

Product Code AN073	Herbal Heart Tonic	Pages: 18
For all species and ages (and humans)		
Last Updated: 11-06-18		

If you or your pet has been vet diagnosed with hyperthryoidism and / or (Hypertrophic or dilated) Cardiomyopathy (enlarged heart) and is lethargic (with or without fainting spells): Then this remedy is what your pet needs, as it is safe and natural with no adverse side affects as seen when taking chemical heart controlling drugs. It is fine to use both drug and natural remedies at same time, until the health and energy has improved through this formula.

#### NUTRITION for the Heart function:

• Ubiquinol, (a form of **CoQ10**), that is supposedly more readily absorbed by an older person or dog, with great success! (pierce cap and add oil to meals – daily)

Magnesium taurate powder and Potassium powder for "hypertension".

(not calcium, calcium competes with magnesium and will deplete magnesium)

(magnesium deficiency can be related to heart disease, epilepsy, kidney disorder)

- Vit E 1 teaspoon of wheat germ oil or several drops for cats/small dogs.
- Fish oils omega caps pierce cap and add oil to meals daily.

# **CHEMICAL DRUGS**

**Heart Drug.** It is recommended to continue the chemical heart drugs if your pet is already on them. Once you see the improvement, then can be reduced after your vet sees that the drugs are no longer needed. But you need to continue the natural heart remedies support. Consult your vet for check ups for possible reduction with the chemical drug medications as if using natural medicines at the same time, the action of the heart will become stronger and general wellbeing will be very obvious.

In general most drugs can be stopped once natural remedies have done their work.

You must continue to give the natural heart remedy as a daily support treatment.

<u>In Congestive Heart Failure (cardiomyopathy) or old age health.</u>

The heart is a muscular organ whose sole function is to pump blood around the body - supplying the tissues of the body with oxygen and nutrients. The heart receives de-oxygenated blood from the tissues of the body and pumps it to the lungs where it is re-oxygenated. The oxygen rich blood then returns to the heart where it is then pumped back to the tissues of the body.



**A Heart Condition** - which can be gradual or sudden in onset - is the loss of the normal pumping action of the heart, leading to a range of symptoms including:

- Reluctance to exercise
- Tiring more easily
- Coughing
- Laboured breathing
- Pale or bluish gums
- Fainting or collapse

Although there are many possible causes of heart disease, the two commonest causes are either due to **heart valve** problems, or due to a problem with the **heart muscle** itself.

Heart conditions **s generally more common in older dogs**, however in certain breeds it is more prevalent at an early age. In cats, heart disease is quite commonly associated with thyroid gland disease. If you are concerned that your pet is showing any of the previously described signs, please come and see us for a check-up. The good news however is that with alternative herbs and homeopathy with effective forms of diagnosis from a VET then seeking alternative natural treatment, the outlook for this condition has never been better.

Pets can be diagnosed with having a Heart Murmur, which can be quite common or less common is having Cardiomyopathy (enlarged heart) or Hyperthyroidism and / or is (Hypertrophic or dilated). Congestive Heart Failure.

Many of the symptoms that can be associated with having a heart disease or condition are: reflex coughing, coughing with little exercise tolerance, congested lungs, resting for long periods in sternal recumbency.

Weakness, falling over -- is often seen in older pets with weak heart action

Symptoms felt are:

rapid and irregular pulse producing palpitation, for congestive heart conditions.

Valvular disease with or without endocarditis.

Possible feeble and irregular pulse..conditions of the Valvular in the older dog.

Violent and rapid action, palpitations.

Low blood pressure.

Oedema of limbs.

Cardiac oedema.

Excessive exhaustion.

Myocarditis, Irregularities of action cause state of anaemia with oedema.

Arrhythmic heart conditions.

Irregularities or rhythm, dropsy.

Dyspnoea on least exertion, dilated heart, weak heart sounds or valvular murmur.

Shortness of breath symptoms or fainting fits, weak heart.

Mitral regurgitation producing cyanosis with small feeble pulse.



**Older dogs show signs:** of cyanosis, a dry cough and respiratory distress. Insufficient systole action, fibrillation dyspnoea, decompensated heart valve, enlarged liver or heart disease associated with kidney failure.

<u>Did you know panting after exercise may be because they have a weak heart action as a consequence of simply "old age".</u> Angina muscles - restriction of chest muscles, anxiety.

THIS IS WHY **MAGNESIUM** mineral supplementation given daily will quickly respond to many of these symptoms.

Things you should know!

# **POTASSIUM** (mineral)

If you or your pet is taking **Diuretic drugs** - be aware this may cause a deficiency in magnesium and potassium.

Potassium is often lost through-- frequent urination -- which causes potassium loss--which causes frequent urination --more potassium loss. Also relevant to heart function having a low potassium or magnesium is - Tachycardia which is a condition that causes your resting heart rate to elevate to higher than normal, which for an adult at rest is 60 to 100 times per minute. 

