

# The Source Mentor session

## Magnesium - Part 2

MENTOR SESSION 27

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### IN THIS MENTOR SESSION:

- The benefits of magnesium just go on and on...
- Tired? Maybe you need magnesium!
- Are you taking the right amount of magnesium?

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## Magnificent magnesium!



**If you're not surprised about all the benefits of magnesium after session 1 then just wait till you're finished with this session...!**

In this session we'll look at some more benefits of magnesium for the body and then we'll get to what most of you are waiting for: how to consume enough magnesium!

## Versatile mineral

**Here are more benefits of the versatile mineral magnesium!**

-Oral magnesium successfully relieves premenstrual mood changes.<sup>39</sup>

-Magnesium improves peripheral blood circulation and seems to have a beneficial effect on visual field in glaucoma patients.<sup>40</sup>

-Magnesium plays an important role in bone formation and bone mineralization and helps prevent osteoporosis.<sup>41,42</sup>

-A high magnesium intake is associated with improvements in symptom scores in asthmatics<sup>43</sup> and the treatment of acute asthmatic attacks.<sup>44</sup>

-Magnesium may be involved in the regulation of body size.<sup>45</sup>



**Magnesium helps prevent Osteoporosis.**



**Control Asthma better with magnesium.**

# Energy

**Optimal magnesium and healthy energy levels are synonymous with each other!**

The reason for this is that magnesium plays a crucial part in the metabolism of energy through the production of the energy molecule called ATP.

Thus, some studies have shown that magnesium alleviates the symptoms of chronic fatigue syndrome.<sup>46</sup>



# Exercise

Research has also shown that exercise induces a redistribution of magnesium in the body to accommodate metabolic needs. There is evidence that even a marginal deficiency of magnesium can impair exercise performance and also worsen the negative effects of strenuous exercise.

(Strenuous exercise causes oxidative stress in the human body, much like in people who are chronically ill).



## Are you producing enough energy?

Strenuous exercise increases sweat and urinary losses of magnesium which may increase magnesium requirements by 10-20%.<sup>47</sup>

Magnesium supplementation or increased dietary intake of magnesium will have beneficial effects on exercise performance in magnesium-deficient individuals.<sup>48,49,50</sup>

(Note: It does seem though that individuals who have normal levels of serum magnesium will not have extra enhanced performance with even higher levels of magnesium supplementation.)

# Magnesium and strength

## Magnesium and strength:

Studies have shown that significant increases in strength occurs after strength training in people with optimal magnesium intake.<sup>51</sup>

Another unique study has also shown that magnesium plays a very important role for older people to maintain their muscle strength.<sup>52</sup>



**Take note!** One of the hundreds of functions that magnesium has is to assist protein synthesis! Don't exercise without it!

# How much do you need?

The Recommended Daily Allowance (**RDA**) represents the **ABSOLUTE MINIMUM** that you need. These levels are the following:

- For men:** 420mg elemental per day (I prefer 600mg elemental per day)
- For women:** 310mg elemental per day (I prefer 500mg elemental per day)

## What factors affect how much you need?

**Some people definitely need more magnesium than others!**

The following groups of people should double check their magnesium intake:

- People who sweat considerable amounts during the day.
- People who take part in exercise and other strenuous activities.
- People who have to function under extreme amounts of stress.
- People with heart disease in their family.



**And some just need more of everything...**

**Elemental issue:** Not all salts of magnesium are equal in how well they're absorbed in the intestine and that's why the RDA is given as an elemental value. You thus need to know what the absorption of the magnesium is that you use. See the page on supplementation to understand this better.

# Where to get magnesium

## Water

Begin with the basics. You know now that magnesium is more bio-available through water so try to find out if your tap water has enough. (See the Tuscany story in session 26—**BUT** don't bargain on your tap water having enough, it probably won't.)

Buy mineral water that has 80 – 110mg magnesium per litre. You may struggle to find this so we suggest you look into fortifying your own water! (See pg 5 for more info).



