Body Prime

The power of Magnesium, helping you be ready for your day

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Introduction

Elite Health is the pinnacle of wellness, where age does not dictate ability.

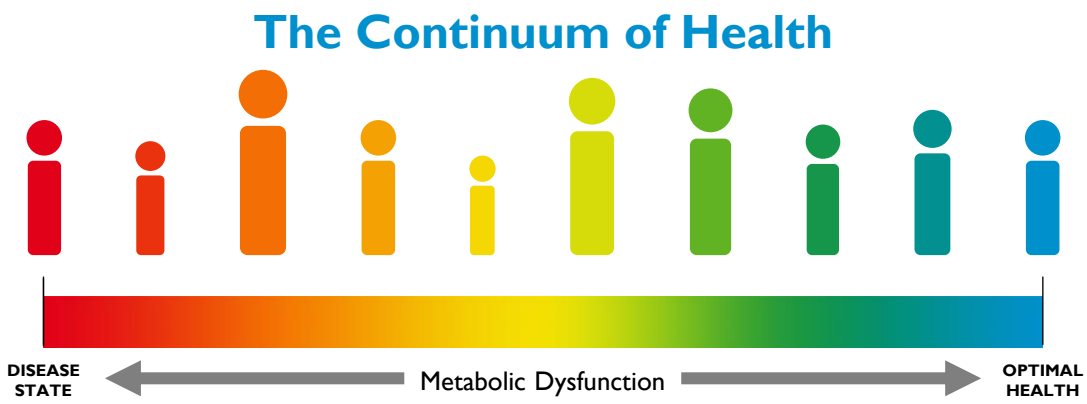
Scientifically, Elite Health is optimal metabolic function, the state in which all body systems are performing efficiently, which gives you the energy to see more, do more, and be more, no matter what stage of life you're in. Live without limitation with Elite Health from Synergy WorldWide.

SYNERGY ELITEHEALTH

Science-based, innovative propriety programs that holistically improve your total health, elevate your performance and unlock your true potential.

Elite Health is for Everyone

Health is a continuum, and everyone is affected.



Overview

The formula of Body Prime has simple ingredients that support cleansing and bowel motility to prime the body for an effective purification Program.

Benefits;

- Contributes to healthy electrolyte balance
- Contributes to natural energy metabolism
- Contributes to muscle function including the heart muscle
- Contributes to normal muscle contraction including normal heartbeat
- Can reduce tiredness and fatigue

Key Ingredients

Apple pectin

Prune powder

Magnesium

Using Body Prime

Bottle	90 Capsules
Serving size:	1 capsule
Daily dose - Maintenance:	2 capsules
Daily dose – As a Laxative:	4-6 capsules
7 day Purify program:	2 capsules
Contraindications:	None known
Length of use:	As desired

Dose form:	Capsule to be swallowed with water
Directions:	Best taken in the evening

Scientific Research

prime[1]

/prīm/

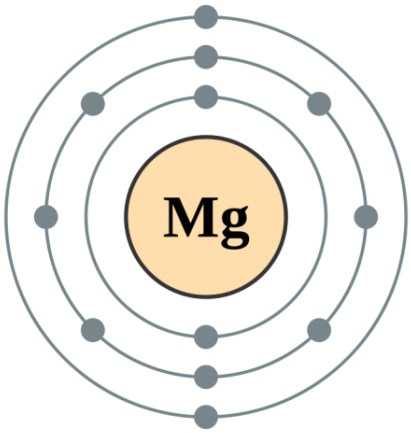
verb

Past tense: **primed**; past participle: **primed**

1. make (something) ready for use or action, in particular.

