

Product CODE: AN022, AN023, AN305, AN148, AN241, AN284. ~ Heart Function & Blood pressure, Fluid build up! ~ Magnesium and Potassium Deficiency symptoms		34 Pages
Last Updated: 21 st December 2020		For All Species and Ages (and humans)
* See page 2	- Congestive Heart Failure or Cardiac fibrosis	
* See page 2 & 4	- Heart Murmur - Mitral Valve Disease (Endocardiosis), Mitral or Tricuspid "Valve" Regurgitation, Insufficiency or Incompetence (or Feline).	
* See page 7-8	- High Blood Pressure	
* See page 6	- Pulmonary Hypertension	
* See page 9 - 11	- Pyothorax (Empyema) Pus in the chest cavity. * with or without Severe chronic " <i>pleural effusion</i> " –is a fluid build up in body wall & lungs, chest cavity	
* See page 14	- How potassium deficiencies affect muscle and respiratory system.	
* See page 18-28	- How Magnesium and deficiency symptoms * See Page 11 Magnesium Dosage	

Our Herbal and Homeopathics formula will not interfere with any other chemical heart drugs or medications.

Formula combines the peripheral - circulation - building benefits of ginkgo with the heart - strengthening and stabilizing properties of hawthorn into one for maximum circulatory support. **Research** indicates that the herb **ginkgo's** circulatory - system benefits may result from this special ability. Randomized, double-blind clinical studies using standardized hawthorn berry extract show that hawthorn appears to increase the efficiency of nerve impulses in, and protect against oxygen deprivation of, the heart muscle. Also, controlled study and found that hawthorn extract can improve heart function in patients suffering from chronic heart disease. These Hawthorn patients also reported fewer overall symptoms, less fatigue and less shortness of breath. Can be taken long term in Homeopathic form (small animals) or in a Herbal extract liquid tonic (for larger pets) which is added to daily meals.

Heart Conditions

Such as congestive heart failure, cardiomyopathy, arrhythmias (irregular), tachycardia (rapid), hypertrophic, aortic thromboembolism. Pulmonary Hypertension prevention and support.

Typically, cats that are predisposed to saddle thrombus have an underlying cardiac (heart) disease that increases turbulence in the flow of blood through the heart. This increased turbulence makes these patients more prone to the formation of clots.

Cats with hyperthyroidism are prone to a cardiac condition called "**hypertrophic cardiomyopathy**".

Therefore, **saddle thrombus tends to be associated with cats that have hyperthyroidism**. Cats that have formed a saddle thrombus typically **appear very weak back end to partially or fully paralyzed, unable to move the "rear legs"**

They are often vocalizing due to severe pain. When touched, the back legs are often cold and stiff, and sometimes there is panting and trouble breathing.

Yes, you can prevent "aortic thromboembolism" from forming in cats with heart failure, with homeopathic medicines as prescribed in this set.

Heart Murmur - Mitral Valve Disease (Endocardiosis) - Mitral or Tricuspid “Valve” Regurgitation, Insufficiency or Incompetence (or Feline).

* See HAMPL Product Code AN305 Naturopathic Heart Valve Set

"Mild" or Chronic Mitral Valve insufficiency that leads to small leaks across the Mitral Valve usually does not create a problem for a dog. The disease is slowly progressive in most cases and the leak will continue to worsen over months to years. If the disease becomes severe, the dog is at risk for developing congestive heart failure.

Congestive Heart Failure * AN022 Congestive Heart failure Set

means that the leak across the heart valve overwhelms the heart and fluid goes from the heart backwards into the lungs (instead of from the heart forward to the body).

Cardiac fibrosis - e.g Cardiac fibrosis commonly refers to the excess deposition of extracellular matrix in the cardiac muscle, but the term may also refer to an abnormal thickening of the heart valves due to inappropriate proliferation of cardiac fibroblasts. Fibrotic cardiac muscle is stiffer and is seen in the progression to heart failure.

* Use in conjunction with the AN022 Congestive Heart failure Set the HAMPL Keloid 58 drops and Magnesium and Potassium * See page 11 Magnesium dosage

Signs of Congestive Heart Failure include cough (especially a cough at rest), a fast breathing rate, difficulty breathing, fainting, weakness, lethargy, exercise intolerance and abdominal distension.

Many of the symptoms that can be associated with having a heart disease or condition are:

- Reflex dry hacking coughing and breathlessness 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.

Mitral Valve Weakness

may even cause the trachea to collapse, as the heart enlarges and fills voids in the chest cavity. Moreover, when a critical pressure is reached, pulmonary edema (flooding of the lungs) can occur. **This weakness can cause "Mitral Regurgitation"** which is a leakage of blood backward through the mitral valve each time the left ventricle contracts. Watch an animation of mitral valve regurgitation. A leaking mitral valve allows blood to flow in two directions during the contraction.

E.g Homeopathic remedy Apis Mellifca is indicated for valve regurgitation, which the DurAid 22-3 and the LungOedema 91-2 has Apis Mell in the complex. If this is not enough See AN305 Mitral Valve Drops (Set of 2).

Further Symptoms Include:

- Rapid and irregular pulse producing palpitation, for congestive heart conditions.
- Valvular disease with or without endocarditis.
- Possible Irregular pulse .. conditions of the valvular in the older dog.
- Violent and rapid action, palpitations.
- Low blood pressure.
- Edema of limbs.
- Cardiac edema.
- Excessive exhaustion.

- Myocarditis, Irregularities of action cause anemia with edema.
- Arrhythmic heart conditions.
- Irregularities or rhythm, dropsy.
- Dyspnoea at least exertion, dilated heart, weak heart sounds or valvular murmur.
- Shortness of breath symptoms or fainting fits, weak heart.

Mitral regurgitation producing cyanosis with a small feeble pulse

Heart murmur

in older dogs may indicate that these dogs have a leaky mitral valve (the heart valve in between the left atrium and left ventricle). The **mitral valve's** job is to allow blood to flow from the left atrium to the left ventricle but not allow blood to flow backward from the left ventricle to the left atrium. This valve degenerates as dog's age and when it does, the older valve allows blood to leak backward. We refer to this disease as chronic valve disease, endocardiosis or degenerative mitral valve disease.

By just having a little "Mitral Valve" Weakness

may even cause the trachea to collapse, as the heart enlarges and fills voids in the chest cavity. Moreover, when a critical pressure is reached, pulmonary edema (flooding of the lungs) can occur.

This weakness can cause "Mitral regurgitation" which is *leakage of blood backward through the mitral valve each time the left ventricle contracts. Watch an animation of mitral valve regurgitation. A leaking mitral valve allows blood to flow in two directions during the contraction.* * Homeopathic remedy **Apis Mellifca** is indicated for valve regurgitation, which the **DurAid 22-3** and the **LungOdema 91-2** formula has Apis Mell in the complex.

If not enough [See AN305 Mitral Valve Drops \(Set of 2\)](#)

Symptoms felt are:

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

Valvular disease with or without endocarditis.

Possible Irregular pulse.. conditions of the valvular in the older dog.

Violent and rapid action, palpitations.

Low blood pressure.

Edema of limbs.

Cardiac edema.

Excessive exhaustion.

Myocarditis, Irregularities of action cause state of anemia with edema.

Arrhythmic heart conditions.

Irregularities or rhythm, dropsy.

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

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Mitral Valve Insufficiency can occur in both dogs and cats!

Mitral valve dysplasia is a common congenital cardiac defect in cats and MVD is the leading cause of death in Cavalier King Charles Spaniels. However, all breed can have an issue. A veterinarian may (or may not) suspected heart valve symptoms, so they may do chest X-rays revealed an enlarged heart. However, we find that when a pet has been diagnosed with an enlarged heart, often the "heart valve" is missed.

Mitral valve insufficiencies, is also called *endocardiosis* refers to **irregular conditions of the mitral valve** located between the two left chambers of the heart. Working properly, it keeps blood flowing from the left atrium to the left ventricle and prevents it from flowing backward.

“**Mitral valve regurgitation, also called mitral regurgitation, mitral insufficiency or mitral incompetence**, is a condition in which your heart’s mitral valve doesn’t close tightly, allowing blood to flow backward in your heart.

” Mayo Clinic Mitral Valve Disease (MVD) is not uncommon for the canine. In fact, it is “the most commonly diagnosed cardiovascular conditions in the dog accounting for more than 70% of all cardiovascular issues in dogs.” The report also notes “The vast majority of the breeds at elevated risk for MMVD are small or toy breeds with average adult weights under 9 kg.”

