

DOG CLINICAL TRIALS

Supervised by W. Jean Dodds, DVM, Conducted at The HEMOPET Center for Greyhound Rescue and Pet Animal Recovery, Garden Grove, CA.

OBJECTIVE

Clinical Research Trials were conducted to prove the overall efficacy and specifically, the retardation of plaque achieved through use of dog::ESSENTIAL™ healthymouth™ dental care water. There were six phases to the trials.

Phase 1:

Selection of Hemopet greyhounds to be in each of the two studies (40 dogs per study). The criteria used in selecting the greyhounds were as follows: Adoption greyhounds received first priority as they are most used to having their teeth cleaned. Second priority was based on kennel housing; one entire kennel of test dogs on healthymouth™ and another entire kennel of control dogs on double purified water only. Dogs missing teeth were not permitted to be in the study group.

Phase 2:

An anesthesia dental cleaning was given to each of the forty dogs in the study groups. Hemopet's veterinarian and veterinary technician hygienist administered all cleanings.

Phase 3:

healthymouth™ was substituted for all regular water in test group, double purified water only for control group.

Phase 4:

Before a dog entered into the study, and after the dental cleaning, the dog was scored at a level of 0 (this means completely plaque and tartar free) for both the upper and lower jaws. This scoring was entered into the clinical trial journal.

Phase 5:

After a dog was entered, that dog was re-scored every seven days on both the upper and lower jaws. All dogs were scored on the upper and lower jaws. Each study lasted for twenty-eight days. After each seven-day interval the results were entered into the clinical trial log. Each dog had a dedicated journal space to record the weekly scoring.

The entire study was supervised by W. Jean Dodds DVM and facilitated monitored by the Veterinary Technician staff of Hemopet including Heidi Stahl (the dental hygienist), Wendy Crone and Mark Lajero, as well as a supervising attendant on duty.

TRIAL PARTICIPANTS

There were two trials. In each trial there were 40 greyhounds, 20 in control group, 20 in test group.

Duration of clinical: 28 weeks

CLINICAL TRIAL ORGANIZATION

dog::ESSENTIAL replaced all drinking water in the test group with healthymouth™, while the control group was given double purified water. Each trial began with the a dental cleaning by the HEMOPET staff dental hygienist on every dog in both groups; providing the study with 40 clean mouthed dogs free of all plaque and tartar with a dental score of 0. Teeth (upper jaw and lower jaw) of each dog in both the test and control group were scored and examined every seven days until to determine the amount of plaque accumulation on each of the relevant teeth on both the upper and lower jaws.

Plaque points used:

0=no plaque

1=1/3 with plaque

2=1/3 to 2/3 with plaque

3= more than 2/3 with plaque

Each dog's scores were then recorded in the clinical study log dedicated to each specific trial. The scoring was conducted by the HEMOPET Veterinarian Technicians.

OBSERVATIONS

Throughout the two studies, it was observed by the Veterinary Technicians and dental hygienist that the longer the test dogs drank healthymouth™ the better their results (less and less plaque accumulation). By the end of the twenty-eight day trial, the benefits showed no indication of plateau.

Throughout the two studies it was observed that healthymouth™ made tartar and plaque very soft and easy to remove. The dental hygienist during each seven day re-scoring observed that plaque left on the teeth of the control group dogs had hardened and had to be removed with an instrument. Any plaque left on the teeth of the test dogs fell off on its own or could be easily wiped away with a dry piece of gauze.

RESULTS

At the conclusion of clinical trials, all data was compiled and calculated based on formatted statistics, by the Lab Director of HEMOPET, Ferdie Ongchangco; producing the Plaque Index Summary.

The data conclusion found plaque reduced 80% on the upper jaw and 77% on the lower for all participants in the test group, for a total reduction of plaque ~80%.