Symptoms include dizziness, light-headedness, elevated pulse rate, palpitations and chest pain, MayoClinic.com notes. Heart disease, high blood pressure and imbalanced levels of electrolytes like potassium are possible causes of tachycardia. Abnormal levels of potassium coupled with heart disease potentially cause tachycardia, according to a study published in a 2001 issue of the "Journal of Cardiovascular Electrophysiology."

# **MAGNESIUM** (mineral)

Magnesium deficiencies can lead to muscle weakness and tremors (spasm) and a host of cardiovascular problems ranging from high blood pressure to arrhythmias. It was suggested that many pets and humans that suffered sudden "cardiac death" from heart rhythm disturbances resulting from a deficiency of magnesium and / or potassium. A shortage can cause or worsen congestive heart failure, atherosclerosis, chest pain (coronary vasospasm), high blood pressure, cardiac arrhythmias, heart muscle disease (cardiomyopathy), heart attack and even sudden cardiac death. Your cells need a steady supply of magnesium to maintain proper smooth muscle function in your blood vessels. In addition, magnesium supplements can help your body shuttle potassium and sodium, two other essential electrolytes, into and out of cells, maintaining proper balance (homeostasis).

(There is a great deal of evidence that magnesium, when administered according to specific protocols in appropriate dosages, can reduce the risk of death in patients who have suffered a heart attack. For example, when a person comes in with a heart attack, doctors give two grams (2,000 mg) intravenously over an hour)



**Please Note**: Do not take Magnesium and Calcium - calcium competes and will depletes magnesium, therefore staying magnesium deficient.

**Diuretics -** One can use Lasix drug in conjunction with the homeopathic diuretic (DuraAid) or use one or the other. Some animals need both, some animals respond better just the homeopathic formula on its own. If your pet has issues still, please contact our office so a custom formula is made specifically for complex health situations. **Also can be used as a natural diuretic for your pet in cases of heart insufficiency causing fluids on the lungs.** 

<u>Restoring Potassium:</u> Braggs Organic Apple Cidar Vinegar in daily meals to help <u>replace</u> <u>potassium loss.</u> e.g Toy dog: 4 drops. Small and med dogs. \*1/2 teaspoon in water and/or add to meals. \*1-2 teaspoons for large dog pets. Use this for a month. Repeat if still on the Lasix drug or both formulas.

# **HYPERTHYROID**

For Felines that also have Hyperthyroidism (overactive thyroid function):

Use formula 1 – homeopathic HAMPL Healthy Heart drops (Congestive Heart failure formula) (and if needed formula 3. HAMPL DuraAid – a natural diuretics homeopathics)

The dosage would be the same for any size pet or age, as they are natural formulas so you cannot overdose, nor any side effects.

WE HAVE PROVIDED

PRODUCT CODE: 073. HAMPL Non Drug Prescription
AN073 HAMPL HeartTonic 22-2 100ml (3.4oz)

**WE ALSO HAVE A SET** 

#### PRODUCT CODE: 022. HAMPL Non Drug Prescriptions - Set of 3

- 1. HAMPL Congestive Heart 22-1 50ml (1.7oz) \* homeopathic medicine
- 2. HAMPL Heart Tonic 22-2 100ml (3.4oz) \* herbal medicine
- 3. HAMPL DuraAid 22-3 50ml (1.7oz) \* homeopathic diuretic medicine

# **DIURETIC**

"HAMPL Dura Aid" DROPS is a <u>natural diuretic</u> that take along side or in place of the diuretic drug (the drug is best avoided due to causing depletion of potassium). We find the drug is not always affective enough at times, so people will repeat dosing of the natural DurAid drops to get the pet comfortable again. If your pet is/or has been on **chemical diuretics**, to help restore their potassium by giving apple cider vinegar for a number of weeks. If you have a cat which maybe more difficult to give **apple cider vinegar** to, try the magnesium and potassium tablets instead (crush and add a pinch twice daily in meals).



A natural potassium replacement is "Apple Cider Vinegar" or Potassium Capsules (for pet use powder from caps and mix in meals).

# **Example:**

<u>Med/Ige dog:</u> Add 1 tablespoon to fresh filtered drink water every time you change water for your dog.

<u>Small dogs/Cats</u>: Several drops diluted in a teaspoon of water and added to daily meals. Or use HAMPL potassium formula drops called "**HAMPL Potassaid**" (AN019 from the kidney aid set)

# **USING HERBAL MEDICINES**

# HAMPL Heart Tonic 22-3 100ml

**Herbal Dosing (brown liquid)** <u>must be</u> diluted in some food or liquid before dosing. (See bottle label for amount of drops per species and sizes)

# **EXAMPLE:**

Canine: unsweetened applesauce, or sardines (plain) in spring water.