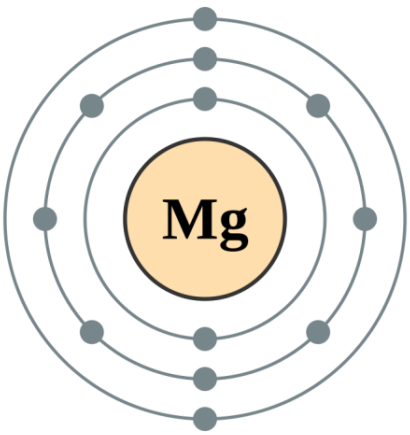
- **Prime = Prepare**
  - Prepares the body for any health regimen and for nutrient absorption
- Has a mild, progressive effect that won't interrupt regular activity
- Take 2 per day at any time of day, taking more than 2 may have a laxative effect

Why Magnesium?
Nutrition & Regularity



- Increase Bowel Motility/Regularity
- Contributes to:
    - Muscle Function, including the heart
    - Muscle Contraction, including normal heartbeat

Energy & Exercise

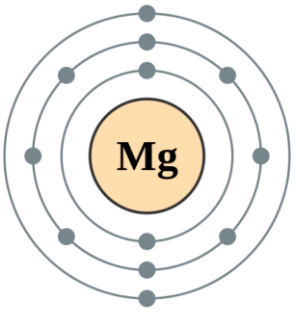


- Can reduce tiredness and fatigue
- Contributes to:
    - Healthy electrolyte balance
    - Natural energy metabolism
    - Muscle Function
    - Muscle Contraction

Body Prime
Additional Magnesium studies

Digestive health is ranked as the **#3 health concern** among consumers today.

With new studies revealing the importance of digestive maintenance, an increasing number of people are **looking for a supplement** that will support the way their bodies **regulate nutrients.**



THE ROLE OF MAGNESIUM IN HYPERTENSION AND CARDIOVASCULAR DISEASE

- Intake of 500 mg/d to 1000 mg/d may reduce blood pressure (BP) as much as 5.6/2.8 mm Hg.
- Preliminary evidence suggests that insulin sensitivity, hyperglycemia, diabetes mellitus, left ventricular hypertrophy, and dyslipidemia may be improved with increased magnesium intake.
- Magnesium acts as a natural calcium channel blocker, increases nitric oxide, improves endothelial dysfunction, and induces direct and indirect vasodilation.

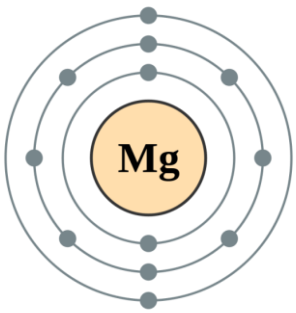
J Clin Hypertens (Greenwich). 2011 Nov;13(11):843-7. doi: 10.1111/j.1751-7176.2011.00538.x. Epub 2011 Sep 26.

Body Prime
Additional Magnesium studies

NUTRITIONAL FACTORS IN THE PREVENTION AND MANAGEMENT OF CORONARY ARTERY DISEASE AND HEART FAILURE.

- Nutritional factors such as magnesium, folic acid, vitamins B12 and B6, L-arginine, and polyunsaturated fatty acids (PUFAs) beneficial for patients with coronary artery disease (CAD), and in the prevention and arresting the progression of Heart Failure and cardiac arrhythmias
- These nutrients closely interact with the metabolism of L-arginine-nitric oxide (NO) system