ABOUT HEMOPET

Veterinary transfusion medicine is a vibrant emerging specialty. HEMOPET, HEMOPET is a 501(c)(3) charitable organization, established the first private non-profit animal blood bank in 1991 and has since expanded worldwide. HEMOPET services over 2000 veterinary clinics nationwide and in Canada. Hemopot's licensed facility houses a colony of healthy, canine donors of universal blood type (DEA 4), maintained in an outstanding environment, screened for an inclusive list of pathogens, and current on all vaccinations. All canines are all rescued Greyhounds deemed unsuitable for the racing industry. HEMOPET currently maintains 175 donors in a large facility in Garden Grove, California and has initiated a novel rescue-donor-adoption program for them. All dogs have been neutered and receive on-site 24 hours-a-day veterinary care and maintenance. Dr. Dodds is actively expanding HEMOPET's range of nonprofit services and educational activities. The animal blood bank program provides canine blood components, blood bank supplies, and related services throughout North America. HEMOPET's retired Greyhound blood donors are adopted as pets through the Pet Life-Line arm of the project. On behalf of HEMOPET, Dr. Dodds consults in clinical pathology nationally and internationally.

First Experiment OCT to DEC 2007

First week Lower Jaw TESTS (treated)		LOWER JAW				LOWER JAW				LOWER JAW				LOWER JAW				total points	
		C	P3	P4	M1	C	P3	P4	M1	C	P3	P4	M1	C	P3	P4	M1		
1	JayRack	0	0	0	0	0	0	0	1	0	0	0	1	1	1	0	1	5	
3	Torie	0	0	0	0	0	0	1	0	0	0	1	1	0	0	1	1	5	
5	Monica	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	
7	Poppy	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	1	5	
9	Louise	0	0	0	0	0	0	1	1	0	0	1	1	0	0	1	1	6	
11	Lick Ums	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	
13	Bid	0	0	0	0	0	1	0	0	0	1	0	1	0	1	0	1	5	
15	Heiress	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	3	
17	Venus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
20	Willow	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	3	
21	Rich	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	3	
23	Stetson	0	0	0	0	0	1	0	0	0	1	0	1	0	1	1	1	6	
25	Tina	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	3	
27	Jennifer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
29	Ocean	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	
31	Jingle	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	1	4	
33	Case	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	1	4	
36	Siren	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	1	4	
37	Art	0	0	0	0	0	1	0	0	0	1	0	1	0	1	0	1	5	
39	Mache Man	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	1	4	
n		20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	AVE	72
mean		0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.4	0.0	0.3	0.2	0.8	0.1	0.5	0.3	0.9		
sd		0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.5	0.0	0.4	0.4	0.4	0.2	0.6	0.5	0.4		
mode		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0	

First week Lower Jaw CONTROLS (not treated)		LOWER JAW				LOWER JAW				LOWER JAW				LOWER JAW				total points	
		C	P3	P4	M1	C	P3	P4	M1	C	P3	P4	M1	C	P3	P4	M1		
2	Whoopsie	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	2	8	
4	Busted	0	0	0	0	0	0	0	0	1	0	0	1	1	1	1	1	6	
6	Leslie	0	0	0	0	0	0	0	0	1	0	1	1	1	1	1	1	7	
8	Matinee	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	8	
10	Clear lake	0	0	0	0	0	1	0	1	1	1	1	2	1	2	1	2	13	
12	Good fella	0	0	0	0	0	1	0	1	1	1	1	2	1	1	1	2	12	
14	Timmy	0	0	0	0	0	1	1	1	1	1	1	2	1	1	2	2	14	
16	Benny	0	0	0	0	0	1	0	1	1	1	1	1	1	2	1	1	11	
18	Fran	0	0	0	0	0	0	0	1	1	1	1	1	1	2	1	2	11	
19	Koko QT	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	11	
22	Flurry	0	0	0	0	0	1	0	0	1	1	2	1	1	1	2	2	12	
24	Juice	0	0	0	0	0	1	0	1	1	1	1	1	1	1	2	2	12	
26	Alison	0	0	0	0	0	1	1	1	1	1	0	1	1	2	1	2	12	
28	Yukon	0	0	0	0	1	0	0	1	1	1	1	1	1	2	1	2	12	
30	Arnie	0	0	0	0	0	1	0	1	1	1	1	1	1	2	1	2	12	
32	Beamer	0	0	0	0	1	1	0	1	1	1	1	2	2	1	2	3	16	
34	Zap	0	0	0	0	1	0	1	1	1	1	1	2	2	2	1	3	16	
35	Cheezit	0	0	0	0	0	1	0	1	1	1	2	2	1	2	2	2	15	
38	Geronimo	0	0	0	0	0	1	0	0	0	1	0	1	0	1	0	1	5	
40	Karma	0	0	0	0	0	1	0	1	1	2	1	2	3	3	1	2	17	
n		20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	ALL	230
mean		0.0	0.0	0.0	0.0	0.2	0.6	0.2	0.7	0.9	1.0	1.0	1.4	1.2	1.5	1.2	1.9		
sd		0.0	0.0	0.0	0.0	0.4	0.5	0.4	0.5	0.3	0.4	0.5	0.5	0.6	0.6	0.5	0.6		
mode		0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.00	

