



## **How might Nutrition support Post Natal Depression (PND)**

If, as the saying goes, we are what we eat, then it makes sense that nutrition has a role to play in how we feel. Post Natal Depression (PND) affects as many as 10% of new mums and is the most prevalent mood disorder associated with childbirth. Yet research in this area is still very limited, and little advice is given about the role our diets play in mental health.

Each month the female body undergoes an intricate sequence of hormonal fluctuations in preparation for pregnancy. Once pregnant, the hormonal rollercoaster continues and both oestrogen and progesterone, the principal female sex hormones, increase dramatically, as much as 50-fold and 10-fold respectively (1). Then comes the birth and suddenly both hormones crash and drop to their pre-pregnancy levels in just a few days. Is it so surprising therefore that this hormonal shift may cause a reaction in some women? In fact, studies have confirmed that sensitivity to oestrogen-related signalling is increased in women with PND (2, 3). Simply put, this means our communication system is out of balance which directly impacts our mood.

So how can nutrition help?

### **The relationship between our gut and brain**

People are often surprised by how closely connected the gut and brain are, and a commonly used term to describe this relationship is the gut-brain axis. This is essentially a sophisticated communications network between the gastro-intestinal tract and the brain. Our mouth and digestive tract is the gateway to the outside world and where most foreign elements enter the body through the food we

consume. Because of this, it has an intricate alarm system to notify the body of harmful substances, and over 50% of our immune cells can be found in the intestines (4). Messages are transmitted to the brain by hormones in the bloodstream or neurotransmitters in the central nervous system. One of the key messengers is the hormone serotonin, which is often called the 'happiness hormone', but not many people know that it is mostly produced in the gut. So, you see our gut has a direct relationship with our mood.

## **How diet may support mental health**

There are a number of ways that nutrition and a good diet can help support mental health during pregnancy and postpartum;

- 1) To correct pre-existing nutritional deficiencies
- 2) To support pregnant and lactating women who have increased nutrient needs (for example, nutrient requirements during pregnancy are 70% higher for vitamin C and folate and 150% higher for iron compared with the nonpregnant and nonlactating women) (5,6).
- 3) To support the gut-brain communication system
- 4) To flush toxins from the body which can contribute to low mood and anxiety

## **Include a wide variety of foods**

All foods contain nutrients called vitamins and minerals and so a general recommendation is to include as wide a variety of foods in your everyday diet as possible to ensure a good overall intake of all nutrients. It's an easy trap to fall into eating the same thing over and over, especially postpartum when new mums are sleep deprived and concentrating on the needs of their new-born and less on their own needs. Deficiencies of folate, vitamin B12, iron, zinc, selenium and omega 3 fatty acids tend to be more common among depressed than non-depressed persons (7,8). These nutrients are commonly found in everyday foods such as colourful fruits and vegetables, good quality meat, oily fish and seafood protein, beans and pulses, and nuts and seeds. Including a wide range of foods in the diet is therefore the best way to get a good mix of nutrients and support the body during postpartum recovery. Asking friends and family to get involved in helping with shopping and meal preparations is often a great support. Online shopping and home delivery can also be helpful tools.

## **Aim for quality rather than quantity**

When we are tired and 'low' there is a tendency to reach for quick snacks and comfort foods which typically are high in sugars, salts and unhealthy fats. Snacking can often lead to over-eating of low nutrient foods which can exacerbate a low mood. Instead, it may be helpful to aim for an abundance of fresh and seasonal foods, and limit processed foods. Some research has shown that poor diet may be linked to a greater risk of postnatal depression, and can increase feelings of stress and anxiety (9). Making healthy switches from biscuits and crisps to, apples, vegetable sticks, hummus, olives (to name just a few examples) will provide more nutrient-dense foods and help the body's all important communication system between the gut and the brain.

And don't forget to drink. Water helps flush everyday toxins from our body and keeps us hydrated which all contributes to healthy function, especially postpartum when the body is adjusting to so many hormonal changes. Aim for 1.5-2 litres daily. So diet can play an important role in supporting general well-being postpartum and help with the symptoms of PND by providing the ingredients for the body to make important hormones and neurotransmitters. For more personalised advice always consult a qualified Nutritionist or Dietician.

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