Nutrition. *2015 Feb;31(2):283-91*



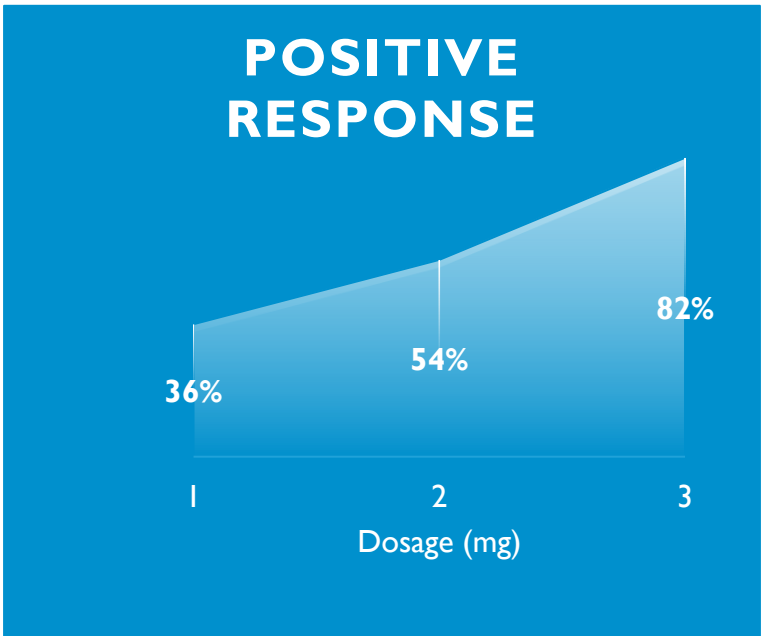
RECOMMENDATIONS

Individuals at high risk for CAD, cardiac arrhythmias, and HF and those who have these diseases need to be screened for plasma levels of magnesium, folic acid, vitamins B12 and B6, L-arginine, NO, ADMA and correct their abnormalities to restore normal physiology.

Body Prime
F107 Clinical Study - Efficacy as a Laxative

Objectives of the Study:

- To explore the efficacy of escalating doses of F107 for the maintenance of regularity of bowel function over a 2 week period
- To explore the safety/tolerability and acceptability of escalating doses of F107 with repeated use over a 2 week period by healthy subjects



Results:

<u>82% of subjects (9/11) have the positive response (increased bowel movements) to the dosing between 400 – 1200 mg Magnesium.</u>

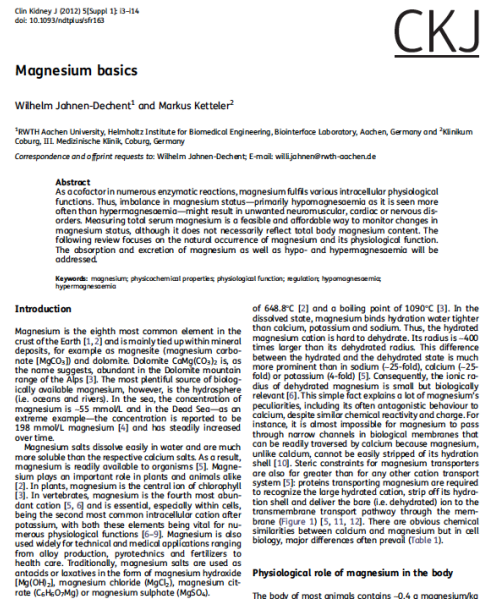
- Number of subject response to 2 capsules (400mg Mg): 4/11
- Number of subject response to 4 capsules (800mg Mg): 2/11
- Number of subject response to 6 capsules (1200mg Mg): 3/11

Magnesium Overview

- Mg is a co-factor in over 300 enzyme systems involved in the regulation of blood pressure, energy production, muscle, nerve, brain function, DNA & RNA synthesis, bone, Etc.
- About 25 grams of Mg in the Adult body (50-60% in bone)
- RDI – adult females = 320 mg; adult males = 420 mg

People at risk for magnesium deficiency:

- Leaky gut and other GI conditions
- Type 2 diabetes
- Alcohol dependence
- Low mineral bone density
- People with migraines – 600 mg per day for prevention
- Older adults



Clin Kidney J (2012) 5(Suppl 1): i3–i14
doi: 10.1093/ndtplus/sfr163

CKJ

Magnesium basics

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Abstract

As a cofactor in numerous enzymatic reactions, magnesium fulfils various intracellular physiological functions. Thus, imbalance in magnesium status—primarily hypomagnesaemia as it is seen more often than hypermagnesaemia—might result in unwanted neuromuscular, cardiac or nervous disorders. Measuring total serum magnesium is a feasible and affordable way to monitor changes in magnesium status, although it does not necessarily reflect total body magnesium content. The following review focuses on the natural occurrence of magnesium and its physiological function. The absorption and excretion of magnesium as well as hypo- and hypermagnesaemia will be addressed.

