DR.VEGAN®

Staying hydrated

A guide to hydration for health, energy, and performance

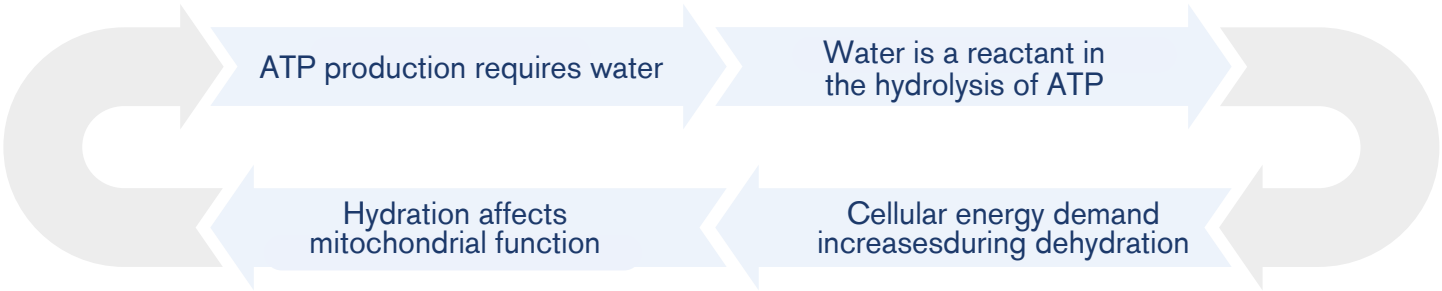
Practitioner Paper • *For practitioner use only*

Every cell relies on water to function properly; it's involved in nutrient transport, waste removal,energy production, and chemical reactions.

Through sweating and evaporation, water helps maintain a stable internal body temperature. This is vital for preventing overheating during exercise or in hot climates. Even mild dehydration (~1–2% loss of body weight) can impair mood, memory, concentration, and cognitive performance.

Water is essential for the production of saliva, gastric juices, and bile. It aids in digestion and helps prevent constipation. It also supports the kidneys and liver in removing toxins.

The dehydration cycle



The body constantly adjusts fluid and electrolyte levels via:	**Even mild fluid deficits (~1–2% body weight) can cause:**
Kidney filtration and reabsorption	Cognitive slowing
Gastrointestinal absorption	Reduced thermoregulation
Hormonal feedback loops	Fatigue and impaired exercise performance

DIET AND LIFESTYLE TIPS FOR CLIENTS

Drink water regularly

Aim for 1.5–2 litres daily, adjusting for body size, activity level, and climate. Sip steadily throughout the day rather than waiting until you're thirsty.

Start your day with water

Have a glass of water first thing in the morning to rehydrate after overnight fasting.

Include hydrating foods

Add water-rich fruits and vegetables to your meals, including cucumber, watermelon, strawberries, lettuce, celery, courgette, oranges and grapefruit.

Balance electrolytes

Sodium, potassium, magnesium, and calcium help your body retain water properly. Include sources like coconut water, bananas, spinach, sweet potatoes, nuts and seeds.

Limit dehydrating beverages

Cut back on high-caffeine drinks (coffee, energy drinks), especially in large quantities. Avoid or moderate alcohol intake, which is dehydrating.

Flavour water naturally

Add slices of citrus fruits, berries, cucumber, or herbs like mint to make water more appealing.

Soups, smoothies, and herbal teas

All count toward your fluid intake and offer variety, especially in colder weather.

Carry a reusable water bottle

Make it a habit to keep it within reach at all times.

Set reminders

Use apps or phone alarms to remind you to drink every hour.

Monitor urine colour

Pale yellow indicates good hydration; dark yellow or amber suggests you need more fluids.

Hydrate before, during, and after exercise

This is especially important for intense or long-duration activity.

Adjust for environment

In hot weather or heated indoor environments, increase water intake. Cold, dry air can also increase water loss through respiration.

Avoid waiting until you're thirsty

Thirst is a late sign of dehydration, especially in older adults.

Create a hydration habit stack

Link drinking water with existing habits (e.g. drink a glass after brushing teeth, before each meal, or when checking emails).

Hydrate+

Hydrate+ by DR.VEGAN® is a scientifically formulated electrolyte formula without compromise for demanding athletes and active individuals during and after exercise.

