

RCN Fertility Nursing Forum Podcast — Episode 1: Nutrition for Fertility with Karen Mannion

Host: Natasha Witchell

Guest: Karen Mannion, Nutritionist and Mindset Coach

Duration: Approx. 35 minutes

Episode Show Notes / Key Takeaways

- The Mediterranean diet is a well-studied, heart-healthy pattern, but dietary advice should be culturally inclusive and celebrate diverse, nutrient-dense foods.
- Key lifestyle factors for fertility include nutrient-rich diet, comprehensive blood tests (vitamin D, B12, folate, iron), stress management, gut health, and restorative exercise.
- Folate from food is preferred; genetic variations affect folate metabolism, so supplements should be personalised when possible.
- Caffeine moderation is advised, especially during assisted reproduction treatments, due to its effect on stress hormones and progesterone levels.
- For endometriosis, supporting liver detoxification through high-fibre, cruciferous, and Apiaceae family vegetables, managing inflammation, and stress reduction is key.

Full Transcript

Natasha Witchell (00:01)

A warm welcome to our listeners to the very first RCN Fertility Nursing Forum podcast. My name is Natasha and I'm a Forum Committee member and Advanced Clinical Practitioner in the NHS in South Wales. This first podcast will focus on nutrition, and we're very lucky to have Karen Mannion with us. I'll do a quick introduction for Karen: she is a qualified nutritionist, mindset coach and speaker with a long-standing interest in wellness. After struggles with her own hormone health, she now focuses on empowering perimenopausal women to transition into menopause with confidence and vitality, reclaiming control over their mind and body. Karen is also the founder of the Motivational Weight Loss Course, which she runs for the NHS. She delivers this programme to women needing to lose weight for fertility treatment. After many years working in diet and behaviour change, Karen works with clients

both in groups and one-to-one to teach perimenopausal women principles of health to reduce hot flushes, manage anxiety, lose weight and build confidence. Welcome, Karen — thank you so much for joining me on our first podcast.

Karen Mannion (01:25)

Thank you, Natasha. That was a mouthful, I didn't realise I'd done so much until you listed it all.

Natasha Witchell (01:28)

You've done so much, Karen — lovely to speak with you. I've prepared some questions; if that's okay we'll run through them. To begin, is the Mediterranean diet the best dietary pattern to recommend for our patients?

Karen Mannion (01:53)

That's a great question. The Mediterranean diet is well researched and praised for health benefits — it emphasises fruits, vegetables, whole grains, nuts, olive oil, fish, a little lean meat and dairy, low levels of ultra-processed foods, lots of herbs, and social eating. It's been linked to lower chronic disease risk and longer life.

However, my work is with women from diverse cultural backgrounds. If we say the Mediterranean diet is the single "best" diet, we can risk excluding other cultural food traditions that are also healthy. Most cultures have nutrient-rich staples — vegetables, fruits, beans, lentils, nuts — and it's about making the right choices within someone's cultural context. Food is tied to identity, so we should be inclusive and celebrate the variety of healthy eating patterns around the world.

Natasha Witchell (04:44)

Exactly — sticking strictly to the Mediterranean model narrows things too much.

Karen Mannion (04:50)

Yes, and reflecting my own background, my ancestors didn't eat a Mediterranean diet, so it's important to embrace diversity and be inclusive.

Natasha Witchell (05:26)

When someone is thinking about getting pregnant and considering their diet, what lifestyle factors do you also take into account?

Karen Mannion (05:45)

I usually start by understanding their current health status. Pregnancy places a big demand on the body, and many people are highly stressed or eating in ways that are not optimal. First, consider what needs to change so the body is thriving.

I encourage comprehensive blood tests — vitamin D, B12, folate, iron and liver function are important. Many women with conditions like endometriosis or fibroids take lots of painkillers, which burden the liver. We should check whether any work needs to be done on those fronts.

Stress is another major factor: high stress can reduce progesterone during the luteal phase and affect fertility. I ask clients how they currently manage stress; many can't name an

effective strategy. Gut health is critical too — chronic diarrhoea, constipation or IBS symptoms can signal gut inflammation or a disrupted microbiome, which affects immunity and hormones.

So I focus on three areas: blood tests, stress management, and gut health. Also, restorative exercise that calms the nervous system is valuable — not just high-intensity training, but activities that help the body rest and recover.

Natasha Witchell (10:32)

It's fascinating — being more aware of bowel habits and gut health can really help. Are there particular food groups patients should limit or avoid?

Karen Mannion (10:44)

I focus on reducing foods that spike blood glucose — mainly ultra-processed foods high in sugar and unhealthy fats: sweets, crisps, biscuits and packaged snacks. I explain carbohydrates in three groups:

- **Nutrient-dense carbs:** colourful vegetables (cucumber, tomatoes, radish, spinach, rocket) — these keep blood sugar stable and provide nutrition.
- **Higher-glycaemic whole foods:** potatoes, butternut squash, yams — fine in moderation and depending on plate composition.
- **Ultra-processed carbs:** packaged foods with additives, high sugar and unhealthy fats — these harm the gut microbiome and increase inflammation.

