Thrombosis and embolism share many similarities, but they are unique conditions. Thrombosis occurs when a thrombus, or blood clot, develops in a blood vessel and reduces the flow of blood through the vessel. Embolism occurs when a piece of a blood clot, foreign object, or other bodily substance becomes stuck in a blood vessel and largely obstructs the flow of blood.

A similar condition, thromboembolism, refers to a reduction in blood flow that’s specifically caused by an embolism from a blood clot.

Many people develop blood clots, and there are many types and causes of thrombosis and embolism. A block in blood flow in a deep vein, large artery, or pulmonary (lung) blood vessel carries the greatest health risk.

**Symptoms**

The symptoms of thrombosis and embolism depend on the:

- type of blood vessel involved
- location
- impact on blood flow

Small thrombi and emboli that don’t significantly block blood vessels may not cause symptoms. Around 50 percent of people with DVT have no signs of the condition at all. However, large obstructions can starve healthy tissues of blood and oxygen, causing inflammation and eventually tissue death.
Strokes

As in people, there are two types of strokes in pets: ischemic (caused by insufficient blood supply) or hemorrhagic (caused by too much blood). An ischemic stroke happens when a blood clot or other material becomes lodged in a vessel, preventing blood flow. Since the brain cells in that area are deprived of the oxygen and glucose needed to function properly, they eventually die.

A hemorrhagic stroke, which is much less common in pets, happens when a vessel ruptures, usually because of trauma or disease. Brain cells can be damaged when excess blood within the skull compresses the cells, or from too much hemoglobin, a component of red blood cells, which can be toxic to neurons.

In dogs, the most common underlying causes for ischemic strokes are Cushing’s disease (a condition associated with the adrenal glands), hypothyroidism (low thyroid hormone levels), chronic kidney disease and high blood pressure.

Differentiate between the symptoms of a stroke and the symptoms of other conditions.

A stroke is a sudden event. You should suspect a stroke if a pet that was fine and normal 5 minutes ago, is now struggling to get up. If the dog is struggling because its dizzy, such as if they have heart disease, this episode may pass within a few minutes, once the dog has caught its breath be able to rise and walk around.

A dog that has had a stroke, however, will remain disorientated for hours or even days.

~ Please note, this symptom also overlaps with inflammation in the balance mechanism in the inner ear. (middle ear infection)

~ In addition, there is a sliding scale of weakness, depending on the severity of the stroke. Sometimes if it is only mild the dog can stand and walk around slowly as if drunk, other times the dog is incapacitated, lies on their side and is barely conscious.

See HAMPL Thrombosis 295 formula, the HAMPL Stroke Recovery 266 formula, Magnesium (minerals), Congestive Heart formula if also has Heart Failure condition, or/and Cushings or Thyroid imbalances.
Saddle Thrombus in Felines

Saddle thrombus is nearly exclusively a feline phenomena (it is reported in dogs rarely), causing a severe situation where the lodged clot cuts off blood supply to the legs. The lack of nutrient rich, oxygen rich blood reaching the tissues of the legs leads to severe pain, disuse of the legs and severe damage to the tissues, blood vessels, and nerves.

Cats with hyper-thyroidism are prone to a cardiac condition called hypertrophic cardiomyopathy. Therefore, saddle thrombus tends to be associated with cats that have hyperthyroidism.

Other conditions such as hypertension or degenerative kidney disease may also predispose cats to the development of saddle thrombus. This is why many veterinarians include blood pressure measurement as part of the routine yearly wellness examinations and recommend yearly senior wellness blood work as an integral component of the yearly visit.

Cats that have formed a saddle thrombus typically appear 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.

Allopathic Medicines has very little to offer and no cure. However we have had amazing success using homeopathics for prevention and assisting healing before further damages appear.

Also pet with heart conditions or hyperthyroidism see remedies and minerals recommended.

Venous thrombosis

Veins are the blood vessels responsible for returning blood to the heart for recirculation. When a clot or embolus blocks a major or deep vein, blood pools behind the obstruction, causing inflammation. Though they can occur anywhere, most cases of venous thrombosis develop in the deep veins of the lower legs. Blockages that occur in the small or superficial veins tend not to cause major complications.

