DR.VEGAN®

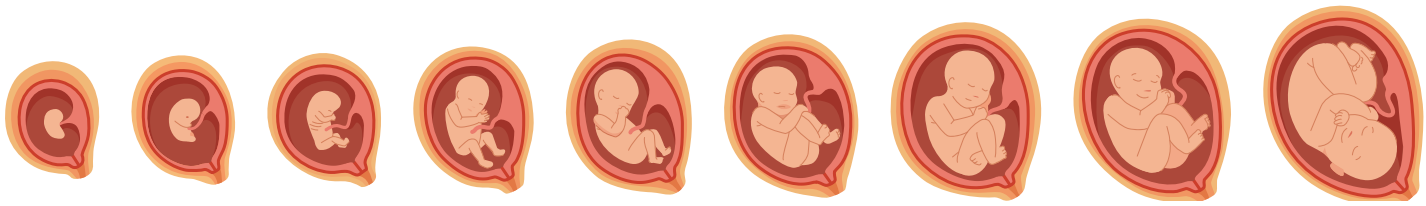
Supporting a healthy pregnancy

Nutritional foundations for pregnancy

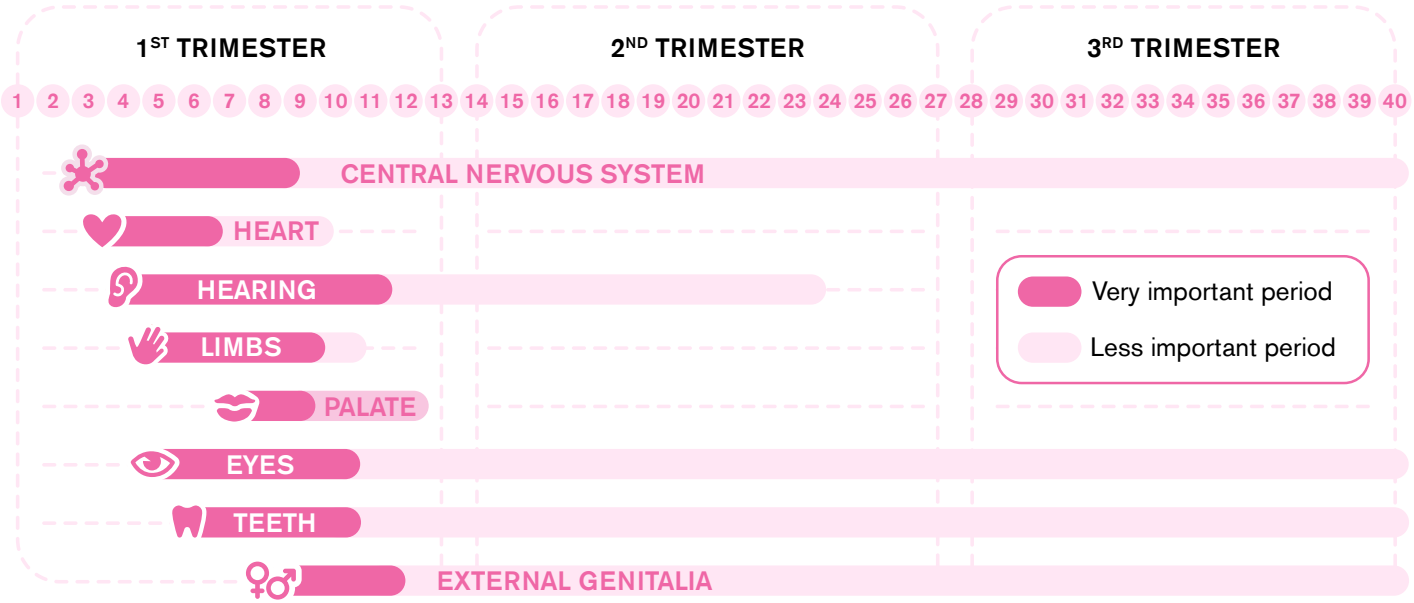
Practitioner Paper • *For practitioner use only*

Optimal nutrition before, during, and after pregnancy is essential to support maternal health and provides the best possible foundation for foetal and infant development. The physical demands of pregnancy greatly increase the requirements for nutrients. Studies consistently conclude that many pregnant women do not meet the recommended intake of several essential nutrients. The role of comprehensive prenatal supplementation is well established, with multi-nutrient formulations shown to support positive maternal and foetal outcomes.