**Equine:** can add to some Apple Juice and oral syringe.

**Felines or toy dogs and other small animals**: 20-30 drops in a 20ml (egg cup) boil kettle and fill with hot water.

**NOTE:** Felines cannot metabolize alcohol, so it is vital that before making up the dose of herbal treatments, we add some hot water to the amount we are going to use, so the alcohol will vaporize. (Alcohol is used a preservative). See feline herb instructions on label.

# Medicimal Herbal Uses

**Burdock Root** - contains a good amounts of **electrolyte potassium** (308 mg or 6.5% of daily-required levels per 100 g root) and low in sodium. Potassium is an important component of cell and body fluids that helps control heart rate and blood pressure. This herb root contains small quantities of many vital vitamins, including folic acid, riboflavin, pyridoxine, niacin, vitamin-E, and vitamin-C that is essential for optimum health. Both vitamin C and E are powerful natural antioxidants help the human body stave off infections, cancer and neurologic conditions. Furthermore, it also contains some valuable minerals such as iron, manganese, magnesium; and small amounts of zinc, calcium, selenium, and phosphorus. The root, leaf, and seed are used to make medicine. People take burdock to increase urine flow, kill germs, reduce fever, and "purify" their blood. It is also used to treat colds, cancer, anorexia nervosa, gastrointestinal (GI) complaints, joint pain (rheumatism), gout, bladder infections, complications of syphilis, and skin conditions including acne and psoriasis. Burdock is also used for high blood pressure, "hardening of the arteries" (arteriosclerosis), and liver disease. Some people use burdock to increase sex drive.

**Red clover** - is a source of many nutrients including calcium, chromium, **magnesium**, niacin, phosphorus, **potassium**, thiamine, and vitamin C. Red clover is a rich source of isoflavones. Cardiovascular - Researchers theorize that red clover might help protect against heart disease, with stronger, more flexible arteries (called arterial compliance), which can help prevent heart disease. Red clover may also have blood-thinning properties, which keeps blood clots from forming. It appears to improve blood flow.

**Hawthorn Berries -** Hawthorn, which is related to the rose, has a long history of use for treating heart disease. Hawthorn is a small, thorny shrub whose leaves and flowers contain large



concentrations of antioxidants, including quercetin and oligomeric procyandins. Hawthorn can be used in cardiomyopathy to improve heart function associated with congestive heart failure and relieve angina, or chest pain. A 2011 report published in "Planta Medica" states hawthorn extract is an effective treatment for mild congestive heart failure, coronary artery disease and atherosclerosis. Hawthorn may also lower blood pressure. Take hawthorn only under your doctor's supervision and don't take it with other heart medications.

**Cardiomyopathy** can be associated with congestive heart failure, coronary artery disease and atherosclerosis, or hardening of the arteries. Although there are many prescription medications available to treat cardiomyopathy, some herbs may also be beneficial. Never self-treat a heart problem; talk to your doctor about the correct herb and dosage that is right for you.

**Coleus -** known scientifically as Coleus forskohlii, is a perennial herb of the mint family. Its roots and leaves are harvested for their high concentration of the compound forskolin. Standardized extract of coleus containing forskolin can be used to treat **cardiomyopathy.** Forskolin may improve heart function in congestive heart failure and cardiomyopathy by increasing the force of the heart's contraction, dilating coronary arteries and lowering blood pressure without increasing your heart's need for oxygen.

# Lethargy?

This is caused by lower levels of oxygen in the blood which in turn is caused by anaemia. Lethargy may also be caused by low potassium levels

#### NATURAL MEDICINES SOLUTION:

starting using the homeopathic **HAMPL PotassAid 19-3** regularly. Plus the **BioCare "Potassium Ascrobate"** Capsules form the UK website. For possible high blood pressure. Use the homeopathic **HAMPL High Blood Pressure** drops. Lethargy may sometimes be a sign of heart problems, especially if it appears after giving fluids. Start the **HAMPL Healthy Heart drops**. **Weakness, especially in the back legs.** 

This is very common in anemia. Your cat or dog may find it more difficult to jump on your bed. See also \* low potassium (see below), metabolic acidosis and high phosphorus. Also cats with high blood pressure may also no longer jump.

## NATURAL MEDICINES SOLUTION:

- 1. **HAMPL HBP 148 formula** (homeopathic formula for high blood pressure drops)
- 2. **HAMPL Anaemia 19-4 drops** (this formula is supplied with the Homeopathic Kidney Set).
- 3. Boron powder for reducing high phosphorus levels. \* add a pinch daily in food or oral mixture.
- 4. For possible "Low Potassium" minerals in body. \*add a pinch daily in food or oral mixture.

# Chemical "diuretic drug use"

Often a pet who is on OR previously used the chemical "Diuretic Drugs" would often caused a deficiency in Potassium. As the drug depletes the body of potassium.