# Where to get magnesium

## Food

Regarding magnesium, the rule is: **'green is good!'** This is because the centre of the chlorophyll molecule which gives plants their green colour contains magnesium.

These include spinach, broccoli, etc.



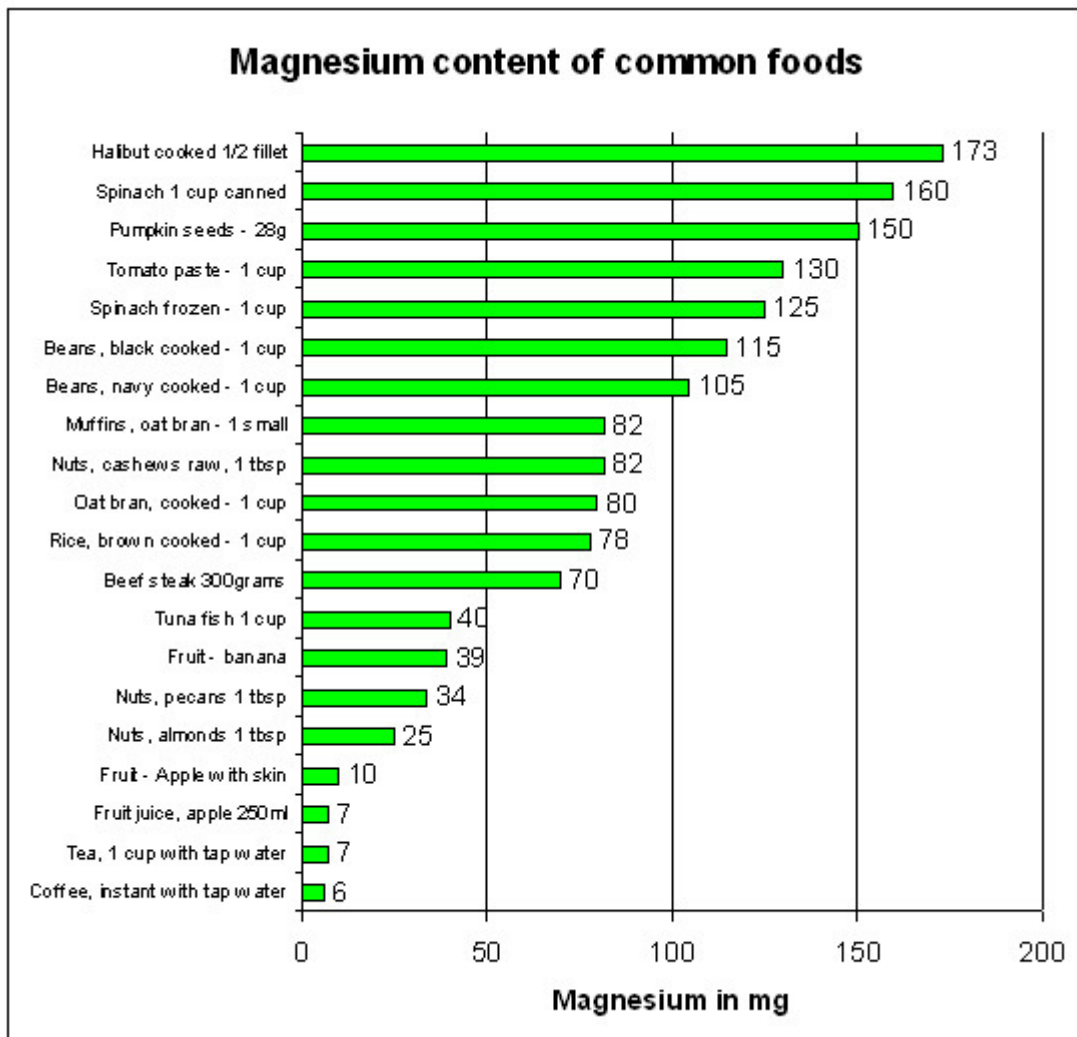
Legumes: Beans and peas, nuts, seeds and whole, unrefined grains. (Remember that refined white breads are not good because the magnesium-containing germ and bran has been removed.)