~ **Canine or Feline Heart Murmur, Mitral Valve Issues (endocardiosis) Mitral Valve Regurgitation, Insufficiency or Incompetence . * See Product Code: AN305 formulas.**

Mild or Chronic Mitral Valve insufficiency that leads to small leaks across the mitral valve usually does not create a problem for a dog. The disease is slowly progressive in most cases and the leak will continue to worsen over months to years. If the disease becomes severe, the dog is at risk of developing congestive heart failure. While the unnatural reduction in the size of the canine species appears to have some bearing on the incidence of mitral valve disease, the tiny Chihuahua has a very low incidence of MVD. The English Toy Spaniel and the Cavalier King Charles Spaniel may have the highest affliction rate of mitral valve disease and it is regarded as a genetic defect. Mitral valve repair surgery is common in humans but even in 2017, any kind of open heart surgery is still rare in veterinary medicine. If you locate a veterinary cardiologist, who could offer open heart surgery, the surgery would last nearly 10 hours with a bill of around \$80,000. So if your dog is having this heart valve problem and the vet says there’s nothing he can do, you now can try the HAMPL homeopathic formulas specifically made to support the health and function of your pet's heart function, naturally and gently. **Reference: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3307894/>**

Prevention of Strokes or Thrombosis.

Providing **Magnesium Taurate** supplement powder in meals daily for one to two weeks, generally can replace the need for **Clopidogrel drug (used as a prevention of strokes)** ~ We have also the **homeopathic Kali Mur** in the **Congestive Heart 22-1 formula** for prevention of thrombosis.

Leg Weakness - Also, pets with high blood pressure may also no longer be able to jump. If acute back end weakness all of a sudden like pain, see **HAMPL Thrombosis 295 50ml** (treatment or prevention) as blood clots can be common in kidney pets, old pets, heart condition, or hyperthyroidism pets.

e.g **Saddle thrombus tends to be associated with cats that have hyperthyroidism.** Cats that have formed a saddle thrombus typically **appear very weak back end to partially or fully paralyzed, unable to move the "rear legs"** **Magnesium deficiency** is also associated with low levels of **potassium** in the blood (hypokalemia).

So start providing these minerals to prevent this condition or treat.

Heart insufficiency action may cause fluids in the lungs.

If your pet is on a chemical diuretic, it is fine to use both, however, if on the drug you will also need to restore the loss of potassium in the body. You will find using natural heart and diuretic remedies the drugs will be eventually reduced, your vet will be guiding you when to do this as improvement is seen and fewer drugs are needed. In many cases, the Vet will say that drugs are no longer needed. This only happens when you are also using natural medicines for this condition, as they restore and support naturally - unlike drugs are given which just control symptoms only.

Diuretic Drug Diuretic tablet Vs Homeopathic Diuretic drops?

DuraAid is a natural alternative to "Furosemide drug", but with none of the potential side effects. You can use Lasix drug in conjunction with the homeopathic diuretic **HAMPL DuraAid 23** 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.

DRUG ~ The lasix (**furosemide drug**) you can continue to use the **DuraAid 23 drops** (a natural diuretic) alternative or use in conjunction with the drug.

Loss of Potassium

However if on the Chemical Lasix drug (past or present) you will need to restore the loss of potassium in the body. If using only the homeopathic Diuretic (natural medicine) then potassium loss should not be an issue. **Low Magnesium** in tissue cells (not blood) will also cause potassium deficiencies

Chylorthorax

Pets diagnosed with Chylorthorax - a vitamin supplement called **rutin** may be a beneficial treatment in some cats with chylorthorax. It is thought to stimulate cells called macrophages to remove the fat in the chyle, and may reduce the amount of fluid accumulation. The best one to get is **Now Foods, Rutin, 450 mg, 100 Veggie Caps**. As you can open the capsule and easily add a pinch of the powder in each meal given. ~ **Easy to order online from iherb.com**

Example

1. A natural vitamin supplement called **Rutin** may be a beneficial treatment in some cats with chylorthorax. It is thought to stimulate cells called macrophages to remove the fat in the chyle and may reduce the amount of fluid accumulation. The proposed mechanisms of action of rutin include reducing leakage from blood vessels, increasing protein removal by lymphatic vessels, increasing the macrophage phagocytosis of chyle, increasing tissue macrophage numbers, and increasing proteolysis and removal of protein from tissues The best one to get is **Now Foods, Rutin, 450 mg, 100 Veggie Caps**. As you can open the capsule and easily add a good pinch of the powder in each meal given, plus they are free of many of the preservatives that are in the coating of a tablet. Easy order online from iherb.com
2. Pets will also greatly benefit with the **HAMPL DuraAid 23 drops**, (to drain fluid) **plus**
3. **HAMPL Infection Fighter 71 formula (herbal antibiotic)** to work on lymphatic fluid prevention that continues to accumulate in the pleural cavity. Often by the time you read this, your cat is already **depleted of vital fluids due to tap draining at the Vet**. It is important to replace fluids, so they feel better and help kidney flushing and appetite restoring.
4. **Sub-Q fluids (fluids dribbled just under the skin - takes 5 minutes to do)** The Set can be bought from us, or some nice Vets will set you with what you need, but make sure you

* See [the instructions AN108 pdf HELP SHEET](#), as not all vets are familiar with **Sub-Q**.

They normally offer IV fluids (fluids via vein) If your cat has also got a heart condition, we suggest you could also use the homeopathic (**AN022-1**) **HAMPL Congestive Heart drops longer term** as a general heart support. e.g. adding a couple of drops in daily meals. **Niacin supplements** are not needed when using these natural formulas. It maybe of best interest **to avoid drugs in this case as this may present further toxic build up in the lymph system especially when kidney function diminishes**.

Other odd symptoms – If you are already using natural heart remedy and/or chemical heart drugs in conjunction and everything thing is going well, then symptoms of coughing or other respiratory symptoms appear, upon investigation we have found that there is a **bronchial infection causing asthma-like symptoms**. Similar to heart failure. So this virus or bacterial infection needs to address with **Herbal Congestion 250** or homeopathic **Virus Respiratory** or **Asthma 91-1 formulas**. It is fine to use these in conjunction whilst on natural or/and chemical heart drugs. **e.g.** Acute breathing attack and respiratory problems. If this is suspected, please contact us or go online and get **the HAMPL Respiratory drops Set of 2 (Product code AN024)**

Using Diuretic Drugs

If you or your pet is taking **Diuretic drugs** - be aware this may cause a **deficiency of 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.

Reference: MayoClinic.com

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.

NATURAL Diuretics

One can use Lasix drug in conjunction with the homeopathic diuretic (**DuraAid 23 formula**) 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 in the lungs.**

Natural Potassium Replacement

We also recommended the supplement **POTASSIUM powder**(mineral)

Potassium BiCarbonate powder

Toy dog, Cat: a pinch in meal twice a day.

Small dog: 1/4 teaspoon powder in milk drinks or in meals twice a day.

Med-Large: 1/2 teaspoon powder twice a day. **Or just for Canines Restoring Potassium** Using Braggs Organic Apple Cider Vinegar in daily meals to help replace potassium loss. e.g **Toy dog:** 4 drops. **Small and med dogs.** 1/2 teaspoon of 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. ~ In conjunction with **Magnesium** * see page 11

Pulmonary Hypertension - Treating or Prevention

*** See further down for recommended magnesium brands and dosage, increase amount every 3 weeks, until symptoms are no longer an issue. * See page 11**

Pulmonary hypertension refers to elevated blood pressure in the arteries of the lungs and the right side of the heart. Pulmonary hypertension results in both a narrowing and hardening of the blood vessels that transport blood from the heart to the lungs.

Early symptoms include - chest pain, fatigue, shortness of breath, loss of appetite, pain in the upper right area of the abdomen, and a fast heartbeat. As the condition progresses, symptoms expand to include - **leg or ankle swelling, fainting or feeling lightheaded, and a bluish tinge to the lips or skin.**

Magnesium is a natural calcium antagonist [12]. Magnesium is used clinically for the treatment of pre-eclampsia/eclampsia, arrhythmia, and asthma [13–16]. Notably, Magnesium is a vasodilator [12]. Magnesium also has potent anti-oxidant and anti-inflammation activities [12,16,17]. Moreover, magnesium can modulate mitochondrial dysfunction, inflammasomes, and apoptosis [18–20]. Therefore, we conjectured that Magnesium may act by modulating pulmonary vascular resistance and the aforementioned mechanisms to exert beneficial effects against pulmonary hypertension.

Reference file:///C:/Users/newuser/Downloads/ijms-20-04622.pdf
<https://journals.physiology.org/doi/abs/10.1152/jappl.1994.77.2.751>
<https://www.nature.com/articles/pr1999199>

Blood Pressure

Re-balancing the "Blood Pressure" when too high. Suggest using Homeopathic [HAMPL HBP 148 100ml drops](#) and [Magnesium](#)

HEART HEALTH - This is a natural, safe solution for all species and age using safe alternatives that actually balances rather than controls blood pressure. If your pet is not getting [Magnesium supplement](#) in diet then often high blood pressure can occur in some pets. For Heart Related Conditions use in conjunction with [HAMPL Congestive Heart 22 \(Set of 3\)](#) and [Magnesium drops or powder](#).