**Potassium (mineral)** Our bodies (human) need about 4500mg of it a day from all source. Large to med Canines: Perhaps half this amount. A pinch for a feline and toy god. Potassium is important for a person's muscles to work effectively, including the heart. Potassium also has a role in regulating blood pressure. Low potassium levels (hypokalaemia) can cause weakness as cellular processes are affected.



# Potassium is a mineral (electrolyte) in the body.

Almost 98% of potassium is found inside the cells. Small changes in the level of potassium that is present outside the cells can have severe effects on the heart, nerves and muscles. The kidney is the main organ that controls the balance of potassium by removing excess potassium into the urine

# The normal potassium level is 3.5-5.0 mmol/L (millimoles per litre)

Low potassium is defined as a potassium level below 3.5 mmol/L.

**Low potassium causes ...** Dehydration, diarrhoea, excessive sweating (hyperhidrosis) and laxative abuse are common causes of low potassium levels. Other causes include medicines that affect the amount of potassium in the body, such as diuretics, also known as water pills.

# Low potassium symptoms

Symptoms of low potassium are usually mild. At times the effects of low potassium can be vague. There may be more than one symptom involving the gastrointestinal (GI) tract, kidneys, muscles, heart and nerves.

Weakness, tiredness, or cramping in arm or leg muscles, sometimes severe enough to cause inability to move arms or legs due to weakness (much like a paralysis)

Tingling or numbness

Nausea or vomiting

Abdominal cramping, bloating Constipation

Palpitations (feeling your heart beat irregularly)

Passing large amounts of urine or feeling very thirsty most of the time

Fainting due to low blood pressure

Abnormal psychological behaviour: depression, psychosis, delirium, confusion etc

# Hypokalemia

If your pet may have low levels of potassium, they may experience side effects such as abnormal heart rhythms, a breakdown of muscle fibers, constipation, fatigue, and muscle weakness or spasms.

# **Arrythmias**

There are many different kinds of arrhythmia. Some make the heart beat too fast, while others make it beat too slowly or even skip beats. All types of arrythmia can cause a wide variety of symptoms including dizziness and fainting, notes the Texas Heart Institute. An irregular heart rhythm from any cause might also be accompanied by shortness of breath, chest pain and sweating. Symptoms usually occur when there is a dramatic drop in potassium. You may not always experience side effects if your potassium levels are slightly off balance.



Please give your dog or cat:

**BioCare "Potassium Ascrobate"** Capsules www.biocare.co.uk (this has Potassium with Vitamin C which is great)

OR

# Potassium Bicarbonate Capsule www.pureformulas.com

\* feline or toy dog: add a pinch into meals. Or add 1/2 a teaspoon of this to your vitamin powder mix – or 1/18 teaspoon to meals and mix well. Double the amount for small to med dog, and three times as much for large dog.

# Heavy Breathing, Wheezing , Fast Heart Rate.

These may be related to a heart condition (e.g. hyperthyroid – common in cats as they age) **or to high blood pressure**, **but anemia** may in itself cause heart problems and high blood pressure: your vet can determine which came first.

NATURAL MEDICINES SOLUTION: Then use the appropriate homeopathic formulas. Or if you already have the **HAMPL Healthy Heart drops**, try them of frequent repeats to see if this is what was needed, if not, no harm done, just go onto the **HAMPL HBP 148 drops** (homeopathic high blood pressure support). We also have the homeopathic Hyperthyroid drops if required.

# **Naturopathic Advice**

The muscle may either weaken or stretch (dilated cardiomyopathy), or it may thicken greatly (hypertrophy cardiomyopathy). Either condition will limit the heart's ability to pump blood.

Many of the dilated form of cardiomyopathy have been associated with a deficiency of the amino acid L-taurine.

**Dr. Don Hamilton DVM** (author of Homeopathic Care for Cats and Dogs) ... said Cardiomyopathy is an autoimmune disease, and vaccines are major causes of autoimmune disease.

**Feed 3 to 4 small meals a day** rather than 2 large ones. Feed small amounts of red meat; feed more turkey chicken and chicken necks daily. Mulched raw veggies in blender and add to each small meal daily.

Feed other meals during the day of Tofu, cooked eggs and natural yoghurt, cottage cheese.



# Magnesium (mineral supplement)

as well as work on home prepared foods, with some (human grade) Colostrum or Probiotics powders

#### MAGNESIUM TAURATE – is a good type of magnesium for heart conditions.

Felines, toy dogs, rabbits, birds etc: Add a pinch in meals daily.

Canines, farm animals: add ½ teaspoon in daily meals.

80% of pets and humans are deficient in this mineral – magnesium. So they recommend to build up the dosing over a month or so. So the dosage we have indicated are a good starting point.