Total Points (test and control)	302
Points for Test (treated) Grp	72
Points for Control (not) Grp	230
% improvement	76%

% plaque remaining	24%
	76%

Plaque points used:
 0 = no plaque
 1 = less than 1/3 plaque
 2 = 1/3 to 2/3 with plaque
 3 = more than 2/3 with plaque

n	320	320	ave % bias	-69%
mean	0.23	0.72		
sd	0.43	0.72		
mode	0.00	1.00		
effect size*	0.70			

*an Effect Size value of 0.5 represents a Moderate and 0.8 a Large statistical and clinical difference between the two groups.

Anti-Plaque Water

Test subjects: Greyhounds from HEMOPET

Study dates: Oct 2007 to December 2007

Data for First 4 Weeks

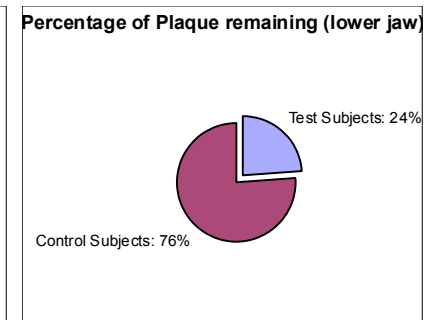
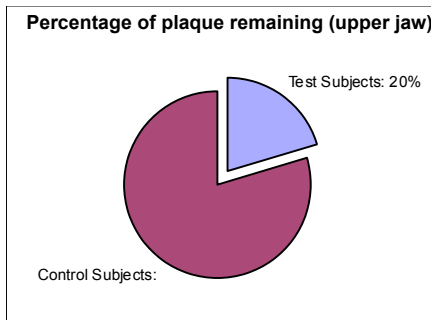
Total Test Subjects: 20
Total Test Controls: 20

Plaque points used:
0 = no plaque
1 = less than 1/3 plaque

2 = 1/3 to 2/3 with plaque
3 = more than 2/3 with plaque

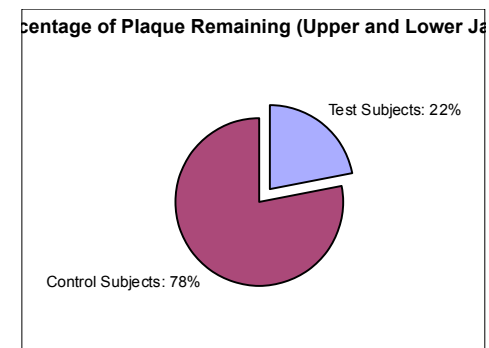
Upper Jaw

	plaque points	% plaque remaining
Test Subjects:	75	20%
Control Subjects:	293	80%
Total points:	368	100%



