



Mito Xcell

Energy, Mood and Endocrine Support



Orthoplex White Mito Xcell is a classically innovative formula aimed at restoring energy, supporting mood and addressing endocrine dysregulation through the intricate relationships that are connected by the mitochondria.

Years in the making, Henry Osiecki has been a key driver in the development of the formulation by extensively scrutinising the literature and applying comprehensive biochemical insight from decades of clinical experience.

By combining therapeutic doses of magnesium citrate, acetyl-L-carnitine and inositol with mitochondrial-specific nutrients, Mito Xcell targets the previously unknown complexities of this organelle.

- ✓ **Gluten Free**
- ✓ **Dairy Free**
- ✓ **Soy Protein Free**
- ✓ **Vegan**

- ✓ Powder suitable for titration, based on age or presentation
- ✓ Suitable for use with common medications
- ✓ Sustainably sourced with all 8 isomer forms of vitamin E
- ✓ Low heavy metal zinc citrate*

Indications

- Supports energy levels and healthy mood balance
- Aids glucose metabolism
- Supports sperm motility and production

Excipients: Colloidal anhydrous silica, natural Orange Flavour, glycine, malic acid, palm fruit oil, starch sodium octenyl succinate, *Stevia rebaudiana* leaf extract.

Warnings: If symptoms persist seek the advice of a healthcare professional. Vitamin and mineral supplements should not replace a balanced diet. This product contains selenium which is toxic in high doses. A daily dose of 150 micrograms for adults of selenium from dietary supplements should not be exceeded. Do not take while on warfarin therapy without medical advice. **Contains sulphites.**

Contraindications: None.

Pregnancy and lactation: Contact Clinical Support on 1800 077 113.

Companion products:

Methyl1c BioEnhanced · S.F.M. Xcell · Heme Synergy

Product details

AUST L 333696

Pack Size: 150g oral powder and 300g oral powder

Adult Dose: Mix 1 scoop (1 level included scoop contains approx. 8g) into water and consume immediately. Take once or twice daily, or as recommended by your registered healthcare practitioner.

Storage: Store below 25°C in a cool, dry place, away from sunlight.

Each 8g (1 heaped included scoop) contains:

Magnesium (as Magnesium citrate)	300mg
Acetyl levocarnitine hydrochloride	1g
Inositol	1g
Rutoside	750mg
Levocarnitine	250mg
Alpha lipoic acid	50mg
Ubidecarenone (Coenzyme Q10)	30mg
Riboflavin sodium phosphate	10mg
Nicotinamide	50mg
Calcium pantothenate	100mg
Biotin	3mg
Manganese (as Manganese amino acid chelate)	2mg
Selenium (as Selenomethionine)	60mcg
Zinc (as Zinc citrate dihydrate)	10mg
Palm tocotrienols complex (+EVNoIMax™)	5mg
<i>Reynoutria japonica</i> root (Dry Herb Equiv)	20g
equiv. Resveratrol	100mg



+EVNoIMax™ is a trademark of ExcellVite Inc and protected by US Patent

*All Zincs listed on the ARTG meet Pharmacopoeia requirements for levels of heavy metals. We have found a Zinc that meets and exceeds these regulatory requirements because we understand that you will only accept the best.

Loss of function in mitochondria, the key organelles responsible for cellular energy production, can result in excess fatigue, endocrine dysregulation, mood imbalance and other symptoms that are common complaints in almost every chronic clinical presentation.

Mito Xcell has been specifically formulated to address these key common presenting complaints and is supported by a wealth of clinical trials to maximise results for your patients.

All forms of carnitine have been critically reviewed and evaluated to bring you the cutting-edge combination of 1g acetyl-L-carnitine and 250mg L-carnitine per dose, to replicate the latest clinical trials. Not only does this combination have the well-known effects on the mitochondria, additional actions include targeting healthy mood balance and endocrine function; common patient complaints which are heavily impacted by the mitochondria.

Myo-inositol has been innovatively added at the exact dosage of 1g per serve to provide key benefits for glucose metabolism and endocrine dysregulation, acting through an intracellular second messenger system and regulating a number of hormones such as TSH, FSH and insulin.

Mitochondrial biogenesis, the process of increasing the number of mitochondria in the cell, is an exciting new field of research, with significant interest focusing on resveratrol and rutin. Both of these have been included at clinically relevant doses.

In addition to the comprehensive formula design above, Mito Xcell also provides the key nutrients known to regulate mitochondrial function, including coenzyme Q10, alpha lipoic acid, mitochondrial specific antioxidants and magnesium.

Contains nutrients to support mitochondrial function, biogenesis and energy production

The citric acid cycle and the electron transport chain (ETC) are mitochondrial processes needed to produce ATP through oxidation of macronutrients, fats, amino acids and sugars. This cycle is dependent on enzyme systems co-ordinated into sets of Complexes I – IV which rebuild ATP via oxidative phosphorylation (OXPHOS).⁶ Several nutrients are essential for the function of the citric acid cycle. Coenzyme Q10 is a vital cofactor in the ETC and contributes to ATP generation.¹ As an antioxidant it protects cells from Reactive Oxygen Species (ROS) and stabilises Complex III in the mitochondrial membrane.⁷ B Vitamins are essential coenzymes in mitochondrial respiration and cellular energy production and have a direct role in the citric acid cycle, the ETC and the formation of ATP.⁸

Acetyl-L-carnitine supports energy production from long chain fatty acids.¹ It modulates acetyl CoA homeostasis which links glycolysis and pyruvate oxidation within the citric acid cycle; a deficiency of acetyl-L-Carnitine is associated with reduced mitochondrial function and insulin resistance.¹

Contains antioxidants to protect cells from damaging free radicals

The largest number of mitochondria are found in metabolically active cells in the liver, brain, skeletal muscle and cardiac muscle where cellular energy needs to control how many mitochondria are in each cell. Mitochondria produce approximately 90% of our cellular energy by OXPHOS, and it is this oxidative process that can cause mitochondrial dysfunction.³

Resveratrol increases the number of mitochondria and modulates pathways involved in OXPHOS.⁹ Selenium increases mitochondrial biogenesis, reduces oxidative stress, decreases ROS and restores mitochondrial function.¹⁰ Manganese and zinc are both involved in the antioxidant system super oxide dismutase (SOD) that prevents peroxidation and quenches ROS.¹¹ Alpha lipoic acid is a potent antioxidant that is a critical cofactor in mitochondrial alpha-ketoglutarate dehydrogenase and is important in oxidative decarboxylation reactions.¹

Contains nutrients to support healthy blood glucose balance

Blood glucose imbalance can lead to mitochondrial dysfunction which may lead to insulin resistance.¹² Several nutrients support healthy glucose metabolism and insulin sensitivity. Inositol is an insulin sensitiser,¹³ while biotin deficiency impairs mitochondrial function and plays a role in the mitochondrial metabolism of glucose.¹⁴

References available upon request.