It contains the optimal levels of Sodium, Potassium, Magnesium, Calcium, Vitamin B12, Vitamin C and Amino Acids, with zero sugar, stevia or artificial sweeteners.

These deliciously flavoured drinks replenish essential minerals for optimal hydration, energy, muscle performance, psychological function, and endurance. Refreshingly light in taste, powerful and effective.

ORANGE & PINEAPPLE

Nutritional Information

	PER 1 SERVING	EC %NRV*
Energy	11 KJ/3 Kcal	0.1
Fat	0g	0.0
of which saturates	0g	0.0
Carbohydrates	0.6g	0.2
of which sugars	0g	0.0
Fibre	0.1g	0.4
Protein	0g	0.0
Salt	0.6g	10
Sodium	600mg	30
Magnesium	150mg	40
Calcium	250mg	31
Potassium	250mg	12
Vitamin C	300mg	375
L-Taurine	300mg	**
Vitamin B12	300mcg	10,000

* NRV= Nutrient Reference Value
** No NRV Established

INGREDIENTS

Sodium Citrate, Magnesium Glycinate, Calcium Citrate, Pink Himalayan Salt (Sodium Chloride), Potassium, Vitamin C (Calcium Ascorbate), L-Taurin, Vitamin B12 (Methylcobalamin), Citric Acid,Juicy Orange and Pineapple Natural Flavour, Monk Fruit Extract.

Directions

- Recommended serving: 1 sachet per day
- Add sachet to 250ml-750ml still water, still well.

LEMON

Nutritional Information

	PER 1 SERVING	EC %NRV*
Energy	9 KJ/2 Kcal	0.1
Fat	0g	0.0
of which saturates	0g	0.0
Carbohydrates	0.5g	0.2
of which sugars	0g	0.0
Fibre	0.1g	0.3
Protein	0g	0.0
Salt	0.6g	10
Sodium	600mg	30
Magnesium	150mg	40
Calcium	250mg	31
Potassium	250mg	12
Vitamin C	300mg	375
L-Taurine	300mg	**
Vitamin B12	300mcg	10,000

* NRV= Nutrient Reference Value
** No NRV Established

INGREDIENTS

Sodium Citrate, Magnesium Glycinate, Calcium Citrate, Pink Himalayan Salt (Sodium Chloride), Potassium, Vitamin C (Calcium Ascorbate), L-Taurine, Vitamin B12 (Methylcobalamin), Citric Acid, Juicy Lemon Natural Flavour, Monk Fruit Extract.

Free From

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

KEY INGREDIENTS IN HYDRATE+

Vitamin C

Water-soluble antioxidant: Vitamin C circulates in plasma and interstitial fluid, helping maintain osmotic balance by scavenging free radicals and protecting endothelial function.[1]

Modulation of inflammation: Through collagen synthesis, Vitamin C strengthens capillaries, minimising fluid leakage and supporting microcirculatory exchange of fluids.[1]

Supports capillary integrity: Indirectly supports electrolyte gradient maintenance by protecting cellular components from oxidative stress.[2]

Enhances sodium-potassium ATPase function: Chronic stress suppresses immune function. Selenium helps strengthen the immune response by supporting the function of immune cells including T-cells, B-cells, and macrophages. By enhancing immune function, selenium helps the body cope with infections or illnesses that may arise as a result of stress.

Vitamin B12

Supports neurotransmitter function: B12 supports neuromuscular function, which affects thirst signalling and electrolyte regulation.[13]

Maintains myelin sheath integrity and neurological function: This ensures appropriate hypothalamic-pituitary-adrenal axis signalling, including vasopressin (antidiuretic hormone) release.[4]

Supports red blood cell production: This contributes to plasma osmolarity regulation and perfusion, indirectly aiding hydration.

Sodium

Primary extracellular cation: Vital for fluid retention and osmotic equilibrium.

Extracellular fluid volume: Works with aldosterone and ADH to maintain extracellular fluid (ECF) volume.5 Sodium drives water reabsorption in kidneys (via sodium-glucose and sodium-hydrogen exchangers), which is especially important after fluid loss (sweating, vomiting, or diarrhoea).

Potassium

Major intracellular cation: Potassium maintains cellular hydration via osmotic gradients. It regulates cell membrane potential and influences smooth muscle contraction, including vascular tone and renal perfusion.