Seafood and some dairy products are also good sources of magnesium.



## Food table for magnesium

This list serves only as an example of the levels of magnesium in certain common foods. Note how high spinach, beans and some of the nuts are.



# How to supplement magnesium

## Capsules & tablets



**Not all salts of magnesium are equal!** <sup>53,54</sup>

**The magnesium supplements that are absorbed the best are amino acid chelate varieties like:**

Magnesium glycinate, magnesium bis-glycinate and magnesium taurate. (Read what form they are on the supplement label.)

**2<sup>nd</sup> Best on absorption and probably slightly cheaper:**

Magnesium malate, gluconate, citrate, fumarate, aspartate, acetate, lactate and pidolate. (Some sachet supplements contain aspartate)

**3<sup>rd</sup> best and probably the cheapest of the magnesium supplements:**

Magnesium chloride, carbonate, bicarbonate, sulphate.

(Note: You definitely will absorb these inorganic varieties but you'll need significantly more due to the poorer absorption.)

**Worst absorption and not advisable:** Magnesium oxide

## Fortified water

Research states that magnesium is absorbed better when taken in a watery medium. This is also the way that I recommend it and I've seen several success stories where overworked and overtired businesspeople feel dramatically better by just taking properly fortified magnesium water.

As I said on the previous page, you can get your magnesium through mineral waters that have been fortified properly but if that's not an option then you can fortify your own water using the recipe below.

### Dr Will Davis's magnesium recipe:

This is a simple and cheap recipe to fortify your own water using magnesium chloride crystals. Remember that you need to follow the recipe to the letter.

- 1) Take one litre of purified water.
- 2) Add 5 heaped teaspoons of magnesium chloride crystals.
- 3) Shake up **'the solution'** and refrigerate.
- 4) Drink a total of 80ml of the above **solution** daily in divided dosages. What that basically means is that you can take 20ml of the solution **in a glass of fruit juice or water** 4 times per day. (DO NOT drink the solution neat—it tastes horrible!)

### What if I'm taking magnesium capsules already?

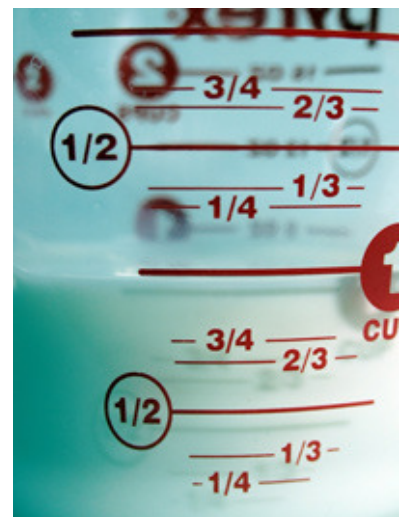
If you're taking other magnesium supplements then only add **one teaspoon** of magnesium chloride to **25 litres** of purified water. Use the water for cooking and making beverages etc.

### Over-dose?

Magnesium is water-soluble and the body gets rid of excess magnesium through the kidneys. So the biggest issue with an overdose is that it will give you diarrhoea. To really get hypermagnesaemia you would have to take absolute mega dosages of magnesium.

Consult with your healthcare practitioner before starting your own magnesium fortification.

Avoid high doses of magnesium if you suffer from kidney failure or myasthenia gravis.



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## References continued from session 26.

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# About Dr Anton



Dr Anton Janse van Rensburg is a practising medical doctor who has devoted himself to the study of unique, scientifically sound solutions to modern diseases. He is also a qualified metal toxicologist, has a master's degree in Applied Human Nutrition and is the South African programme director for the Robertson Wellness Brain Chemistry Optimisation Programme.

He has written on a variety of wellness topics for numerous South African magazines and newspapers and in 2009 co-authored the book 'Diamonds in the Dust – crafting your future landscape'.

Besides being a wellness coach to company executives Dr Anton is an established public speaker and no stranger to radio and television. He has provided guidance to scores of audiences with his passion for wellness education.

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