STAGES OF DEVELOPMENT



1 MONTH 2 MONTHS 3 MONTHS 4 MONTHS 5 MONTHS 6 MONTHS 7 MONTHS 8 MONTHS 9 MONTHS



Inflammation

Inflammation plays an essential role in pregnancy and although needed to some level, too much inflammation can contribute to pre-eclampsia, miscarriage, premature labour, intrauterine growth restriction, gestational diabetes and neurodevelopmental disorders in offspring (linked to maternal immune activation).

Managing inflammation during pregnancy is an essential part of maintaining overall health and can be achieved through nutrition, physical activity, adequate sleep, stress reduction and supporting gut health.

Gestational Diabetes

Gestational diabetes mellitus is glucose intolerance of varying severity with onset or first recognition during pregnancy, typically diagnosed in the second or third trimester.

In mid to late pregnancy, placental hormones (human placental lactogen, progesterone and cortisol) increase insulin resistance to increase glucose delivery to the foetus. Gestational diabetes occurs when the maternal pancreas cannot compensate with sufficient insulin secretion.

Gestational diabetes increases the risk of

- Pre-eclampsia
- Caesarean delivery
- Higher long-term risk of type 2 diabetes and metabolic syndrome
- Large birth weight of the infant
- Birth trauma
- Neonatal hypoglycaemia
- Respiratory distress
- A higher risk of diabetes development later in life

THYROID FUNCTION

In pregnancy, there is an increased demand for thyroid hormones to support foetal neural development. The increase in human growth hormone stimulates the suppression of TSH and an increase in T4 production. Iodine requirement increases by 50% to facilitate the increased thyroid hormone production.

Risks of insufficient thyroid function during pregnancy:

- Miscarriage
- Pre-eclampsia
- Premature birth
- Impaired foetal neurodevelopment

Thyroid antibodies are also a concern during pregnancy and if raised, can also lead to miscarriage, premature birth and postpartum thyroiditis.

DIET AND LIFESTYLE TIPS FOR CLIENTS

Focus on food variety

Whole grains, fruits, vegetables, lean protein, and healthy fats.

Small, frequent meals

Small, frequent meals help manage nausea and maintain blood sugar levels.

Consume omega 3 food sources daily

These include chia seeds, flax seeds, walnuts and their oils.

Consume iron-rich foods daily

Iron supports increased blood volume (including lentils, spinach, beans and whole grains).

FIRST TRIMESTER

Goal: Supporting early development, managing nausea, and preventing nutrient insufficiencies.

- **Methylated folate:** 400 mcg / day to prevent neural tube defects
- **Vitamin B6:** High dose can help with nausea
- **Iron:** Increased demand due to blood volume expansion
- **Protein:** Essential for cell growth and development. 1.2 grams of protein per day per kg of body weight.
- **Omega3 Fatty Acids (DHA):** Essential for the development of the nervous system.
- **Hydration:** Essential if experiencing vomiting. Consider electrolyte drinks.
- **Keep blood sugar levels stable:** Eat complex carbohydrates and protein every 2.5 to 3 hours to help keep nausea at bay.
- **Keep a snack next to the bed** to eat upon waking if nausea is a problem.

SECOND TRIMESTER

Goal: Growth acceleration and bone development.

- **Calcium:** 1,000 mg/day to support foetal bone development.
- **Vitamin D:** Supports calcium absorption and immune function.
- **Omega 3 Fatty Acids (DHA):** Essential for brain and eye development.
- **Magnesium:** Supports muscle function and may reduce leg cramps.
- **Fibre:** To ease constipation due to progesterone slowing digestion.

THIRD TRIMESTER

Goal: Final growth, brain development, and preparation for birth.

- **Iron:** Peak demand to support maternal blood volume and foetal stores.
- **Choline:** Important for foetal brain and spinal cord development.
- **Vitamin C:** Supports iron absorption and immunity.
- **Protein:** 1.5 g / kg of body weight per day. Supports tissue growth and milk production.
- **Probiotics and prebiotics:** May reduce risk of group B *Streptococcus* colonisation and supports maternal gut health.
- **Smaller, more frequent meals:** To help with reflux.
- **Stay hydrated:** To support amniotic fluid levels and circulation.

