

Ashleigh van Nierop. Naturopath BHSc (Nat), Bach Comp Med. Member ANTA.

Ash@biosoulnaturopathy.com www.Biosoulnaturopathy.com

TREATMENT PLAN FOR: Emma Dodsley Date: 24/9/24

Health Goals	1. Quit vaping
	2. To establish a morning routine that supports smoking cessation and supports circadian rhythm regulation (sleep-wake cycle).
	Shift to a modern paleo way of eating to reduce systemic inflammation.
	4. Exercise 30 mins, three times per week.
Diet	 Paleo diet. This is to reduce systemic inflammation. ADHD, PCOS and endo are all associated with body-wide inflammation and immune involvement. Avoid grains, legumes, dairy. Think of this as a detox and reset for your body. Systemic inflammation will decrease significantly. Ideally do this for 6 weeks. After 6 weeks we can gently reintroduce certain foods and see how your body reacts. However, it is likely that foods such as wheat may always be a no-go.
	2. Minimise caffeine intake. Caffeine consumption during pregnancy can pose risks to your baby's health. It may cause your baby's heart to beat very fast and potentially lead to dangerous arrhythmias or irregular heart rhythms. If consumed in large amounts, caffeine can make your baby dependent on it. This dependency can result in irritability and withdrawal symptoms in newborns, similar to drug withdrawal. It's important to understand that caffeine affects babies differently than adults. While an adult's body typically metabolises half of the caffeine consumed in 3-7 hours, a newborn or preterm baby may take up to 120 hours to process the same amount. For a developing foetus, this process takes even longer. This prolonged exposure increases the potential risks associated with caffeine consumption during pregnancy.

Lifestyle

To establish a morning routine that supports smoking cessation:
 Waking up at 7am daily. Go straight to the kitchen and put the
 kettle on and make yourself a cup of tea. Drink the tea outside.
 Practice mindfulness when you enjoy your tea- look at the steam,
 smell the aroma, feel the warmth of the cup, taste the tea flavour.
 Enjoy.

Once you are good at this, then you may wish to add an activity after your tea. Perhaps taking a shower or watering the garden. The longer you can occupy yourself before vaping the better!

This structured approach aims to rewire brain circuits, creating healthier habits and supporting the long-term goal of quitting vaping

..morning sunlight helps regulate your "circadian clock" — the body's mechanism for anticipating when to wake up and go to sleep — and it manages other biological processes like hunger and body temperature. Later in the day, try to get outside in the afternoon. The particular wavelengths of the sun when it is low in the sky (yellows and oranges, in contrast with blue) come through even if it's overcast. Sunlight viewed in the late afternoon/evening communicates to the brain's circadian clock that it is evening and time to begin the process of transitioning to sleep that night.-https://www.hubermanlab.com/newsletter/using-light-for-health

 Buy one of the flavoured air devices to help quit vaping. Here's two that I've seen around: https://tryfum.com.au/

https://tryfum.com.au/

- 3. Seek a second opinion from G.P. regarding spinal/back issue.
- 4. Consult with your psychiatrist about adjusting your medication dose.
- 5. Find a form of exercise that you enjoy and partake in it 3 times a week. Make sure your heart rate elevates, and you get a bit sweaty! Here's why:
- 1. Pregnancy health:
 - o Reduces risk of gestational diabetes
 - o Helps manage healthy weight gain
 - o Improves cardiovascular health
 - o Potentially eases labour and delivery
- 2. ADHD management:
 - Improves focus and concentration
 - Reduces symptoms of hyperactivity and impulsivity
 - Boosts mood and reduces anxiety (increases endorphins and dopamine)
 - Enhances executive function
- 3. Smoking cessation support:
 - Reduces cravings for nicotine

