knock-on effect of again depleting the levels of magnesium through stress.

Historically we all ate a diet that included higher levels of natural magnesium; but modern food production techniques have dramatically reduced the amount of magnesium found in many food, increasing the need for supplementation and possibly increasing anxiety and mental health issues.

A fun and simple way to increase your child's magnesium levels are adding Epsom salts to the evening bath. Natural food sources of magnesium include nuts, seeds, oily fish, dark leafy greens, bananas, strawberries, buckwheat, cocoa, molasses and natural yoghurt. Magnesium supplements might also be a good option to ensure your child's stored levels remain consistent, especially if they have a narrow range of foods that they will eat.

High Cortisol

If the body perceives a threat or stressful situation it goes into "fight or flight" mode, and this can create physical sensations, such as, dizziness, a rapid heartbeat, difficulty breathing, sweatiness or shaky hands and feet. These are caused by a rush of adrenaline and other stress hormones that prepare the body to make a quick getaway or "flight" from danger.

Cortisol is one of the chemicals produced by our adrenal glands, instantly giving the body the energy to cope with stress or danger. However, if these cortisol levels stay high for a sustained period, i.e. we are constantly in a state of stress, it can lead to various health concerns and in little people and teenagers alike, these can include mental illness, weakened immune system, weight gain, poor sleep, and a restricted production of serotonin (our happy hormone). Often leading to a sense of overwhelm, anxiety, low energy and depression. These symptoms can also create cravings for foods high in sugar and carbs which sadly exacerbate the situation.

The simplest and arguably most effective solutions are changing your child's diet and exercise. Avoid or cut down on foods with a high sugar content and reduce white carbohydrate intake. Try and ensure a meal isn't just carbohydrates but includes protein and fat too. Look to increase protein-rich foods and healthy fats. Aim for every meal also have a good source of dietary fibre and fruit & veg. Additional considerations are ensuring your child's diet is rich in omega-3, zinc and magnesium, introducing liquorice, chamomile and green teas. B vitamins can be helpful too.

Regular movement and exercise are great at reducing cortisol levels and thus relieving stress and anxiety. A good run around the park, kicking a ball, riding a bike or a simple walk in the countryside can make a big difference. Mindfulness and yoga are also great stress reducers for young kids and teenagers.

Lack of B Vitamins & Iron?

B vitamins and iron can play a key role in a supporting your child's nutrition. Many children are unable to methylate efficiently, which means they can't break B vitamins down into a usable form for the body and they need specialist methyl forms of these when taking supplements. Low levels of vitamin B12, B6 and folate are associated with some neurological diseases and psychiatric disorders. Often the production of neurotransmitters such as serotonin, dopamine, noradrenaline and adrenaline are inhibited, which directly impact on your child's brain's ability to create a balanced stable mood, sense of well-being and ability to feel happiness.

Blood tests or urine tests can be organised through a highly experienced naturopath or nutritional therapist to establish if your child needs supplementation. Grass-fed red meat, eggs, wholegrains and green leafy vegetables can help in the meantime.

More Omega-3?

Omega-3 essential fatty acids have had more research about mood and brain health than any other nutrient. Oily fish is the best way to get enough omega-3 to feed the brain, which in turn will help to calm anxiety and many other mental health problems.

Signs of an Omega-3 deficiency can include keratosis pilaris, a skin condition in which the top of the arms or even face are dry and rough bumps, often called chicken skin. Dry skin and hair and a thirsty child may also point towards a need for much more omega-3. If your child is allergic to fish or is a "fish-phobe" then other sources of omega-3 include flax seed, chia seed, walnuts, omega-3 rich eggs and organic milk.

Low Vitamin D?

With more children having high levels of screen time, indoors and living in colder climates north of the equator and overuse of sunscreen, most physicians now recognise supplementation of vitamin D as essential for many children.

Even for children living south of the equator, genetic variations called VDR can block the body's ability to absorb vitamin D; and in this case, vitamin D levels will need ongoing support, sunshine or not.

Cod liver is the best natural form of vitamin D. Rosemary and sage help the body to absorb vitamin D, so use plenty of these herbs in your cooking to optimise your family's vitamin D levels.

Inflammation

Inflammation within the body has recently been found to be linked to anxiety and depression. Inflammation is caused by the body's natural defence mechanism to illness and disease as well as being the direct result of some diseases that are by nature inflammatory. To exacerbate the situation, once inflammation is switched on, it becomes self-perpetuating as inflammatory cytokines travel throughout the body causing oxidative stress to the powerhouse cells, the mitochondria. Inflammation markers have been shown to shoot up during depressive episodes and drop off in periods of remission.

Inflammation within the brain creates anxiety-provoking chemicals like quinolinate, in turn creating symptoms called "sickness syndrome" such as lethargy, sleep disturbance, decreased social activity, mobility, libido, learning, anorexia. Researchers have found patients with higher levels of inflammatory markers are more respondent to anti-inflammatory treatments than to antidepressants.

Inflammation within the body can be reduced through regular exercise (interval training has been shown to be particularly helpful), relaxation and meditation and healthy eating – a diet free from refined sugar, grains and carbs and preservatives and high in natural fats can help to dramatically reduce inflammation. The yellow Indian spice turmeric can help significantly with bringing down inflammation so add this to your cooking on a regular basis or add in a specialist turmeric supplement.