



The Poodle Scene

JUNE 2015

SUMMER NEWSLETTER

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A little note from your new editor...

I would like to introduce myself to all those people that do not know me...

My name is Gloria Koolsbergen, yes, the family name is Dutch, but I was born in Argentina. I arrived in Canada at 19 years old, my mother tongue is Spanish. I studied at Concordia at night to improve my English and earned a Certificate in Journalism, Graphics and Advertising... However, sometimes I may have some grammar mistakes in English.

That said, I will ask people to overlook those little mistakes, and when you send me any submissions try to do your own editing.

If there are French speaking members they can also send me French text and I will be happy to place it in the News Letters. I do speak French, but again, my grammar is very poor, therefore I can translate to English but not the other way around. If somebody is willing and able to do the translations for me and/or edit my text I'll be happy to send the copy to be revised and it will be very much appreciated!

I also would like to mention that I found that it was a challenge to get ahead on a different culture. I took a training course on mind control and positive thinking. I would like sometimes to place a few thoughts about positive thinking and visualization to use it as problem solving. Those courses turned my life around and motivated me to move forward in a positive path of growth and learning. I went to night school to improve my skills, get a profession, and pursue my various interests.

I was an only child and as such, I was bored, I spent time sewing, writing and painting.

I also like alternative medicine, and I studied at NHC (Natural Health Consultants Institute). I completed a course on Herbal Medicine, and continued with more that a 1000 hours of night studies after my full time job as a Technical Illustrator at Bombardier. Some of the courses included Re-



search, Pathology, Chinese Medicine, Aromatherapy, Homeopathy, and Flower Essences. I like to apply some of what I learned towards my poodles. If you are interested, I can share with you some of the tips that I have learned that help with my poodles.

Nutrition was also part of the studies on Holistic medicine, I cook for my dogs. I can occasionally share some recipes into which sometimes I mix some healing herbs.

Because I'm a breeder of miniature poodles, it is sometimes hard to predict in advance when the females are going to be in heat, or have babies. Because of that, reason I can't plan in advance and volunteer to some of the club functions unless I am free at the last moment or planned a couple of months before. I'm the only care giver to my dogs, as my husband is a very busy business man.

Besides breeding and showing my dogs for conformation, I enjoy very much doing agility with them and sometimes do competition trials. I have obtained a few titles with my dogs and they enjoy it as much as I do.

We are on the web:
www.poodlesglow.com

NEWSLETTER:S

PLEASE SEND ME BRAGS, HUMOR, RECIPES, ETC.

TOPICS YOU LIKE TO READ ABOUT (given enough time for research)

To my personal e-mail: poodlesglow@live.com

Next News letter will be the Fall Issue. Submissions should be in before the end of September.

JUNE 2015



Congratulations to all our Top Agility Dogs!

Results for the Top 10 dogs for all breeds, the Top 10 for each group and the Top 5 for individual breeds are compiled from the CKC's database, and include all corrections and cancellations. Every effort has been made to ensure the accuracy of our Top Dogs.

#	Top Agility Dogs 2014	All breeds	Trials	Av. Score	Points
1	AgMCh. & AgMChV Buddington's Enchanting Balanchine	Cavalier King Charles Spaniel	38	100.0	189
2	AgMCh. Marolou Run McClean CGN, IPV, CD, RE, 22 100.0 110 AgMX2, AgMXV	Soft-coated Wheaten Terrier	22	100.0	110
3	AgMCh. Cartier Bella Estrella Goya CDX, RE	Poodle (Miniature)	19	100.0	95
4	AgMCh. Braewood Protector Of Zion NP	Spaniel (American Cocker)	18	100.0	90
5	Ch. Subria Silent Is Golden NP, AgX, AgMXJ	Poodle (Miniature)	17	100.0	85
5	Criterion Celestial Sky Rocket CGN, NPV, RE, AgX,, AgMXJ, AgMXJV	Poodle (Standard)	17	100.0	85



Annie Monette with GOYA

Poodles are on TOP 5 of all breeds!!!

AgMCh. Cartier Bella Estrella Goya, CDX, RE

Sire: Sanew's Last Laugh
Dam: Glintondale's Marie Soleil



Goya est une partenaire d'activité incroyable, toujours prête à me suivre.
Très active, intelligente et affectueuse, elle est une membre à part entière de la famille.
Goya a été championne d'agilité au provincial du Québec en 2012 et a terminé 3e au Canada au CKC en 2014, en plus d'avoir son CDX en obéissance et son RE en rallye-o.

Goya is a fantastic activity Partner, always ready to do something with me.
Very active, intelligent and affectionate, she's a part of family.
Goya finished first at the Québec Championship agility in 2012 and she's the third best dog in CKC Canada in 2014. She also have an obedience title CDX and rally-o title RE.

Be a Leader through Positive Training

Written by Mark R. Walden

Dog Training! In my experience, it's not just about training the dog but the owner as well. Being an effective leader is essential – the dog needs to understand that you and your family are in charge. Every second you spend with your dog it is taking in vital information; you want to make things as clear to the dog as possible. Behavioral problems in most cases stem from the misleading behavior from the owner and family. It's not about being aggressive or domineering, but simply letting the dog know that it doesn't have to stress about protecting its family. In this article I will go right back to basics and explain very simple methods of communication you have to be aware of to make sure there is a good line of communication between you and your dog.

Body Language

Absolutely essential – and that's why I'm putting this first. A great deal of leadership comes down to body language. Much communication between pet and owner is expressed without saying a word. Dogs can easily read body language that may seem weak, tentative or quiet. However, a dog can also detect aggressive postures and body behavior which, rather than helping control the animal, may make things worse. That said, a dog will recognize a projection of assertiveness and authority.

To assert your authority to relax rather than threaten the dog, these are some of the positive actions he will recognize:

- Keep your head upright and posture high.
- Avoid any sort of direct eye contact until you are ready to interact, especially if the dog is showing signs of fear and anxiety, as eye contact can be perceived as threatening.
- Avoid things like direct finger pointing, which can again be threatening.
- When rewarding your dog make sure you express your appreciation clearly. Smile and open your arms; he will read your welcoming body language positively.

Decision-making & Action

When you make a decision on anything, it must be firm, final and immediate and your dog must know this. This is often easier said than done and it won't always work, especially during the puppy/adolescent stages. Dogs often protest with gesturing or barking; try and avoid this as much as you can and if they behave this way, make sure you ignore it at all costs.

Having lived with mischievous Beagles most of my life, I know this behavior all too well!

Again, ensure you are being firm, but not violent or aggressive, as this will only make things worse.

Tone of Voice

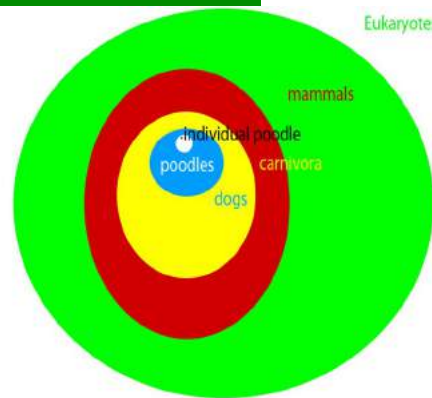
This is perhaps the most obvious step but often a problematic area. Dogs are just as good as humans when it comes to detecting the tone of voice. The reason I mention it last is because it works alongside the other two steps and they must be consistently used or your dog will become confused.