	Helps manage withdrawal symptoms				
	 Provides a healthy alternative to cope with stress 				
	4. General well-being:				
	 Improves sleep quality 				
	 Boosts energy levels 				
	 Enhances overall mood and reduces depression risk 				
	 Strengthens muscles and improves posture 				
	5. Stress reduction:				
	 Lowers cortisol levels 				
	 Provides a healthy outlet for tension 				
	6. Long-term health:				
	Supports postpartum recovery				
	 Establishes healthy habits for life after pregnancy 				
Doubless					
Barriers					
Referral/Investi	1. Get your bloods done from the G.P. and email me the results. I'll have				
gations	a look at them prior to your next visit.				
Prescription	- Pure Natal Multi Vitamin 1/day				
	- SPM fish oil high dose 1/day				
	- NAC 1/day				
	- I omitted the extra magnesium as there may be a small chance it can				
	interact with the dexamphetamine.				
	· ·				
Recipes:					
necipes.					
Other	Return visit in 3 weeks				
Extra Info	NAC:				
	N-acetylcysteine (NAC) has emerged as a potential treatment for reducing				
	nicotine cravings and withdrawal symptoms in individuals with addiction,				
	particularly in smoking cessation contexts. The efficacy of NAC, however,				
	appears to be mixed based on recent studies.				
	Efficacy in Smoking Cessation				
	A randomized controlled trial in Indonesia found that NAC				
	significantly increased smoking abstinence rates (37.7% vs. 6.6% for				
	placebo) and reduced craving scores (6 vs. 12, p=0.04)(Harlivasari et				
	al., 2024).				
	NAC's mechanism may involve modulating glutamate levels, which				
	could help alleviate withdrawal symptoms and cravings associated				
	with nicotine addiction(Fedele, 2023)./				

NAC & Mental Health:

MENTAL HEALTH					
ADHD (in patients with SLE) ¹⁸	2400-4800mg/ day	12 weeks	Clinically significant symptom reduction in ADHD was observed in the NAC treatment group compared to placebo (p=0.001).		
Autism ¹⁹	900-2700mg/ day	12 weeks	Improvement in irritability, stereotypy, speech and lethargy/ withdrawal in the NAC group vs placebo (p<0.001).		
Autism with Risperidone ²⁰	600-900mg/day	8 weeks	The NAC + Risperidone group showed significantly greater reduction in irritability compared to Risperidone alone (p<0.035).		
Bipolar disorder ^{21,22,23}	1000mg BD	24 weeks	NAC showed significant improvement in MADRS (p<0.01) & BDRS (p<0.01) scores after 8 weeks, with decreased suicidal thoughts (p=0.03) & mania (p=0.04) compared to placebo.		
Depression ²⁴	500mg BD	16 weeks	Significant reduction in symptom severity from baseline to endpoint (p=0.001), especially in those with more severe depression.		
Mania ²⁵	1000mg BD	24 weeks	Improvement in manic symptoms on Young Mania Rating Scale, while depressive symptoms worsened in placebo group.		
Early psychosis ²⁶	2700mg/day + standard care	6 months	NAC patients had improved cognitive processing speed, verbal fluency and reduced negative symptoms (p=0.047), plus increased blood and brain glutathione levels vs placebo.		
Obsessive compulsive disorder (OCD) ²⁷	600-2400mg/ day	12 weeks	NAC group showed a significantly improved Yale-Brown Obsessive Compulsive Scale score in SSRI-resistant patients (p=0.003).		
Obsessive compulsive disorder in children & adolescents ²⁸	600mg- 2400mg/day	10 weeks	NAC group had significant changes on the OCD scale (p=0.001) from week 4, with improvements in physical (p=0.005), emotional and social functioning (p=0.001), not observed in placebo.		
Parkinson's disease ²⁹	500mg BD	12 weeks	NAC treatment in PD patients increased dopamine transporter binding by 4.9% & improved PD symptoms significantly compared to standard care.		
Post-traumatic stress disorder (PTSD) with substance use disorder in veterans ³⁰	2400mg/day	8 weeks	NAC group showed a 32% decrease in PTSD scores and an 81% decrease in substance cravings compared to placebo (p<0.05).		
Schizophrenia ³¹	1000mg BD	24 weeks	A significant improvement was observed in negative symptoms on the Positive and Negative Symptoms Scale (PANSS).		
Traumatic brain injury ³²	1500-2000mg BD	1 week	NAC group had a complete resolution of their mild traumatic brain injury symptoms (headache, hearing loss, cognitive dysfunction).		