#### MORE INFORMATION

#### MAGNESIUM "CO-FACTORS"

Supplementing magnesium alone is not as effective in raising magnesium levels in your body, as when you take it along with its co-factor. **Your body requires co-factors** which will enable it to effectively utilize magnesium in all the processes and functions that require it.

The THREE MOST IMPORTANT co-factors needed whilst taking Magnesium are:

**B6** (P5P) activated **BORON** trace mineral **BICARBONATE** powder

Other co-factors that can be added are: SELENIUM (mineral) TAURINE (amino acid) ZINC (mineral)

# Vitamin B6 (P5P)

B6 helps magnesium get inside the cell.

Recommended source is local bee pollen, starting with a small amount and working up to 1 teaspoon.

# Boron is natural trace mineral

Boron helps keep magnesium inside the cell.

Recommended sources are Boron that is called Borax powder (found in the laundry aisle of your local grocery store) or a regular boron supplement (for those less brave).

# <u>Bicarbonate</u>

Bicarbonate helps get the magnesium inside the mitochondria.

Recommended source is magnesium bicarbonate as you will consume both bicarbonate and magnesium at the same time. Sodium bicarbonate (baking soda/bicarb soda) can also be added to your bath.



#### Selenium, Taurine and Zinc

These three all help your body with its ability to intake and retain magnesium.

# For Example:

- 1. B6 (P5P) Activated form of vitamin b6 around 33.3mg (Thorne Research brand) (powder from cap) or cap for human. Twice a day. (or taken as part of a B-complex)
- 2. **Boron trace mineral** (called Borax powder at the supermarket)

#### **REFERENCES:**

Much information adapted from: http://www.scribd.com/doc/133116926/The-Borax-Conspiracy-How-the-Arthritis-Cure-Has-Been-Stopped

- (1) http://www.ncbi.nlm.nih.gov/pubmed/9638606
- (2) http://www.whale.to/w/Boron.html
- (3) http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1566627/pdf/envhper00403-0084.pdf
- (4) http://nah.sagepub.com/content/7/2/89.full.pdf
- (5) http://www.arthritistrust.org/Articles/Boron and Arthritis.pdf
- (6) http://www.ncbi.nlm.nih.gov/pubmed/172591209
- (7) http://www.ithyroid.com/Boron.htm
- (8) http://www.ncbi.nlm.nih.gov/pubmed/21129941
- (9) http://www.lef.org/magazine/mag2006/aug2006\_aas\_01.htm
- (10) http://www.earthclinic.com/Remedies/borax.html
- (11) http://jac.oxfordjournals.org/content/63/2/325.long
- (12) http://www.ncbi.nlm.nih.gov/pubmed/21774671
- (13) http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2873987/
- (14) http://www.earthclinic.com/CURES/fluoride.html
- (15) http://www.supergenial.ch/pi1/pd2.html
- (16) http://www.health-science-spirit.com/ultimatecleanse.html
- (17) http://www.sciencelab.com/msds.php?msdsld=9927593
- (18) http://www.hillbrothers.com/msds/pdf/n/borax-decahydrate.pdf
- (19) http://www.atsdr.cdc.gov/toxprofiles/tp26-c2.pdf
- (20) http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OPP-2005-0062-0004
- (21)http://en.wikipedia.org/wiki/Globally\_Harmonized\_System\_of\_Classification\_and\_Labelling\_of\_Chemicals
- (22) http://echa.europa.eu/documents/10162/17230/supdoc\_boric\_acid\_20100609\_en.pdf
- (23) http://www.inchem.org/documents/sids/sids/15630894.pdf
- (24) http://www.sciencelab.com/msds.php?msdsld=9927258



Different types of Magnesium available.

Magnesium Glycinate powder
or liquid is a chelated form of
magnesium that tends to
provide the <b>highest levels of</b>
absorption and bioavailability
and is typically considered ideal
and is typically considered ideal
for those who are trying to

\* This form of magnesium will NOT cause DIARRHEA "IF" needing to take a lot of Magnesium for therapeutic benefits.

Magnesium Oxide powder is a non-chelated type of magnesium, bound to an organic acid or a fatty acid. Contains 60 percent magnesium, and has stool softening properties.

\* Avoid - poorly absorbed (and the cheapest and most common forms found in supplements).

# Magnesium Chloride / Magnesium lactate powder contain only 12 percent magnesium, but has better absorption than others, such as magnesium oxide, which contains five times more magnesium.

# Magnesium Sulfate / Magnesium hydroxide

(milk of magnesia) are typically used as a laxative.

Be aware that it's easy to overdose on these, so ONLY take as directed

\* Avoid - poorly absorbed (and the cheapest and most common forms found in supplements)

# Magnesium Carbonate powder, which has antacid properties, contains 45 percent magnesium.

\* Avoid - poorly absorbed (and the cheapest and most common forms found in supplements) Magnesium Taurate powder contains a combination of magnesium and taurine, an amino acid. Together, they tend to provide a <u>calming effect on your body and mind</u>. This type of Magnesium is good for HEART conditions.