The key is plate composition and prioritising whole, nutrient-dense carbs while limiting ultra-processed foods.

Natasha Witchell (13:30)

You mentioned folic acid and folate — there's been a buzz that folate might be more bioavailable than folic acid. What are your thoughts?

Karen Mannion (13:55)

It's an interesting area. I sometimes use genetic testing to understand nutrient absorption. Folate in foods often exists in polyglutamate forms and needs conversion to a monoglutamate form to be absorbed. Some people don't convert well, so folic acid (the synthetic form) can be helpful for them. Personally, I favour food sources first — green leafy vegetables and sprouted seeds (sprouted mung beans or chickpeas) are very nutrient dense and good folate sources.

Folate must be converted to methylfolate via methylation, which is important for gene regulation, egg and sperm quality, hormone breakdown, and stable genetic transmission. A subset of people may not methylate efficiently and might benefit from a methylated supplement, but I'd prefer genetic information before recommending that because over-methylation can cause jitteriness or mood instability. Food-first is my default.

Natasha Witchell (17:56)

That makes sense, and it's helpful to hear the food-first approach. These diet and lifestyle factors also affect BMI. What do you consider the optimal BMI range for conception, and how does BMI affect outcomes?

Karen Mannion (18:32)

Research suggests an optimal BMI range of about **18.5 to 24.9**. Underweight (<18.5) can disrupt hormones, cause irregular or absent cycles, reduce egg quality and impair implantation. A BMI over 25 can lead to hormonal disruptions: fat cells can produce estrogen via aromatisation, and higher leptin levels can affect how the brain responds to energy signals, which can impair ovulation. Higher BMI is also associated with increased miscarriage risk and pregnancy complications such as gestational diabetes and hypertension.

NHS targets for treatment access are often set (for example, some services ask for BMI under a certain threshold), and many women on my courses work hard to get their BMI to an acceptable range. Weight change is a lot of work and requires lifestyle shifts, but seeing benefits often keeps people motivated.

Natasha Witchell (22:04)

Many listeners will relate to that morning coffee — how much caffeine is safe, and can moderate intake affect fertility?

Karen Mannion (22:20)

NICE guidance says there's no consistent evidence that caffeine affects the ability to conceive naturally, but for assisted reproduction such as IVF, maternal caffeine consumption may have an adverse effect on success rates, so it's advised to limit caffeine when trying to conceive via IVF.

People metabolise caffeine differently. Slow metabolisers will have caffeine in their system longer; it's broken down by the liver and can up-regulate adrenaline and cortisol, increasing stress and potentially reducing progesterone in the luteal phase. For people struggling with fertility, I often recommend reducing or removing caffeine — it can be one of several factors affecting outcomes.

Caffeine blocks adenosine, a calming chemical that supports sleep and other restorative processes. If someone removes caffeine, they may feel a temporary "crash" as adenosine re-engages; I often suggest easing off gradually. In practice, if caffeine is a major part of someone's routine and they're struggling with fertility, I advise trialling a reduction to see if it helps.

Natasha Witchell (27:09)

Thanks — that's really practical. Moving into specific conditions: do you have nutritional advice for patients with endometriosis?

Karen Mannion (27:19)

Endometriosis often involves immune disruption and may be associated with other autoimmune conditions, so gut health is a priority. The condition is estrogen-dependent, and

estrogen is detoxified by the liver. Painkillers and alcohol add burden to the liver, so we want to support healthy liver detoxification.

A high-fibre diet helps eliminate excess estrogen and other toxins. Foods from the **brassica** family (broccoli, radish, rocket) support healthy estrogen metabolism and liver function, as do members of the **Apiaceae** family (carrot, parsley, coriander, celery). These foods, plus overall whole-food eating, can support estrogen detoxification.

We also want to manage inflammation and blood sugar — avoiding frequent snacking and prioritising two or three good meals a day can help reduce insulin-driven inflammation. Vitamin D and omega-3 fatty acids have shown benefits for pain by reducing prostaglandins. Restoring nervous system balance — via meditation, breath work, walking or other restorative activities — helps reduce hypervigilance and chronic pain states. It's a multi-pronged approach: diet, mindset, movement and stress regulation.

Natasha Witchell (34:14)

That all makes sense — I'm sure many listeners will be off to Google those food families. I could talk to you all day, but sadly we're at the end of our first podcast. Thank you so much for being our first guest; it's been fascinating, and I hope listeners take a lot away from this.

Karen Mannion (34:40)

Thank you, Natasha. It's been wonderful speaking with you. I've really enjoyed it — take care.

Natasha Witchell (34:47)

Thanks, Karen. Take care — bye now.