Issues with Elevit:

*Issues with Folic Acid (found in Elevit)

- Not the same as natural folate
- Requires conversion in the body, which can be inefficient
- Up to 50% of the population may have genetic variations (MTHFR) limiting conversion
- Poor conversion can lead to buildup of inactive folate, potentially dangerous for the foetus
- May contribute to recurrent miscarriage in some cases
- *Problems with Elevit and over the counter supplements
- Contains low doses of nutrients that may be ineffective
- Not strictly regulated by TGA for efficacy
- Uses less bioavailable forms of nutrients (folic acid, B12, iron, zinc)
- Missing essential nutrients like choline
- Insufficient vitamin D content (200 IU vs. recommended 1000-2000 IU)
- Unnecessary copper content that could lead to imbalances
- *Absorption and Bioavailability Concerns
- Conversion of inactive to active folate occurs in the digestive system and liver

- Suboptimal digestive and liver health can further slow conversion
- High doses of inactive folate may worsen the situation
- Some forms of nutrients in Elevit may cause gastrointestinal issues (e.g., iron as ferrous fumarate, zinc sulfate)

Omega 3's and Pregnancy:

The Benefits of Omega-3 Fish Oil

Omega-3s have been found to be essential for both neurological and early visual development of the baby. However, the standard western diet is severely deficient in these critical <u>nutrients</u>. This omega-3 dietary deficiency is compounded by the fact that pregnant women become depleted in omega-3s because the fetus uses omega-3s for its nervous system development. Omega-3s are also used after birth to make <u>breast milk</u>. With each subsequent pregnancy, mothers are further depleted. Research has confirmed that adding EPA and DHA to the diet of pregnant women has a positive effect on visual and cognitive development of the baby. Studies have also shown that higher consumption of omega-3s may reduce the risk of allergies in infants.

Omega-3 fatty acids have positive effects on the pregnancy itself. Increased intake of EPA and DHA has been shown to prevent pre-term labor and delivery, lower the risk of <u>preeclampsia</u>, and may increase birth weight. Omega-3 deficiency also increases the mother's risk of <u>depression</u>. This may explain why <u>postpartum mood disorders</u> may become worse and begin earlier with subsequent pregnancies.

https://americanpregnancy.org/healthy-pregnancy/pregnancy-health-wellness/omega-3-fish-oil-and-pregnancy/#:~:text=Omega%2D3%20fatty%20acids%20have,the%20mother's %20risk%20of%20depression.

Vaping and it's effects on the baby in utero:

Impact on Fetal Growth

- Vaping has been linked to reduced fetal growth, as evidenced by studies showing lower birth weights and growth restrictions in embryos exposed to e-cigarette vapor(Ozekin et al., 2023).
- Animal studies indicate that nicotine disrupts lung and skeletal development, with specific gene expression changes associated with impaired growth(Ozekin et al., 2023).

Neurodevelopmental Concerns

- Prenatal exposure to nicotine from vaping affects critical brain development, particularly in the hippocampus, where dysregulation of mTOR signaling pathways has been observed(Lee et al., 2023).
- Altered immune responses and increased cancer risks in offspring have also been reported, suggesting broader implications for longterm health(Ndeke et al., 2024).

Chemical Exposure Risks

 Vaping aerosols contain various carcinogens that can cross the placental barrier, potentially leading to DNA damage in developing organs(Ndeke et al., 2024). • The complexity of vaping products, including unknown inhalational toxins, raises concerns about their safety during pregnancy(Bush et al., 2024).

NOTE: Lifestyle and dietary recommendations have been provided to support your health goals. If you experience any adverse reactions or discomfort, discontinue the recommendations immediately. We will discuss modifying them during your next appointment. If you have any serious concerns, please contact me for guidance.

Herbal medicines have been prescribed as part of your treatment plan. Like any medication, discontinue their use if you experience rashes, diarrhea, digestive issues, allergic symptoms, or any other adverse reactions that you suspect may be related to the herbs. Please notify me immediately if you experience any such reactions.

Nutritional supplements have been prescribed to address your health condition. If you experience any signs or symptoms that you believe may be associated with these supplements, discontinue them immediately and contact me. Your health and safety are of utmost importance.