KIDNEY HEALTH - **For Kidney Disease conditions** (CRF) in cats and dogs will often get HBP so if unsure get them checked. Or what for symptoms like panting off and on. This may be a sign of High blood pressure, which occasionally happens. It would not hurt to use the remedy just to protect as well. **Balancing the blood pressure from high back to normal, naturally. Also aids better circulation and enhances as a kidney tonic for CRF in kidney patient pets.** Once the condition has improved, if the pet is drinking water most days then instead of putting drops on the body can stir in a dose to the filtered water bowl, every time you change it a few times a week. Or alternatively, add a dose to daily meals.

VERY HIGH BLOOD PRESSURE

We can also use the **Chinese Skullcap Herb** can also be used if the homeopathic formula is not enough. This herb lowers fever quite effectively and can bring down seriously **high blood pressure** very quickly (in high doses). Request this herbal liquid from us, as you can use both homeopathic and herbal at the same time.

Chinese Skullcap liquid Extract For a 50ml bottle. \$55AUD

Or request a larger bottle. High blood pressure can also be balanced by giving **Magnesium** (powder or liquid) in daily diet – ongoing.

Enalapril Maleate Drug * warning side effects of this drug.

Enalapril is an angiotensin-converting enzyme (ACE) inhibitor that is commonly prescribed by veterinarians for the treatment of high blood pressure in cats and dogs. It can also be used in conjunction with other medications for the treatment of mild to severe heart failure.

Side Effects and Drug Reactions

- ~ Allergic reaction (labored breathing, hives, etc)
- ~ Vomiting
- ~ Diarrhea
- ~ Lethargy
- ~ High blood pressure
- ~ Fever
- ~ Dizziness
- ~ Fainting
- ~ Ulceration of the digestive tract

REFERENCE: READ ABOUT MORE side SERIOUS effects

<https://www.webmd.com/drugs/2/drug-6301-3281/enalapril-maleate-oral/enalapril-oral/details/list-sideeffects>

Hyperthyroidism *(can also have "hypertrophic cardiomyopathy" symptoms)*

Hyperthyroid cats are prone to a cardiac condition called "hypertrophic cardiomyopathy" (HCH). Therefore, **saddle thrombus tends to be associated with cats that have hyperthyroidism.** Cats that have formed a saddle thrombus typically **appear very weak back end partially or fully paralyzed, unable to move the "rear legs"**. They are often vocalizing due to severe pain. When touched, the back legs are often cold and stiff, and sometimes there is panting and trouble breathing.

1. Yes, you can prevent "**aortic thromboembolism**" from forming in cats with heart failure, with homeopathic medicines as prescribed in this set.
2. Also if your cat has Hypertrophic cardiomyopathy which is defined by left ventricular hypertrophy w/o causative systemic or other cardiac diseases. It is the most common form of heart disease in the cat!

Mitral regurgitation may develop from distortion of the left ventricular cavity and from the systolic anterior motion of the mitral valve (SAM).

* Refer to [Homeopathic Mitral Valve Support drops \(AN305\) Set of 2.](#)

(Use in conjunction with Natural Heart Support drops Set). [ReMyte Minerals](#) including, 1/4 cap of [Magnesium Taurate](#) powder in every meal daily. (Cardiovascular Research Ltd is a good Brand) * See page 11 Magnesium Dosage.

Feline Hypertrophic Cardiomyopathy (HCM)

Hypertrophic cardiomyopathy is defined by left ventricular hypertrophy w/o causative systemic or other cardiac diseases. It is the most common form of heart disease in the cat! **Mitral regurgitation** may develop from distortion of the left ventricular cavity and from the systolic anterior motion of the mitral valve (SAM).

SYMPTOMS may be seen as *exercise intolerance, coughing, trouble breathing, increased breathing rate, collapse, or weakness.*

Bradycardia

is a medical term derived from Greek and means "**slow heart.**" In humans, bradycardia is a diagnosis given when resting heart rate falls below 60 beats per minute and causes symptoms. For infants, bradycardia is defined as a heart rate less than 100 beats per minute with symptoms.

Bradycardia has many causes, but a primary one is congestive heart failure or CHF. In some cases with pets, there is also a mitral valve insufficiency, and so if acute congestion, we suggest also formula [AN305 -1 Acute Mitral Valve 30ml drops](#) (to use initially to help balance fluid again, then continue with the Congestive Heart Formula drops for prevention and support) Suggest using these formula's as well as adding the content of the **Vitamin Coenzyme Q10**, or CoQ10 for short, is a vitamin-like substance that helps strengthen your heart and is able to mitigate the symptoms of CHF and bradycardia.

Atrial fibrillation

(also called AFib or AF) is a quivering or irregular heartbeat (arrhythmia) that can lead to blood clots, stroke, heart failure and other heart-related complications - which can be corrected by taking the mineral magnesium daily. **Congestive heart failure** means that the leak across the heart valve overwhelms the heart and fluid go from the heart backward into the lungs (instead of from the heart forward to the body). Signs of congestive heart failure include a cough (especially a cough at rest), *a fast breathing rate, difficulty breathing, fainting, weakness, lethargy, exercise intolerance and abdominal distension.* * See page 11

Pyothorax (also called “Empyema”) The extra fluid can also become infected, resulting in an accumulation of pus. An empyema is often accompanied by fever. Pyothorax is most commonly a complication of **pneumonia**, which is a bacterial lung infection.

Types of pus in the cavity area can be linked to several different bacteria, including:

- Bacterial infections (ex. actinomycosis, nocardiosis)
- Bacteroides
- Corynebacterium
- Escherichia coli
- Fusobacterium
- Pasteurella
- Peptostreptococcus
- Streptococcus

With Bacterial Infection- severe - acute or chronic Pleuritis Effusion.

Pleural effusion. In some cases of pleurisy, **fluid builds** up in the small space between the two layers of tissue. This is called pleural effusion. When there is a fair amount of fluid, pleuritic pain lessens or disappears because the two layers of pleura are no longer in contact and don't rub together.

* **Pyothorax refers to the presence of “inflammatory fluid” or “pus” within the chest cavity, which is the area between the lungs and the inner walls of the ribs.**

NATUROPATHIC PROTOCOL

* See product formula **AN241 Pyothorax Bacterial Infection and / or Severe chronic pleuritis effusion Set**, and suggest also getting the **drug Colchicine** (*a prescription drug often prescribed for human gout conditions*)

Case study

A dog with "Pyothorax" bacterial pus Infection in chest cavity.

The pet carers were given weeks of antibiotic drugs to their dog, which he also had fluid build in chest cavity. Eventually the Vet suggested surgery to save him, so follow week they opened the dog up and flushed infection from the thorax. ... A week or so later, severe ongoing fluid build up wall of body and lungs (pleuritis effusion)

Came to us for last hope in saving their beautiful dog: *We did a Bioscan (feedback machine) and sent to pet carers over the next two months.*

HAMPL STARTED the dog on

VITAMIN Rutin 450mg 2-3 times a day.

Herbal Antibiotic **HAMPL Infection Fighter 71 drops** 30-40 mixed with slippery elm and coconut milk - 4 x a day

HAMPL Dura aid 3-4 drops - A dose 5-6 times a day,

HAMPL Drawing out 16 drops - A dose - 4-5 times a day

HAMPL Trachea Aid 189-1 drops - A dose - 1-2 times a day or when needed.

Apocynum Cannabinum in the potency of 200C. A dose on body - 4 x a day (which is now in Dura Aid drops)

HAMPL Keloid 58 - Scar Tissue Drops 3 x's a day (damages from surgery to release infection in the thorax - pyothorax infection, which would be not necessary if treated with homeopathics **Drawing Out 16 drops** and herbal antibiotic)

IMMUNE BOOST

Add 1/2 -1 (or more) teaspoon IN MEALS of a strong immune boosting powder is ProBoost Thymic Protein. Order form: <https://www.proboostdirect.com/> Animal Pro Biotics and he drinks small amounts of goats milk when he eats.

And he still had 3 liters of fluid in his chest cavity only 12 days after his previous tap.

This was his 6th one like of drawing out fluids.

Then one time during this episode of taking him back to vets every week they put him on a pain med which made him pant and he accumulated a 16 oz of fluid overnight ?? the vet said it did not make sense, actually, none of this does...

... We are beside ourselves and exhausted, that poor dog has gone through more than anyone should have to, this will be his last chest tap.

HAMPL's LATEST REMEDIES 13th DECEMBER – 2018

HAMP Drawing Out 16 Drops, and **HAMPL Dura Aid 23 Drops**, and **Apoc Cann 200C**

FIRST Bioscan - the homeopathic single remedy **Aurum lod CM** was also given.

SECOND "Bioscan"- for **larynx spasm, chronic pericarditis** - *which is the now in the DuraAid 23 drops.*

.... *Plus given **Rutin 450mg 2xs** a day and **Liposomal C liquid**, Pro Boost Support, SB Pro Biotics powder (**prevent infection after extensive use of chemical antibiotics the vet had prescribed**).*

I was doing my research about Pyothorax Infection - (bacterial infection pus build up in the chest cavity & pleural effusion) and came across a person who also had this condition, also took the drug Colchicine, I believe it was only one tablet, and found that the fluid up completely stopped and never returned.