FOODS TO AVOID

- **High-mercury fish:** E.g. shark, swordfish or king mackerel.
- **Raw or undercooked meat, fish or eggs:** Risk of listeria, toxoplasmosis, or salmonella.
- **Unpasteurised dairy products:** Unpasteurised milk and soft cheeses (e.g. brie or camembert).
- **Deli meats and pâté:** Unless heated until steaming hot.
- **Excess caffeine:** The official guideline is for pregnant women to limit caffeine to 200 mg per day (~1 cup of coffee). However, some research concludes that no amount of caffeine is safe in pregnancy.
- **Alcohol:** Avoid completely.

Prenatal supplements

Take prenatal supplements, especially supplements containing folate, vitamin D and choline.

Exercise regularly

- Aim for 150 minutes of moderate-intensity exercise per week, unless advised otherwise.
- **Safe options:** Walking, swimming, prenatal yoga and pilates.
- **Avoid:** Contact sports, high-risk falls and overheating.

Get adequate sleep

- Aim for 7–9 hours of sleep each night.
- Use pillows to support the bump and sleep on the left side in the second and third trimesters.

Manage stress

- Use relaxation techniques: Deep breathing, meditation, mindfulness, or prenatal massage.
- Stay connected with supportive friends, family or a pregnancy group.

Avoid harmful substances

- No smoking, vaping, alcohol or recreational drugs.
- Limit exposure to strong chemicals and pesticides.
- Review prescription and over-the-counter medications with a doctor.

Pregnancy Multinutrient

Formulated to support your optimal health during pregnancy and common pregnancy-related issues, our Pregnancy Multinutrient provides the finest 27 vitamins and minerals for complete support for you and your baby through all trimesters of pregnancy and during breastfeeding.

	PER 2 CAPSULES	EC %NRV*
Vitamin B1	30mg	2727
Vitamin B2	20mg	1429
Vitamin B3	20mg	125
Vitamin B5	15mg	250
Vitamin B6	15mg	1071
Folate	400µg	200
Vitamin B12	25µg	1000
VVitamin C	50mg	63
Vitamin D3	25µg	500
Vitamin E	12mg α-TE	100
Vitamin K2	83µg	110
Beta-Carotene	3mg	**
Biotin	50µg	100
Calcium	74mg	9
Choline	40mg	**
Chromium	50µg	125
CoQ-10	30mg	**
Copper	240µg	24
Inositol	10mg	**
Iodine	150µg	100
Iron	15mg	107
Lutein	3mg	**
Magnesium	48mg	13
Manganese	1mg	50
Molybdenum	50µg	100
Selenium	100µg	182
Zinc	14mg	140

* NRV - Nutrient Reference Value
** No NRV Established

Ingredients

Calcium Citrate, Vitamin C (Acerola (Malpighia Glabra) extract), Magnesium Citrate, Choline Bitartrate, Iron (Ferrous Citrate), Zinc Citrate, Vitamin B1 (Thiamin Hydrochloride), Coenzyme Q-10, Lutein, Vitamin B2 (Riboflavin 5' Phosphate), Vitamin B3 (Nicotinamide), Selenium (L-Selenomethionine), Vitamin B6 (Pyridoxine Hydrochloride), Vitamin B5 (Pantothenic Acid, Calcium Salt), Beta-Carotene (Natural), Vitamin E (D-Alpha Tocopheryl Succinate), Inositol (Myo-Inositol), Vitamin D3 (Cholecalciferol), Vitamin K2 (Menaquinone MK7), Manganese Glycinate, Copper Bisglycinate, Folate (Calcium-L-Methylfolate), Chromium Picolinate, Iodine (Potassium Iodide), Molybdenum (Ammonium Molybdate), Biotin (D-Biotin), Vitamin B12 (Methylcobalamin), Capsule shell (Hydroxypropyl Methylcellulose).

Free from

Added Sugar, Starch, Sweeteners, Gluten, Wheat, Soya, Lactose, Dairy, Artificial Flavours, Colours and Preservatives.

Directions

- Take two capsules daily, ideally with food, but this isn't essential.
- They can be taken together or separately, in the mornings or evenings.

