



THE POST NATAL COURSE

COMPLETE PILATES

POST NATAL NUTRITION

A PRACTICAL GUIDE
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Post Natal Nutrition for Healing and Well Being

Having a baby is hard work! Your body has literally grown and given birth to another human being all in the space of 9 months, WOW! Your connective tissues and muscles (especially the abdominals and pelvic floor) have stretched and weakened considerably. Not only that, you as Mum, having suffered major physical trauma to your birth canal, the soft tissues around the pelvis and the pelvic floor muscles, and/or major abdominal surgery now have to keep up with the continual demands of looking after a newborn (and possibly an army of other small people). This calls for a look at what you are putting into your body to fuel it, to heal it and if you're breastfeeding to lay the amazing foundations for your baby too.

Historically, the role of a New Mum was to establish great attachment with her newborn, to take the time to breastfeed her infant and to focus on healing her body ready for the next pregnancy. The optimal time between children being 3 yrs between children to allow full healing (but this would rarely happen). Only after this amount of time would she then think about her sex drive. She had extended family and the sisterhood supporting her and helping with the baby as well as any older children.

Roll forwards several decades later and we find ourselves, especially in the West, laden with ideals and expectations of being the perfect parent with perfect feeding patterns from day 1, a pre pregnancy body within 6-12 weeks, a return to an insatiable sex drive within 6-12 weeks and either a return to full time corporate work within a few months or becoming a social media influencer further portraying the highlight reel of having a newborn. Oh and not only that, Mum's are expected to do all that with little or no support from extended family and the sisterhood! I feel stressed just writing the truth!



Your Body Needs To Heal

After having a baby very little emphasis is put on the lifestyle and nutritional aspects for healing to the postnatal woman. A nutritionally dense way of eating builds the foundations of health for decades to come for you (and you baby if you are breastfeeding).

Fuelling your body with great foods can do the following:

Aid fat loss -balancing the hormones will aid fat loss.

C - section - provide deep healing to the uterus

Healing the Diastasis Recti and Pelvic Floor - Collagen is required to heal the connective tissue of and muscles.

Energy - Provide a controlled level of energy rather than the boom/bust cycle of sugar and caffeine which will lead to storing fat (especially round the tummy area).

Improve Mental Wellbeing - what is happening in the gut affects the brain and by stabilising the hormones overall mood should be improved.

Whether you have had a vaginal delivery with/without tears, episiotomy and instrumental assistance or whether you have had an elective/emergency caesarian section, your body has undergone significant trauma. You may now have a Diastasis Recti and/or prolapse and you can influence the rate and the effectiveness of your healing by your nutrition and lifestyle habits.



The Stages Of Healing

There are 4 stages to healing which should help you understand what is happening to your body.

- 1. Haemostasis** - (within hours of injury/birth) is when the blood vessels constrict, blood coagulates which causes a temporary blockage. The wound is sealed.
- 2. Inflammatory Phase** - (4-6 days after injury/birth) the bacteria and cell debris are removed from the site of injury.
- 3. Proliferation Phase** - (2-3 weeks after injury/birth) new blood vessels and collagen are deposited and the wound contracts.
- 4. The Maturation/Remodelling Phase** - (Up to 18months to 2years after injury/birth) collagen remodels into straight lines.

Isn't your body amazing! In the practical sessions we focus on the importance of movement and good posture to help the collagen remodel with great alignment rather than being in crumpled up position causing pain when you go to move etc.



What Your Body Needs To Heal Well

- 1. Enough calories** - now is not the time to start some crazy keto diet or to starve yourself wanting to get rid of any weight gained in pregnancy. Without enough calories your body won't heal.
- 2. Protein** - amino acids are the building blocks of collagen, deficiency seriously affects healing and immune function
- 3. Carbohydrates** - they get bad press. They are your body's best fuel source and are an important source of many vitamins and minerals. Cells in your body rely on a constant and steady supply of energy from glucose to function optimally. While you don't want your blood sugar chronically high you don't want it too low either. They fuel activity within the cells which is turn fuels metabolic function. When eaten with a balance of protein and fat they enter the bloodstream more slowly.
- 4. Water** - Hydration is key, each collagen molecule is 70% water. We're talking 1.5-2L daily not like 4L though as you'll end up just peeing out all your nutrients.
- 5. Vitamins and Minerals** - a nutrient dense diet and a high quality post natal supplement massively improve healing and general well being.
- 6. Essential fatty acids** - used for energy, brain function, spares the protein so it can be used for wound healing.
- 7. Antioxidants** - foods high in these have anti-inflammatory effect on the body.
- 8. Oxygenation** - good posture will allow for more effective air entry into the lungs allowing more oxygen to circulate through the body.
- 9. Reducing Stress** - A massive one! Increased stress massively impairs wound healing. Did you know that sunlight reduces cortisol by 21% per hour? The more time you can spend outdoors in a green environment the lower your cortisol levels will be.