Keywords: magnesium; physicochemical properties; physiological function; regulation; hypomagnesaemia; hypermagnesaemia

Introduction

Magnesium is the eighth most common element in the crust of the Earth [1, 2] and is mainly tied up within mineral deposits, for example as magnesite (magnesium carbonate [$MgCO_3$]) and dolomite. Dolomite $CaMg(CO_3)_2$ is, as the name suggests, abundant in the Dolomite mountain range of the Alps [3]. The most plentiful source of biologically available magnesium, however, is the hydrosphere (i.e. oceans and rivers). In the sea, the concentration of magnesium is ~55 mmol/L and in the Dead Sea—as an extreme example—the concentration is reported to be 198 mmol/L magnesium [4] and has steadily increased over time.

Magnesium salts dissolve easily in water and are much more soluble than the respective calcium salts. As a result, magnesium is readily available to organisms [5]. Magnesium plays an important role in plants and animals alike [2]. In plants, magnesium is the central ion of chlorophyll [3]. In vertebrates, magnesium is the fourth most abundant cation [5, 6] and is essential, especially within cells, being the second most common intracellular cation after potassium, with both these elements being vital for numerous physiological functions [6–9]. Magnesium is also used widely for technical and medical applications ranging from alloy production, pyrotechnics and fertilizers to health care. Traditionally, magnesium salts are used as antacids or laxatives in the form of magnesium hydroxide [$Mg(OH)_2$], magnesium chloride ($MgCl_2$), magnesium citrate ($C_6H_6O_7Mg$) or magnesium sulphate ($MgSO_4$).

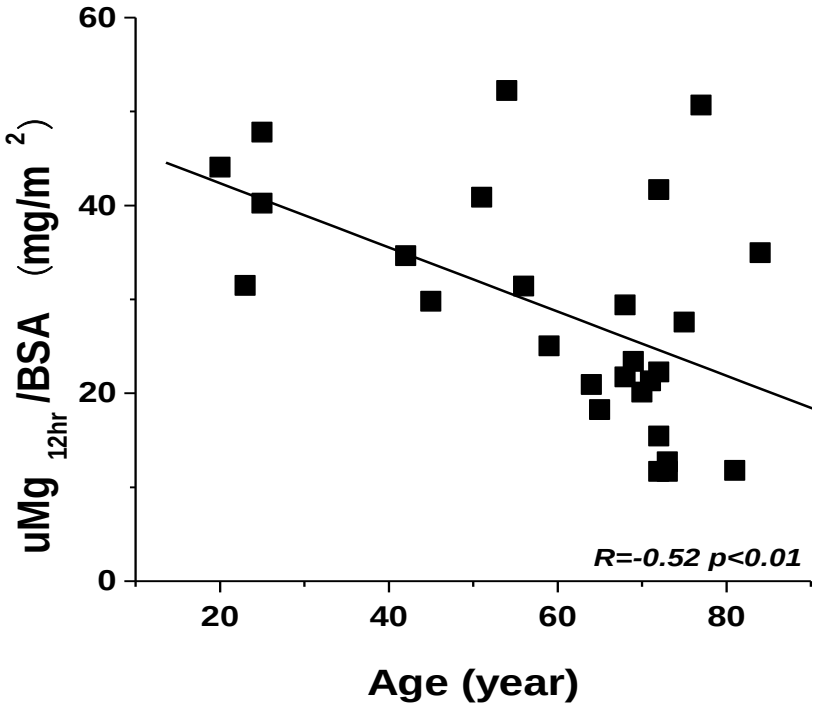
of 648.8°C [2] and a boiling point of 1090°C [3]. In the dissolved state, magnesium binds hydration water tighter than calcium, potassium and sodium. Thus, the hydrated magnesium cation is hard to dehydrate. Its radius is ~400 times larger than its dehydrated radius. This difference between the hydrated and the dehydrated state is much more prominent than in sodium (~25-fold), calcium (~25-fold) or potassium (4-fold) [5]. Consequently, the ionic radius of dehydrated magnesium is small but biologically relevant [6]. This simple fact explains a lot of magnesium's peculiarities, including its often antagonistic behaviour to calcium, despite similar chemical reactivity and charge. For instance, it is almost impossible for magnesium to pass through narrow channels in biological membranes that can be readily traversed by calcium because magnesium, unlike calcium, cannot be easily stripped of its hydration shell [10]. Steric constraints for magnesium transporters are also far greater than for any other cation transport system [5]: proteins transporting magnesium are required to recognize the large hydrated cation, strip off its hydration shell and deliver the bare (i.e. dehydrated) ion to the transmembrane transport pathway through the membrane (Figure 1) [5, 11, 12]. There are obvious chemical similarities between calcium and magnesium but in cell biology, major differences often prevail (Table 1).

