

# Magnesium



## What does it do?

\*Acid/Alkaline balance

\*Metabolism of carbohydrates, minerals, and sugar

\****Immune function***- production of white blood cells (WBC)

\****Natural sedative***- improve weakness, tiredness, chronic fatigue, may have a role in preventing heart disease, stroke, atherosclerosis, normal sodium and potassium

\***Bone and tooth formation/growth, nerve transmission, muscle function/contraction, enzyme activation, protein synthesis, enzyme activation (ADP, ATP), glucose utilization**



## What are the deficiency symptoms?

\*Nervousness, tremors, abnormal nerve function, easily aroused anger

\*Disorientation, low magnesium levels in the blood, tremor

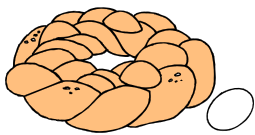
\*Blood clots, poor growth, convulsions, tetany, hyperirritability, even death

\****Easily depleted by***- prescription drugs, alcohol, carbonated drinks, renal disease



## What happens with an excess?

\****High magnesium levels in the blood***- low blood pressure, respiratory failure, heart rhythm disturbances



## Best Food Sources:

\*Nuts, leafy green vegetables, whole grain bread and cereal, legumes, meats, chili, nuts, peanut butter, fish, shellfish, rice, pumpkin seeds, sunflower seeds, tofu, milk, halibut, wheat germ/bran, almonds, mackerel, spinach, cashew nuts, seafood, dairy products, cocoa, chocolate, soybeans, dried peas and beans, beet greens

## U.S. RDA (Recommended Daily Allowance):

\****RDA's/mg.***- Infant- 40-60, Children- 1-3- 80, 4-6- 120, 7-10- 170, Males- 11-14- 270, 15-18- 400, 19-51+- 350, Females 11-14- 280, 15-18- 300, 19-51+-280, Pregnancy- 320, Lactation- 1st 6 months- 355, Last 6 months- 340

\*45 to 50% of meal intake absorbed, beware of excess phytates

\****Normal Lab Value***- 1.6 to 2.1 Meq/Liter