**** So we suggest they try this drug (1/2 tab) and it worked for this dog****

Drug Colchicine - a **drug used for Gout in humans** (crush 1/2 tablet for a medium size dog, small dog ¼ tab)

Colchicine is an alternative to anti-inflammatory painkillers

It works by reducing the number of white blood cells which travel into the inflamed areas. This helps break the cycle of inflammation and reduces the swelling and pain.

A high white blood cell count usually indicates.

An increased production of white blood cells to fight an infection

An immune system disorder that increases white blood cell production.

A reaction to a drug that increases white blood cell production

A disease of bone marrow, causing abnormally high production of white blood cells

The two commonly used categories of white blood cell disorders divide them quantitatively into those causing excessive numbers (proliferative disorders) and those causing insufficient numbers (leukopenias).^[14] Leukocytosis is usually healthy (e.g., **fighting an infection**), but it also may be dysfunctionally proliferative. WBC proliferative disorders can be classed as myeloproliferative and lymphoproliferative. Some are autoimmune, but many are neoplastic.

*** Last report was on the 27th of December - no more fluid buildup, and back to normal health.**

FOR ALL HEART CONDITIONS

The type of Magnesium you or your pet needs is **MAGNESIUM TAURATE** recommended brands below:

*** For USA clients only ... (as they dont ship to other countries)**

Magnesium Taurate 500mg - 210 Capsules By Double Wood Supplements

For Sleep, Calming, and Cardiovascular Support

Made in USA, by Double Wood Supplements by [Double Wood Supplements](#)

*** For USA and Australian and other countries.**

KAL® Magnesium Taurate Plus 400mg w/Coenzyme B6 - 90 tabs

Highly Bioavailable, Chelated, Vegan | for Normal Nerve, Muscle Function and Heart Health * Buy from [iherb.com](#) (worldwide shipping)

Or

Piping Rock Magnesium Taurate 1000 mg - 120 Capletes

The Amino acid Taurine and magnesium that has special properties for the heart. Taken together in this combination, magnesium and taurine have a synergistic effect, stabilizing cell membranes, making this form of magnesium highly absorbed.

Magnesium Taurate does not have a laxative effect and is the recommended form of magnesium for people with heart problems. It appears that the amino acid Taurine is important for heart health and may prevent arrhythmias and protect the heart against the damage caused by heart attacks.

GENERAL HEART HEALTH – dosage

TOY DOG to FELINES: open one capsule and add half a cap of the powder from in every meal given. (or crush caplet - coated tablets - and take out the outer casing pieces after crushing)

SMALL TO MED CANINES: open one capsules or crush caplet and add the all of the powder in meals.

LARGE CANINE: open two capsules or crush caplet and add the all of the powder in meals.

ACUTE OR ADVANCE HEART CONDITIONS – dosage

TOY DOG to FELINES: open one capsule or crush caplet and add half a cap of the powder mixed in a little food – repeat this four times a day.

SMALL TO MED CANINES: open one capsules or crush caplet and add the all of the powder mixed in a little food – repeat this four times a day.

LARGE CANINE: open two capsules or crush caplet and add the all of the powder in meals mixed in a little food – repeat this four times a day.

Minerals The mineral "**MAGNESIUM**" supplementation given daily will quickly resolve many of these symptoms.

*Please note: **HAMPL Congestive Heart 22-1 50ml and HAMPL DurAid 22-3 (diuretic)** which are both homeopathic formula - will not interfere with any other chemical heart drugs or medications. Our Formula combines the peripheral circulation building benefits of ginkgo with the heart strengthening and stabilizing properties of hawthorn into one for maximum circulatory support.*

Potassium.

*** Too much magnesium ongoing or a lot all at once can throw potassium into the bottom of its range and that makes symptoms worse e.g cramping. .. So make sure you are also giving Potassium as well.**

What about "Arrhythmias" (*irregular heartbeats*)

a heart murmur, an enlarged heart, or even heart failure.

Types of "Arrhythmias"

Understanding some common terms in the language of cardiac arrhythmias helps sort through the types of rhythm problems. An arrhythmia is any abnormality in heart rhythm.

Arrhythmias are categorized in three main ways:

- * **Rate:** If the heart rate is rapid, or greater than 100 beats a minute, it is considered a tachycardia. Alternatively, a slow heart rate, below 60 beats a minute, is known as a bradycardia.
- * **Location:** The location of the problematic electrical circuit helps define the arrhythmia. For instance, a rhythm is called supraventricular if it originates above the ventricles (lower chambers). So, the problem is most likely in the upper chambers (atria). It follows that a ventricular arrhythmia is the result of a problem in the lower chambers (ventricles).
- * **Irregular:** The nature of the heartbeat, whether it is steady or chaotic, is another key to categorizing an arrhythmia. A rapid beat that is irregular and chaotic may be a type of fibrillation or quivering beat.

Tachycardia (*rapid heartbeat*)

Types and Causes of "Rapid Heartbeat"

Tachycardia usually is caused by a problem with the electrical system that flows from the upper to the lower chambers of the heart and triggers the heartbeat.

Supraventricular tachycardia (SVT)

This type of tachycardia originates in the upper chambers (the name supraventricular means above the ventricles). In most cases, SVT is not dangerous; however, if episodes happen frequently, the heart muscle can be weakened over time.

Ventricular tachycardia (VT).

This more dangerous type of tachycardia starts in the lower chambers, or ventricles. VT can be life-threatening. Without treatment, ventricular tachycardia can lead to ventricular fibrillation, a severely irregular, rapid and ineffective beating of the ventricles that is the most **common cause of cardiac arrest**.

Morley Robbins (*nutritional expert USA*)

...Research tells us that "**EXCESS Iron**" is now recognized as the source of "arrhythmogenesis" (silly way of saying: creates arrhythmias) **The last line of this article:** "The specific K+ (Potassium) Channel affected by Iron, may, therefore, be a target for treatment of the arrhythmias caused by iron-overload cardiomyopathy." And there's one other amazing fact, that says it all in this article. It's a recognized fact that Rats have the natural ability to produce Vitamin C (not the man-made Ascorbic Acid, mind you). And what this article reveals is that Rats have the natural ability to EXCRETE IRON!

"Because the Rat can excrete excess Iron, cardiac iron deposition could not be produced in vivo in this species.

" There are two very important conclusions to be drawn:

- 1) All Cardiac studies based on Rats are TOTALLY invalid, as the reduced iron status of these rodents puts a wrench into thousands & thousands of studies; and
- 2) **Take Vitamin C!** If a Rat can use their natural ability to "excrete excess Iron," why can't we?! No, I can find NO research to back that up. Please read this article carefully and know that excess, unmanaged Iron is the BAD guy, and **Vitamin C** is the good guy.

Reference: <http://m.circ.ahajournals.org/content/100/6/675.full.pdf>

Please consider using the below minerals and supplements

Probiotics and Immune Boosting

1. PROBIOTICS

Using Ultimate FLORA Probiotic 150 billion (Renew Life) Is one of the very best probiotics and often comes up for pets when we have a clinical test done.

2. IMMUNE BOOST

Add 1/2 -1 (or more) teaspoon IN MEALS of a strong immune boosting powder is **ProBoost Thymic Protein**. Order form: <https://www.proboostdirect.com/>

Keep the **saccharomyces** AND **Bionutri EcoDophilus** going ...doesn't need fridge either but so effective when needed). Animal probiotics are expensive, poor quality and shallow spectrum very often so no need to do that, we share similar biomes. **Don't get tooling up on differences between animals and humans in regards to the biome .. here is the mechanism ... it's all "one long tube"**.

Mouth affects the gut, and gut affects mouth .. a bidirectional influence. The oral microbiome is an important part of the gut microbiome and tending to its balance should a routine part of any good "gut protocol." Indeed, dysbiosis of the oral microbiome (and a leaky oral mucosa) might be key underlying imbalances in the pathogenesis of systemic diseases, including autoimmune as well as cardiovascular disease. **Suggested Guide Animal Dosage** - Working towards healing your pet's bladder, bowel, kidney and liver conditions, you need to supplement his/her diet with large amounts of probiotics (acidophilus, bifidus and other types of friendly bacteria). Start with small amounts and add to your pet's meals and increase as you go along. Canine: adding 1/4 capsule of the powder, and mix well into meals. After a couple of weeks increase to ½ cap daily. Feline, toy dog, infant farm animal or other small animals: add a pinch and mix well into meals.

How long should we continue this Probiotic and Immune Boost? Because intestinal bacteria should repopulate fairly quickly, 4 – 8 weeks of probiotic replacement usually suffices. (continuing need can signal that something else continues to disrupt resumption of healthy bowel flora that may require further investigation) If this probiotic is rough on you or your pets / animals gastrointestinal tract, reduce the amount for the first few weeks. At any time you or your pet / animal are put on chemical antibiotic – please take this probiotic at the same time. **It takes 2 months to fully restore gut flora and immune system may take longer depending on each pet.**

3. Restoring Potassium:

Potassium Bicarbonate powder

Toy dog, Cat: a pinch in meal twice a day.

or 1 drop of Organic apple cider in a tablespoon of water and add to meals daily

Small dog: 1/2 powder from capsule twice a day or 5 drops of Organic apple cider in 2 tablespoons of water and add to meals daily,

Med - Large: 1 powder from capsule twice a day or 1 tablespoon of Organic apple cider and add to meals daily.