Lower Jaw

	plaque points	% plaque remaining
Test Subjects:	72	24%
Control Subjects:	230	76%
Total points:	302	100%



Combined Upper and Lower Jaws

	plaque points	% plaque remaining
Test Subjects:	147	22%
Control Subjects:	523	78%
Total points:	670	100%

Mean Mouth Plaque Score = 26.15 (C); 7.35 (T)

VOHC % Reduction = 26.15 - 7.35 ÷ 26.15 = 71.9 %

% Effectivity: 71.90%

t-Test: Paired Two Sample for Means

	Upper Jaw		Lower Jaw	
	Test	Control	Test	Control
n	400	400	320	320
mean	0.1875	0.7325	0.2250	0.7188
sd	0.3908	0.6724	0.4257	0.7185
Std Error of Mean (SEM)	0.01954	0.33620	0.02380	0.04017
Lower 95% conf. limit	0.1492	0.6666	0.1784	0.6400
Upper 95% conf. Limit	0.2258	0.7984	0.2716	0.7975
min	0.000	0.000	0.000	0.000
max	1.0000	3.0000	2.000	3.000
median (50th percentile)	0.000	1.000	0.000	1.000
Normality Test KS	0.4968	0.2621	0.4796	0.2664
Normality p	<0.0001	<0.0001	<0.0001	<0.0001
two-tailed p	<0.0001		<0.0001	
t	18.589		13.628	
df	399		319	
95 % confidence interval				
Mean of paired differences =	-0.5450		-0.4938	
The 95% confidence interval of the difference	-0.6026 to -0.4874		-0.5650 to -0.4225	
r	0.49660		0.45350	
one-tailed p	<0.0001		<0.0001	
Kolmogorov and Smirnov distance KS	0.32000		0.33000	
KS p	<0.001		<0.001	

Upper Jaw 2nd Experiment Feb to Mar 2008

First 4 Weeks Upper Jaw

Test (Treated)

1	GAME	1
3	ROOSKIE	2
5	BEAMER	3
7	CONKER	4
9	AUTHORITY	5
11	BE-REAL	6
13	BRAX	7
15	DELTA	8
17	GABLE	9
19	HAVEN	10
21	HURRY	11
23	KEEPER	12
25	MALI	13
27	MCFATTIE	14
29	MCLOVIN	15
31	RAPPIN	16
33	RHETT	17
35	SAPHIRA	18
37	SERENA	19
39	SPENCE	20

UPPER JAW					UPPER JAW					UPPER JAW					UPPER JAW				
I3	C	P3	P4	MI	I3	C	P3	P4	MI	I3	C	P3	P4	MI	I3	C	P3	P4	MI
0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1
0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1
0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	1
0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	1
0	0	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0	1	0	1
0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	0	1	1	1
0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1
0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	1
0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	1
0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	1
0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	1
0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	0	1	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1

total points	
	4
	3
	2
	3
	5
	2
	5
	5
	7
	3
	4
	5
	4
	3
	5
	4
	6
	2
	2
	79

n	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
mean	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.6	0.0	0.1	0.3	0.2	1.0	0.0	0.1	0.3	0.3	1.0
sd	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.2	0.5	0.0	0.2	0.5	0.4	0.0	0.0	0.2	0.5	0.5	0.0
mode	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0

ALL	400
	0.2
	0.4
	0.0

First 4 Weeks Upper Jaw

Control (not treated)

2	ZEN	1
4	BETTY BOOP	2
6	GOODFELLA	3
8	GREEN WAVE	4
10	GRIZZLY	5
12	JIMINY	6
14	JULIE	7
16	MOVE OVER	8
18	PAK-B	9
20	PETROS	10
22	POPPY	11
24	SANDBERG	12
26	SUAVE	13
28	VELVET	14
30	WHOOPSIE	15
32	XAMINE	16
34	Z-DOG	17
36	STATIC	18
38	RAIN	19
40	ART	20