Common symptoms of venous thrombosis include:

- pain and tenderness
- redness or discoloration
- swelling, often around the ankle, knee, or foot

The affected area will also be warm to the touch.
Pulmonary embolism

Pulmonary embolism (PE) occurs when a piece of a blood clot breaks free and travels through the bloodstream to the lungs. It then becomes lodged in a blood vessel. It’s commonly associated with DVT. Pulmonary embolism can be very dangerous and develop extremely rapidly. In about 25 percent of pulmonary embolism cases, sudden death is the first symptom.

Common symptoms of PE include:

- trouble breathing
- rapid breathing
- dizziness and light-headedness
- rapid heart rate
- chest pain that gets worse when breathing in
- coughing up blood
- passing out

Arterial thrombosis

Arterial thrombosis is often associated with atherosclerosis. Atherosclerosis is the development of plaques, or fatty hardenings, on the inner wall of an artery. Plaques cause the artery to narrow. This increases the amount of pressure in the blood vessel. If this pressure becomes intense enough, the plaque can become unstable and rupture. Sometimes when a plaque ruptures the immune system overreacts. This can lead to the development of a large clot and a life-threatening condition, like a heart attack or stroke.

Seek immediate medical attention if you have symptoms of arterial thrombosis including:

- chest pain that often comes on randomly, such as when you’re resting, and won’t respond to medication
- shortness or loss of breath
- sweating
- nausea
- a limb or area of skin that has become cool, lighter in color than normal, and very painful
- unexplained loss of muscle strength
- lower portion of the face slumps to one side
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 hydration. 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 deplete big time.

**Pet, humans with:** LOW BLOOD PRESSURE - Magnesium - can lower blood pressure. ADRENAL FATIGUE - Zinc and Magnesium - can lower Cortisol output.
Magnesium – the Ultimate Heart Medicine

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

This 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 aspirate 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 Northwestern 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]

REFERENCES ▲

Heart Conditions - like congestive heart failure, cardiomyopathy, arrhythmias (irregular), tachycardia (rapid), hypertrophic, aortic thromboembolism.

Typically, cats that are predisposed to saddle thrombus have an underlying cardiac (heart) disease that increases turbulence to 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.

- 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.

Heart murmurs
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.

If "ACUTE" Mitral Valve insufficiency, also see the formulas for this condition.
Heart Murmur - Mitral Valve Disease (endocardiosis) - Mitral Valve Regurgitation, Insufficiency or Incompetence (or Feline).

Product Code: AN305 "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** 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).

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.

**Congestive Heart Failure.**
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 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 LungOdema 91-2 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 on least exertion, dilated heart, weak heart sounds or valvular murmur.
Shortness of breath symptoms or fainting fits, weak heart.
Mitril regurgitation producing cyanosis with a 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. Did you know panting after exercise may be because they have a weak heart action as a consequence of simply old age Angina muscles restriction of chest muscles, anxiety?
Minerals - This is why the mineral "MAGNESIUM" supplementation given daily will quickly resolve many of these symptoms.
Please note: HAMPL Congestive Heart 22-1 50ml and HAMPL DurAid 22-2 (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.

FOR ALL HEART CONDITIONS
The type of Magnesium you or your pet needs is MAGNESIUM TAURATE

Cardiovascular Research Ltd., Magnesium Taurate, 180 Capsules
By Cardiovascular Research Ltd.
We get ours from iherb.com

Add the powder from capsules of the "Magnesium Taurate" capsules supplement - 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 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

TOY DOG to FELINES: open one capsule and add half a cap of the powder from in every meal given.

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

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

ACUTE OR ADVANCE HEART CONDITIONS

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

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

And add a Taurine Supplement Capsule in meals with the Magnesium supplement.

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 taking these below minerals

Restoring Potassium:

1. Potassium Bicarbonate powder or Potassium Gluconate capsules (only adding 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.
POTASSIUM  (also see Page 24)

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.

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:  4 drops.
Small and med dogs.  * ¼ - ½  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-is (Hypertrophic or dilated). Congestive Heart Failure.

2. VITAMIN C  -  Whole Food Vitamin C - Capsules

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.
3. MAGNESIUM Taurate Powder (mineral)
* 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 Magnesium and Calcium - calcium competes and will deplete magnesium, therefore staying magnesium deficient.**
A Herbal 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.

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.

JUST SOME OF THE COMMON side effects of the DRUGS PRESCRIBED FOR OUR PETS - unfortunately.

**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).
Potassium (mineral)

Our bodies need about 4500mg of it a day from all source

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.

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.