Potassium works with sodium in Na+/K+ ATPase pumps to move water between compartments.[6]

Calcium

Supports tight junction integrity: In epithelial cells, which prevents fluid leakage across membranes (e.g. gut barrier, blood-brain barrier).[7]

Involved in renal tubular reabsorption of sodium and water: Regulates aquaporin function in the kidneys and cell signalling related to fluid transport[8]

Magnesium

Cofactor in over 300 enzymatic reactions: Magnesium is needed in enzymatic reactions, including Na+/K+ ATPase, affecting electrolyte balance and cellular hydration.[9]

Magnesium helps regulate vascular tone and supports antidiuretic hormone (ADH) response.[11]

Taurine

Regulates cell volume (osmolyte): Acting as an organic osmoprotectant during dehydration or osmotic stress.[12]

Modulates ion transport and calcium signalling: Which influences renal reabsorption of sodium and water.[13]

DRUG INTERACTIONS

Interaction Severity		
Major	Dolutegravir	Calcium reduces the level of this drug.
	Elvitegravir	Calcium reduces the level of this drug.
	Levodopa	Magnesium may reduce the bioavailability of this drug.
Moderate	Alkylating Agents	Vitamin C may reduce the effects of these drugs.
	Antitumour Antibiotics	Vitamin C may reduce the effects of these drugs.
	Oestrogens	Vitamin C may increase the levels of these drugs.
	Fluphenazine	Vitamin C may decrease the levels of this drug.
	Indinavir	Vitamin C may decrease the levels of this drug.
	Levothyroxine	Vitamin C may decrease the levels of this drug.
	Warfarin	Vitamin C may decrease the levels of this drug.
	Antihypertensive Drugs	Sodium may reduce the effects of these drugs.
	Corticosteroids	Sodium may increase the risk of hypernatraemia when taken with these drugs.
	Lithium	Sodium may alter the effects of this drug.
	Sodium-containing Drugs	Sodium may increase the risk of hypernatraemia when taken with these drugs.
	Tolvaptan	Sodium may increase the risk of hypernatraemia when taken with these drugs.
	Ace Inhibitors	Potassium may increase the risk of hyperkalaemia when taken with these drugs.

Interaction Severity		
Moderate	Angiotensin Receptor Blockers	Potassium may increase the risk of hyperkalaemia when taken with these drugs.
	Potassium Sparing Diuretics	Potassium may increase the risk of hyperkalaemia when taken with these drugs.
	Bisphosphonates	Calcium reduces the absorption of these drugs.
	Calcipotriene	Calcium increases the risk for hypercalcaemia when taken with this drug.
	Diltiazem	Calcium reduces the effects of these drugs.
	Levothyroxine	Calcium reduces the level of this drug.
	Lithium	Calcium may increase this risk of hypercalcemia when taken with this drug. Lithium may increase the excretion of this drug.
	Quinolone Antibiotics	Calcium and magnesium reduce the level of this drug
	Raltegravir	Calcium reduces the level of this drug.
	Sotalol	Calcium reduces the level of this drug.
	Tetracycline Antibiotics	Calcium and magnesium reduce the level of this drug.
	Thiazide Diuretics	Calcium increases the risk of hypercalcaemia when taken with these drugs.
	Verapamil	Calcium reduces the effects of this drug.
	Aminoglycoside Antibiotics	Magnesium may increase the risk of neuromuscular weakness when taken with these drugs. .
	Bisphosphonates	Magnesium may decrease the absorption of these drugs
	Calcium Channel Blockers	Magnesium may increase the effects of these drugs

Interaction Severity		
Moderate	Digoxin	Magnesium may reduce the absorption of this drug
	Ketamine	Magnesium may reduce the absorption of this drug.
	Sulfonylureas	Magnesium may reduce the absorption of this drug
	Antihypertensive Drugs	Taurine may increase the risk of hypotension when taken with these drugs.
Minor	Acetaminophen	Vitamin C may prolong the clearance of this drug.
	Aspirin	Vitamin C may increase aspirin levels.
	Choline Magnesium Trisalicylate	Vitamin C may increase the level of this drug.
	Salsalate	Vitamin C may increase the level of this drug.
	Gabapentin	Magnesium may reduce the absorption of this drug.

Drug-nutrient interactions have been taken from the Natural Medicines Database, October 2024. Please do your own due diligence before recommending this product to individuals taking medicines.

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