Cont... page 13

POTASSIUM

Also If you or your pet is taking a drug that is a "Diuretic " also 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. Muscle Weakness and Cramps.... As mentioned in the introduction, potassium is necessary for the proper functioning of the body's muscles. So if you're low on the nutrient, it stands to reason that you will likely experience some problems. Muscle weakness may be among the first signs, which the San Francisco Chronicle says can "cause a person difficulty when walking or holding objects."*

In addition, the muscles may twitch or cramp. These spasms, particularly when they occur in the leg, are often referred to as charley horses.

If potassium levels continue to drop, the source warns that muscle paralysis can occur, and "If the paralysis involves the diaphragm, the muscle responsible for breathing, respiratory failure will occur."

Reference: 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."

* Diuretics

One can take the 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.**

OR

Braggs Organic Apple Cider Vinegar in daily meals to help replace potassium loss.

e.g Toy dog: 2-3 drops.

Small and med dogs.

* ¼ 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.

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

Potassium. Note: Too much magnesium ongoing or a lot all at once can throw potassium into the bottom of its range and that makes symptoms worse. So make sure you are also giving Potassium as well.

4. VITAMIN C

Natural Vitamin C

~ Kadadu Plum powder from - TheAustSuperFoods.com.au

Toy dog, Cat: a pinch in meal twice a day.

Small dog: 1/2 powder from capsule twice a day.

Med - Large: 1 powder from capsule twice a day.

5. MAGNESIUM Taurate Powder (mineral)

* See page 10 Dosage

* **Suggest Magnesium Taurate capsules (use powder form cap and add to meals).**

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)

Magnesium Taurate is a combination of the Amino acid Taurine and magnesium that has special properties for the heart. Taken together in this combination, magnesium and taurine have a synergistic effect, stabilizing cell membranes, making this form of magnesium highly absorbed. Magnesium Taurate does not have a great laxative effect and is the recommended form of magnesium for people with heart problems. It appears that the amino acid Taurine is important for heart health and may prevent arrhythmia and protect the heart against the damage caused by heart attacks. Magnesium taurate requires oral supplementation for six to twelve months to restore intracellular levels. **Please Note: Do not take or give Magnesium and Calcium** - calcium competes and will deplete magnesium, therefore staying magnesium deficient

6. Coenzyme Q10 (CoQ10) Ubiquinol

Hypertension, 200 mg/day	World class athletes who need extra ATP turnover, 300 to 600 mg/day	Heart transplant or severe congestive heart failure (CHF), 300 to 600 mg/day in divided doses
Arrhythmia, 200 mg/day	Typical athletes, 100 to 300 mg/day	Mitral valve prolapse, a combination of 400 mg magnesium and 100 to 200 mg of ubiquinol

Coenzyme Q10 (CoQ10) is used for energy production by every cell in your body. It also helps protect against cellular damage from free radicals.

For humans - CoQ10 is especially important if you take a statin drug as statins deplete your body of CoQ10, thereby speeding up progression of heart disease. CoQ10 (or ubiquinol) is also appropriate for those with other chronic diseases besides heart problems, such as diabetes, amyotrophic lateral sclerosis (ALS), chronic fatigue and autism for example. Ideally, you'll want to split the dose up to two or three times a day, rather than taking it all at once, as this will result in higher blood levels.

Other dosing guidelines, as presented by [Dr. Stephen Sinatra](#) (a board-certified cardiologist, and a prominent expert in the field of natural cardiology) include for adult humans:

One of the brands I like is

Bluebonnet Nutrition - Ubiquinol, Cellular Active CoQ10, 100 mg, 60 Veggie Softgels

(I get my at www.iherb.com * read the reviews for assisting a renew energy, with or without heart conditions)

Med to large canines: cut top of capsule and squeeze a full capsule of the gel into food, once to twice a day. **Small dog:** cut top of capsule and squeeze ½ half a gel into food, once to twice a day. **Toy dog, or cat:** cut top of capsule and squeeze ¼ a gel capsule into food, once to twice a day.

*** SOME OF THE COMMON side effects of the DRUGS PRESCRIBED FOR OUR PETS.**

HEART DRUG Common Side Effects of the VETMEDIN drug.

The most commonly reported side effects of VETMEDIN were

poor appetite, lethargy, diarrhea, dyspnea, azotemia, weakness, and ataxia.

The prevalence of side effects was similar in the active control group (enalapril, an angiotensin-converting enzyme [ACE] inhibitor).

DIURETIC Common Side Effects of the UREX drug.

Symptoms of overdose may ..include weakness, dizziness, lethargy, nausea, vomiting, diarrhoea, anorexia, sweating, mental confusion, blurred vision, tingling in the arms or legs, restlessness, headache, tinnitus (ringing in the ears), cramping, constipation, and symptoms associated with electrolyte and fluid depletion. The active ingredient in Urex is called frusemide which belongs to a group of medicines called diuretics. Diuretics are used to help the kidneys remove excess fluid from the body. Urex is used to treat a number of medical conditions, **including oedema (swelling of the body due to excess fluid).**

*** if your pet is showing any of these symptoms** to help elevate it, dilute in some fluids a pinch

of **Potassium Gluconate** (powder from capsule) and **Magnesium Taurate** (powder from capsule).
Oral dose 2ml 4 x daily for 3 - 5 days. Then just add a good pinch of each mineral to daily meals

Potassium (mineral)

In general Healthy Maintenance dosing:

Our human body need about 4500mg of it a day from all source.

Canines need 1000mg (1g) of potassium a day for med to large dogs.

Cats need 330mg of potassium a day.

Toy dog, Cat: a pinch in meal twice a day.

and 1 drop of Organic apple cider in a tablespoon of water and add to meals daily

Small dog: 1/2 powder from capsule twice a day

and 5 drops of Organic apple cider in 2 tablespoons of water and add to meals daily,

Med - Large: 1 powder from capsule twice a day

and 1 tablespoon of Organic apple cider and add to meals daily.

DOUBLE THE AMOUNT IF SYMPTOMS OF DEFICIENCIES.

Low potassium – symptoms

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.

Poor growth in puppies - *paralysis of neck muscles and rear legs and general weakness later in life.*

Cat or Kitten - *anorexia; retarded growth; neurological disorders, including ataxia and severe muscle weakness.*

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 or hallucinations.*

Note: anyone (and pets) on heart medication and diuretics, will be also become deficient in this mineral.

Due to the actions of the diuretic drug. (loses potassium from body). These patients must replace enough Potassium back into their body to prevent side effects from lose of this vital mineral. Potassium is necessary for the proper functioning of the body’s muscles. So if you’re low on the nutrient, it stands to reason that you will likely experience some problems

In addition, the muscles may twitch or cramp. These spasms, particularly when they occur in the leg, are often referred to as charley horses.

If potassium levels continue to drop, the source warns that muscle paralysis can occur, and “If the paralysis involves the diaphragm, the muscle responsible for breathing, respiratory failure will occur.”

Different types of Magnesium available:

<p>Magnesium Glycinate powder or liquid is a chelated form of magnesium that tends to provide the highest levels of absorption and bioavailability and is typically considered ideal for those who are trying to correct a deficiency.</p> <p><i>* This form of magnesium will NOT cause DIARRHEA “IF” needing to take a lot of Magnesium for therapeutic benefit</i></p>	<p>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 <u>stool softening properties</u>.</p>
<p>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.</p>	<p>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 directed or use a better quality magnesium.</p> <p><i>* We suggest to Avoid - poorly absorbed (and the cheapest and most common forms found in supplements)</i></p>
<p>Magnesium Carbonate powder, which has antacid properties, contains 45 percent magnesium.</p>	<p>Magnesium Taurate contains a combination of magnesium and taurine, an amino acid. Together, they tend to provide <u>calming effect on your body and mind</u>.</p> <p>** FOR ALL HEART CONDITIONS **</p>
<p>Magnesium Citrate powder is magnesium with citric acid which has <u>laxative properties</u>.</p>	<p>Magnesium Threonate is a newer, emerging type of magnesium supplement that appears promising, primarily for</p>

<p>* Use for constipation issues if required.</p> <p>Magnesium Asparate – not recommended.</p>	<p>to its superior ability to penetrate the mitochondrial membrane, and may be the best magnesium supplement on the market.</p>
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Some 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
Insomnia
Hyperactivity
Bruxism (grinding teeth) nerve disorder

Muscular:

Weakness
Muscle Spasms (Tetany)
Tics
Muscle Cramps
Hyperactive Reflexes
Impaired Muscle Coordination (Ataxia)
Tremors
Involuntary Eye Movements and Vertigo
Difficulty Swallowing
Reflux

Equines:

Polysaccharide Storage Myopathy (PSSM1)

providing Magnesium will help prevent or treat clinic symptoms that can include: *Skin twitching, stiffness, firm painful muscles, sweating, weakness, and reluctance to move with light exercise. Occasionally gait abnormalities, mild colic and muscle wasting may also occur.*

In many cases horses that have tested positive have no history of 'tying-up' or other symptoms associated with PSSM1.