- Make sure your tone of voice and commands are clear
- Use short phases and commands: sit, stay, paw, dinner (their favourite one, obviously!)
- Try to make sure all commands are used in with conjunction with the dog's name, especially when you have more than one animal in the house!
- When praising the dog, along with body language, deliver it with a smile and a soft, welcoming, reassuring voice. He may not understand what you are saying but will recognise the tone with which you say it!

I wish you all the best of luck! For more information, advice and other dog related blogs, visit my website at www.markwalden.org – And follow me on Twitter @MarkRWalden



Author Bio: I'm passionate about animal welfare. I'm a Dog Handler, Blogger, Treasurer SE Basset Hound and currently working in Dog Law. I've lived with dogs all of my life and after thinking that you can never get enough of a good thing I've decided to work with them! I've managed a boarding kennels for 5 years, and currently working in Dog Law. I'm involved in events and shows such as Discover Dogs, London Pet Show, Windsor Championship Show and Crufts.



When we talk
about diversity,
we are talking
about the
amount of
genetic variety

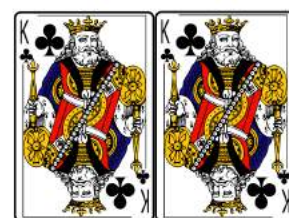
try thinking
of packs of
cards as a
genetics
analogy.

Some recent diversity studies in poodles and what they mean

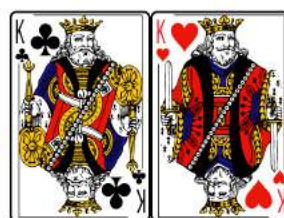
by Dr MJ Rawlings

Before getting to the crux of this matter and the studies themselves (which are going to be in the next blog post), a crash course in the principles that underpin breeding for genetic diversity, that I hope will be layman-accessible.

When we talk about diversity, we are talking about the amount of genetic variety. This variety can be within an individual, or distributed amongst many individuals forming a bloodline, a breed, or a species. In the diagram below, we can see that an individual poodle contains less genetic diversity than its breed, which contains less than the dog family (domestic dogs, wolves, dog-like animals) considered all together as a species, which contains less than the *carnivora* order to which dogs belong (which includes things like bears and cats) which in turn contains less than all mammals considered together and all eukaryotes.



Homozygous
'King' locus, two alleles
the same



Heterozygous
'King' locus, two alleles
different

To make this easy to understand, try thinking of packs of cards as a genetics analogy. Cards come in packs which contain four suites and twelve individual numbers such as queen, jack, five. Let's think of the numbers as being the DNA itself (loci,

or perhaps chromosomes) and the suites being alleles, i.e. versions of the same DNA. Because all mammals and therefore poodles and people, have diploid DNA ('two parts'), an individual poodle can have two versions of each card. For example, it could have the king of spades and the king of clubs, or two kings of spades, but it can only have two king cards, and two of each other card.

Some of these cards we will want to be the same, because some of them will confer breed-specific attributes, and we want these genes to be consistent, otherwise our poodles or some of their offspring might end up not looking like or behaving like poodles, and would not be fit for purpose.

As another example, perhaps the four of diamonds is the card for a long, curly single coat, and the other fours confer different types of coat. All our poodles need

to have two four-of-diamonds in their hand and not any other fours. For other traits, different breeders may put more value on different cards depending on

their specific goals. Imagine the ace of spades is the card that causes a dog to have a black or brown-based coat and the other aces are for coat colours such as white/cream/apricot/red. As someone

PCC CKC agility trial held at The Poodle Farm July 11 and 12 closes in 20 days. Entry via The Entry Line and premium is on our website www.thepoodlefarm.com

~ COMING EVENTS ~

21 JUNE - CARO TRIAL ~

Premium

11-12 JULY -

CKC AGILITY TRIAL



In May I came home with a new addition to our Poodle Family who we named Pynk. I met a wonderful breeder in Hungary last year and she has entrusted me with an Apricot Miniature Poodle, quite different to my other miniature poodles as they are somewhat larger. I look forward to a new journey with another poodle and I will certainly enjoy being in two different height classes versus all dogs in one height class!

I thoroughly enjoy poodles and love the versatility of the breed.

Debby DaCosta
Kallysta, P2 and Krystal

www.thepoodlefarm.com

JUNE 2015

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				



Dream big, work hard and
believe in yourself
Krystal & Debby

Competing with Miniature Poodles in the European Open as well as the Agility World Competition

A dream came true!



This adventure began at the Nationals 2013 when Kayl McCann approached and congratulated me. In disbelief I went to the board to see for myself.

Wow a dream came true!!!

however being a cautious person I waited on pins and needles in disbelief until I received the official confirmation in print! I can still remember that moment as if it were yesterday, I could hardly contain my excitement...

My dog P2 and I were on

the World Team travelling to the Netherlands in 2014.

Our journey included fundraising and monthly training sessions. All National team members were assigned International style drills and sequences to video tape and submit for feedback from the coach. I found these training sessions very beneficial as our local competitions do not resemble what we see there. It also gave me a chance to meet and keep in touch with other team members across Canada. P2 and I learned a lot, we had personal bests and we became a much better dog and handler team as a result of this experience. Most of all, I thank P2 for being my agility partner, she gave it her best and I am thankful for every second.

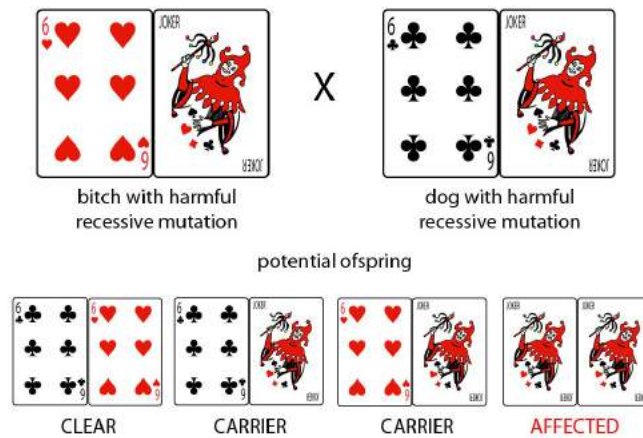
In 2014 Kallysta was named on the IFCS as an Alternate and P2 and Kallysta represented Team Canada at the European Open as well as the Agility World Competition on the CKC Agility Team Canada.

In May of 2015 P2 represented Canada at the World Agility Open Agility Team after a long rehab. P2 had an unfortunate accident and tore her shoulder requiring surgery October 2, 2014. I am thankful to have so many qualified and helpful specialists such as Chiropractic, Massage Therapy, Physio Therapy, Surgeons and rehab professionals from around the world helping P2 to return to her normal activities. With their help and my dedication P2 returned to agility competition with Team Canada in May 2015 at the World Agility Open in the Netherlands. We are now preparing for EO (European Open) in Germany at the end of July where both Kallysta and Krystal will be representing Canada at this event. Krystal and I will continue to prepare for AWC in Italy the beginning of October, this is Krystal's first year on the World Stage. It is an incredible journey to visit Europe, meet new people, compete at international levels and watch everything you worked so hard for to unfold. It is hard to explain the joy we experience travelling abroad, stepping to the line with my Poodle Companions, running as a team then walking off the field feeling so accomplished!



This is P2 doing competition.