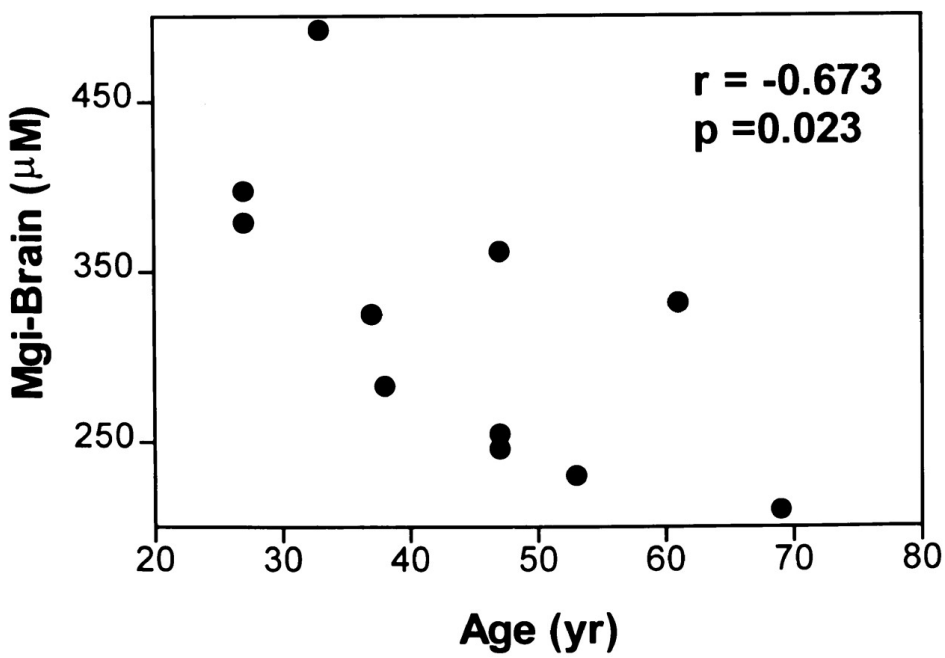
Physiological role of magnesium in the body

The body of most animals contains ~0.4 g magnesium/kg

Source : https://ods.od.nih.gov/factsheets/Magnesium-HealthProfessional/

We Produce Less Magnesium As We Age





Resnick, L. M. et al. Hypertension, 1997

Magnesium Deficiency

Early signs of magnesium deficiency include:

- loss of appetite, nausea, vomiting, fatigue, and weakness

As magnesium deficiency worsens:

- numbness, tingling, muscle contractions and cramps, seizures, personality changes, abnormal heart rhythms, and coronary spasms can occur

Severe magnesium deficiency can result in:

- hypocalcemia or hypokalemia (low serum calcium or potassium levels, respectively) because mineral homeostasis is disrupted

Habitually low intakes of magnesium induce changes in biochemical pathways that can increase the risk of illness over time.

- hypertension and cardiovascular disease
- type 2 diabetes
- osteoporosis
- migraine headaches
- RDI – adult females = 320 mg; adult males = 420 mg

Magnesium – Overdose

5,000 mg/day Mg has been associated with toxicity

https://ods.od.nih.gov/factsheets/Magnesium-HealthProfessional/

Best Food sources of Magnesium

	Mg per Serving	Percent DV
Almonds, dry roasted, 1 ounce	80	20
Spinach, boiled, ½ cup	78	20
Cashews, dry roasted, 1 ounce	74	19
Peanuts, oil roasted, ¼ cup	63	16
Cereal, shredded wheat, 2 large biscuits	61	15
Soymilk, plain or vanilla, 1 cup	61	15
Black beans, cooked, ½ cup	60	15
Edamame, shelled, cooked, ½ cup	50	13
Peanut butter, smooth, 2 tablespoons	49	12
Bread, whole wheat, 2 slices	46	12
Avocado, cubed, 1 cup	44	11
Potato, baked with skin, 3.5 ounces	43	11
Rice, brown, cooked, ½ cup	42	11
Yogurt, plain, low fat, 8 ounces	42	11