Horses have a unique metabolism. They do not need much of the mineral or herbs etc.

Metabolic:

Increased Intracellular Calcium
Hyperglycemia
Calcium Deficiency
Potassium Deficiency

Cardiovascular:

Irregular or Rapid Heartbeat
Arrhythmias including Atrial fibrillation (AF)
Coronary Spasms

Example:

Atrial Fibrillation (also called AFib or AF)

is a quivering or irregular heartbeat (Arrhythmia) that can lead to Blood Clots, Stroke, Heart Failure and other Heart-related complications - **which can be corrected by taking the mineral Magnesium daily.**

Left Ventricular Hypertrophy

is an enlargement and thickening (hypertrophy) of the walls of your heart's main pumping chamber (left ventricle).

(Left Ventricular Hypertrophy can develop in response to some factor – such as **High Blood Pressure** or a **Heart Condition** — that causes the left ventricle to work harder.

A left sided dysfunction is called “**Left-Sided Diastolic Failure**” (or **dysfunction**). The left ventricle loses its **ability to relax** normally (because the muscle has become stiff). The heart can't properly fill with blood during the resting period between each beat. Often times with this kind of failure the heart walls are thick, weak and stiff.

* The mineral - Magnesium helps muscles to relax.

In the article, "*Magnesium supplementation improves diabetic mitochondrial and cardiac diastolic function*," author Samuel Dudley, MD, PhD, Academic Chief of Cardiology at the University of Minnesota Medical School and his fellow researchers found that Magnesium can be used to treat Diastolic Heart Failure. "We've found that Cardiac Mitochondrial Oxidative Stress can cause Diastolic Dysfunction. Since **Magnesium** is an essential element for mitochondrial function, we decided to try the supplement as a treatment," explained Dudley. "It eliminated the poor heart relaxation that causes Diastolic Heart Failure."

Reference: <https://www.sciencedaily.com/releases/2019/01/190110141730.htm>

You or your pet might be magnesium deficient if you have any of the following symptoms:

- Insomnia
- Irritability
- Noise Sensitivity
- Anxiety
- Autism
- ADD
- Palpitations
- Angina
- Constipation
- Anal Spasms
- Headaches
- Migraines
- Fibromyalgia
- Chronic fatigue
- Asthma
- Kidney stones
- Diabetes
- Obesity
- Osteoporosis
- High Blood Pressure
- Menstrual Cramps
- Irritable Bladder
- Irritable Bowel Syndrome
- Reflux
- Trouble Swallowing

Types of Magnesium to AVOID

- Magnesium Glutamate; it breaks down into the neurotransmitter Glutamic Acid, which without being bound to

other Amino Acids is Neurotoxic. Glutamic Acid is a component of Aspartame, which should also be avoided.

- Magnesium Aspartate; it breaks down into the neurotransmitter Aspartic Acid, which without being bound to other amino acids is Neurotoxic. Aspartic Acid is a component of Aspartame, which also should be avoided.

Magnesium For Humans: Best Practices

Take your first dose of Magnesium when you wake up in the morning and the last dose at bedtime, as our Magnesium levels are most deficient in the early morning and late afternoon. Most people find that Magnesium is as good as a sleeping pill at helping them to get a good night's rest. Magnesium does not necessarily need to be taken with meals, but it is preferable to take it between meals for better absorption, as it requires stomach acid to be properly absorbed. After a full meal, your stomach acid is busy digesting food and may not be available to help absorb Magnesium. Also, Magnesium is an alkaline mineral and acts as an anti-acid: when taken with meals, it may neutralize stomach acid and impair digestion. So if you develop loose stools while taking Magnesium, it does not necessarily mean you are absorbing enough and losing the rest; it may mean you are taking too much at one time.

Note: Too much magnesium ongoing or a lot all at once can throw potassium into the bottom of its range and that makes symptoms worse. So make sure you are also giving Potassium as well.

Cortisol (Stress Hormone - Adrenal Function)

If you have low Cortisol output, such as second or third stage **Adrenal Fatigue**, it is best to take only minimal amounts of Magnesium, as it has been known to lower cortisol levels if you take a lot of it. If you have done a Saliva Hormonal Stress test, you could take a Magnesium supplement at the points where you are highest of cortisol output. Stay at a low dosing of capsules once per day over a period of months, at 6 months increase the dosage to another capsule at bedtime.

NEVER Take Your Daily Magnesium Dosage In One Sitting

This applies to your pets too. Spread out the dosage 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.

Magnesium: A Powerful Medicine

Magnesium is a big player in emergency rooms, where it treats heart arrhythmias, heart attacks, migraines and the toxemia of pregnancy. But why should Magnesium be restricted to acute care emergency medicine? It is high time for

Magnesium to take up its role in helping to prevent and treat chronic conditions, before they reach a crisis level.

Getting Tested For Magnesium Deficiency

As the majority of magnesium is *inside your cells*, having a **Serum Magnesium test** is useless as it only detects 1% in your blood, not your cells. However, if you have a **RBC Magnesium Blood Test** this will show you how much magnesium is in your cells. Unfortunately, not many (if any) doctors test the RBC (Red Blood Cell) Mag – Blood Test, so you most likely will need to request (or insist) this test rather than Serum Magnesium test.

The Optimum range is 6 – 7

Serum Magnesium Levels, like the kind that are routinely done in the hospital, are going to miss a HUGE percentage of people and pets with very real and very problematic magnesium deficiencies. **The normal range of Magnesium Blood Tests on Laboratory evaluations is from approximately 1.5 to 2.5 mEq/liter** - although this will vary slightly depending upon each individual laboratory, but having a 'normal' level simply is worthless information if you are having problems.

Red Blood Cell Magnesium Levels also called '**RBC Magnesium**' tests, are an improved way to get your Magnesium level checked. RBC Magnesium Tests check the level of Magnesium inside of the Red Blood Cells inside your bloodstream. Unfortunately, this level does not correlate very well with the levels inside your TISSUES where you really want to know about your magnesium status.

If you have an RBC (red blood cells) **Magnesium blood test this will show how much magnesium is in your cells**. But you need to put in a special request to test the **RBC (red blood cell) Mag** – blood test, so you most likely will need to request (or insist) this test rather than Serum Magnesium Test. Or just simply start using Magnesium mineral supplement to improve your pets health conditions...you will see the difference.

Which Magnesium Supplement is Best?

The best supplement to use is Magnesium Glycinate (or bisglycinate) a magnesium joined to the amino acid glycine. This is the least laxative of all the magnesiums, and the most absorbable. Glycine has its own beneficial calming effect on your GABA receptors.

Most people start off at one capsule (100mg) once or twice a day. Then over 3 weeks go up to three capsules once a day in the morning and evening, increasing to 2 capsules twice a day, possibly going up to 3 capsules twice a day over time if needed. Some people also combine other sources of Magnesium as well. This is also the same amount for a medium to large dog.

~ **Taking Epsom Salt baths** (Mag Sulphate) three times a week and topically use Magnesium Cream or Magnesium Oil on sore muscles or skin to absorb the Magnesium daily.

Taking 600mg to 1,000 mg a day is advised.

‘Every Known Illness Is Associated With A Magnesium Deficiency’

According to **Dr. Norman Shealy's** ‘Every known illness is associated with a Magnesium deficiency’ and ‘Magnesium is the

most critical mineral required for electrical stability of every cell in the body.

A Magnesium deficiency may be responsible for more diseases than any other nutrient'

This exposes a gaping hole in modern medicine that explains a good deal about iatrogenic death and disease. Because magnesium deficiency is largely overlooked, millions of Americans suffer needlessly or are having their symptoms treated with expensive drugs when they could be cured with magnesium supplementation.

Magnesium deficiency is often misdiagnosed because it does not show up in blood tests – only 1% of the body's magnesium is stored in the blood. Most doctors and laboratories don't even include magnesium status in routine blood tests. Thus, most doctors don't know when their patients are deficient in magnesium, even though studies show that the majority of Americans are deficient in magnesium.

Magnesium is needed by every cell in the body including those of the brain and is one of the most important minerals when considering supplementation because of its vital role in hundreds of enzyme systems and functions related to reactions in cell metabolism, as well as being essential for the synthesis of proteins, for the utilization of fats and carbohydrates.

Magnesium is needed not only for the production of specific detoxification enzymes but is also important for energy production related to cell detoxification. A Magnesium deficiency can affect virtually every system of the body

There is an eternal need for magnesium as well as water and when Magnesium is present in water life and health are enhanced. We literally *thirst* for magnesium rich water.. In a world though where doctors and patients alike do not even pay attention to thirst and important issues of hydration it is not hopeful that we will find many recognizing and paying attention to magnesium thirst and hunger which is a dramatic way of expressing the concept of Magnesium deficiency.

