



# PAW prints

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## Supplying minerals – a question of source?

Minerals comprise less than 0.7% of the body, but their dramatic effects on a variety of animal functions make minerals and their balance absolutely essential for proper nutrition. Essential minerals in animal diets are composed chiefly of the macro minerals calcium, phosphorus, potassium, sodium and magnesium (measured in parts per hundred), but include micro minerals iron, zinc, copper, manganese, iodine, cobalt and selenium (measured in parts per million). Macro minerals are involved in structural integrity, acid-base balance, osmotic pressure and cell, nerve and muscle function. Most micro minerals are components of metallo-enzymes while iodine is necessary for thyroid hormone, iron for hemoglobin and cobalt for vitamin B12 synthesis. Indiscriminate supplementation of minerals is likely to be more harmful than beneficial with mineral imbalance the most likely cause of several problems in dogs, cats and horses.

In the last ten years, a renewed interest in the bio-availability (availability of the mineral at the target tissue) of mineral source has helped drive new generations of organic minerals. Comparatively little information exists on the bio-availability of minerals for pets and horses but research continues on optimum inclusion levels in the diet to maximize the health and “well-being” of the animal (e.g. dogs and horses with a predisposition to joint disease). Problems with classical mineral deficiency in pets are now seldom seen when feeding commercial diets (but still occur with home-mixed diets) and more likely relate to mineral interactions or bio-availability problems.

Minerals in animal diets are unique nutrients because they contain no carbon, which makes them inorganic molecules. A new class of minerals, called chelated or organic minerals, is now available to the animal feeding industry. Organic (or chelated) minerals differ from inorganic minerals in that the mineral element is bound to amino acids or small peptides to form a structure that is stable and electrically neutral. This differs from traditional mineral form where the mineral element is bound to another inorganic mineral such as the typical oxide or sulfate inorganic (rock) mineral form of manganese oxide or ferrous sulfate. Studies

on the digestion of organic minerals indicate that organic minerals are viewed by the body as protein rather than mineral during their absorption from the intestinal tract. The stable protein structure can increase the mineral's absorption across the gut wall and can hide the mineral element from other minerals that might interfere with absorption. For example, chelation can shield a mineral from external influences like unabsorbed calcium binding to zinc reducing its availability.

There are many naturally occurring organic minerals including chlorophyll (chelated magnesium), vitamin B12 (chelated cobalt) and hemoglobin (chelated iron) and so this relatively new concept is not an unusual mineral form to the animal. Organic minerals must be used in conjunction with inorganic mineral forms to assure mineral requirements will be met. The relative amounts of different mineral sources is an important question to commercial nutritionist as a determination of relative bio-availability may be more important than the absolute amount of a particular mineral in the diet.

Inorganic oxide mineral sources have been popular in the feed industry because of their low reactivity with other minerals and minimal water reactivity or crystallization. It is well known that the oxide form of minerals such as copper oxide and iron oxide have poor availability in animals. Other oxide forms have reasonable absorption and bio-availability. Sulfate forms are popular but reactivity may be high due to crystallization with water.

Studies with chelated zinc have shown advantages in terms of availability, animal performance, and reductions in mineral interaction. Qualified nutritionists use this data to design improved diets considering the potential health and animal welfare benefits of appropriate mineral levels at target tissues. Diet mineral levels should always be based on sound ingredient analysis. If a qualified nutritionist has designed a diet, do not supplement with additives unless directed by a veterinarian or nutritionist. Additional supplementation with vitamins and minerals is not necessary and may cause mineral imbalances.