Pairs well with

Vegan Omega 3

Gut Works®

Choline

Vitamin D3

KEY INGREDIENTS IN PREGNANCY MULTINUTRIENT

B Vitamins

B vitamins are essential for energy production, for the production of new cells and DNA, and therefore, for the growth and development of the foetus. Maternal vitamin B12 deficiency may contribute to recurrent miscarriages and an increased risk of birth defects, including neural tube defects, and may also be a causative factor in premature births. Insufficient B12 during pregnancy means the subsequent breast milk does not contain adequate levels for the neonate's growth and development.[1]

Folate

The role of Folate deficiency in neural tube defects has been long established.[16] Aside from the prevention of neuro tube defects, Folate supplementation helps prevent megaloblastic anaemia, which remains a significant problem for pregnant women. Foetal folate status is prioritised, and therefore folate supplementation is as much for the health of the mother as it is for the baby.[2] Low folate status during pregnancy may lead to low birth weight and a higher risk of developing long-term adverse effects.[2]

Vitamin C

Vitamin C is required for the production of collagen, essential for the formation of foetal skin, bones and blood vessels. Collagen is the main structural component in every cell, with higher levels in the neonate than at any other time in life.

Vitamin D

Vitamin D is an important nutrient for the immune system and bone health. It is required for the absorption of calcium, essential for the formation and development of the baby's bones. Maternal Vitamin D insufficiency is associated with long-term problems in the child, such as schizophrenia and type 1 diabetes.[3]

Vitamin K2

Is essential for proper calcium metabolism, ensuring that calcium is directed to the bones and teeth, which supports the development of the foetal skeletal system.

Vitamin E

Vitamin E is necessary for foetal membrane development and for the growth of cellular structures. Foetal cells are multiplying at an incredible rate and require a significant amount of Vitamin E. Vitamin E is essential for platelet function and contributes to placental microcirculation.[4]

Beta-carotene

Beta-carotene is essential for pregnant women, as it converts into Vitamin A. Taking a Vitamin A supplement is not recommended for pregnant women because an excess can lead to foetal abnormalities. Vitamin A deficiency can also lead to foetal abnormalities. However, Beta-carotene gets converted into Vitamin A at the rate the body requires it.

Calcium and Magnesium

Calcium and Magnesium are required for the development of bones and teeth in the baby. The mother has these minerals stored in her bones, and the foetus will use them as needed. Supplementation of these minerals is to prevent the mother from becoming deficient.

Choline

Choline is vital during pregnancy for foetal brain development, particularly in neural tube formation and cognitive function. Adequate Choline intake reduces the risk of neural tube defects and supports proper liver function in the developing foetus. Despite its importance, many pregnant women consume less Choline than recommended.[5]

Chromium

Chromium is an essential trace mineral for blood sugar balance. Chromium requirements increase during pregnancy. Chromium supplementation improves glycaemic control in women with gestational diabetes.[6]

CoQ10

CoQ10 is an antioxidant that supports mitochondrial function. CoQ10 levels naturally increase during pregnancy, suggesting a role in supporting increased metabolic demands. Research concludes that supplementation with CoQ10 reduces the risk of developing pre-eclampsia in women at risk for the condition.[7]

Inositol

Inositol, particularly myo-inositol, has insulin-sensitising effects and may reduce the risk of gestational diabetes when supplemented during pregnancy. Some studies have shown that myo-inositol supplementation decreases gestational diabetes incidence, though more extensive research is needed to confirm these findings.[8]

Iodine

Iodine is required for normal thyroid function. Inadequate levels impair the development of foetal nerve myelination, cell differentiation, and maturation. Iodine insufficiency during pregnancy increases the rate of miscarriage, causes a reduction in birth weight, and increases infant mortality rates. Maternally deficient neonates are at high risk of cognitive impairment.[9]

Iron

Iron is essential for the production of haemoglobin and for enzymatic reactions required for the creation of protein. Maternal anaemia is strongly associated with low birth weight, prematurity and impaired cognitive performance.[10]

Lutein

Lutein is necessary for the development of the retina of the eye and for visual development. Lutein is a member of the carotenoid family and is particularly needed for mothers with gestational diabetes. Lutein supplementation during pregnancy significantly reduces neonatal oxidative stress at birth in neonates born to diabetic mothers.[11]

Manganese

Manganese is an essential trace mineral needed for the development of foetal bones. Low maternal Manganese levels are associated with foetal intrauterine growth retardation and lower birth weight.[12]

Molybdenum

Molybdenum is another trace mineral needed by both the mother and foetus. Molybdenum plays a role in glucose metabolism. Decreased Molybdenum levels have been observed in the placental tissues of growth-restricted and lost pregnancies.[13]