JUNE 2015



Let's imagine the six tells the dog's body how to make substances that make the dog's blood clot normally if it is injured, and that

who enjoys blacks and browns, I like a dog who has two copies of the ace of spades, because this is a dog who can't produce cream-type colours in his offspring. A person who likes cream-type colours, however, is likely to prefer the dog who has one or both aces being something other than spades. Having two cards of the same number from different suites is what in genetic terms is called heterozygosity. Having two of a number from the same suite is conversely called homozygosity. Other cards might have nothing to do with appearance or temperament, and be to do with the immune system. We know from scientific studies that animals with heterozygosity at the genes that control immune system function tend to be healthier, more robust, and longer-lived. So if the king, queen, and jack cards are all involved in the immune system, we ideally want to try to avoid having pairs from the same suit, and we want the breed to have as many suits as possible so we can hold on to them all to make it long-term viable.

It can sometimes happen that when a poodle splits its hand of two of each card into just one of each card to make an egg or sperm, a mistake is made and a card might be duplicated, omitted, or accidentally replaced with something else. This is what's called a random mutation. Some mutations can be harmless, for example, the three of hearts might turn

into the three of diamonds. Other mutations might cause the embryo to fail to develop into a puppy, or the puppy to die soon after birth, such as an egg having no eight card, or a sperm having two kings. Some mutations may cause the gene to become non-functional, but have no effect when the dog gets a normal gene from the other parent. Let's imagine the six tells the dog's body how to make substances that make the dog's blood clot normally if it is injured, and that all suites are normal. Now, if a mutation in a sperm replaces the six with a 'joker' card,

that is, the recessive gene for von Willebrand's disease, the puppy that is born will be healthy, because it got a normal six from its mother. However, the joker card in place of the six is now in the puppy and can be passed on, and if the puppy or a descendant of it happens to meet up with a distant relative who has also inherited the joker card, or chanced to have the same mutation, some of the puppies they produce will have two copies of the joker card and no functional 6, and will be affected by von Willebrand's disease.

Because the DNA in a dog is in effect a very large hand of cards, the vast majority of dogs are likely to have a couple of this sort of mutation that is harmless unless combined with one of the same. Because not all of these mutations have tests as the one for von Willebrand's disease, and also because of the benefits to the immune system and general fitness that heterosis brings, it is usually considered best to avoid breeding dogs that are genetically very similar. At present, the genetic similarity of poodles can be estimated by a number of tools powered by analysis of the detailed pedigrees that are the great advantage of purebred dogs. Coefficient of Inbreeding (COI) can be calculated for most breeds over a number of generations, and our breed is blessed with a highly precise international database and accurate tool for this in the form of the Standard Poodle Database/PHR over fifteen generations. As the computing power accessible to most at the current time struggles to handle calculations much over fifteen generations, it's also possible to generate fig-

We know from scientific studies that animals with heterozygosity at the genes that control immune system function tend to be healthier, more robust, and longer-lived.

This is why it becomes a problem when all the individuals in a breed are inbred

Although dogs who are 50% Wycliffe on average will draw 50% of their genetic material from these poodles, an individual may have more or less actual genetic influence because of random inheritance over a great many generations

If a completely heterozygous bitch with a deck composed of full suites of hearts and diamonds is bred to an unrelated, completely heterozygous dog with a deck of spades and clubs only, the deck is shuffled and split in a way that means offspring will all have two of each card, one from each parent, and have a hand made up equally of spades and clubs, and hearts and diamond from each parent. But, some of the puppies might have more clubs and hearts in their hands, and others might be more spades and diamonds, with the result that they could either be very similar or very different. It isn't necessarily the case that each grandparent contributes exactly 1/4 of the genetics to the grandpuppy. The COI of a brother to sister mating assuming no prior relatedness is 25%, but in reality this is an averaged estimate that reflects the most likely percentage of cards that will be the same. The siblings' potential offspring's decks could vary from anything to 100% the same to 0% the same.

Similarly, when we say a poodle is 50% Wycliffe, what we mean is that 50% of its pedigree traces back to five poodles used to found the Wycliffe kennel in the 50s/60s. Although dogs who are 50% Wycliffe on average will draw 50% of their genetic material from these poodles, an individual may have more or less actual genetic influence because of random inheritance over a great many generations. The more generations, the greater the degree of inaccuracy can be.

Because a poodle has two of each card, it can carry an effective minimum of one (two the same) and a maximum of two different versions of each card. So the hypothetical maximum a dog can have in its hand is the equivalent of two full suites, and the minimum is just one suite (bearing in mind this is ignoring some cards that are always identical that confer breed characteristics, and others that are identical and common to all dogs, all mammals, etc.). It is beneficial for individual dogs to be heterozygous, but since a heterozygous dog is only two suites' worth of diversity, in the long term the breed is going to be in trouble if all the individuals are heterozygous but related and genetically similar, and mainly

composed of only hearts and diamonds, as since cards are inherited randomly, it will be hard to ensure heterozygosity in future generations. Although there are disadvantages to the individual involved with being very homozygous, if many individuals are very homozygous but still different from each other, with some dogs being mostly all clubs and others being mostly all hearts, or diamonds, or spades, or other suites we're not familiar with, this has little impact on the diversity of the breed as a whole, as the population still has a large variety of cards of different suites. This is why it becomes a problem when all the individuals in a breed are inbred on, say, the famous ancestor the hearts suite came from, and heart cards become overrepresented in all individuals of the breed, and the other suites become much rarer or perhaps disappear entirely. When two dogs mate, if both of them have a lot of hearts cards, it makes it likely the puppies will get pairs of hearts for most of the cards in their hands.

Because calculations like COI, Wycliffe, and OEA are predictions of heterozygosity and are highly dependent on having accurate pedigrees, some scientific methods have been developed that look at pieces of the dog's actual DNA and can provide a more accurate insight on how heterozygous individual dogs are, and how similar dogs are to each other on a genetic level. These tests can be used to see how much diversity there is in the breed, and the results on individual dogs can be used to see how usual or unusual they are to the breed taken as a whole. They can be used by breeders to plan matting's or to select genetically dissimilar offspring from a litter. They can also be used in cases of incomplete pedigrees, for example, if someone finds a poodle in a distant country with a three-generation pedigree, the tests will help to show if this poodle contains the same old suites that we know in our countries, or something new and exciting, and should open up a great many more methods of selection and breeding. The next post will explain these new tests.

This article is part 1 of 3, to be continued on following News letters.

GLOW Miniature poodles completed two more titles



Ch. Denote Glow Claire de Lune with me, Gloria Koolsbergen

Denote Glow Claire de Lune is retired from my breeding program, however she is still competing on agility trials and enjoying herself!

Here she is on my arms just waiting for her turn.

She has not competed in a long time and she only needed one Q to finish her title; therefore we took a chance and she got it on her first try.

Portos has been placed on a new home, but Alta, his new mom, lets me use him for competition trials. He also needed only one Q to complete his gamers title and he did it with points to spare!

König also got 2 Q's on Saturday.



Ch. Portos with Attitude holds three AAC titles now.



Agility Treats my dogs love !

Chicken Liver and Ground Pork or Beef

Ingredients:

- 3 eggs
- 1 pound of Chicken livers
- 1 pound of the same amount of lean ground pork or beef.
- 1 cup of oat flakes
- 1 cup of rice flour
- 1 cup of Back Wheat flour
- 1/2 cup of Safflower Oil
- 1 tsp of salt
- 1 tsp of Garlic Powder

Preparation:

Place all in the blender.

Heat oven at 375°.

Place paste over a parchment paper on a cookie sheet.

It must be about 1 1/2 cm. thick.

Cook for about 20 minutes until it does not stick to the knife.

Place it on the counter for 10 minutes and cut it on small squares with a big knife.

Let them cool, then bag to preserve them in the freezer.