Magnesium Citrate powder is magnesium with citric acid, which has <u>laxative properties</u>. \* Use for constipation issues if required.

Magnesium Asparate – not recommended.

Magnesium Threonate is a newer, emerging type of magnesium supplement that appears promising, primarily due to its superior ability to penetrate the mitochondrial membrane, and may be the best magnesium supplement on the market.



Magnesium (mineral supplement) as well as work on home prepared foods, with some (human grade) Colostrum or Probiotics powders in coconut milk or water for a least a month for both yourself and your older or young animals and pets.

I use the below three types for myself and my pets. (Along with Magnesium oil spray for myself)

POWDER ~ Magnesium Taurate powder

**Add approx**.  $\frac{1}{4}$  to  $\frac{1}{2}$  teaspoon of Magnesium powder (small dog or pet) or  $\frac{1}{2}$  teaspoon for med to large dogs and horse

Felines, toy dogs, small animal: Add a pinch (1/16 teaspoon) in meals daily.

**Canines:** add ¼ small to med size dog, ½ teaspoon large dog. Mixed in daily meals. (Can add to some water and oral syringe with other herbal formula and supplements)

80% of pets and humans are deficient in this mineral – magnesium. So they recommend to build up the dosing over a month or so. So the dosage we have indicated are a good starting point.

Because Magnesium needs co factors to help absorb into the cells of the body, we can take either supplements or foods.



Signs of Magnesium Deficiency
The classic physical signs of low magnesium are:

### Neurological:

Behavioral disturbances
Irritability and anxiety
Lethargy
Impaired memory and
cognitive function
Anorexia or loss of appetite
Nausea and vomiting
Seizures
Insomia
hyperactivite

#### Muscular:

Weakness
Muscle spasms (tetany)
Tics
Muscle cramps
Hyperactive reflexes
Impaired muscle
coordination (ataxia)
Tremors
Involuntary eye movements
and vertigo
Difficulty swallowing
reflux

### Metabolic:

Increased intracellular calcium Hyperglycemia Calcium deficiency Potassium deficiency

#### Cardiovascular:

Irregular or rapid heartbeat Coronary spasms

You or your pet might be magnesium deficient if you have any of the following symptoms: Insomnia, Irritability, Sensitivity to loud noises, Anxiety <u>Autism</u>, ADD, Palpitations, Angina, Constipation, Anal spasms, Headaches, <u>Migraines</u>, , Fibromyalgia, Chronic fatigue, Asthma, Kidney stones, <u>Diabetes</u>, Obesity, Osteoporosis, High blood pressure, Menstrual cramps, Irritable bladder, Irritable bowel syndrome, Reflux.

<u>Constipation</u> – is often a deficiency of minerals. Constipation is often misinterpreted as a lack of fiber, but that is not the case – it reflects failed transition to <u>healthy bowel flora</u> and mineral deficiencies. People have been using magnesium to treat constipation, but not all magnesium's work that way, so here are a couple types of magnesium supplements that will help with constipation issues. Guide line to start using this mineral supplement.



Magnesium Citrate powder is magnesium with citric acid, which has laxative properties. Cat, toy dog, small animal, infant animal: ... try adding a "pinch" of magnesium citrate (mineral) powder.

Dog: try adding ½ a teaspoon of magnesium citrate powder supplement.

AUSTRALIA <a href="http://au.evitamins.com/magnesium-citrate-powder-now-5182?">http://au.evitamins.com/magnesium-citrate-powder-now-5182?</a>
<a href="http://www.evitamins.com/magnesium-citrate-powder-now-5182">http://www.evitamins.com/magnesium-citrate-powder-now-5182</a>

And <u>Magnesium Oxide</u> powder is a non-chelated type of magnesium, bound to an organic acid or a fatty acid. Contains 60 percent magnesium, and has <u>stool softenina</u> properties.

The ones HAMPL sell are well absorbed and do not cause loose stools e.g. But its worth trying the above ones. If you already have the ones we supply that is fine to continue with this also to help bring up the low magnesium levels your pet / animals is displaying.

### CORTISOL (adrenal function - stress hormone)

If you have low cortisol output – second or third stage <u>Adrenal fatigue</u>, it is best to only do min amounts of magnesium, as magnesium can lower cortisol's if you take a lot of it. If you have a done a Saliva Hormonal Stress test, you could take a magnesium supplement at the points were you are highest of cortisol output. But stay at low dosing of capsule once a day and over a period of months to 6 months increase to another capsule at bed time.