Selenium

Selenium is needed for antioxidant defence and thyroid function during pregnancy. Adequate Selenium levels are associated with reduced risks of premature birth and growth-restricted infants. Supplementation throughout pregnancy has shown positive effects on placental growth, foetal development and postnatal outcomes.[14]

Zinc

Zinc is needed for DNA synthesis and protein synthesis within the foetus, and a Zinc deficiency in pregnancy is associated with slowed growth. Foetal Zinc deficiency may be caused by low Zinc status in the mother and the poor placental perfusion of Zinc. Iron and Folate decrease the availability of Zinc, and Zinc supplementation is recommended alongside folate and iron supplementation.[15]

Copper

Copper is essential for forming red blood cells and for the blood vessels, skeletal and nervous systems of the foetus.

DRUG INTERACTIONS

Interaction Severity

Major	Warfarin	Vitamin E may increase the risk of bleeding when taken with this drug. Vitamin C and Vitamin K may decrease the effects of this drug. Selenium and CoQ10 may interfere with the action of this drug.
Moderate	Tetracycline Antibiotics	Riboflavin, Iron and Zinc may decrease the effects of these drugs.
	Amiodarone	Vitamin B6 may increase the phyto-sensitive side effects of this drug.
	Antihypertensive Drugs	Vitamin B6 and CoQ10 may increase the effects of these drugs.
	5-fluorouracil	Folate may increase the toxicity of this drug.
	Capecitabine	Folate may increase the toxicity of this drug.
	Methotrexate	Folate may reduce the effects of this drug.
	Phenobarbital	Folate may increase the risk of seizures when taken with this drug.
	Phenytoin	Folate may reduce the level of this drug.
	Primidone	Folate may increase the risk of seizures when taken with this drug.
	Pyrimethamine	Folate may reduce the effects of this drug.
	Alkylating Drugs	Vitamins C and E and CoQ10 may reduce the effects of these drugs.
	Antitumor Antibiotics	Vitamins C and E may reduce the effects of these drugs.
	Oestrogens	Vitamin C may increase the effects of these drugs.

Interaction Severity

Moderate

Fluphenazine	Vitamin C may decrease the level of these drugs.
Indinavir	Vitamin C may decrease the levels of these drugs.
Immunosuppressants	Selenium may reduce the effects of these drugs.
Atorvastatin	Vitamin D may reduce the absorption of this drug.
Calcipotriene	Vitamin D and calcium may increase the risk of hypercalcaemia when taken with this drug.
Cyclosporine	Vitamin E may increase the absorption and levels of this drug.
Selumetinib	Vitamin E, when taken with this drug, may lead to excessive Vitamin E levels.
Antiplatelet / Anticoagulant Drugs	Selenium increases the risk of bleeding when taken with these drugs.
Barbiturates	Selenium may increase the sedative effect of these drugs.
Antidiabetes Drugs	Selenium and inositol may increase the risk of hypercalcaemia when taken with these drugs.
Insulin	Chromium may increase the risk of hypercalcaemia when taken with this drug.
Amiodarone	Iodine, when taken with this drug, may cause excessively high levels of iodine in the body.
Antithyroid Drugs	Iodine may alter the effects of these drugs.
Lithium	Iodine, when taken with this drug, may have hypothyroid effects.
Cephalexin	Zinc may decrease the levels of this drug.
Cisplatin	Zinc may interfere with the effects of this drug.
Integrase Inhibitors	Zinc may decrease the levels of this drug. Iron may decrease the effects of this drug.
Penicillamine	Zinc and Iron may decrease the levels of this drug.
Quinolone Antibiotics	Calcium, Magnesium and Iron may reduce the absorption of these drugs. Zinc may decrease the effects of these drugs.
Ritonavir	Zinc may decrease the levels of this drug.
Benzodiazepines	Zinc may increase the sedative effects of these drugs.