I only take out the amount I will need for each training session.

HOPE YOUR DOGS ENJOY THEM !



Safflower oil is rich in Omega six and it is a very healthy supplement for your dog.

GCH Signet William the Conqueror, RN, PCD, CGN



Ghyslaine Simard is the proud owner of William. In 2014 he placed 4th Miniature poodle in Canada

William's sire is:
GCHEX Axinite Black Magriffe Thalpet CGN
Dam is:
Ch. Typecast Tapestry of Clarion (USA)

Breeders are: Donna Wilson (Signet Poodles) and Louise Montgrain.

William had a wonderful time at PCA this year and Ghyslaine is planning to go back next year. To summarize:

William placed 4th in the Open Dog Class,

Beautifully groomed and presented by Chrystal Murray Clas.
 Thank you Chrystal you are wonderful.

In Rally Novice, he took 2nd place with a score of 97/100.

In Novice Obedience he qualified. **In Agility**, although William did not Q, he still looked awesome. Ghyslaine is extremely proud of him as the PCA venue is quite intimidating for such a young dog. He just turned 20 months.



William got a group Second owner/handled by Ghislaine Simard on the Ottawa Show May 22/2015.

Jerusalem Artichoke

Common names: sunchoke, girasole, Jerusalem sunflower, Topinambur,

Botanical name: *Helianthus tuberosus* L

Family : belongs to the aster family, sunflower- Asteraceae

French name: Artichaut de Jérusalem, Artichaut de terre, Artichaut du Canada, Hélianthe tubéreux, Poire de terre, Soleil vivace, Topinambour

Properties: Reported to be aperient, aphrodisiac, cholagogue, diuretic, spermatogenic, stomachic, and tonic, Jerusalem artichoke is a folk remedy for diabetes and rheumatism (Duke and Wain, 1981). antistress, immunomodulational and antinarcotic

Constituents: Since the food reserves are stored in the form of inulin, the tubers serve as substitutes for potatoes and starches in diabetic diets. They are a potential source of levulose for use in sweetening by diabetics. One report notes that Jerusalem artichokes contain about 80% water, the remainder made up of about 15% protein, 1% fat, 75% nitrogen-free extract with 60% inulin, 4% fiber and 5% ash

Like potatoes and other tubers, the Jerusalem artichoke stores carbohydrates, but most of them are in the form of inulin, a sugar that can sometimes cause flatulence. (If you have never sampled Jerusalem artichoke, you should eat it in small amounts until you are able to determine how your body will react to it.) The vegetable is also an incomparable source of iron, almost on a par with meats, yet without any fat content.

Liver Cleansing: Topinambur has got a hepatoprotective activity and thanks to the enhancement of the immunoprotective functions of the system (which is the basis of preventive treatment for tumour diseases), it has got a radioprotective and anti-toxic effect and helps to purify the system of radionuclides, heavy metals and toxins of organic origin.

Topinambur has been found to possess anti-stress, immunomodulational and antinarcotic kinds of activity. It is a very effective phytoadaptogen increasing work ability and vitality of the organism.

Cooking:

Jerusalem artichoke is grown primarily for tubers which can be eaten fresh or raw, cooked in appetizing ways similar to Irish potatoes, or pickled. The edible portion of this member of the sunflower family is the tuber or swollen end of an underground stem, which in some respects resembles a potato.

The fresh tuber tastes like a water chestnut and is used in salads. Tubers can also be cooked like potatoes.

Preparation: Scrub sunchoke well with a vegetable brush. It's better not to peel them, as much of their nutrient value lies just beneath their thin, edible skin. If you choose to do so, however, use a vegetable peeler. Should the small areas of skin around the knobby portions prove difficult to remove, just leave them on. (Immediately immerse peeled or cut-up sunchoke in cold water acidulated with lemon juice or vinegar, or their flesh will discolor.) If you are boiling or blanching the tubers, you may remove the skin after cooking; it will peel or rub off easily. Do be aware, however, that when cooked unpeeled, the flesh of sunchoke will darken



It is easy to grow in the garden collected on late fall and stores for along time on the fridge.

because of their iron content.

Actions and pharmacology: Jerusalem Artichoke tubercle is a source of inulin, a unique complex sugar. Contrary to potato's starch, which is composed of a very long chain of glucose and has a very high glycemic index, inulin is composed of a shorter chain (30 molecules) of fructose and has a low glycemic index.

Therefore, Jerusalem Artichoke helps to control sugar levels, reducing sugar cravings and hypoglycemia. It also helps to reduce hyperinsulinemia and may be useful as a supportive therapy for non insulin-dependant Type II diabetes (or Syndrome X), which is characterized by elevated insulin levels. Jerusalem Artichoke reduces the feeling of hunger and is therefore useful in low-calorie diets to control « the munchies ». Finally, it acts as a prebiotic for the good bacteria of the intestine, improving nutrient absorption and overall health.



The root can be bought on some stores, if planted on the garden can be invasive, therefore be cautious where you plant it. I use it on dog food, it is sweet tasting and my dogs love it even raw.

Optic Nerve Hypoplasia

ONH causes the visual loss in infancy; including abnormalities of the endocrine system

Optic nerve hypoplasia, having once been regarded as exceedingly rare in humans, is now regarded as one of the major causes of visual loss in infancy. The estimated frequency of ONH in poodles is 0.8%. These changing clinical perspectives are reviewed, together with a discussion of the pathogenesis of optic nerve hypoplasia in the light of cell death and nerve fiber degeneration seen in normal development of the neural visual system. ONH in poodles seems to be an isolated problem, whereas in humans ONH is a symptom of a syndromic disorder.

Request for Research Samples from Miniature* or Toy* Poodles diagnosed with Optic Nerve Hypoplasia or Micropapilla - December 19, 2013

The Poodle Club of America Foundation, Inc. is supporting research aimed at identifying the molecular causes of Optic Nerve Hypoplasia & Micropapilla in miniature and toy poodles. OptiGen in collaboration with the research laboratory of Dr. Gustavo Aguirre at the University of Pennsylvania is collecting samples and clinical data on these diseases with the goal of developing diagnostic DNA tests for the conditions. Research samples from affected dogs are needed for this study. More complete information on the studies as well as research sample submission forms may be found at [Optic Nerve Hypoplasia & Micropapilla : http://www.optigen.com/opt9_micropap.html](http://www.optigen.com/opt9_micropap.html)

- Please note we have focused this study in Miniature and Toy Poodles because it is in these varieties that Optic Nerve Hypoplasia, Micropapilla are more frequently found. However, if there are Standard Poodles diagnosed with Optic Nerve Hypoplasia, Micropapilla, we would be delighted to include samples from them as well for the research work.

Molecular Genetic Study of Optic Nerve Hypoplasia (ONH) and Micropapilla (Mp) in the Miniature* and Toy* Poodle

The Poodle Club of America Foundation, Inc. and Gustavo Aguirre, VMD, PhD
University of Pennsylvania and OptiGen, LLC

Background: The Poodle Club of America Foundation, Inc. has funded a three year research study to be carried out at the University of Pennsylvania and OptiGen, LLC to identify the molecular genetic basis of ONH and Mp, and develop a DNA-based diagnostic test that can be used to identify dogs that are genetically normal or are at risk to transmit the undesirable genetic defect to their progeny. By judiciously using the DNA test information, breeders can minimize the risk of producing affected dogs while maintaining the genetic diversity of the breed.