UPPER JAW					UPPER JAW					UPPER JAW					UPPER JAW				
I3	C	P3	P4	MI	I3	C	P3	P4	MI	I3	C	P3	P4	MI	I3	C	P3	P4	MI
0	0	0	0	0	0	0	1	0	1	1	0	1	1	1	1	1	2	1	2
0	0	0	0	0	0	0	1	1	0	1	1	1	1	1	2	1	1	2	2
0	0	0	0	0	1	0	0	1	1	1	1	1	1	2	1	2	1	2	2
0	0	0	0	0	1	0	1	0	1	1	1	1	1	2	2	1	2	1	2
0	0	0	0	0	1	0	2	0	1	1	1	1	1	2	1	1	2	2	3
0	0	0	0	0	0	0	1	1	1	1	1	1	1	2	1	1	2	2	2
0	0	0	0	0	1	0	1	0	1	1	1	1	1	2	2	1	2	2	3
0	0	0	0	0	0	1	1	0	1	1	1	1	1	2	1	1	2	2	2
0	0	0	0	0	0	1	1	0	1	1	1	1	1	2	2	1	2	2	3
0	0	0	0	0	0	0	0	0	1	0	1	1	1	2	1	2	2	1	3
0	0	0	0	0	0	0	1	1	1	1	1	1	1	2	2	2	2	2	2
0	0	0	0	0	0	0	1	0	1	1	1	1	1	2	1	2	2	3	2
0	0	0	0	0	0	0	1	0	1	1	1	1	1	2	1	2	1	2	3
0	0	0	0	0	0	1	0	1	0	0	1	1	1	2	2	1	2	2	3
0	0	0	0	0	0	1	0	1	0	0	1	1	1	2	1	2	2	2	3
0	0	0	0	0	0	1	0	0	1	1	1	1	1	2	2	2	2	2	3
0	0	0	0	0	0	1	1	0	1	1	1	1	1	2	2	2	2	2	2

total points	
	13
	16
	17
	17
	19
	17
	20
	17
	19
	15
	19
	19
	17
	18
	16
	19
	18
	17
	18
	18
	349

n	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
mean	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.8	0.4	0.8	0.9	1.0	1.0	1.1	1.8	1.5	1.4	1.9	2.5
sd	0.0	0.0	0.0	0.0	0.0	0.4	0.5	0.6	0.5	0.4	0.4	0.2	0.0	0.3	0.4	0.5	0.5	0.3	0.5
mode	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	1.0	2.0	2.0	2.0

ALL	400
	0.9
	0.8
	0.0

Total Points (test and control)
 Points for Test (treated) Grp
 Points for Control (not) Grp
 % improvement

428	% plaque remaining
79	18%
349	82%
82%	

Plaque points used:
 0 = no plaque
 1 = less than 1/3 plaque
 2 = 1/3 to 2/3 with plaque
 3 = more than 2/3 with plaque

*an Effect Size value of 0.5 represents a Moderate, and 0.8 a Large statistical and clinical difference between the two groups.

n	400	400	ave % bias
mean	0.2	0.9	-77%
sd	0.4	0.8	
mode	0.0	0.0	
effect size*	0.82		

Upper Jaw 2nd Experiment Feb to Mar 2008

First week Lower Jaw

TESTS (treated)

		LOWER JAW				LOWER JAW				LOWER JAW				LOWER JAW				total points
		C	P3	P4	M1	C	P3	P4	M1	C	P3	P4	M1	C	P3	P4	M1	
1	GAME	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
3	ROOSKIE	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	3
5	BEAMER	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	1	4
7	CONKER	0	0	0	0	0	1	0	0	0	1	0	1	0	1	0	1	5
9	AUTHORITY	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	3
11	BE-REAL	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	3
13	BRAX	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	3
15	DELTA	0	0	0	0	0	1	0	0	0	1	0	1	0	1	0	1	5
17	GABLE	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	1	4
19	HAVEN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
21	HURRY	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	1	4
23	KEEPER	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	3
25	MALI	0	0	0	0	0	1	0	0	0	1	0	1	0	1	0	1	5
27	MCFATTIE	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
29	MCLOVIN	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	1	6
31	RAPPIN	0	0	0	0	0	1	0	0	0	1	0	1	0	1	0	1	5
33	RHETT	0	0	0	0	0	0	1	0	0	0	1	1	0	0	1	1	5
35	SAPHIRA	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
37	SERENA	0	0	0	0	0	0	0	1	0	0	1	1	0	0	1	1	5
39	SPENCE	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	3