In fact there happens to be a relationship between what we perceive as thirst and deficiencies in electrolytes. I remember a person asking, **"Why am I dehydrated and thirsty when I drink so much water?"**

Thirst can mean not only lack of water but it can also mean that one is not getting enough nutrients and electrolytes. Magnesium, Potassium, Bicarbonate, Chloride and Sodium are some principle examples and that is one of the reasons magnesium chloride is so useful.

Few people are aware of the enormous role that Magnesium plays in our bodies. It is by far the most important mineral in the body after oxygen, water, and basic food.

Magnesium is more important than Calcium, Potassium or Sodium and regulates all three of them.

Sadly, millions of people suffer around the world today from Magnesium deficiency without even knowing it.

Symptoms of Magnesium Deficiency

The first symptoms of deficiency can be subtle as most Magnesium is stored in the tissues: leg cramps, foot pain, or muscle 'twitches' can be the first sign.

Other early signs of deficiency include *loss of appetite, nausea, vomiting, fatigue, and weakness.*

As Magnesium deficiency worsens, *numbness, tingling, seizures, personality changes, abnormal heart rhythms, and coronary spasms can occur.*

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

A full outline of Magnesium deficiency was beautifully presented in a recent article by **Dr. Sidney Baker.**

“Magnesium deficiency can affect virtually every organ system of the body. With regard to skeletal muscle, one may experience twitches, cramps, muscle tension, muscle soreness, including back aches, neck pain, tension headaches and jaw joint (or TMJ) dysfunction. Also, one may experience chest tightness or a peculiar sensation that he can’t take a deep breath. Sometimes a person may sigh a lot.”

“Symptoms involving impaired contraction of smooth muscles include constipation; urinary spasms; menstrual cramps; difficulty swallowing or a lump in the throat-especially provoked by eating sugar; photophobia, especially difficulty adjusting to oncoming bright headlights in the absence of eye disease; and loud noise sensitivity from stapedius muscle tension in the ear.”

“Other symptoms and signs of Magnesium deficiency and discuss laboratory testing for this common condition. Continuing with the symptoms of Magnesium deficiency, the central nervous system is markedly affected. Symptoms include insomnia, anxiety, hyperactivity and restlessness with constant movement, panic attacks, agoraphobia, and premenstrual irritability. Magnesium deficiency symptoms involving the peripheral nervous system include numbness, tingling, and other abnormal sensations, such as zips, zaps and vibratory sensations.”

“Symptoms or signs of the cardiovascular system include palpitations, heart arrhythmias, and angina due to spasms of the coronary arteries, high blood pressure and mitral valve prolapse. Be aware that not all of the symptoms need to be present to presume magnesium deficiency; but, many of them often occur together.

For example, people with mitral valve prolapse frequently have palpitations, anxiety, panic attacks and premenstrual symptoms.

People And Animals With “Magnesium Deficiency” Often Seem Agitated Or ‘Uptight’.

One of the principle reasons doctors write millions of prescriptions for tranquilizers each year is the nervousness, irritability, and jitters largely brought on by inadequate diets lacking magnesium.

People (or Animals) with even a slight deficiency become irritable, highly-strung, sensitive to noise, hyper-excitable, apprehensive and belligerent. Other general symptoms include a salt craving, both carbohydrate craving and carbohydrate intolerance (especially chocolate) and breast tenderness.

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.

Early warning signs of Magnesium Deficiency can include:

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

Further manifestations of Magnesium Deficiency can include:

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

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

~ Severe magnesium deficiency can result in low levels of calcium in the blood called **(hypocalcemia)**.

~ Magnesium deficiency is commonly associated with low levels of potassium in the blood called **(hypokalemia)**.

Potassium.

Note: Too much magnesium ongoing or a lot all at once can throw potassium into the bottom of its range and that makes symptoms worse. So make sure you are also giving Potassium as well.

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 soon we have the manifestation of the disease we call Diabetes.

Magnesium deficiency is synonymous with Diabetes and is at the root of many if not all cardiovascular problems and may be a common factor associated with insulin resistance.

Magnesium deficiency is a predictor of both Diabetes and Heart Disease; diabetics both lose more magnesium and need more magnesium and than most other people. In two new studies, both men and women 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 the blood sugar levels of a Diabetic get too high, 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 Dehydration and 'Diabetic Thirst'

Generally, optimal balances of electrolytes are necessary to maintain the best possible hydration levels in the body. 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.

Magnesium – the Ultimate Heart Medicine

Posted by *Dr Sircus* on December 8, 2009 | Filed under Cardiology, Magnesium, Medicine

This edition offers a substantial breakthrough in cardiac medicine that could positively impact the lives of thousands of people and their families. When someone is in cardiac arrest or are having a stroke, having panic attacks with heart palpitations what is the first thing, the very first thing we would reach for? Our biological engine is seizing up (heart attack) what do we inject?

For the next million years there is going to be only one answer and that answer is magnesium. If you're ever rushed to the hospital with a heart attack, intravenous magnesium could save your life.

In a 1995 study, researchers found that the in-hospital death rate of those receiving IV magnesium was one-fourth that of those who received standard treatment alone. In 2003, a follow-up study of these same patients revealed an enduring effect of magnesium treatment. Nearly twice as many patients in the standard treatment group had died compared to those who received magnesium, and there were considerably more cases of heart failure and impaired heart function in the placebo group. In addition to increasing survival after heart attack, IV magnesium smoothes out arrhythmias and improves outcomes in patients undergoing angioplasty with stent placement.

[Magnesium is absolutely essential for the proper functioning of the heart.](#)

Magnesium's role in preventing heart disease and strokes is generally well accepted, yet cardiologists have not gotten up to speed with its use.

Magnesium was first shown to be of value in the treatment of cardiac arrhythmias in 1935. Since then there have been numerous double-blind studies showing that magnesium is beneficial for many types of "**arrhythmias**" including "**atrial fibrillation**" (AF), ventricular premature contractions, ventricular tachycardia, and severe ventricular arrhythmias. Magnesium supplementation is also helpful in angina due to either a spasm of the coronary artery or atherosclerosis.

*Heart palpitations, "flutters" or racing heart, otherwise called "arrhythmias", usually clear up quite dramatically on **500 milligrams of Magnesium Taurate or glycinate**, (request hospital staff - you do not want magnesium citrate or aspartate as hospitals will use the cheaper form of magnesium, which is not the best form of magnesium) once or twice daily or faster if given intravenously.– Dr. H. Ray Evers*

A magnesium deficiency is closely associated with cardiovascular disease.[1] Lower magnesium concentrations have been found in heart attack patients[2] and administration of magnesium[3] has proven beneficial in treating ventricular arrhythmias.[4],[5],[6],[7] Fatal heart attacks are more common in areas where the water supply is deficient in magnesium and the average intake through the diet is often significantly less than the 200-400 milligrams required daily.[8]

Magnesium is proving to be very important in the maintenance of heart health and in the treatment of heart disease. Magnesium, and potassium are all effective in lowering blood pressure.[9],[10],[11],[12] Magnesium is useful in preventing death from heart attack and protects against further heart attacks.[13],[14] It also reduces the frequency and severity of ventricular arrhythmias and helps prevent complications after bypass surgery.

Magnesium deficiency appears to have caused eight million sudden coronary deaths in America during the period 1940-1994.[15] – Paul Mason

Researchers from North western University School of Medicine in Chicago have determined that not having enough magnesium in your diet increases your chances of developing coronary artery disease. In a study of 2,977 men and women, researchers used ultrafast computed tomography (CT scans) of the chest to assess the participants' coronary artery calcium levels. Measurements were taken at the start of the study—when the participants were 18- to 30-years old—and again 15 years later. The study concluded that dietary magnesium intake was inversely related to coronary artery calcium levels. Coronary artery calcium is considered an indicator of the blocked-artery disease known as atherosclerosis.

Almost all adults are concerned about the condition of their heart and cardiovascular system. Some live in constant fear wondering whether any ache, cramp or pain in their upper body is a sign of a heart attack. There isn't an adult living in North America that hasn't lost a loved one or a family member to heart disease. The fact is heart attacks kill millions every year.

Chernow et al in a study of postoperative ICU patients found that the death rate was reduced from 41% to 13% for patients without hypomagnesemia (low magnesium levels). Other post heart surgery studies showed that patients with hypomagnesemia experienced more rhythm disorders. Time on the ventilator was longer,[16] and morbidity was higher than for patients with normal magnesium levels. Another study showed that a greater than 10% reduction of serum and intracellular magnesium concentrations was associated with a higher rate of postoperative ventricular arrhythmias. The administration of magnesium decreases the frequency of postoperative rhythm disorders[17] after cardiac surgery. Magnesium has proven its value as an adjuvant in postoperative analgesia. Patients receiving Mg required less morphine, had less discomfort and slept better during the first 48 hours than those receiving morphine alone.