ONH is a rare genetic defect in which the optic nerve fails to develop normally, leading to blindness; one or both eyes may be affected. Although autosomal recessive inheritance is suspected, there is insufficient genetic information to date to validate the mode of inheritance. It is likely that disease predisposition is controlled by one gene while the additional modifying gene(s) influence the expression and severity of the disease. Mp **may be** part of the same disease continuum in which dogs with apparently "hypoplastic" optic nerves on clinical examination retain normal vision and pupillary light responses (PLR), and optic nerve structure is normal behind the globe. Only by well focused research study can these issues be resolved and DNA based test(s) developed.

Your help is needed

To carry out this study we need the assistance of dog owners/breeders, as well as board certified veterinary ophthalmologists (ACVO, ECVO) so that samples for the research study can be definitely ascertained. We are very grateful for your interest in participating in the present research study. Please make sure that only one form is used for each study dog.

A research form for submitting samples and information for this study can be found. The owner should

Minimize the risk of producing affected dogs while maintaining the genetic diversity of the breed.

we need the assistance of dog owners/breeders

Members Achievements with Miniature Poodles

Ch. GLOW Blanca Nieves aka Neige

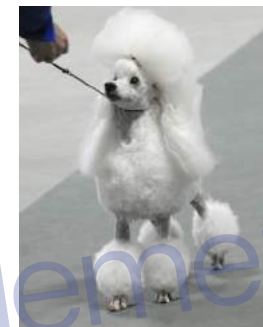
Neige glides when she walks and has a very nice reach!

Neige is the top miniature poodle bred by Gloria Koolsbergen

Sire: Light and Lively Mr. Mc.Cloud

Dam; Ch. Denote Glow Claire de Lune

Beautifully groomed and handled by Jennifer Carr.



Neige has earned multiple group placements. Last show at Victoria County she got another Group 4.

She misses only a few points to be GCH!

Gloria is so proud of her! she is smart and she has such a sweet nature !



Now she started training on agility and she loves the sport!

For more info or pictures go to: www.poodlesglow.com

AGMCH, CH, Eaglehill's Keep Them Guess N, CDX, RN, FMCH, HIC, HIT.

In limited showing Denim placed #5 miniature poodle and #6 Non Sporting in Agility for 2014. Denim is taking a break from Agility and Flyball this year and will be working towards his Utility Obedience in order to obtain his Obedience Trial Champion title.

Denim makes each and every training session an enjoyable one, he is a dog that loves to work and makes a game out of everything he does. Denim is a dog that will never want to retire, so following his OTCH, our plans are to play in some barn hunt and scent detection in order to keep him busy and entertained in his semi retirement.

As always a special thank you to Tim Garrison of Eaglehill Poodles for such an amazing boy , Denim exceeded my expectations.

Sire: AM/CAN CH Eaglehill Ravendune Regalia TP
Dam: AM CH Eaglehill's Butterfly Kisses

Loved, trained and handled by:Dawn Thomas
Casryn reg.Acton, ON
cheaglehillskeepthemguessn.blogspot.com
Stud service now available on a limited basis



Ch Glicks Speranze Primavera aka Enzo



Sire: AKC Ch Ark-Ola Bacio Cioccolato

Dam: Ch BPIG Glicks Midsummer Night Nala CD RN CGN , Registered Therapy Dog

Congratulations to new champion, multi BPIG! "Enzo" obtained his championship and group 2 at the Sault Ste. Marie Kennel Club show in May.

Now Enzo will focus on his obedience career and nose work with co-owner Michelle Jessop.

Thank you to handler Allie Cowie and to Michelle Jessop for making dreams come true.

Submitted by L.K. Glickman,

514-688-8634

GLICKS STANDARD POODLES REGD.

www.glickmanworld.com

Members Achievements with Toy Poodles

Can & Am GCh. Lordemar Dare and Go at White Magic

Sire: CH Lordemar Tenacious

Dam: Michanda Mystical Star Lordemar

We had fun showing Poker at PCA this year, he has a lovely personality.

We are very proud of Poker, he finished his CAN CH in only one weekend and finished his AM CH from the 9/12 month class

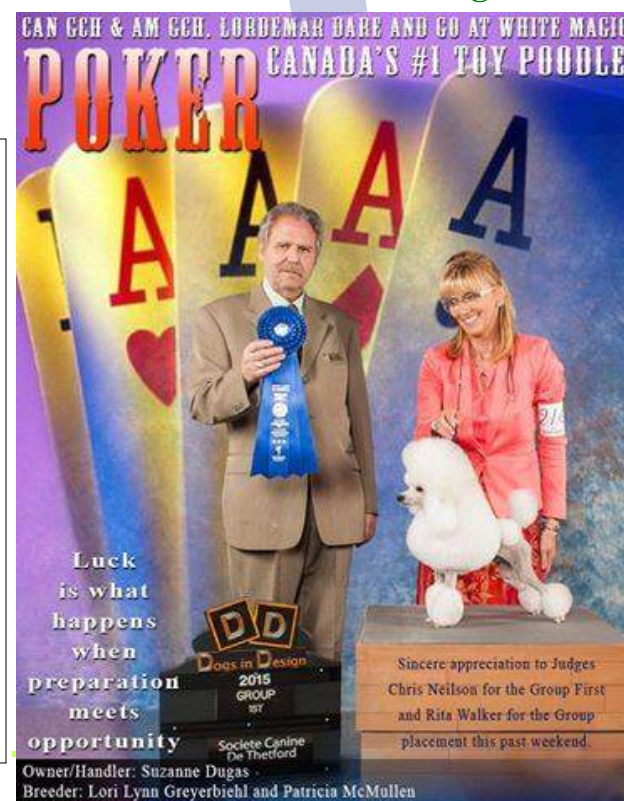
Poker is N° 1 Toy Poodle in Canada. Multiple Group winner BPS and BPIS

A special thanks to the breeders Lori Lynn Greyerbiehl & Patricia McMullen for trusting us with this beautiful boy :

He is loved and handled always by his owner Suzanne Dugas.

Poker is available as stud to selected bitches. For more information give us a call at:

450-433-3381



complete the first section of owner and dog information. The second section of the form requests the examining ophthalmologist to provide brief clinical descriptions and, if possible, fundus photographs. Along with the completed form, we need a copy of the dog's pedigree (5-6 generations), any current/previous eye exam records, and 3-5 ml of whole unclotted blood in EDTA to be sent to OptiGen 767 Warren Rd. Ithaca NY 14850. Please call OptiGen 607-257-0301 or email genetest@optigen.com with any questions on sample submission.

What is ONH?

Optic Nerve Hypoplasia is an inherited disorder in Miniature Poodles that results in blindness in one or both eyes from birth.

Animals diagnosed with micropapilla are not blind, however it cannot be determined if the vision may be reduced as the assessment of visual acuity and fields in dogs cannot be done clinically.

Though the specific gene mutation has yet to be identified in dogs, several genes have been identified as causing the eye disorder in humans. No treatment corrects the problem, but dogs that have limited vision or are blind are able to adjust for their handicap by relying on their acute senses of smell and hearing. In fact, some dogs function so well that their owners are unaware of the abnormality.

In a **normal** dog's eye, the optic nerve head, which carries signals from the retina to the brain, is from 2 ½ to 3 millimeters in diameter, says Greg Acland, BVSc., DACVO, professor of medical genetics at The Baker Institute for Animal Health of Cornell University. "In a true optic nerve hypoplasia case, when you look into the eye, it's much smaller than that and the dog has, to some extent, severe loss of vision in the affected eye," Acland explains. "In really severe cases, the optic nerve can be tiny or essentially absent, and the dog will be completely blind in that eye." Veterinary ophthalmologists, such as Acland, are able to detect the disorder during a routine eye examination in puppies as young as 6 weeks by using a magnifying instrument, an ophthalmoscope, and a light source to see inside the back of the eye.