#### NEVER TAKE YOUR DAILY MAGNESIUM ALL AT ONCE.

Spread it out through the day; four times a day is best if you have been experiencing diarrhea. If that does not do the trick, you probably need to cut back the amount you are taking or switch to another type or brand of magnesium.

# 8 ways that Magnesium Rescues your Hormonal System

- 1) **Magnesium regulates cortisol.** Magnesium calms your nervous system and prevents excessive cortisol. Your stress hormonal system (called HPA, or hypothalamic-pituitary-adrenal axis) is your central hormonal system. When it is better regulated, then your other hormonal axes thyroid and sex hormones will function better.
- 2) **Magnesium lowers blood sugar.** Magnesium is so effective at sensitizing the insulin receptor that I refer to it as our 'natural metformin'. Better insulin control means fewer sugar cravings. Healthy insulin sensitivity is important for weight loss and <u>PCOS</u>, and it also prevents osteoporosis.
- 3) **Magnesium supports thyroid.** Magnesium is essential for the <u>production of thyroid hormone</u>. It is also <u>anti-inflammatory</u>, which helps to quiet the autoimmune inflammation that underlies most cases of thyroid disease. (Other ways to address thyroid autoimmunity include glutenelimination and a selenium supplement.)
- 4) **Magnesium aids sleep**. As I've written here <u>before</u>, magnesium is the great sleep-promoter, and sleep is crucial for hormone production. Sleep is when we should have a surge in anabolic hormones like DHEA and growth hormone. If you know that <u>you have a Catabolic system</u> compared to a Anabolic one (it is best not to take magnesium at night) As Magnesium



is a catabolic inducer.

- 5) Magnesium fuels cellular energy. Magnesium is so <u>intricately involved</u> with glycolysis and the Krebs cycle (ATP energy production), that we can safely say: "There is no cellular energy without magnesium." Glandular tissue like thyroid, ovaries and testes is metabolically very active, so requires even more cellular energy and more magnesium than other tissue.
- 6) **Magnesium makes hormones.** Magnesium is involved in the manufacture of steroid hormones such as progesterone, estrogen and testosterone. Magnesium has been shown to reduce hot flashes by 50%.
- 7) **Magnesium activates vitamin D.** Without enough magnesium, vitamin D <u>cannot do its job</u>. Conversely, too much vitamin D supplementation can <u>cause magnesium deficiency</u>.
- 8) **Magnesium is anti-aging**. The mineral has been shown to prevent <u>telomere shortening</u>, reduce <u>oxidative stress</u>, and enhance the <u>production of glutathione</u>.

# Magnesium is powerful medicine.

Magnesium is a big player in emergency rooms, where it treats heart arrhythmias, heart attack, migraine and the toxemia of pregnancy. But why should magnesium be restricted to acute care emergency medicine? It is time - past time - for magnesium to take up its role in treating chronic conditions.

# Can you test for magnesium deficiency?

Yes. As the majority of magnesium is *inside* your cells, having a <u>Serum Magnesium test</u> is useless as only detects 1% in your.

However, if you have a **RBC Magnesium blood test** this will show how much magnesium is in your cells. Not many doctors test RBC Mag test, so you most likely will need to request this rather than Serum Mag test.

# Optimum range is 6 – 7

Most people start off at one capsule (100mg) once to twice a day. Then over 3 weeks go up to three capsules once a day am and evening. Then go up to 2 capsules twice a day. Then over a period again, if needing, go up to 3 capsules twice a day. Some people also combine other sources of magnesium as well. Having a Epsom Salt baths (mag sulpate) three times a week, and topically using magnesium cream or magnesium oil on sore muscles or anywhere to absorb the magnesium daily. Taking 600mg to 1,00mg a day is good

Persons or Animal that is only slightly deficient in magnesium become irritable, highly-strung, and sensitive to noise, hyper-excitable, apprehensive and belligerent.

If the deficiency is more severe or prolonged, they may develop twitching, tremors, irregular pulse, insomnia, muscle weakness, jerkiness and leg and foot cramps.

If magnesium is severely deficient, the brain is particularly affected. Clouded thinking, confusion, disorientation, marked depression and even the terrifying hallucinations of delirium tremens are largely brought on by a lack of this nutrient and remedied when magnesium is given.

Because large amounts of calcium are lost in the urine when magnesium is undersupplied, the lack of this nutrient indirectly becomes responsible for much rampant tooth decay, poor bone development, osteoporosis and slow healing of broken bones and fractures.

With vitamin B6 (P5P) (the activated B6 form), magnesium helps to reduce and dissolve calcium phosphate kidney stones. Magnesium deficiency may be a common factor



associated with insulin resistance.

