# PROFESSIONAL INFORMATION

Scheduling Status: **SO** 



Cal-Mag

# 2. Qualitative and Quantitative Composition

Each capsule contains the composition as per table 2.1 below.

# 2.1 Composition

Each white capsule contains	
Magnesium (as S. cerevisiae)	150 mg
Providing elemental Magnesium 30 mg	
Calcium (as AlgaeCal®)	220 mg
Providing elemental Calcium 62 mg	

## 2.2 Sugar Free

**2.3** For full list of excipients see section 7.1.

## 3. Pharmaceutical form

Size 0 capsules containing light brown free-flowing powder.

4.	Clinical Information	14
4.1	Indications for Use	15
	Where a deficiency in the active ingredients may exist.	16
4.2	Method of Administration and Posology	17
4.2	.1 Administration	18
Ora	illy.	19
4.2	.2 Posology	20
Adı	ults and children over 18 only.	21
Tak	e 2 capsules daily.	22
Tak	e capsules with a sufficient quantity of water.	23
Do	not chew the capsules swallow whole.	24
Tak	e capsules at approximately the same time every day.	25
4.3	Contraindications	26
Not	t recommended for individuals who are hypersensitive (allergic) to any of the ingredients contained in the	27
pro	duct.	28
4.4	Special Warnings and Precautions	29
Not	t recommended for individuals who are under the age of 18. Women who are pregnant or breastfeeding should	30
con	sult a relevant healthcare practitioner before use. Do not exceed the recommended daily dose.	31
4.5	Interactions	32
S. c	erevisiae: Major risk of interactions with MAOIs. Moderate risk of interactions with antidiabetic drugs and	33
lith	ium.	34
Ma	gnesium: Moderate risk of interactions with aminoglycoside antibiotics, antacids, bisphosphonates, calcium	35
cha	nnel blockers, digoxin, ketamine, quinolone antibiotics, skeletal muscle relaxants, sulfonylureas, and tetracycline	36
ant	ibiotics. Major risk of interactions with levodopa/carbidopa.	37

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The safety in pregnancy and breastfeeding has not been established.

# 4.7 Effects on ability to drive and use machinery.

No known effect.

#### 4.8 Side Effects

Mild gastrointestinal disturbances may occur, such as nausea, diarrhoea, constipation, indigestion, bloating, metallic taste in the mouth, and flatulence.

## 5 Pharmacological Classification:

Category and Class D: 34.12 Multiple Substance Formulation. Complementary Medicine.

## 6 Pharmacokinetic Properties

## Magnesium

Absorption: Parathyroid hormone and Vitamin D are both required for absorption of magnesium. A third of the required dietary requirement is absorbed in the GIT. The amount/efficiency of the magnesium absorption depends on the magnesium stores in the body. The absorption from supplements varies from 38% to 65% depending on the body stores. Plasma concentration peaks at 4 hours after consumption of a dose of magnesium. The dosage form of magnesium may contribute to the absorption of magnesium. Magnesium is well absorbed from any food form. When magnesium intake is increased the fractional absorption usually decreases. The bioavailability of magnesium appears to be the best in magnesium chloride and magnesium lactate. Magnesium oxide and magnesium sulphate only contribute to about 4% bioavailability.

Distribution: The skeleton and soft tissue contain about 25 g of magnesium. Two thirds of the skeletal magnesium is bound to the bone and therefore is not available as a magnesium source, a third of the skeletal magnesium is a reservoir to maintain the extracellular magnesium concentrations and is at the surface of the bone, this is about 1% of the total body concentration of magnesium, 55% is ionized in the plasma, 30% is bound to plasma proteins and 15% complexed anions.

Magnesium undergoes a reabsorption filtration process. The concentration of magnesium in the proximal tube is 1.5 times of the concentration of the glomerular filtrate, and 20% to 30% is reabsorbed. The loop of Henle reabsorbs about 65% of filtered magnesium. Magnesium and calcium compete for transport in the thick ascending limb of Henle at the basolateral surface. Magnesium reabsorption is dependent on the parathyroid hormones, plasma magnesium, and calcium level alterations and the use of loop diuretics.

Excretion: The kidneys excrete between 3% and 5% filtered magnesium. Over a 24-hour period, between 10 to 5000 mg magnesium is excreted. Urinary magnesium and pH modulate urinary calcium excretion.

# Calcium

Absorption: Calcium absorption is affected by several factors. It varies based on age environmental and dietary conditions. In healthy premenopausal females, the proportion of dietary calcium absorbed varies from 10% to 60%, and is directly linked to body mass index, dietary fat, and serum Vit D level. The proportion of dietary calcium absorbed is inversely correlated to dietary calcium intake, fibre and alcohol intake and exercise. Low calcium absorption can be linked to low-fat, high-fibre diet, possibly due to the rate of transit in the intestines. Protein may also have an impact on calcium absorption.

With weight loss greater than 5%, a greater loss of bone mass and increased risk of bone fracture is a possibility.78Calcium absorption during weight loss seems to decrease. Taking calcium supplements during weight loss seems to79suppress the increased bone resorption. Calcium has a threshold absorption. Above threshold increased calcium80intake has no effect, below threshold it results in increased response. It is recommended that calcium be taken at81500 mg doses or less. Taking calcium with food improves the absorption of calcium.82

FOODGROWN™© Version 1.0 May 2023 Calcium absorption seems to improve from early to late pregnancy and decreases in early lactation and then 83 84 increase at weaning. Distribution: Bones and teeth contain more than 99% of calcium in the body. Calcium is mainly present in the bone 85 as hydroxyapatite. The blood, extracellular fluid muscle and other tissue also contain calcium. The reserve source 86 of calcium that is present in the bone can be mobilized to maintain extracellular calcium concentration. 87 Excretion: Calcium is excreted in the urine and faeces. During late pregnancy and lactation the excretion in the 88 89 urine is decreased. Calcium supplementation increase urinary excretion. Calcium excretion is increased with individuals affected by osteoporosis. Calcium excretion in urine is decreased when intake of calcium is low and 90 intake of protein is high. 91 92 **Pharmaceutical Information** 7 93 94 7.1 List of Excipients Milled rice flour, vegetarian capsules. 95 7.2 Incompatibilities 96 97 None 7.3 Shelf Life 98 24 months from date of manufacture 99 7.4 Storage 100 Store in a cool dry place, between 15°C -25°C. Store in original container. 101 7.5 Presentation 102 60 white size 0 capsules packed in a 300 ml cylindrical white container with a lid and packaged. 103 7.6 Disposal and handling of product 104 All unused medication should be disposed of in accordance with local regulatory authority. 105 8. Holder of certificate of registration 106 **FoodGrown**<sup>TM</sup>© 107 **371 Angus Crescent** 108 Northlands Business Park 109 110 North Riding Gauteng 111 South Africa 112 9. Registration Number 113 Still to be allocated 114 10. Date of first authorisation 115 Still to be allocated 116 11. Date of review 117 New 118 Reference: https://naturalmedicines.therapeuticresearch.com/ 12. 119 120 **APPLICANT DETAILS:** 121 FoodGrown<sup>™</sup>© 122 371 Angus Crescent 123 Northlands Business Park 124

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