*David Dyle, M.Sc., P.Ag. Nutritionist, Agro Pacific Industries*

## This month...

- Info on minerals and diet
- the 'Prez' talks
- training suggestions

## Good training habits

- Use only one command
- Don't use the dog's name or repeat the command when correcting
- Praise the dog after every correction
- Corrections with the leash are quick jerks, not pulls or tugs
- Short, frequent training sessions are more beneficial to the dog
- Practice makes perfect, do your homework
- Never call the dog to punish him
- Use the leash and collar, or voice for corrections. Keep your hands for praise
- Never jerk your dog off his feet
- Generally, don't train your dog off leash
- Don't progress faster than the dog
- Follow through with any command you give the dog
- Do not adapt to the dog, make him adapt to you
- End each training session on a positive and happy note
- Practice in different locations, use lots of distractions
- Make your commands clear and concise.

*Graciously accepted from the Richmond Dog Fanciers Association*

will scan & place photo

*caption here*

## Greeting a strange cat

When making friends with a strange cat, be polite. Make brief eye contact if he will. Squat down or bend over, offer a hand, speak quietly and warmly, and wait.

If he approaches you, that's great. Allow him to sniff your hand if he wants, then give him a gentle stroke under his chin.

He'll stay if he's enjoying himself, move closer if he wants more, and retreat if and when he's had enough.

Don't try to pick him up yet. He'll jump up if he wants to be in your lap.

Do not, repeat not, chase after him if he doesn't want to make friends. The time might not be right or he just needs more time to get to know you.

## From the Prez



*Happy Birthday to us, Happy Birthday to us. We made it to our 5th birthday. Wow!*

We are very pleased with ourselves. Only a small percentage of companies make it this far. We're now one of those companies.

We should thank a whole pile of people, from our Area offices to our Independent Contractors to our Pet Professionals to our suppliers.

We should also thank **you**, our valued customers, for supporting us through these years. Our mission is, and always will be, to provide the best possible products and services to you. Your continuing support is inspiring.

A few words about quality. We strive to give the best value for your money while not compromising the quality of our formulations. One of our biggest challenges is competing with products that appear similar to ours when you look at the ingredient list, but pale in comparison when you see the results.

Not all ingredients are created equal. A chicken meal may look like a chicken meal but there are no less than five grades to choose from. Most manufacturers choose the lowest grade possible (cheapest) because big companies have to make big bucks in order to please their owners. We choose the highest grade possible (most expensive) because we know you care about your pets as you would any valued family member, and your family members should be fed the very best. We're proud that **our quality is second to none**.

We've always gone the extra mile with our formulations and now we certify that our formulations do **not** contain Ethoxyquin. We don't buy any of our raw ingredients from suppliers that include this toxic preservative. We are one of the few companies that can say this to its customers.

We're proud of our products and proud of the results our products provide. Thank you again for helping a fledgling Canadian company hit an important milestone.

Bandit

## Contact us

"Paw Prints" is published every two months by Pets First Products and Services Inc. Your comments, submissions and suggestions are very welcome. Contact us at:

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Contact our editor if you have any suggestions for the newsletter. You can reach her via email at: [pets1\\_editor@yahoo.com](mailto:pets1_editor@yahoo.com) or drop her a note at the above address.

## How to puppy/kitten-proof your house

Kittens and puppies are naturally inquisitive, which can often lead to serious injury. Here are some tips on how you can make your house safer for the new arrival.

**THAT'S SHOCKING** – Young animals love to chew when they're teething. Keep electrical wires out of reach, or use a pet-repellent.

**THEY'D DIE FOR SOME CHOCOLATE** – Chocolate can be dangerous. It contains theobromine, a powerful stimulant that is toxic to pets. Sweets, cakes and cookies can also upset a young animal's gastro-intestinal tract and lead to diarrhea and vomiting.

**TREATS CAN BE THREATS** – Never give turkey, chicken or rib bones as a treat. They can splinter and cause serious injury.

**COMMON HOUSEHOLD KILLERS** – Cleaning agents, bleach, ammonia, disinfectants, drain cleaner, oven cleaner, paint, gasoline, rat poison. Keep them locked up.

**ANTI ANTIFREEZE** – Pets are attracted to the odor and sweet taste of antifreeze. Store it in a high place, tightly sealed, wipe up any spills on the garage floor. Window-washing solution also contains antifreeze. And remember, engine warmth promotes catnaps, so honk your horn to wake pets under the hood.