n	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	AVE	73
mean	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.4	0.0	0.3	0.2	0.9	0.0	0.3	0.3	1.0	0.2		
sd	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.5	0.0	0.4	0.4	0.3	0.0	0.5	0.4	0.0	0.4		
mode	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0		

First week Lower Jaw
CONTROLS (not treated)

		LOWER JAW				LOWER JAW				LOWER JAW				LOWER JAW				total points
		C	P3	P4	M1	C	P3	P4	M1	C	P3	P4	M1	C	P3	P4	M1	
2	ZEN	0	0	0	0	0	1	0	1	1	1	1	1	1	2	1	2	12
4	BETTY BOOP	0	0	0	0	0	1	0	1	1	2	1	2	1	2	2	2	15
6	GOODFELLA	0	0	0	0	0	1	0	0	1	1	2	1	1	2	2	2	13
8	GREEN WAVE	0	0	0	0	0	1	0	1	1	1	1	1	2	1	2	2	13
10	GRIZZLY	0	0	0	0	0	1	0	1	1	1	1	2	1	2	2	3	15
12	JIMINY	0	0	0	0	0	1	0	1	1	1	1	2	2	1	2	3	15
14	JULIE	0	0	0	0	0	1	0	1	1	1	2	2	2	2	2	3	17
16	MOVE OVER	0	0	0	0	0	1	0	1	1	2	1	2	1	2	2	3	16
18	PAK-B	0	0	0	0	0	0	1	1	1	1	1	1	2	2	2	2	14
20	PETROS	0	0	0	0	0	1	1	1	1	1	1	1	2	2	2	2	15
22	POPPY	0	0	0	0	0	1	0	1	1	2	1	2	1	2	2	3	16
24	SANDBERG	0	0	0	0	0	1	1	1	1	1	1	2	1	2	1	3	15
26	SUAVE	0	0	0	0	0	1	0	1	1	2	1	2	2	2	1	3	16
28	VELVET	0	0	0	0	0	1	0	1	1	1	1	1	2	2	2	2	14
30	WHOOPSIE	0	0	0	0	0	1	1	1	1	1	1	2	2	2	1	3	16
32	XAMINE	0	0	0	0	0	1	0	1	1	1	1	1	2	2	2	2	14
34	Z-DOG	0	0	0	0	1	0	1	0	1	1	1	2	2	1	2	3	15
36	STATIC	0	0	0	0	0	1	1	1	1	1	1	2	2	2	3	3	18
38	RAIN	0	0	0	0	0	0	1	1	1	2	1	2	2	3	2	3	18
40	ART	0	0	0	0	0	1	0	1	1	2	1	1	2	3	2	3	17

n	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	ALL	304
mean	0.0	0.0	0.0	0.0	0.1	0.9	0.4	0.9	1.0	1.3	1.1	1.6	1.7	2.0	1.9	2.6	1.0		
sd	0.0	0.0	0.0	0.0	0.2	0.4	0.5	0.3	0.0	0.5	0.3	0.5	0.5	0.5	0.5	0.5	0.9		
mode	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	3.0	0.0		

Total Points (test and control)
Points for Test (treated) Grp
Points for Control (not) Grp
% improvement

377
73
304
81%

% plaque remaining
19%
81%

Plaque points used:
0 = no plaque
1 = less than 1/3 plaque
2 = 1/3 to 2/3 with plaque
3 = more than 2/3 with plaque

n
mean
sd
mode
effect size*

320
0.2
0.4
0.0

320
1.0
0.9
0.0

ave % bias
-76%

*an Effect Size value of 0.5 represents a Moderate and 0.8 a Large statistical and clinical difference between the two groups.