What Impairs Healing

1. Smoking - causes narrowing of blood vessels up to 50mins after each cigarette, increases the amount of Carbon Dioxide in the tissues therefore decreases the amount of oxygen needed for healing.

2. Sugar - higher glucose levels can stiffen the blood vessels making it harder for blood to flow making it harder for nutrients and oxygen to reach cells and repair them. Mums will inherently grab something sugary for ease, thinking that it's a quick way to get energy. The boom/bust cycle of relying on sugar is a vicious cycle that does you no favours.

3. Stress - elevated cortisol levels increases the production of the inflammatory cytokines which causes inflammation in the body. Caffeine can also increase the cortisol levels so don't hammer the coffee habit!

4. Poor sleep hygiene - this is literally the cruelest thing to say to new mum!!! I'm sorry, it's more to be aware that a lack of sleep increases your cortisol levels. The hygiene part doesn't refer to fresh bedsheets every night but more that blue light (laptop, tv, phones) suppresses the melatonin secretion needed for restful sleep and so 2hrs before going to bed turn off the devices. Also resist the urge for online shopping and checking other people's fabulous lives on social media whilst feeding your baby in the night as the blue light, even if not shining in their eyes will affect their melatonin levels and may well affect their sleep too.

5. Anaemia - really common in new Mums especially if you have lost blood during birth. Symptoms of this are weakness, tired, breathlessness. A natural iron supplement (spatone or the like) that can be put into a small glass of orange juice is always a great idea for a new Mum.

6. Malnutrition - your body needs enough high quality food to heal.

7. Overtaxed liver - the liver is used for connective tissue. If it is being used to detoxify processed foods, refined sugars, BPA from plastics, parabens from skin creams it has less use for the connective tissue. Organic skin cream is a good option to reduce the parabens.

Conditions such as Ehlers Danlos Syndrome, Diabetes and medications for Cancer and for Clotting can also effect healing.

Nutrition For Soft Tissue & Bone Healing

Foods that contain collagen:

1. Bone Broth - throw your left over bones from any boned meat (eg. chicken thighs, legs , lamp chops, roast chicken carcass) into a pan with water and simmer for several hours. That is your bone broth that you can add to cooking most things.

2. Vitamin A - liver - especially grass fed beef. That can include liver pate.

3. Collagen protein powder - we're not talking protein powder full of rubbish consumed by avid weight lifters for the gains. I would recommend Nature's Cure Collagen Hydrolysate (available on amazon) or Great Lakes. They are both unflavoured and can be easily dissolved in drinks or put into smoothies.

4. Amino acids - a) Lysine and Proline - found in meat, chicken, fish, egg whites (free range), wheatgerm and peanuts b) Arginine and Glutamine - coconut water

5. Vitamin C (and lots of it) - Found in citrus fruits, 100% pure orange juice, strawberries, rose hips, dark leafy vegetables (steamed) as they are kinder on your stomach)

6. Vitamin E - sunflower seeds, peanuts, sardines, salmon, sweet potato

7. Copper - oysters, beef liver, liver pate

8. Hyaluronic Acid - Seaweeds (kelp), sweet potato, avocado, mango, bone broth soups

9. Zinc - Pecans, cashews, dates, cocoa, oysters, beef, blue cheese, eggs (free range), cocoa, chocolate.

10. Essential fatty acids - many foods have omega 6 added, but you also need omega 3 found in wild salmon, sardines, grass fed beef, milk, yoghurt, cheese and eggs (free range for dark yolks)



Healing & Hormones

Okay, so we've learnt about healing. What about supporting your sex hormones, oestrogen and progesterone being a couple of them. Did you know that your oestrogen levels drop to 10% of what they were when you were pregnant with 3 hours of giving birth? (woah there!). Not only that but did you know that 7 days after giving birth they plummet to levels seen in a post menopausal lady?

What about progesterone, that glowy, feel good hormone that made you 'bloom' in pregnancy, sorry there's not great news either, 72hrs after giving birth the levels of progesterone are undetectable. So if anyone comments on how hormonal you seem..... (insert applicable response).

Hopefully you may start to understand a little bit more why supporting your healing and hormones plays such a key part as a Mum. This next section should hopefully give you more of an idea of the high quality foods we're talking about and some easy recipes to follow.

As a rule of thumb plan each meal with good sources of protein as the centrepiece, add some carbohydrate and essential fats and feel wholly satisfied, cutting your cravings for high processed, empty caloric, healing reducing rubbish!



