

# S.F.M Xcell

Thyroid, Metabolic and Nervous System Support

**Orthoplex White S.F.M Xcell is a comprehensive formula designed to support thyroid, immune and adrenal function and to assist with general wellbeing during times of stress.**

Providing nutrients important for thyroid hormone production and the conversion of T4 to T3, S.F.M Xcell now features Inositol, Hydroxocobalamin, Folic acid and Riboflavin sodium phosphate alongside the proprietary Withania KSM-66® extract. Inositol is involved in thyroid stimulating hormone (TSH) receptor signal transduction, making it an essential component of normal, healthy thyroid function. Withania KSM-66® is a high-quality extract of Withania, containing a highly concentrated withanolide content.

- ✓ Inositol which is required for TSH receptor signalling and healthy thyroid function
- ✓ Nutrients required for production and conversion of T4 to T3
- ✓ Full suite of activated B vitamins, including Hydroxocobalamin
- ✓ High concentration Withania KSM-66® extract

## Indications

- Contains nutrients required for thyroid hormone production
- Maintains healthy immune function
- Supports healthy neurotransmitter synthesis and nervous system function
- Contains nutrients to support the proper function of the adrenal gland

## Excipients

Calcium hydrogen phosphate dihydrate, microcrystalline cellulose, povidone, croscarmellose sodium, crospovidone, colloidal anhydrous silica, magnesium stearate, maltodextrin, hypromellose, macrogol 400, carnauba wax.

## Warnings

*This medicine 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. Vitamin and/or mineral supplements should not replace a balanced diet. If symptoms persist consult your healthcare practitioner. Consult a health care professional prior to use if you are pregnant, likely to become pregnant or breastfeeding.*

## Contraindications

Chloramphenicol, Anti-Thyroid Drugs and Cephalixin  
Pregnancy & lactation not advised

*Information taken from Natural Medicines Database and accurate as of September 2019*



- ✓ Gluten Free
- ✓ Dairy Free
- ✓ Egg Free
- ✓ Soy Protein Free

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**Pack Size:** 60 tablets

**Adult Dose:** Take 1 tablet twice daily, one hour before a meal, or as recommended by your registered healthcare practitioner.

**Storage:** Store below 30°C in a cool, dry place, away from direct sunlight.



Full disclosure of excipients in every formulation

## Each Tablet Contains

Tyrosine	500mg
Inositol	300mg
Selenium (as Selenomethionine)	187.5mcg
Zinc (as Zinc citrate dihydrate)	10mg
Iodine (as Potassium iodide)	100mcg
Chromium (as Chromium nicotinate)	15mcg
<i>Withania somnifera root (KSM-66®)</i> (Dry Herb Equiv)	300mg
<i>Rehmannia glutinosa root</i> (Dry Herb Equiv)	400mg
Thiamine hydrochloride	11.2mg
Riboflavin sodium phosphate	13.3mg
Nicotinic acid	5mg
Nicotinamide	30mg
Calcium pantothenate	30mg
Pyridoxal 5-phosphate	21.9mg
Calcium folinate	270mcg
Hydroxocobalamin	500mcg

*Please note Orthoplex White products can only be purchased if you are an Orthoplex White approved customer. This medicine may not be right for you. Read the warnings before purchase. If symptoms persist talk to your health professional.*

# Technical Information

There is a well explored relationship between thyroid function, stress and immune function. S.F.M. Xcell has been formulated to support healthy thyroid function, while at the same time, providing support for healthy immune function and general wellbeing during times of stress.

## Contains Nutrients required for Healthy Thyroid Function and Thyroid Hormone Production

The major thyroid hormones, T3 and T4, help to regulate a number of important processes, including cellular oxygen consumption, basal metabolism, energy production, normal growth and thermogenesis. A number of key nutrients available in S.F.M. Xcell play a role in their synthesis. Iodine and tyrosine are both essential precursors for the manufacture of thyroid hormones, while selenium is required as a cofactor for the enzyme that converts T4 to T3.<sup>1</sup>

Emerging research suggests that inositol is involved in thyroid stimulating hormone (TSH) receptor signal transduction and therefore normal healthy thyroid function. Specifically, inositol forms a part of the signalling cascade resulting from activation of the TSH receptors, where it relays this hormone's message from the cell membrane to the molecular machinery involved in thyroid hormone production. In this way, inositol is currently understood to be involved in one of the first steps of thyroid hormone production.<sup>2</sup>

## Maintains Healthy Immune Function

S.F.M. Xcell contains a number of nutrients involved in maintaining healthy immune function.

Zinc and selenium play an important role in maintaining healthy immune function by supporting both innate and adaptive immune processes. Vitamins B2 and B6 also help to maintain healthy immune function.<sup>3</sup>

## Supports General Wellbeing During Times of Stress and May Help to Support Healthy Adrenal Function

During times of stress, the adrenal glands increase their production of cortisone and other adrenal hormones that counteract the stress response. Vitamin B5 specifically aids this process through supporting the production of these hormones. Tyrosine is also understood to support the function of the adrenal glands by acting as a precursor to epinephrine.<sup>4</sup>

## Supports Healthy Neurotransmitter Synthesis and Nervous System Function

S.F.M. Xcell also includes ingredients that support healthy nervous system function. Tyrosine is a precursor to several catecholamine neurotransmitters such as dopamine and norepinephrine, while vitamin B6 supports the production of these neurotransmitters through its role as a cofactor.<sup>5</sup> Thiamine is also important, playing a role in nerve function and transmission while vitamin B12 supports nerve myelination.<sup>6</sup>

Finally, inositol is a constituent of the intracellular phosphatidylinositol second messenger system throughout the nervous system, where it is involved in supporting norepinephrine, serotonin and cholinergic signalling.<sup>7</sup>

References available upon request.

## Nutrients for Thyroid Hormone Synthesis: T3 & T4