0.82

Anti-plaque Water

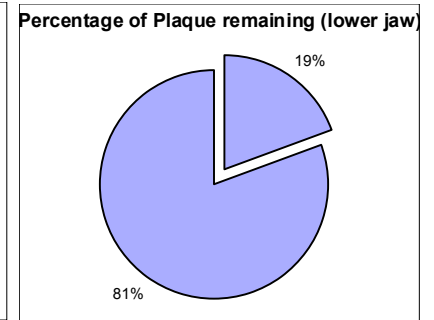
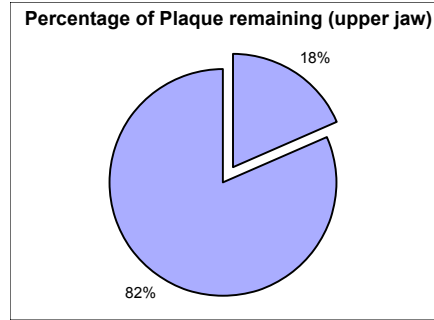
Test subjects: Greyhounds from HEMOPET
Study dates: FEB 2008 to MAR 2008

Total Test Subjects: 20
Total Test Controls: 20

Plaque points used:
0 = no plaque
1 = less than 1/3 plaque
2 = 1/3 to 2/3 with plaque
3 = more than 2/3 with plaque

Upper Jaw

	plaque points	% plaque remaining
Test Subjects:	79	18%
Control Subjects:	349	82%
Total points:	428	100%



Lower Jaw

	plaque points	% plaque remaining
Test Subjects:	73	19%
Control Subjects:	304	81%
Total points:	377	100%

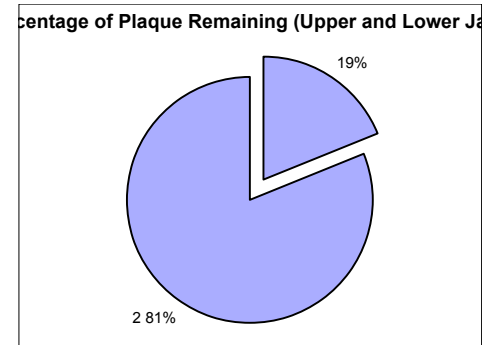
Combined Upper and Lower Jaws

Mean Mouth Plaque Score = 32.65 (C); 7.6 (T)

	plaque points	% plaque remaining
Test Subjects:	152	23%
Control Subjects:	653	77%
Total points:	805	100%

VOHC % Reduction = 32.65 - 7.6 ÷ 32.65 = 76.7 %

% Effectivity: 76.70%



t-Test: Paired Two Sample for Means*

	Upper Jaw		Lower Jaw	
	Test	Control	Test	Control
n	400	400	320	320
mean	0.1975	0.8725	0.2281	0.9500
sd	0.3986	0.8264	0.4203	0.8803
Std Error of Mean (SEM)	0.01993	0.04132	0.02349	0.04921
Lower 95% conf. limit	0.1584	0.7915	0.1821	0.8535
Upper 95% conf. Limit	0.2366	0.9535	0.2742	1.0460
min	0.000	0.000	0.000	0.000
max	1.000	3.000	1.000	3.000
median (50th percentile)	0.000	1.000	0.000	1.000
Normality Test KS	0.4924	0.2394	0.4782	0.2253
Normality p	<0.0001	<0.0001	<0.000	<0.0001
two-tailed p	<0.0001		<0.0001	
t	18.892		16.900	
df	399		319	
95 % confidence interval:				
Mean of paired differences =	-0.6750		-0.7219	
The 95% confidence interval of the difference	-0.7452 TO -0.6048		-0.8059 TO -0.6378	
r	0.50270		0.49690	
one-tailed p	<0.0001		<0.0001	
Kolmogorov and Smirnov distance KS	0.28		0.27000	
KS p	<0.0001		<0.0001	

