Treatment Plan for JESSICA CROUGHTON
Date : 21.10.24

Patient Health Priorities : Improve fatigue. Support neurotransmitters. Reduce inflammation. Improve bloating. Reduce cholesterol. Support kidney function. Improve hormonal detoxification.

Short term

- Improve fatigue through improvements in iron metabolism, supporting the adrenal glands and increasing stress resilience and recovery.
- Support neurotransmitter production through optimised gut function (improve barrier function, reduce inflammation, improve microbiome) and nutritional support
- Reduce inflammation to improve endometriosis, back pain and mood changes through optimised gut function and nutritional support
- Improve bloating by supporting digestion with nutritional and herbal strategies
- Reduce cholesterol through dietary and nutritional strategies, and improvement in liver function
- Improve hormone detoxification to improve symptoms of endometriosis

Long Term

- Support kidney function to prevent decline in function
- Improve oestrogen metabolism to prevent progression of endometriosis

Nutrition Overview for JESSICA CROUGHTON
Date : 21.10.24

Include the following foods...		Target
Fibre	**Soluble fibre** - fruit and vegetables, barley, seed husks, flaxseed, psyllium, oat bran, legumes (lentils, peas, dried beans, soy) **Insoluble fibre** - wheat bran, corn, rive, skins and fruit and vegetables, dried teas, nuts, seeds, wholegrain foods **Resistant starch** - unripe banana, lentils, unprocessed cereals and grains, cooked and cooled potato and rice	30g/day
Water		2L/day
Protein	**Optimal sources** - poultry (chicken, turkey, duck), seafood, eggs, lean meats **Plant sources** - quinoa, chickpeas, lentils, nuts, seeds, peas, beans, tempeh, hemp seeds, hemp protein powder **Limit** - dairy, red meat, processed meats (bacon, sausages, deli meats)	With each meal
Healthy fats	Fatty fish - salmon, mackerel, anchovies, sardines, herring; flaxseed/linseed, chia seeds, walnuts, olive oil, eggs,	
Iron	**Haem iron sources** : meat (beef, lamb, pork, kangaroo), poultry (chicken, turkey, eggs), seafood (salmon, sardines, tuna) and organ meats (liver, kidney, pate) **Non-haem sources** : legumes (mixed beans, lentils, chickpeas), dark green leafy vegetables (spinach, silver beet, broccoli), tofu, nuts, seeds, dried fruit, wholemeal pasta and bread	18mg/day

Eliminate or limit the following foods...	
Saturated Fat	fried foods, dairy products, coconut oil, butter, takeaway foods, bakery goods, commercial biscuits and crackers, fat on meat, ghee, lard, palm oil, sausages, cured meats, ice cream, milkshakes, chocolate
Seed oil	Eliminate - Canola oil, sunflower oil, corn oil, safflower oil, grape-seed oil, rice bran oil, cottonseed oil, sesame oil,
Caffeine	Avoid after 1pm No caffeine until 1 hour after a healthy breakfast

Track your intake using the Easy Diet Diary app (free download)

Prescription Overview for JESSICA CROUGHTON
Date : 21.10.24

PRESCRIPTION	Breakfast	Lunch	Dinner	Bedtime
Bioheme (Iron)	1 every second day			
Vitamin C Powder	1 tsp with iron			
SPM			1	

Herbal and nutrient prescriptions are individualised to your own health factors. They should only be taken by the person they are prescribed for. Please advise your naturopath if you commence a new pharmaceutical medication as this may change your herbal/nutrient prescription.