Symptoms of MS that are also symptoms of magnesium deficiency include muscle spasms, weakness, twitching, muscle atrophy, an inability to control the bladder, nystagmus (rapid eye movements), hearing loss, and osteoporosis. People with MS have higher rates of epilepsy than controls. Epilepsy has also been linked to magnesium deficiencies.[1]

# Another good list of early warning symptoms is

# Suggestive early warning signs of magnesium insufficiency:

Physical and mental fatigue
Persistent under-eye twitch
Tension in the upper back, shoulders and neck
Headaches
Pre-menstrual fluid retention and/or breast tenderness

# Possible manifestations of magnesium deficiency include:

Possible manifestations of magnesic
Low energy
Fatigue
Weakness
Confusion
Nervousness
Anxiousness
Irritability
Seizures (and tantrums)
Poor digestion
PMS and hormonal imbalances
Inability to sleep
Muscle tension, spasm and cramps
Calcification of organs
Weakening of the bones
Abnormal heart rhythm

Severe magnesium deficiency can result in low levels of calcium in the blood (hypocalcemia). Magnesium deficiency is also associated with low levels of potassium in the blood (hypokalemia).

**Magnesium levels drop at night**, leading to poor REM (Rapid Eye Movement) sleep cycles and un refreshed sleep. Headaches, blurred vision, mouth ulcers, fatigue and anxiety are also early signs of depletion.

We hear all the time about how heart disease is the number one health crisis in the country, about how high blood pressure is the "silent killer", and about how ever increasing numbers of our citizens are having their lives and the lives of their families destroyed by diabetes, Alzheimer's disease, and a host of other chronic diseases



# Signs of severe magnesium deficiency include:

Extreme thirst
Extreme hunger
Frequent urination
Sores or bruises that heal slowly
Dry, itchy skin
Unexplained weight loss
Blurry vision that changes from day to day
Unusual tiredness or drowsiness
Tingling or numbness in the hands or feet
Frequent or recurring skin, gum, bladder or vaginal yeast infections

But wait a minute, aren't those the same symptoms for diabetes?

Many people have diabetes for about 5 years before they show strong symptoms. By that time, some people already have eye, kidney, gum or nerve damage caused by the deteriorating condition of their cells due to insulin resistance and magnesium deficiency. Dump some mercury and arsenic on the mixture of etiologies and pronto we have the disease condition we call diabetes.

Magnesium deficiency is synonymous with diabetes and is at the root of many if not all cardiovascular problems. Magnesium deficiency is synonymous with diabetes and is at the root of many if not all cardiovascular problems.

Magnesium deficiency is a predictor of diabetes and heart disease both; diabetics both need more magnesium and lose more magnesium than most people. In two new studies, in both men and women, those who consumed the most magnesium in their diet were least likely to develop **type 2 diabetes**, according to a report in the January 2006 issue of the journal Diabetes Care. Until now, very few large studies have directly examined the long-term effects of dietary magnesium on diabetes.

Dr. Simin Liu of the Harvard Medical School and School of Public Health in Boston says, "Our studies provided some direct evidence that greater intake of dietary magnesium may have a long-term protective effect on lowering risk," said Liu, who was involved in both studies.

The thirst of diabetes is part of the body's response to excessive urination. The excessive urination is the body's attempt to get rid of the extra glucose in the blood. This excessive urination causes the increased thirst. But we have to look at what is causing this level of disharmony. We have to probe deeper into layers of cause. The body needs to dump glucose because of increasing insulin resistance and that resistance is being fueled directly by magnesium deficiency, which makes toxic insults more damaging to the tissues at the same time.

When diabetics get too high blood sugars, the body creates "ketones" as a by-product of breaking down fats. These **ketones cause blood acidity which causes** "acidosis" of the blood, leading to Diabetic Ketoacidosis (DKA), This is a very dangerous condition that can lead to coma and death. It is also called "diabetic acidosis", "ketosis", "ketoacidosis" or "diabetic coma". DKA is a common way for new Type 1 diabetics to be diagnosed. If they fail to seek medical advice on symptoms like urination, which is driving thirst they can die of DKA.



# Oral magnesium supplements "reduce erythrocyte", dehydration.

In general optimal balances of electrolytes are necessary to maintain the best possible <u>hydration</u>. Diabetic thirst is initiated specifically by magnesium deficiency with relative calcium excess in the cells.

Even water, our most basic nutrient starts having a hard time getting into the cells with more going out through the kidneys.

Please note:

Magnesium - needs cofactors to get into the cells, which are:

Vitamin B6 (P5P), Zinc (mineral), Potassium (mineral), Boron (trace minerals).

Example: taking Vitamin B1 and Taurine amino acid, gets Magnesium into cells, Selenium (mineral) keeps it in the cells.

Whereas – taking Vitamin D, Calcium supplements, caffeine, stress and certain drugs will eat Magnesium <u>deplete big time.</u>

# Pet, humans with:

LOW BLOOD PRESSURE - Magnesium - can lower blood pressure.

ADRENAL FATIGUE - Zinc and Magnesium- can lower Cortisol output.