Even with modern advancements in veterinary medicine, determining whether a dog is visually impaired is still fairly crude. Additionally, optic nerve hypoplasia may be difficult to differentiate from micropapilla, a similar eye disorder in which there also is a small optic nerve, but dogs show no evidence of

visual impairment. "It has been argued for many years whether the two conditions — optic nerve hypoplasia and micropapilla — are related," says Acland.

"Some experts have a belief, or gut feeling, that if you look at **lines of poodles in which breeders have bred dogs with micropapilla, then you can end up with dogs with true, absolute blinding optic nerve hypoplasia.** But, not every-

body agrees with that, not all ophthalmologists and certainly not all breeders."

Fundus phenotypes are highly variable, which makes clinical characterization difficult. To obtain samples that are clinically characterized in a consistent manner, Optigen and Dr. G. Aguirre from the University of Pennsylvania developed a clinical research form for the ONH/micropapilla project. Such consistency in clinical ascertainment will be essential to properly develop the population for the research study.

The disorder appears to be autosomal recessive, Acland says. If so, dogs that carry the mutated gene do not have optic nerve hypoplasia themselves, but **when bred to another carrier will produce affected offspring**, as well as healthy and carrier offspring. Several generations down the **line as dogs are bred together that share a common ancestor**, or carriers, some offspring wind up with the eye disorder.

That is why it is important to get a DNA test to identify carriers, and we should help Optigen by sending samples to Dr. G. Aguirre of our affected dogs with micropapilla or ONH.

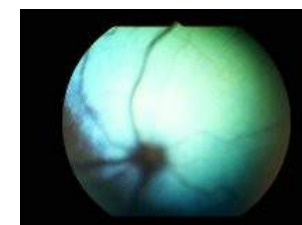
Breeders should be aware of this possibility and they should exert caution when choosing couples for breeding.

Until the causative gene and mutation are identified, micropapilla should be considered a 'milder' manifestation of ONH.

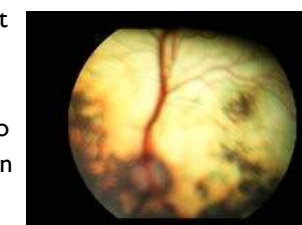
Note: The Poodle Club of America Foundation, Inc. is also supporting research aimed at identifying the molecular causes of juvenile inherited cataract in all poodle varieties. OptiGen in collaboration with the research laboratory of Dr. Gustavo Aguirre at the University of Pennsylvania is collecting samples and clinical data on these diseases with the goal of developing diagnostic DNA tests for the condition. Research samples from affected dogs are needed for this study. More complete information on the study as well as research sample submission forms may be found at

http://www.optigen.com/opt9_micropap.html

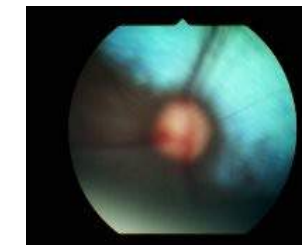
We will address background information about juvenile inherited cataracts in our next issue.



This is a fundus photo of an ONH affected eye



This is a fundus photo of an eye with micropapilla.



This is a fundus photo of a Normal eye

DO YOU KNOW WHAT A TITER TEST IS?



Shockingly, many pet owners have no idea!

A titer test (pronounced tight-errr) is a laboratory or in-house veterinary test measuring the existence and level of antibodies (necessary to fight off disease) in your pet's blood. Basically, it's a test that will tell you whether or not you actually need to vaccinate your pet.

It's also super useful when making a decision about vaccinating a pet with an unknown vaccination history, or for determining if pets have received immunity from vaccination.

Why is this so important?

Because of what can happen if you over-vaccinate your pet! "Vaccinosis", the name for the chronic disease, is caused by continued use of vaccines. These symptoms mimic the original disease in parts.

According to the guide "Canine Nutrigenomics" by world-renowned veterinarian immunologist Dr. Jean Dodds and Diana R. Laverdure:

"Vaccines have achieved many important benefits for companion animals, including:

- Saved more animals' lives than any other medical advance.
- Significantly reduced canine distemper, hepatitis and parvovirus.
- Significantly reduced feline pan leukopenia.
- Eliminated rabies in Europe.

other medical advance.

However after spending many years monitoring the results of vaccinosis, those in the animal healthcare field now have a duty to re-examine and improve the current vaccine protocols for the health and safety of their patients. This is especially true for animals with compromised immune systems, since vaccines represent one more stressor that could prove to be the tipping point between health and disease.

Side effects from dog vaccinations can occur anywhere from instantly up to several weeks

or months later. Vaccines can even cause susceptibility to chronic diseases that appear much later in a dog's life (Dodd, 2001).

Severe and fatal adverse reactions include:

- Susceptibility to infections.
- Neurological disorders and encephalitis.
- Aberrant behavior, including unprovoked aggression.
- Vaccines are linked to seizures. Distemper, parvovirus, rabies and, presumably, other vaccines have been linked with poly neuropathy, a nerve disease that involves inflammation of several nerves. (Dodds, 2001) "

The most basic method for a titer is where your pet's blood is drawn and sent away for testing. It ranges anywhere from \$150 to \$200. The most affordable method is the new "in house" testing procedure. This test is performed at the vet clinic and it takes about 20mins to get the results. The price range is anywhere from \$60 to \$80!

According to truth4pets.org, "Although titer testing may cost somewhat more than vaccination in the short run, it is a bargain long term. Titers do not have to be repeated yearly or even every three years. By testing rather than vaccinating, you avoid the risk of adverse reactions from unnecessary vaccines and the accompanying cost of treatment."

"The most useful time to run a titer test is after your youngster has received her initial series of vaccinations. Especially if you've limited that series to just one or two vaccinations, the last being after 16 weeks of age. The odds are you've just conferred lifetime immunity to your youngster.

If you want to know how effective your vaccinations were in conferring immunity (i.e. did vaccination = immunization?), ask your vet to run a titer test a few weeks later." - Dr. Will Falconer/ Dogs Naturally Magazine

And there you have it. Now you know.

Remember: there is a huge difference between "not vaccinating" and over-vaccinating your pet. Unfortunately some are very quick to pull the "Anti-Vaxxer trigger" these days, the second a vaccine article is released.

With most vet clinics today vaccinating pets

"Vaccinosis", the name for the chronic disease, is caused by continued use of vaccines.

Although titer testing may cost somewhat more than vaccination in the short run, it is a bargain long term.

there is a huge difference between "not vaccinating" and over-vaccinating your pet

Members Achievements with Standard Poodles

GCH Gardenpath's Bettin On Black

Sire: TCH CH Pannovia's Chasing Hearts CD RA TDX UTDX CGN VCX
Dam: CH Canzone Bella Nina of Gardenpath TD CD RE CGN VCX)

"LYRA" quickly finished her Grand Championship as a puppy. Bred & loved by Renee Koch, exquisitely presented in the show ring by Allison Cowie.



AmGrCh. Bronze/CanGrCh. Dawin Reigate Fire Away



Linda Campbell and Suzanne Loblaw are the proud owners of Jordan, AmGrCh. Bronze/CanGrCh. Dawin Reigate

Fire Away who was awarded a prestigious Award Of Merit this year by respected Judge Mr. Randy Garren.