Putting It Into Practice - The Food Bit

Great sources of Protein - eat the best (organic and locally sourced) eggs, chicken, pork, greek yoghurt, white fish, wild salmon, sardines, herring, mackerel, oysters, bacon, grass fed red meats, meat organs (liver, kidney), quinoa

Great sources of Essential Fats - Coconut oil, avocado, olive oil, organic butter, nuts (a small handful is enough) (cashews, pecans, almonds, natural peanuts, Brazil nuts, seeds (chia, sunflower, pumpkin).

Carbohydrates - eat the best (organic and locally sourced due to them growing in mineral dense soils giving you bang for your buck on vitamins, minerals and antioxidants)

Root Vegetables - sweet potato, butternut squash, beetroot, carrots, onions, pumpkin, turnips, celeriac, parsnips, potatoes (roasted preferred to boiled due to the starch content).

Fermented foods - amazing for gut health, (sauerkraut, other pickled vegetables).

Other vegetables with key vitamins/minerals - watercress, cabbage, mushrooms, cauliflower, broccoli, Brussel sprouts, globe artichokes, green leafy veg, courgettes, green peas.

Fruits - lemons, kiwis, limes, oranges, bananas, apples, peaches, dates, cherries, black grapes, melon, raisins, mangoes berries, berries and more berries

Starchy carbs - red/black/brown rice (it does exist), uncooked oats, quinoa

Anti-inflammatory additions - root ginger, turmeric, garlic, high quality dark chocolate (clearly a small amount per day).

A Note On Dairy

There are many different thoughts on consuming dairy especially milk. Personally, if the mum doesn't have any intolerances then I would add milk to the diet as it is a complete food source with a wonderful ratio of carbohydrate: protein: fat and is nutrient dense. A 200ml glass of semi skimmed cow's milk contains 7.2g protein, calcium, iodine, potassium, phosphorus and Vitamins B2,B12. If your baby is suffering with reflux it is advisable to try cutting out dairy to see if this affects it.

Great sources of Dairy - Cow's Milk, cheese (any), yoghurt, cottage cheese, grass fed butter.

Nutritional Breakfast Examples

(ideally within 30minutes of getting up).

Smoothies are a great way to get loads of veggies and nutritionally dense food into a drink. If you're putting in green veg, the recommendation of steaming until they are soft is so they are kinder to your stomach and causes less bloating/wind (for you and baby if you're breast-feeding).

Ideas for smoothies blended in a food processor:

- 1. CHERRY CHOCOLATE** - Kale (steamed until soft) + Collagen + Frozen Cherries + Cocoa Powder Coconut Milk (unsweetened)
- 2. ALMOND BERRY** - Spinach (steamed until soft) + Avocado + Collagen + Cocoa Powder + Frozen Blueberries + Almonds + Coconut Water (unsweetened)
- 3. SUPER GREEN** - Mixed Greens (steamed until soft) + Avocado + Green Apple + Cucumber + Celery + Lemon + Ginger + Water (optional - add some chia or ground flaxseeds and/or herbs like cilantro or parsley and/ or a bit of jalapeño!)

You get the idea, a nutritional smoothie should contain:

- 1. Carbohydrate** - Oats (uncooked), banana, cow's milk (if tolerated)/unsweetened coconut water
- 2. Minerals, vitamins** - green veg, (steamed until soft), berries, (other veg rather than high sugar fruits)
- 3. Protein** - collagen powder, greek yoghurt (tends to have higher protein and less sugar)
- 4. Fat** - Avocado, coconut oil, some nuts/seeds

A few top tips also include:

Pre steam green veg and put in the fridge so they are easy to add.

Buy Frozen Berries for ease and knowing that they are always there and not mouldy.

Unsweetened Coconut Water is jam packed with amino acids all needed for promoting healing.

Enjoy experimenting!!

Other Breakfast Ideas

Porridge (with any leftover gluten free grains).

Warm leftover gluten free grains (quinoa, brown rice) + low glycemic fruit (berries, citrus fruits, peaches + nuts and/or seeds + added fun (shredded coconut, coconut yogurt (unsweetened), coconut oil or butter, and/or dried fruit and/or raw cheese or plain yogurt, and/or herbs/ spices like cinnamon or ginger)

Bircher Muesli

In a bowl mix together grated apple, oats, nuts (any), cinnamon

Stir in greek yoghurt and 100ml water

Cover and chill overnight

Add some seeds in the morning

Overnight soaked oats

Oats, unsweetened coconut water, greek yoghurt, frozen berries, nuts, seeds

Make it the night before, put it in the fridge and voila, breakfast is served!