Other reminders:

- **Herbal Prescription** - can take 7.5mL twice daily if more convenient
- **Iron supplement** can be taken Monday, Wednesday, Friday as an alternative dosing schedule. Please track it carefully using a printed calendar or similar

Testing Recommendations

- Microbiome testing has been ordered
- MTHFR genetic testing could be considered

Detailed goals and rationale for JESSICA CROUGHTON
Date : 21.10.24

HEALTH GOAL	RATIONALE & INFO	DOSE
SPM Active	SPM Active is a specific and targeted approach to facilitate the resolution phase in patients experiencing inflammation which may be failing to resolve in a timely manner. Unresolved inflammation can lead into low-grade, chronic inflammation that may worsen existing disease states, impair recovery and negatively affect healthy ageing. SPM Active contains standardised and concentrated specialised proresolving mediators	Take 1 capsule daily
Improve iron status through iron supplementation	Improve production of healthy red blood cells, in the formation of haemoglobin, and in oxygen transport within the body by correcting iron deficiency Improve immune function through increasing iron availability for macrophage activity and T lymphocyte proliferation Improve energy levels by supporting ATP production Improve thyroid hormone synthesis Research : www.Ncbi.nlm.nih.gov/pmc/articles/PMC9219084/ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7193469/ Take iron either upon waking or before bed, at the same time every second day, with a vitamin C supplement. Take 6 hours away from heavy exercise. Avoid supplements containing zinc, selenium or calcium at the same time. Avoid tea, coffee, dairy and soy protein at time of taking iron.	Prescribed : BioMedica Bioheme 30 capsules Take 1 capsule every second day *** Place a calender on your fridge and mark it each time you take a capsule OR take your iron on Monday Wednesday Friday if it's easier to remember ***

Improve iron status through dietary strategies	Optimise iron rich foods to improve iron status Haem iron sources : meat (beef, lamb, pork, kangaroo), poultry (chicken, turkey, eggs), seafood (salmon, sardines, tuna) and organ meats (liver, kidney, pate) Non-haem sources : ;legumes (mixed beans, lentils, chickpeas), dark green leafy vegetables (spinach, silver beet, broccoli), tofu, nuts, seeds, dried fruit, wholemeal pasta and bread Recommended Daily Intakes Female 19-50 years : 18mg/day Female 51 years and older : 8mg/day https://www.nrv.gov.au/resources/nrv-summary-tables	Minimum 18mg per day
Optimise Iron Absorption through nutritional supplementation of vitamin C	Supports healthy immune system function Improves iron absorption by enhancing the bioavailability of iron Supports collagen synthesis High plasma levels can help decrease the risk of heart disease. Prevention of LDL oxidation by vitamin C may prevent atherosclerosis, thereby mediating a potential role in CVD risk reduction	Prescribed : Amazonia Raw Wholefood Extracts Organic Vitamin C+ 120g Add 2 teaspoons to a glass of water and take with iron supplement (can be taken daily too). Available from Oborne Health Supplies.

Increase fibre to 30g per day to improve cholesterol, improve hormone elimination and gastrointestinal microbiome	• Balance gut microbiome to support immunity, support neurotransmitter production and reduce inflammation • Improve bowel function and hormone metabolism – excess hormones are bound to fibre and excreted during bowel movements • improves satiety which help with weight loss, also bind fats and lowers absorption of glucose through delaying gastric emptying • Soluble fibre reduces cholesterol reabsorption, improves hormone elimination and improves satiety, improves faeces bulk • Insoluble fibre bulks faeces, improves constipation and speeds up digestion • Resistant starch improves microbiome health to produce short chain fatty acids, which may protect against colon cancer and lower cholesterol levels Research – https://www.mdpi.com/2072-6643/12/3/859/htm **Optimise dietary fibre** • *Soluble fibre – fruit and vegetables, barley, seed husks, flaxseed, psyllium, oat bran, legumes (lentils, peas, dried beans, soy)* • *Insoluble fibre – wheat bran, corn, rive, skins and fruit and vegetables, dried teas, nuts, seeds, wholegrain foods* • *Resistant starch – unripe banana, lentils, unprocessed cereals and grains, cooked and cooled potato and rice* https://www.eatforhealth.gov.au/nutrient-reference-values/nutrients/dietary-fibre	**Aim for 30g per day from a variety of sources of fruit, vegetables legumes, seeds and wholegrain.** *Increase fibre intake gradually to avoid gastrointestinal side effects.* *Track your intake using the Easy Diet Diary app (free download).*
Increase water intake to 2L per day to support kidney health, and maintain bowel function	Improve bowel function by increasing water intake to normalise stool consistency and transit times (which will improve cholesterol and hormone elimination) **This is particularly important when increasing fibre in the diet. Fibre increases without adequate water intake may lead to constipation**	**2L per day**