Jordan is a multi BIS and BISS winner and ranked # two Standard Poodle in Canada in 2014. He is currently being expertly shown in the United States by Sarah Perchick.

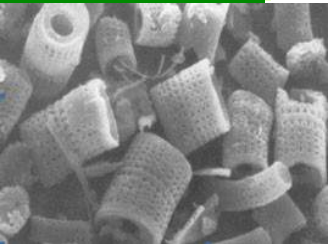
Jordan is bred by Linda Campbell of Dawin Poodles and co-owned and loved by Linda and Suzanne.

Sire: Am/Can Ch. Dawin Wildrose Raisin The Stakes

Dam: Am/Can Ch. Dawin Spitfire

This was a thrill and honor to watch in Salisbury, Maryland this April. Thank you to all that were involved and supported our journey with Jordan.

Diatomaceous Earth



DE is almost pure silica (with some beneficial trace minerals); under a microscope, it looks like shards of glass (glass is made from silica).



The DE seems to create an environment in the digestive system that parasites cannot live in

Diatomaceous earth consists of fossilized remains of diatoms, a type of hard-shelled algae. It is used as a filtration aid, mild abrasive in products including metal polishes and toothpaste, mechanical insecticide, absorbent for liquids, matting agent for coatings, reinforcing filler in plastics and rubber, anti-block in plastic films, porous support for chemical catalysts, cat litter, activator in blood clotting studies, a stabilizing component of dynamite, and a thermal insulator.

Diatomaceous Earth (often referred to as "DE") is an off white talc-like powder that is the fossilized remains of marine phytoplankton. When sprinkled on a bug that has an exoskeleton (such as bed bugs, ants or fleas) it compromises their waxy coating so that their innards turn into teeny tiny bug jerky. But it doesn't hurt mammals. We can eat it. We do eat it! It's in lots of grain based foods because lots of grains are stored with diatomaceous earth to keep the bugs from eating the grain!

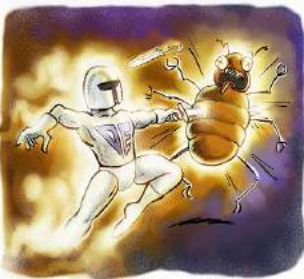
The Food & Drug Administration lists diatomaceous earth as "Generally Recognized as Safe". "Food grade" diatomaceous earth products are purified. They may be used as anticaking materials in feed, or as clarifiers for wine and beer.

We can rub it all over our skin, rub it in our hair, eat it whatever ... and we are unharmed. Many people eat a quarter cup of food grade diatomaceous earth every day. They mix it into juice. I have visited with several people that are keen on living past 100 years that believe that eating lots diatomaceous earth every day will help them with that goal. I have found references where it is cited for colon cleansing, parasite control and detox.

for Pet Consumption:

Our best friends come in all shapes and sizes. Protect them from fleas and other crawling insects with crawling insect control diatomaceous earth. Thoroughly treat floor and bedding in and around pets' sleeping quarters. Treat surrounding cracks and crevices, baseboards, carpeting and wherever fleas and other crawling insects are suspected.

Recommended Food daily doses for Dogs and Cats.



How it works;
On any beetle-type insect that has a carapace, like fleas and cockroaches, the DE works under the shell and punctures the body, which then dehydrates and the insect dies. DE is totally nontoxic. There is no buildup of tolerance like there is to poisons because the method of killing is PHYSICAL, not chemical

Animal	Suggested Rate
Large Cats	1 teaspoon
Kittens	1/4 teaspoon
Dogs 100 lbs +	1-2 tablespoons
Dogs 50-100 lbs	1 tablespoon
Mini dogs	1/2 teaspoon

O.C. Collins, DVM, of Midland Animal Clinic and Hospital in Mid-

land, Texas said, "In clinical observations of feeding dogs over 35 lbs. 1 tablespoon/day, and dogs under 35 lbs. 1 teaspoon/day, of diatomaceous earth, within seven days all ova disappeared from stools. Diatomaceous Earth controlled Ascarids (Toxocana), Hookworms (Ancliyostoma caninum), and Whipworms (Trichuris vulipis)."

Now who wouldn't want this for their pets?

ADVERSE VACCINE REACTIONS

every six months for the rest of these pets' lives, does this not warrant thought or research?

Rodney Habib - Pet Nutrition Blogger

Want more info on titer test? - <http://www.dogsnatrallymagazine.com/titer-testing-dog/>

HEMOPET

W. Jean Dodds, DVM
938 Stanford Street— Santa Monica, CA 90403
(310) 828-4804;FAX (310)-453-5240
www.hemopet.org; hemopet@hotmail.com

Serologic Vaccine Titer Testing

Some veterinarians have challenged the validity of using vaccine titer testing to assess the immunologic status of animals against the common, clinically important infectious diseases.

With all due respect, this represents a misunderstanding of what has been called the "fallacy of titer testing", because research has shown that once an animal's titer stabilizes it is likely to remain constant for many years. Properly immunized animals have sterilizing immunity that not only prevents clinical disease but also prevents infection, and only the presence of antibody can prevent infection. As stated by eminent expert Dr. Ronald Schultz in discussing the value of vaccine titer testing, these tests "show that an animal with a positive test has sterilizing immunity and should be protected from infection. If that animal were vaccinated it would not respond with a significant increase in antibody titer, but may develop a hypersensitivity to vaccine components (e.g. fetal bovine serum). Furthermore, the animal doesn't need to be revaccinated and should not be revaccinated since the vaccine could cause an adverse reaction (hypersensitivity disorder). You should avoid vaccinating animals that are already protected. It is often said that the antibody level detected is "only a snapshot in time". That's simply not true; it is more a "motion picture that plays for years". Furthermore, protection as indicated by a positive titer result is not likely to suddenly drop-off unless an animal develops a medical problem such as cancer or receives high or prolonged doses of immunosuppressive drugs. Viral vaccines prompt an immune response that lasts much longer than that elicited by classic antigen. Lack of distinction between the two kinds of responses may be why practitioners think titers can suddenly disappear.

Viral disease and recent vaccination with single or combination modified live-virus (MLV) vaccines, especially those con-

taining distemper virus, adenovirus 1 or 2, and parvovirus are increasingly recognized contributors, albeit relatively rare, to immune-mediated blood disease, bone marrow failure, and organ dysfunction. Potent adjuvanted killed vaccines like those for rabies virus also can trigger

Adverse Events Associated with Vaccination

The clinical signs associated with vaccine reactions typically include fever, stiffness, sore joints and abdominal tenderness, susceptibility to infections, neurological disorders and encephalitis, collapse with autoagglutinated red blood cells and icterus (autoimmune hemolytic anemia, AIHA, also called immune-mediated hemolytic anemia, IMHA), or generalized petechiae and ecchymotic hemorrhages (immune-mediated thrombocytopenia, ITP). Hepatic enzymes may be markedly elevated, and liver or kidney failure may occur by itself or accompany bone marrow suppression.