Chocolate Banana Pancakes

Banana + unsweetened coconut milk + egg + cocoa powder

Add berries, seeds, nuts on top whilst in pan



Lunches

Bone broth soups

To include bone broth, protein such as meat, quinoa, root vegetables (pumpkin, butternut squash, sweet potato, carrots, onion, garlic) and dark green vegetables.

Salad

Chicken, quinoa, asparagus, carrots, artichokes, coconut oil
(same idea applies as with the smoothies - protein, carbohydrate, fats)

Omelette

Eggs, root vegetables (pumpkin, butternut squash, sweet potato, carrots, onion, garlic), peppers, mushrooms (well cooked), tomatoes, cheese

Eggy oven baked muffins

Coconut oil for greasing individual muffin tins

Bacon, eggs, peppers, tomatoes, cheese (grated), sea salt and pepper to taste

Whisk altogether, divide between muffin cups

Bake in the oven for 15-20mins

Baked Sweet potato

Bake a whole sweet potato in the oven until soft

Fill it with cottage cheese/ left over Bolognese or other protein based main course



Slow Cooker Dinners

Slow Cooker recipes packed with nutrients will ideally include:

- Protein (ideally on the bone)
- Root vegetables (either in this main meal or done as a side)
- Leafy Green vegetables
- Herbs + spices (nothing too hot if breastfeeding)
- Sauces, tomato based, unsweetened coconut milk

Examples of this are:

Bolognese

- Onion, garlic, small amount of chilli
- Grass fed lean beef mince
- Chopped tomatoes
- Tomato puree
- Marmite
- Oregano, basil
- Salt and pepper

Put everything in the slow cooker, leave to cook for about 5hrs.

Curries

- Onion, garlic, chilli, cumin, curry powder, turmeric, grated root ginger, ground coriander etc.
- Protein (meat of choice, on the bone preferred)
- Chopped tomatoes
- Added herbs/spices of choice

Put everything in the slow cooker, leave to cook for about 5hrs.

If meat is on the bone take it out, shred it and put it back in the sauce.



Other Dinners

Stir Fry

Protein (eg. Chicken, pork/beef strips)

Coconut oil, grated root ginger, onions, garlic

Add other vegetables, eg. peppers, mushrooms, beansprouts, cabbage etc

Dash of light soy sauce

Have with black/brown/red rice

Sweet potato fries

Wash and slice sweet potatoes into chip structures

Put a little bit of coconut oil and rock sea salt on them

Space them out well on a baking sheet

Put them in the oven (200 degrees C) for 45mins

Cauliflower/celeriac/carrot mash/puree

Roast the vegetable of choice until soft

Add some grass fed butter

Season to taste

Feeling adventurous?

Eggs or other animal protein + greens and root vegetables (sauté in olive oil and garlic, add some bone broth for added power!) + sauerkraut (or other fermented food)



Snacks (Between Meals To Keep Blood Sugar Stable)

Try to incorporate both protein and carbs into a snack to stabilise the blood sugar. Any of the following are great:

- Fruit and plain greek yoghurt +/- honey
- Blueberries and almonds (other fruit and nuts combo)
- Cheese and fruit
- 1 Square of high quality dark chocolate + nuts
- Cow's milk (if tolerated) and cocoa = hot chocolate
- Smoothie (see previous ideas)

In Summary

Taken from the 'Big Rocks' of Healing Nutrition (by Jenny Burrell)

1. Lots of vegetables – organic where possible.
2. Go easy on the coffee, it increases cortisol and will encourage belly fat.
3. Cut the refined sugar where you can – it's inflaming your body, inflammation will reduce the potential for both healing and fat loss – alcohol counts as sugar....consume wisely.
4. Protein at every meal – it's vital for tissue recovery.
5. Protein breakfast – will stop you getting on the sugar rollercoaster.
6. Soothe your adrenals – get some Tulsi Tea.
7. Keep hydrated, healing is retarded by dehydration.
8. Breathe well – all cellular activity requires oxygen.
9. Add more vegetables instead of starch bread and staples.
10. Juice but ensure mostly vegetables not lots of fruits.
11. Protein/berry smoothies are an excellent way to have a protein breakfast FAST!
12. Avoid hormone disruptors in plastics....get BPA free boxes to transport our food.
13. Choose anti-oxidant rich berries as your 'fruit of choice'.
14. ONLY EAT BEAUTIFUL FOOD!



About Nikki & Complete Pilates

Complete Pilates is a service run by Nikki Kelham, a Chartered Physiotherapist and APPI Certified Pilates Instructor. She specialises in pre and post natal care and seeks to encourage healthy lifestyle and realistic, attainable strength goals with her clients.

She operates a variety of in-person and online courses and classes, you can find out more by visiting **completepilates.co**

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