Decrease dietary saturated fats to reduce cholesterol, improve gastrointestinal health and reduce inflammation	Excess saturated fats stimulate NF-κB signalling to increase inflammatory cytokines Saturated fats negatively alter microbiome by decreasing diversity, gram-negative species and short chain fatty acid production, while increasing pathogenic species Reduction of saturated fats: • reduces LDL cholesterol, total cholesterol and lowers with risk of cardiovascular events • Improves gastrointestinal microbiome diversity and short chain patty acid production, leading to a reduction in inflammation • May lead to a small reduction of body weight Saturated fats are found in fried foods, dairy products, coconut oil, butter, takeaway foods, bakery goods, commercial biscuits and crackers, fat on meat, ghee, lard, palm oil, sausages, cured meats, ice cream, milkshakes, chocolate Research: https://doi.org/10.1093/advances/nmz125 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7388853/	

Optimise intake of intake of healthy fats to provide energy, reduce inflammation	Include these sources of essential fatty acids in your diet on a regular basis: • flaxseed/linseed • chia seeds • walnuts • Hemp seeds, hemp seed oil • Olive oil • Fatty fish - salmon, mackerel, anchovies, sardines, herring Increase Omega-3 intake by inclusion of fatty fish of 2-3 serves per week, with a serve being 150g. Select fish high in Omega-3, including mullet, salmon (Atlantic or Australian), mackerel, sardine, rainbow trout, bream or silver perch. Research: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7875671/ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6117694/ https://doi.org/10.1111/j.1753-4887.2010.00287.x	Aim for 2-3 serves (150g) of fish per week

Protein with each meal to support neurotransmitters and improve energy levels	Protein supports hormone and neurotransmitter synthesis, and the growth of new tissue. It is crucial to maintain muscle mass. It can mitigate muscle mass losses and muscle function losses associated with sarcopenia. Optimal protein in take may help to improve energy balance due to it's slow energy release, which can help to regulate blood glucose levels. **Optimise dietary sources of protein** *Complete protein sources* : lean meat, fish, seafood, eggs, dairy products, soy, quinoa, amaranth seeds *Plant sources* : seeds, nuts, legumes (lentils, beans, chickpeas, split peas), whole grain, tofus **Minimum Target:** FEMALE: Include 0.75g of protein per kilo of body weight per day **Optimal intake:** 1.3 - 1.8g of protein per kilo of body weight per day FEMALE : 88-120g per day Evidence : https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6566799/ https://doi.org/10.1093/ajcn/78.4.734	Hemp Foods Organic Hemp Gold Protein Add to smoothies or use to make chia seed puddings. Available from Oborne Health Supplies Track intake using the Easy Diet Diary app.

Caffeine	Wait until 1 hour after eating to have your first coffee of the day Eliminate any sources of caffeine after midday, including tea, coffee, cocoa, cola and energy drinks. Caffeine has a half life of 3-4 hours in a healthy adult. a typical cup of coffee contains 60-200mg caffeine. a typical cup of black tea contains 40-80mg caffeine. a typical cup of green tea contains 10-40mg caffeine. a typical cup of cocoa contains 5-40mg of caffeine. 100 mL Coca-cola contains 10-30mg of caffeine. Nervous system effects : Caffeine stimulates the central nervous system, triggers a stress response and may disturb sleep. Sleep effects: caffeine blocks adenosine receptors in the brain. One of the things that makes us feel 'sleepy' is the build-up of adenosine levels in our forebrain and hypothalamus, hence why caffeine can affect our sleep. Cardiovascular effects : Caffeine stimulates cardiac output and heart rate, can raise LDL cholesterol. Nutrition effects : Caffeine reduces the absorption of iron, and increases the excretion of phosphorus, potassium, magnesium and calcium.	Substitute your caffeinated beverage for a caffeine free alternative Rooibos tea roasted dandelion & chicory (tastes like coffee) herbal tea chai or turmeric latte