Interaction Severity

Moderate	Aluminium-containing Drugs	Vitamin C, Vitamin D and Calcium Citrate increase the absorption of aluminium-containing drugs
	Bisphosphonates	Calcium and Iron reduce the absorption of these drugs. Take bisphosphonates at least 30 minutes before calcium and iron. Magnesium may increase the absorption of these drugs.
	Diltiazem	Calcium may reduce the effectiveness of this drug.
	Elvitegravir	Calcium may reduce the blood levels of this drug.
	Levothyroxine	Calcium and Iron reduce levothyroxine absorption. Take levothyroxine and calcium and iron supplements at least 4 hours apart. Vitamin C may increase the absorption of this drug. Chromium may decrease the absorption of this drug.
	Lithium	Lithium increases the risk of hypercalcaemia when taken with calcium. Iodine may increase the effects of this drug.
	Sotalol	Calcium reduces the absorption of this drug. Separate doses by 4-6 hours after calcium supplementation.
	Digoxin	Magnesium may decrease the absorption of this drug.
	Mycophenolate	Iron may reduce the absorption of this drug.
	Methyldopa	Iron may reduce the absorption of this drug.
	Lovodopa	Iron may reduce the absorption of this drug.
	Dolutegravir	Iron may reduce the absorption of this drug.
Minor	Atropine	Choline may decrease the effects of this drug in the brain.

Drug-nutrient interactions have been taken from the Natural Medicines Database, April 2025. Please do your own due diligence before recommending this product to individuals taking medicines.

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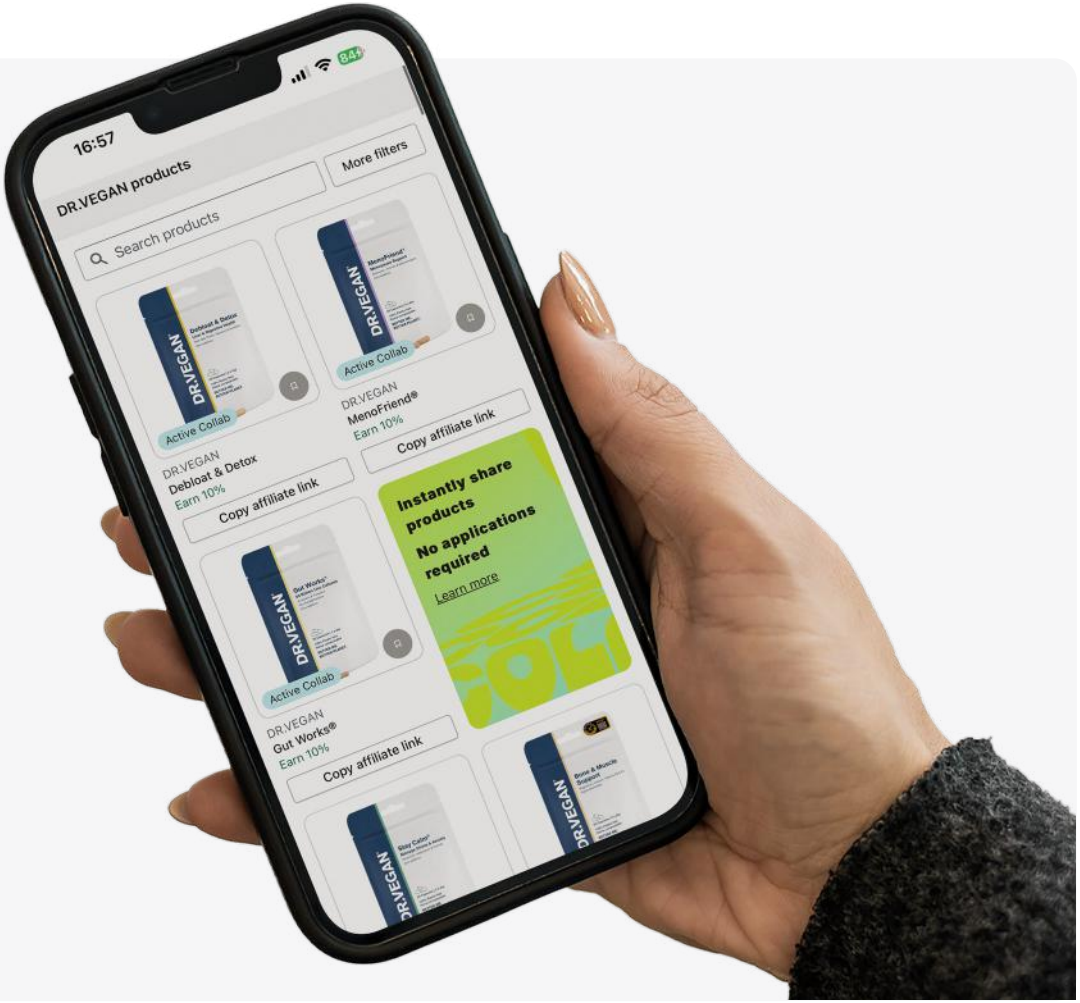

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