**KILLER HOUSEPLANTS** – Poisonous plants include lilies, philodendron, dieffenbachia, elephant ear, eucalyptus, spider plants, azalea, ivy, amaryllis, pyracantha, oleander, boxwood, Jerusalem cherry and plant bulbs.

**KEEP OFF THE GRASS** – If you treat your lawn with chemicals, keep pets away. Read and follow label directions carefully.

**IT FIT YESTERDAY** – Puppies and kittens grow rapidly. Collars and harnesses can be rapidly outgrown, leading to serious wounds.

**TAKE CARE OF PERSONAL CARE ITEMS AND MEDICATIONS** – Cosmetics, shampoos, skin creams, "perm" solutions, depilatories, suntan lotions, sleeping pills, antihistamines, aspirin and acetaminophen can all be lethal.

**IT'S NOT A TOY** – Don't leave plastic bags out. Inquisitive young animals, especially kittens, can suffocate.

**THE HEAT IS ON** – Watch out for hot irons, coffee pots and space heaters. Kittens and puppies will suddenly be able to jump to new heights.

**A DIP TIP** – Keep covers on hot tubs and swimming pools. Kittens and even young puppies can fall in and not be able to get out.

**DO YOU EAT WITH THAT MOUTH?** – Rule of thumb: If any or all of something will fit in a mouth, it's dangerous. Watch out for cigarette butts, rubber bands, balloons, sewing needles, thread, string, ribbons and, yes, even pantyhose. Because what goes in must come out, often via surgery.

### your pet pic here

Send in those pet pictures, and your pet could be featured here!

First prize is 40 lbs of dog food, or 20 lbs of cat food.

*Sorry, no pictures can be returned.*

## If you can . . .

- If you can start the day without caffeine,
- If you can get going without pep pills,
- If you can always be cheerful, ignoring aches and pains,
- If you can resist complaining and boring people with your troubles,
- If you can eat the same food everyday and be grateful for it,
- If you can understand when your loved ones are too busy to give you any time,
- If you can overlook it when those you love take it out on you when, through no fault of yours, something goes wrong,
- If you can take criticism and blame without resentment,
- If you can ignore a friend's limited education and never correct him,
- If you can resist treating a rich friend better than a poor friend,
- If you can face the world without lies and deceit,
- If you can conquer tension without medical help,
- If you can relax without liquor,
- If you can sleep without the aid of drugs,
- If you can say honestly that deep in your heart you have no prejudice against creed, colour, religion or politics, . . .

*Then, my friend . . . you are almost as good as your dog!*

## Q&A

We want to be of help to both and your pets.

If you have a question you would like answered, and think it might be of interest to our customers and fellow newsletter readers, please send it to our newsletter staff, in care of Pets First and we'll publish a selection of questions with answers from our professionals. So, keep those questions coming, we love hearing from you and about you.

**Q** *Why is my cat's tongue rough?*

**A** Your cat's rough-surfaced tongue has many useful purposes. Since cats are self-cleaning, a rough tongue gives them a scrub brush for working on stubborn dirt. It also makes an great loose hair remover.

Drinking is also facilitated by the tongue, those little bumps are like hundreds of little cups that help get the water into the cat.

## Check the net!

Our busy editor spends her spare time surfing the net to find sites of interest to pet owners and lovers. Here are her picks for this issue.

- Looking for everything in one place? Then MiningCo is for you. I found information on aromatherapy for pets, training tips, pet screensavers, lists of breeds and breeders, travel tips (including pet friendly accommodations) and so much more!

<http://cats.miningco.com> and

<http://dogs.miningco.com>

- Here's a great place if you're looking for books about pets (and just about everything else as well!)

[www.amazon.com](http://www.amazon.com)

Any sites you find interesting? Let us know, we'll check 'em out and pass 'em on!