

# Magnesium and children

Many children could use some extra magnesium. More magnesium can relieve growing pains, improve skin conditions, promote concentration or encourage better sleep.

And when it comes to addressing behavioural disorders like ADHD, autism and depression, Zechsal can also be used as a supplement or natural alternative to often-intense medication.

Much clinical research has gone into the administering of magnesium to remedy behavioural disorders among children. Extra vitamin B6 has also been administered as part of most of this research. These studies have all displayed positive results. When magnesium supplementation has been halted, symptoms have reappeared within a few of weeks.

'Anders denken over Magnesium' Marianne Mousain-Bosc 2011 Journal of the American College of Nutrition, Vol. 23, No. 5, 545S-548S (2004) Eksp Klin Farmakol. 2006 Jan-Feb; 69(1):74-7. Magnes Res. 2006 Mar; 19(1):46-52.

## Why Zechsal magnesium?

Natural Zechsal products contain naturally-occurring magnesium chloride. This makes absorption through the skin possible, does not unnecessarily overload the digestive system and ensures a high degree of biological availability.

When taken orally, much of the ingested magnesium does not actually get used. Around 50% to 70% is immediately expelled by the body. And children in particular are often affected by digestive problems associated with oral ingestion. When it comes to absorption through the skin, known as transdermal absorption, the magnesium makes its way straight to the intercellular fluid, thus reducing the risk of digestive problems and optimising entry into the body.

On the other hand, there is a risk of skin irritation as a result of the high concentration of magnesium oil, especially among children. This can be unpleasant, so dilution with water can be an option here. It is also used on the soles of the feet in its pure form because the skin in this region is less sensitive. For children, the use of baths or foot spas with magnesium crystals is a tremendous option. These are highly effective and children often enjoy them. The lower-concentrate, milder body cream is also ideal for use by children.

### Dosage and use

A commonly applied guideline is a daily dosage of at least 6 mg of magnesium per kg of bodyweight. In the United States, the FDA (Food & Drug Administration) has recommended that this amount should be increased to 8 or 10 mg per kg. Here, one must remember that individual requirements vary and are dependent on diet, genetic structure, amount of exercise, stress, etc. Fortunately, it is virtually impossible to overdose on magnesium because the body takes what it needs and expels the rest in a natural way. There are also no significant contraindications, with the exception of persons suffering from severe kidney problems or extremely low blood pressure.

As an example and based on current guidelines, a healthy child weighing 30 kg would need 180 mg of magnesium. We assume that half of this magnesium requirement is obtained from food, so we recommend a supplement of 90 mg. When we adjust this to suit various age groups, we are able to make the following recommendations:

#### **Children aged 0-2 years**

A bath (app. 30 litres of water) containing approximately 100 g of crystals two to three times a week. Around 3 fingertips of body cream applied on the remaining days. This can be applied anywhere, although the feet and abdominal region are ideal.

#### **Children aged 3-6 years**

A foot spa (3 litres of water) containing approximately 40 g of crystals two to three times a week, or a bath (app. 50 litres) containing 150 to 200 g of crystals twice a week. 4 to 5 fingertips of body cream applied on the remaining days.

#### **Children aged 7-12 years**

A foot spa (3 litres of water) containing approximately 50 g of crystals or a bath (app. 50 litres) containing 200 to 250 g of crystals two to three times a week. Liberal application of body cream on the remaining days, or a few magnesium oil sprays on the soles of the feet before bedtime.

#### Children aged 13-16 years

Gradually increase the foot spa dosage to approximately 80 to 100 g and the bath dosage to 500 g of crystals. Apply unlimited body cream and use 10 to 12 sprays of magnesium oil per day.

The adult dosage can be applied from age 16 onwards.

NB: Persist with a certain dosage for at least three weeks, check the results and then increase or decrease the dosage accordingly. Persist for a while again to make sure that the new dosage yields the desired results.

Do not halt application or use periodically. The body cannot stockpile magnesium.