

# Calcium. Is there a difference?

After my recent trips to China I witnessed many forms of calcium on the market. Different prices and different types. To the untrained eye all calcium supplements look the same and most of us would purchase based on price. This could be a very detrimental decision for your dog or cat. Not all calcium supplements are the same and many are not good for your pets health at all. In this article I'm going to explain the difference in calcium supplements and which are the best for your pets and why.

**Calcium is one of the most essential and important minerals in our body. It is also the most abundant, 99% is located in our bones and teeth.**

Calcium is used by almost every cell in the body including the heart and nerves and is necessary for muscle contraction and for the development and maintenance of bone structure. Calcium is an important component of a healthy diet. Although we imagine bones are permanent, they are actually being constantly renewed throughout your pets life and replaced with new bone tissue.

If our pets do not consume enough calcium in their diet, their body takes the necessary calcium from their bones to use for other essential functions. This can result in brittle or porous bones, broken bones, low bone density, weakness - especially in later life and arthritis.

To ensure they maintain excellent bone health, it is essential they receive sufficient quantities of calcium every day. It is even more important to ensure that the body can utilise and absorb the calcium it is given. Natural food-complexed calcium is the most suitable form of calcium for long-term use. Usually good sources of minerals are obtained from natural plant and vegetable foods however calcium content is high in only a select number of foods.

The different forms of Calcium

Calcium Form	Actually Is
Calcium Hydroxyapatite	Processed, degreased, crushed cow bone meal
Calcium Citrate	Limestone or chalk processed with lactic acid and citric acid
Calcium Carbonate	Limestone or precipitated chalk
Calcium Gluconate	Limestone or chalk processed with gluconic acid
Coral Calcium	Dead calcium

The above forms of calcium are either heavily processed or indigestible for your pets digestive tract. These forms of calcium have to be fed in large amounts to get a reasonable amount of calcium and most pets hate large quantities of powdered additives in their food.

Even in these larger doses these calcium's won't provide your pets with the right balance of calcium to phosphorus ratio. Nor do these calcium supplements provide you with the trace vitamins and minerals required to absorb, utilize and metabolize calcium properly.

As an Animal Naturopath I wouldn't recommend the use of any of these types of calcium supplements. They are a waste of money and not good for your pets health long term. Many of these calcium products, when used excessively, can in fact cause bone abnormalities in young animals.

Feeding high calcium diets with excess calcium is often blamed for contributing to bone problems in young, rapidly growing dogs. There does appear to be a link between the incidence of hypertrophic osteodystrophy (HOD), osteochondritis dissecans (OCD) and hip dysplasia, and the overfeeding of calcium. In recent studies, researchers fed dogs calcium at a much higher than recommended amount, and compared the incidence of disease in dogs that were fed normal or less than normal calcium levels. As would be expected, the animals that were overfed calcium showed increased incidence of skeletal problems including hip dysplasia.

Before you purchase your calcium supplement, look at the ingredients. Then have a look at the required dosage. A medium dog up to 30 kilos should not require more than ½ a teaspoon. Any more than this and the products are of very low quality.

The best type of calcium supplement is a natural vegetable form. Natural Animal Solutions manufactures natural calcium from Certified Organic Sea Vegetable harvested from the pristine waters of the Atlantic Ocean in Iceland. This form of calcium is easily absorbed by your pets digestive tract, has a balanced ration of calcium to magnesium and trace minerals Silica, Copper, Selenium, Zinc, Boron, Manganese, Phosphorus and lots more. This is a natural form of calcium and only requires very small dosages for your pets. It is easily and safely digested. Always remember, more isn't better! Stick to the recommended dosage.

*I specifically will mention the use of Nature's Calcium as Natural Animal Solutions has conducted studies on this natural Sea Vegetable and have "proven" benefits. Other calcium's listed above have not been proven to benefit animals in the same way.*

**The most important aspect when taking calcium is the bioavailability of the calcium. Calcium digestibility, solubilisation, absorption and organ uptake and release are important metabolic events when considering calcium bioavailability (body's ability to absorb and utilize).**

Nature's Calcium has a unique porous 'honeycomb-like' structure which reacts well in the digestive system and gives it high absorption properties.

A Nature's Calcium molecule has a very large surface area. This allows faster solubilisation and rapid ionisation of the calcium.



Nature's Calcium also contains other important minerals necessary for the absorption of calcium including magnesium, boron, selenium, zinc, copper and iodine.

**Nature's Calcium can improve Bone Health by**

- Reducing bone breakdown associated with ageing
- Optimizing skeletal integrity
- Optimizing bone strength

**Nature's Calcium can improve Joint Mobility by**

- Relieving symptoms of osteoarthritis
- Increasing joint mobility
- Increasing movement

**Who can benefit from using Nature's Calcium?**

	<b>Beneficial for</b>
<b>Puppies</b>	growing puppy bones
	supplementing calcium for healthy bone growth
	safe for puppies because it is a natural calcium supplement
	(other calcium supplements can cause issues for large, fast growing puppy breeds eg. Golden retriever
<b>Adults</b>	maintaining the muscular skeletal system and assisting active adult dogs
	preventing skeletal diseases eg osteoarthritis
	providing calcium for healthy regeneration of bone
<b>Elderly</b>	the prevention of bone deterioration in older dogs
	those with skeletal disease eg. osteoarthritis
<b>Whelping and lactating bitches</b>	providing extra calcium required whilst feeding
	providing quality calcium to pups from mothers milk

As an Animal Naturopath, my recommendation for supplementing your pet with Calcium is to simply feed raw bones. It is simply the safest way to feed calcium and has the perfect ration of calcium and minerals. It is the easiest way for your pet to digest and utilize calcium as well as the best way to keep your dog away from the dentist. A raw bone is the best dog or cat tooth brush! Never feed cooked bones as once cooked the molecular structure of the bone has changed and makes it indigestible. It will also splinter into sharp edges and then has the potential to tear or damage the bowel. For those that don't feed bones then a natural plant source of calcium like Nature's Calcium is your best and safest option. An alternative option is a high quality Goat Milk. It is high in calcium, easily absorbed and a yummy treat for your pets.