UNTREATED DOGS



TREATED DOGS



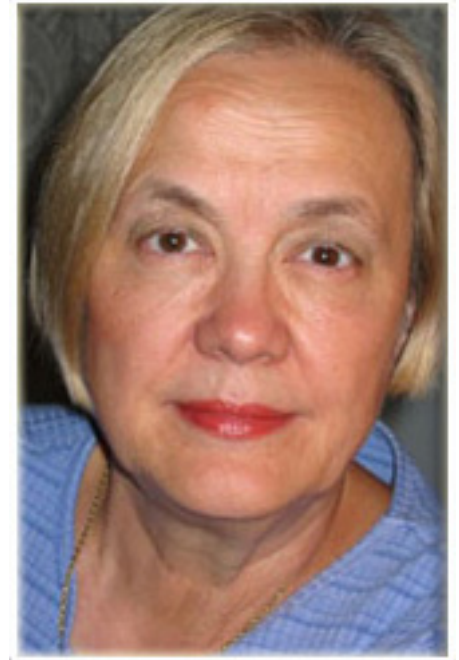
W. Jean Dodds

DVM President, Hemopet

Dr. Dodds received her D.V.M. degree with honors in 1964 from the Ontario Veterinary College, University of Toronto. In 1965 she accepted a position with the New York State Health Department in Albany and began comparative studies of animals with inherited and acquired bleeding diseases. Her position there began as a Research Scientist and culminated as Chief, Laboratory of Hematology, Wadsworth Center.

In 1980 she also became Executive Director, New York State Council on Human Blood and Transfusion Services. This work continued full-time until 1986 when she moved to Southern California to establish Hemopet, the first nonprofit national blood bank program for animals.

From 1965-1986, she was a member of many national and international committees on hematology, animal models of human disease, veterinary medicine, and laboratory animal science. Dr. Dodds was a grantee of the National Heart, Lung, and Blood Institute (NIH) and has over 150 research publications. She was formerly President of the Scientist's Center for Animal Welfare; and Chairman of the Committee on Veterinary Medical Sciences and Vice-Chairman of the Institute of Laboratory Animal Resources, National Academy of Sciences.



In 1974 Dr. Dodds was selected as Outstanding Woman Veterinarian of the Year, AVMA Annual Meeting, Denver, Colorado; in 1977 received the Region I Award for Outstanding Service to the Veterinary Profession from the American Animal Hospital Association, Cherry Hill, New Jersey; in 1978 and 1990 received the Gaines Fido Award as Dogdom's Woman of the Year; and the Award of Merit in 1978 in Recognition of Special Contributions to the Veterinary Profession from the American Animal Hospital Association, Salt Lake City, Utah.

In 1984 she was awarded the Centennial Medal from the University of Pennsylvania School of Veterinary Medicine. In 1987 she was elected a distinguished Practitioner of the National Academy of Practice in Veterinary Medicine.

In 1994 she was given the Holistic Veterinarian of the Year Award from the American Holistic Veterinary Medical Association. She is an active member of numerous professional societies.

Today, Dr. Dodds is actively expanding Hemopet's range of nonprofit services and educational activities. The animal blood bank program provides canine blood components, blood bank supplies, and related services throughout North America. Hemopet's retired Greyhound blood donors are adopted as pets through the Pet Life-Line arm of the project. On behalf of Hemopet, she consults in clinical pathology nationally and internationally. She is also the Editor of *Advances in Veterinary Science and Comparative Medicine* for Academic Press. In addition, Dr. Dodds is the holder of six patents related to animal genetics, antibodies, health care, nutrition and wellness.