It is established that clinically significant changes in a number of electrolytes occur in patients with congestive heart failure (CHF). Magnesium ions are an essential requirement for many enzyme systems, and clearly magnesium deficiency is a major risk factor for survival of CHF patients. In animal experiments, magnesium has been shown to be involved in several steps of the atherosclerotic process, and magnesium ions play an extremely important role in CHF and various cardiac arrhythmias.

Magnesium is also required for muscle relaxation. Lower magnesium levels can result in symptoms ranging from tachycardia and fibrillation to constriction of the arteries, angina, and instant death.

Due to lack of magnesium the heart muscle can develop a spasm or cramp and stops beating.

Most people, including doctors, don't know it, but without sufficient magnesium we will die. It is important to understand that our life span will be seriously reduced if we run without sufficient magnesium in our cells and one of the principle ways our lives are cut short is through cardiac arrest (heart attack).

Yet when someone dies of a heart attack doctors never say "He died from Magnesium Deficiency."

Allopathic medicine ignores the true causes of death and disease and in the field of cardiology this is telling. Magnesium is an important protective factor for death from acute myocardial infarction.[18]

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Constipation

is often a sign of the deficiency of minerals.

Constipation is often misinterpreted as a lack of fiber, but that is not always the case – it reflects failed transition to healthy bowel flora and mineral deficiencies. People have been using Magnesium to treat Constipation, but not all Magnesium sources work that way, so here are a couple types of Magnesium supplements that will specifically help with constipation issues.

Guidelines For Use:

Magnesium Citrate powder is Magnesium with Citric Acid, which has laxative properties.

* **Cat, small animal, infant animal:** Try adding a “a good pinch” of Magnesium Citrate (mineral) powder to food,

building up the amount slowly over a few weeks, until their stools loosen. Then maintain at that amount or go back to a little less.

* **Dog:** Try adding ½ a teaspoon of Magnesium Citrate powder and build up the dosage slowly over a few weeks, until their stools loosen. Then maintain at that amount or go back to a little less.

AUSTRALIA <http://au.evitamins.com/magnesium-citrate-powder-now-5182?>
USA <http://www.evitamins.com/magnesium-citrate-powder-now-5182>

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

The ones that HAMPL sell are easily absorbed and do not cause loose stools. But it may be worth trying the above ones. If you already have the ones we supply it is fine to continue with those, they also help to raise the low magnesium levels your pets are displaying.

Plus

Psyllium Grains

If needing extra help, some pets need **Psyllium Grains** soaked overnight in enough water to make a runny liquid. Then add a tablespoon to each meal, it helps to provide extra fiber too. These grains or husks can be bought online from a variety of health suppliers or from your local health food store or chemist.

What causes Hypokalemia (Renal Failure)?

Magnesium deficiency is also associated with low levels of potassium in the blood (hypokalemia). The most common cause of hypokalemia is chronic kidney failure, a condition common in older cats. Severe or chronic vomiting may also cause hypokalemia in cats.

Published case series suggest that around 25% of cats with chronic renal failure suffer from Hypokalemia – partly due to inadequate potassium intake, but also as a result of inappropriate potassium loss from the kidneys. Although dietary management (feeding of a renal diet) is successful in managing some of these, cats not eating the diet (or those remaining hypokalaemic in spite of dietary management) will benefit from additional potassium. Consequences of Hypokalemia

include worsened renal function, weakness, loss of appetite and, in severe cases, muscle necrosis (Hypokalemic Polymyopathy). Severely Hypokalaemic cats may be presented with severe generalised muscle weakness including ventroflexion of the neck. All of the consequences of Hypokalemia are reversible with appropriate treatment. Severely Hypokalaemic cats (potassium less than 2.5 3.0 mmol/l) and those that are dehydrated or anorexic may benefit from intravenous potassium chloride. **Cats with potassium levels between 3.0 and 4.0 can be supplemented orally.** A starting dose of 12 mmol twice daily is recommended, this can be increased as needed following reassessment of potassium levels. Hypokalemia is best prevented by feeding a high quality protein (which is not found in commercial tin foods), non acidifying diet supplement. **Oral supplementation is safe and there is no danger of inducing Hyperkalaemia through this route of supplementation.**

The Human body needs about 4500mg of Potassium a day from all sources.

We take “Life Enhancement” Potassium Basics Capsules (2 capsules = 1020mgs)

If you take (2) taken 2 x daily = 2040mg with food

If you take (2) taken 4 x daily = 4080mg with food

Low Potassium: Causes and Side Effects

Sodium and potassium play unique roles within the body. If sodium levels are high, your potassium levels are low. 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.

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. **Potassium (mineral)** - Humans need about 4500mg of it a day from all source

Low potassium – symptoms - Potassium is important for a pet or person's muscles to work effectively, including the heart. Potassium also has a role in regulating blood pressure. So if your pet has got High Blood Pressure, then to get this back down, we need **to give ¼ teaspoon of Potassium Gluconate powder** (from capsule) in meals twice a day. Or dilute in some liquid and oral syringe. 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.**

* **Low potassium causes** dehydration, diarrhoea, excessive sweating (hyperhidrosis).

Other causes include medicines that affect the amount of potassium in the body, such as diuretics, also known as water pills. 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.

Symptoms Include:

- 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
- In many cases, the cat will have a **poor quality coat**.
- **Abnormal psychological behaviour:** depression, psychosis, delirium, confusion or hallucinations.

How to Treat Hypokalemia:

~ **Potassium Bicarbonate** powder, Magnesium, Taurine amino acid powder and Vitamin B6 (P5P) Capsules (by Thorne Research Brand).

~ **Vitamin B6 – (PHP) activated B6.** Pyridoxine also aids in maintaining “sodium and potassium” balance. Vitamin B6 also promotes red blood cell formation prevent anemia.

~ **Taurine amino acid in cells**, Taurine keeps “potassium and magnesium” inside the cell, while keeping excessive sodium out.

Types of Potassium Supplement:

There are three main types of potassium supplement:

~ **Potassium Gluconate** - this oral supplement is often used by people. Potassium Gluconate (one of the most available supplement forms) goes into solution easily to give potassium ions (which is the electrolyte), and the gluconate part is **metabolized in the liver** to create bicarbonates. Bicarbonates are also electrolytes. So this is similar to supplementing potassium Bicarbonate.

~ **Potassium Citrate** - Another oral supplement which can be helpful for cats and dogs who also may have metabolic acidosis happening.

~ **Potassium chloride- used if you are injection potassium into the Sub-Q bag of fluids**. Potassium Chloride is another important electrolyte – it gives the salty taste to salt and tends to “raise blood pressure” (loss of chloride usually accompanies a potassium deficiency because chloride is secreted to maintain serum pH). So naturally, potassium chloride tends to raise blood pressure, and tends to be **acid forming**. Potassium chloride will also help to raise the cell levels of potassium faster than potassium bicarbonate. This seems to make sense given their relative effects on electrolyte balance and blood pressure and pH. **Chloride** helps maintain the proper acid/alkali balance in the body. Chloride is also necessary for the production of hydrochloric acid (HCl) in the stomach which helps in the digestion of protein. In general, the chloride requirement is 1.5 times the sodium requirement. This is because most of the sodium and chloride come from salt, and by weight, salt provides 1.5 times more chloride than sodium.

~ **Potassium Bicarbonate** - is “alkalizing” it helps to prevent calcium loss that can be caused by a functional potassium deficiency which are both desirable for most people – particularly given modern diets. Potassium bicarbonate is also the form most similar to what you get from eating vegetables. However potassium bicarbonate will tend to **lower blood pressure**. **But often High Blood pressure is seen, and therefore potassium is also needed to correct this**. Bicarbonates are also electrolytes.

Natural Medicine Solutions:

5 steps

1. **HAMPL HBP 148 formula** (homeopathic formula for high blood pressure drops, plus the other supplements below)
2. **HAMPL Anemia 19-4 drops** this formula is supplied with the Homeopathic Kidney Set).
3. For **Boron (trace mineral) *phosphorus balancer-** use the **(ReMyte Mineral drops)** for reducing high phosphorus levels. 5 to 10 drops cat, double for dogs.
4. For prevention or solution to **“Low Potassium” minerals in body.** *add **“Potassium Bicarbonate”** powder is effective in treating most causes of potassium deficiency called **“Hypokalemia”** (i.e. commonly occurring issue for renal conditions or older pets - low potassium levels)
5. For all situations we also need to provide **Magnesium** (5 drops of reMag Magnesium) or a pinch of Magnesium Glycinate powder twice a day in food or milk drinks on an ongoing basis. We all need this mineral daily.

Note: Too much magnesium ongoing or a lot all at once can throw potassium into the bottom of its range and that makes symptoms worse. So make sure you are also giving Potassium as well.

Vitamin C

Whole Food Vitamin C powder * buy from iherb or other suppliers

Toy dog, Cat: a pinch in meal twice a day.

Small dog: 1/2 powder from capsule twice a day.

Med - Large: 1 powder from capsule twice a day.