Furthermore, **MLV vaccination** has been associated with the development of transient seizures in puppies and adult dogs of breeds or cross-breeds susceptible to immune-mediated diseases especially those involving **hematologic or endocrine tissues (e.g. AIHA, ITP, autoimmune thyroiditis)**. Post-vaccinal polyneuropathy is a recognized entity associated occasionally with the use of distemper, parvovirus, rabies and presumably other vaccines. This can result in various clinical signs including muscular atrophy, inhibition or **interruption of neuronal control of tissue and organ function, muscular excitation, incoordination and weakness, as well as seizures.**

An augmented immune response to vaccination is seen in dogs with pre-existing inhalant allergies (atopy) to pollens. Furthermore, **the increasing current problems with allergic and immunological diseases have been linked to the introduction of MLV vaccines** more than 20 years ago. While other environmental factors no doubt have a contributing role, the introduction of these vaccine antigens and their environmental shedding may provide the final insult that exceeds the immunological tolerance threshold of some individuals in the pet population. The accumulated evidence indicates that vaccination protocols should no longer be considered as a "one size fits all" program.

Giving annual boosters when they are not necessary has the client paying for a service which is likely to be of little benefit to the pet's existing level of protection against these infectious diseases. It also increases the risk of adverse reactions from the repeated exposure to foreign substances.



Dr. Dodds is founder of HEMOPET, the non-profit animal blood bank, and a friend to animal lovers the world over. HEMOPET is where we can have blood tests to check for vaccine antibodies instead of unnecessarily re-vaccinating our companion animals. She has written excellent articles that everyone, especially our veterinarians, should read.

These articles are the opinions of Dr. Dodds gained by her research, and not the official Club policy.

PRACTICAL UNDERSTANDING OF THYROID DISEASES & THEIR MANAGEMENT

Part 1 of 3

INTRODUCTION

Hypothyroidism is the most common endocrine disorder of canines, and the second most common endocrine disorder of older felines, after diabetes. At least 80% of canine cases result from autoimmune (lymphocytic) thyroiditis). The heritable nature of this disorder poses significant genetic implications for breeding stock. Thus, accurate diagnosis of the early compensatory stages of canine autoimmune thyroiditis leading up to hypothyroidism affords important genetic and clinical options for prompt intervention and case management.

Although thyroid dysfunction is the most frequently recognized endocrine disorder of pet animals, it is often difficult to make a definitive diagnosis. As the thyroid gland regulates metabolism of all body cellular functions, reduced thyroid function can produce a wide range of clinical manifestations. Many clinical signs mimic those of other causes and so recognition of the condition and interpretation of thyroid function tests can be problematic (Table 1).

In cats, it has recently been established that feline hyperthyroidism in readily induced, especially in geriatric cats, by feeding commercial pet foods, treats and snacks containing excessive amounts of iodine. This finding has lead to a major change in the iodine formulations of feline commercial pet foods. Hypothyroidism, while rare in cats, can occur in adult cats and a familial hypothyroidism has been described in neonatal Siamese kittens.

BASELINE THYROID PROFILES

A complete baseline thyroid profile is measured and typically includes total T4, total T3, free T4, free T3, T3AA and T4AA, and can include cTSH and/or TgAA. The TgAA assay is

especially important in screening breeding stock for heritable autoimmune thyroid disease.

The normal reference ranges for thyroid analytes of healthy adult animals tend to be similar for most breeds of companion animals. Exceptions are the sighthound and giant breeds of dogs which have lower basal levels. Typical thyroid levels for healthy sighthounds, such as retired racing greyhounds, are at or just below the established laboratory reference ranges, whereas healthy giant breeds have optimal levels around the midpoint of these ranges.

Similarly, because young animals are still growing and adolescents are maturing, optimal thyroid levels are expected to be in the upper half of the reference ranges. For geriatric animals, basal metabolism is usually slowing down, and so optimal thyroid levels are likely to be closer to midrange or even slightly lower.

All animals are not the same:

- Puppies have higher basal thyroid levels than adults
- Geriatrics have lower basal thyroid levels than adults
- Large/giant breeds have lower basal thyroid levels
- Sighthounds have much lower basal thyroid levels

DIETARY-INDUCED HYPERTHYROIDISM IN DOGS AND CATS

Recent studies have documented iatrogenic hyperthyroidism in **dogs** fed the gullet or throat portion of raw red meat (usually beef or lamb). The patient may be relatively asympto-

matic or even found to exhibit primary anestrus, with the diagnosis made upon finding significantly high thyroid basal levels without clinical evidence of a thyroid mass in the neck or chest. Questioning of the pet owners then revealed the raw meat diet (owners may not be aware of the portion of the carcass included in the fed product). Excessive amount of thyroid hormone have been measured not only in the meat source, but also in the juices from the meat. Removing the meat from the diet resolves the hyperthyroidism in about 4-6 weeks, and basal thyroid levels return to normal.

With respect to cats, the rising incidence of hyperthyroidism in older cats since first identified in the mid-1970s, led to much speculation about the true cause(s). Eventually, research focused on the commercial diets fed to the affected cats; most were found to eat foods containing more than the NRC recommended amounts of iodine. Once the iodine content of the foods was lowered, and even fed in less than the recommended amounts to affected cats, their hyperthyroidism resolved. A prescription diet was produced (Hill's y/d) that contained less iodine

for feeding affected cats. Today, a properly balanced amount of iodine is present in commercial pet foods, treats and snacks for both cats and dogs.

Regarding the **iodine content of commercial pet foods, iodine excess causes alterations in thyroid activity**, blocking both its characteristic functions and cell proliferation. Feeding excessive amounts of iodine in foods and supplements (kelp, seaweed) reduces thyroid function in dogs and increases thyroid activity in older cats. This contributes to the rising prevalence of hypothyroidism in young dogs, and hyperthyroidism in older cats. Iodine also increases auto-antigenic potency of thyroglobulin leading to induction of autoimmune thyroiditis

GENETIC SCREENING AND DIAGNOSTIC TESTING FOR CANINE THYROID DISEASE

Most cases of thyroiditis have elevated serum TgAA levels, whereas only about 20-40% of cases have elevated circulating T3 and/or T4 AA. Thus, the presence of elevated T3 and/or T4 AA confirms a diagnosis of autoimmune thyroiditis but underestimates its prevalence.



Iodine also increases auto-antigenic potency of thyroglobulin leading to induction of autoimmune thyroiditis

lence, as negative (non-elevated) autoantibody levels do not rule out thyroiditis. Measuring TgAA levels also permits early recognition of the disorder, and facilitates genetic counseling (Table 2). Affected dogs should not be used for breeding

The commercial TgAA test can give false negative results if the dog has received thyroid supplement within the previous 90 days, thereby allowing unscrupulous owners to test dogs while on treatment to assert their normalcy, or to obtain certification with health registries such as the OFA Thyroid Registry. False negative TgAA results also can occur in about 8% of dogs verified to have high T3AA and/or T4AA. Furthermore, false positive TgAA results may be obtained if the dog has been vaccinated within the previous 30-45 days, or in some cases of non-thyroidal illness. Vaccination of pet and research dogs with polyvalent vaccines containing rabies virus or rabies vaccine alone was recently shown to induce production of antithyroglobulin autoantibodies, a provocative and important finding with implications for the subsequent development of hypothyroidism.

SOME SYMPTOMS ;

- Skin disease and alopecia
- Mal-absorption, dogestion syndrome
- Undesirable behavior
- Seizures of shaking,
- Low temperature and feels cold,
- Obesity
- Lack of energy and attention

THYROID TESTING

Testing with a complete thyroid antibody profile should be done for all breeding stock of any breed, and **both sexes**.

Screening should begin at puberty in males and during the first an estrus period after the maiden heat cycle in females (i.e. 12-16 weeks after the **ONSET** of the maiden heat.

Testing is then repeated annually until about age 6 and them every 2 years until about age 10.

Supplementing with kelp, seaweed reduces thyroid function in dogs This contributes to the rising prevalence of hypothyroidism in young dogs