https://ods.od.nih.gov/factsheets/Magnesium-HealthProfessional/

Why Body Prime uses Magnesium Oxide

Study summary

- The magnesium content in food consumed in the Western world is steadily decreasing.
- We investigated the impact of supplemental oral magnesium citrate versus magnesium oxide on intracellular magnesium levels ([Mg2+]i) and platelet function in healthy subjects with no apparent heart disease.

Results

- **Oral magnesium oxide, rather than magnesium citrate:**
  - significantly increased [Mg2+]
  - reduced total cholesterol and LDL cholesterol
- Both treatments similarly inhibited platelet aggregation in healthy subjects with no apparent heart disease.

Magnesium Research 2012; **25** (1): 28-39 ORIGINAL ARTICLE

Comparison of magnesium status using X-ray dispersion analysis following magnesium oxide and magnesium citrate treatment of healthy subjects*

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Study into Magnesium Supplementation for exercise recovery

Study summary

- To investigate the effect of magnesium supplementation on systolic blood pressure whilst resting and during recovery from aerobic and resistance exercise and on performance

Results

- The supplemented group, had a reduction in mean resting systolic Blood Pressure by 8.9 mmHg (115.125 ± 9.46 mmHg, p = 0.01) and post exercise by 13 mmHg (122.625 ± 9.88 mmHg, p = 0.01)
- Recovery Blood Pressure was 11.9 mmHg lower and Heart Rate decreased by 7 beats per minute

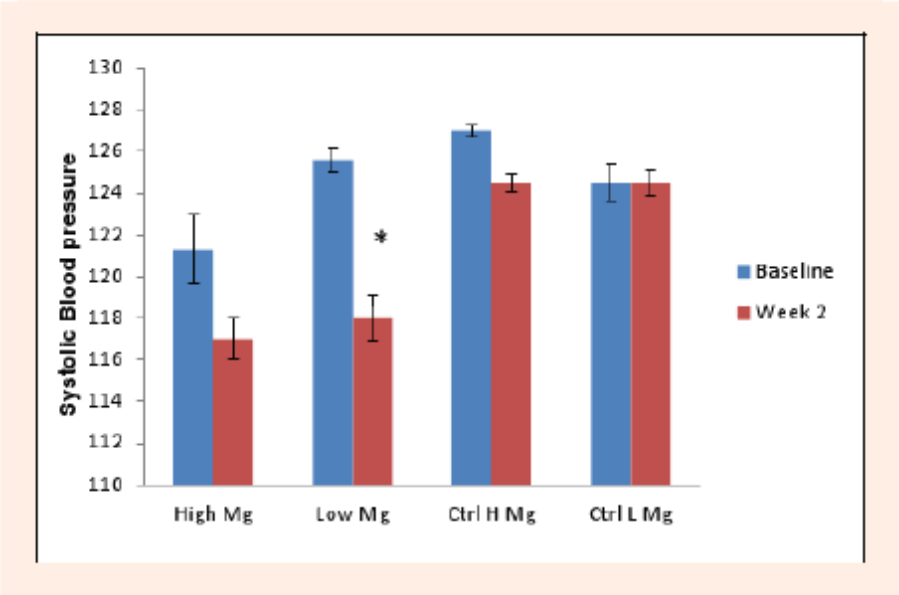

Figure 1. **Mean resting systolic blood pressure change in the experimental and control groups split into high (≥300mg) and low (<300mg) magnesium intake subgroups between baseline and week 2.**

Benefits of a Healthy Gut For Sports and Fitness

- Better absorption of essential vitamins, minerals and proteins
- Improved elimination of toxins and waste
- Increased muscle mass
- Speeds up recovery rates
- Anti-inflammatory for joints

Enhanced Performance

Body Prime