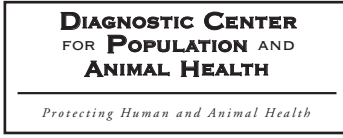


SUPPLIES:	USPS	Fed Ex
Multi-tube Mailers	<input type="checkbox"/> 6 for \$21.00	\$33.00 <input type="checkbox"/>
Includes prepaid US Mail Postage	<input type="checkbox"/> 12 for \$40.20	\$64.20 <input type="checkbox"/>
or prepaid Federal Express.	<input type="checkbox"/> 24 for \$75.60	\$123.60 <input type="checkbox"/>
Hold one to six 4ml tubes.	<input type="checkbox"/> 48 for \$144.00	\$240.00 <input type="checkbox"/>
Insulated Mailers	\$10.00 ea _____	
(Cold Pack/Multiple Samples)	(Postage not included)	
Submission Forms	No Charge _____	
Listing of Normals	No Charge _____	



MICHIGAN STATE UNIVERSITY
 Ph: 517-353-0621
 Hours: M-F 7:30am - 5:30pm EST
 www.animalhealth.msu.edu

Endocrinology Submission Form **A** revised 8/2006/64523
 DCPAH Use Only: Init: _____
 Case # _____
 Rec'd _____ No. Samples _____
 Check No. _____ Amount _____
 Condition _____ Temperature: _____

Office Use Only Ice No Ice USS SST S P L RB G U SL F TS SW Other: _____

Interpretation of results by veterinary endocrinologist (\$4/case) **20020**

DCPAH Account # _____ Submitting Veterinarian _____

Clinic Name: _____

Address: _____

City _____ State _____ Zip _____

Telephone: (_____) _____ Ext. _____

Owner Name _____ Last _____ First _____

Animal Name/ID _____

Canine Feline Equine Other _____

Breed _____

Age _____ Day Wk. Mo. Yr. Weight _____

Sex: M F MC FS Unknown

Date Samples Taken: _____

Date Samples Sent: _____

No. of Tubes: _____ Serum _____ Plasma _____ Urine _____

Times Samples Drawn: _____ am/pm _____ am/pm _____ am/pm

Identify Major Lesions/Signs (please <input checked="" type="checkbox"/> <input type="checkbox"/> NONE (N1))	Location of Lesions/Signs (please <input checked="" type="checkbox"/> <input type="checkbox"/> NONE (N1))
<input type="checkbox"/> Abrasions (A1)	<input type="checkbox"/> Eyes (Y)
<input type="checkbox"/> Acanthosis (A2)	<input type="checkbox"/> Muzzle (M1)
<input type="checkbox"/> Alopecia (A3)	<input type="checkbox"/> Head (H)
<input type="checkbox"/> Anorexia (A4)	<input type="checkbox"/> Neck (N)
<input type="checkbox"/> Calcinosi cutis (C1)	<input type="checkbox"/> Ears (E)
<input type="checkbox"/> Cool Skin (C2)	<input type="checkbox"/> Chest (C)
<input type="checkbox"/> Crusts (C3)	<input type="checkbox"/> Axilla (X)
<input type="checkbox"/> Dermatitis moist (D1)	<input type="checkbox"/> Abdomen (B)
<input type="checkbox"/> Dermatitis erythema (D2)	<input type="checkbox"/> Back (B1)
<input type="checkbox"/> Diarrhea (D3)	<input type="checkbox"/> Sides (S1)
<input type="checkbox"/> Hyperkeratosis (H1)	<input type="checkbox"/> Groin (GR)
<input type="checkbox"/> Hyperpigmentation (H2)	<input type="checkbox"/> Rump (R1)
<input type="checkbox"/> Hypopigmentation (H3)	<input type="checkbox"/> Shoulders (S)
<input type="checkbox"/> Infertility (I1)	<input type="checkbox"/> Genitals (G)
<input type="checkbox"/> Lethargy (L2)	<input type="checkbox"/> Tail (T)
<input type="checkbox"/> Lichenification (L1)	<input type="checkbox"/> Forefeet (F1)
<input type="checkbox"/> Obesity (O1)	<input type="checkbox"/> Hindfeet (F2)
<input type="checkbox"/> Otitis (O2)	<input type="checkbox"/> Forelimbs (L1)
<input type="checkbox"/> Papule/plaque (P1)	<input type="checkbox"/> Hindlimbs (L2)
<input type="checkbox"/> Polydipsia (PD)	<input type="checkbox"/> Generalized lesions (W)
<input type="checkbox"/> Vomiting (V2)	<input type="checkbox"/> Bilateral symmetry (BS)
<input type="checkbox"/> Weight loss (W2)	
<input type="checkbox"/> Wheals (W1)	

THERAPIES (list all current and recent)

NONE

Thyroid therapy (e.g., thyroxine, methimazole)
 Product: _____ (e.g., Soloxine, etc.)
 _____ mg; frequency _____; _____ hrs post pill

Glucocorticoid (e.g., prednisone, oral, eye, ear, topical)
 Product: _____
 Oral _____ mg; frequency _____
 Eye, ear, topical Last administered: _____

Pituitary/Adrenal therapy (e.g., Lysodren, deprenyl)
 Product: _____
 _____ mg; frequency _____
 Last administered _____

Anticonvulsant (e.g., phenobarbital)
 Product: _____
 _____ mg/gr; frequency _____, _____ hr post pill

Others

History & Other Clinical Signs:

Previously tested? (DCPAH case #)

Tentative Diagnosis:

Thyroid Function	Standard	Premium
		(FT4 by dialysis)
Canine		
Canine Thyroid Diagnostic Profile (TT4, TT3, FT4, FT3, T4AA, T3AA, TSH, TgAA)	<input type="checkbox"/> 20010	<input type="checkbox"/> 20011
Canine Therapeutic Monitoring Profile (TT4, TT3, FT4, FT3, TSH)	<input type="checkbox"/> 20012	<input type="checkbox"/> 20013
OFA Canine Thyroid Registry	Contact the laboratory for special submittal forms	
Feline		
Feline Thyroid Profile (TT4, TT3, FT4, FT3)	<input type="checkbox"/> 20015	<input type="checkbox"/> 20016
Feline Thyroid Profile + TSH	<input type="checkbox"/> 20012	<input type="checkbox"/> 20013
T3 Suppression Test		
Feline Thyroid Profile, pre	<input type="checkbox"/> 20015	<input type="checkbox"/> 20016
Post T3, Specify hrs post-pill _____	<input type="checkbox"/> 200xx	<input type="checkbox"/> 200xx
Other Species		
Other Thyroid Profile (TT4, TT3, FT4, FT3)	<input type="checkbox"/> 20015	<input type="checkbox"/> 20016

Adrenal Function
<input type="checkbox"/> Combined dex (0.1 mg/kg) Supp/ACTH Response
<input type="checkbox"/> Cortisol, pre 20017
<input type="checkbox"/> Cortisol, post 200xx
_____ 2 hr or _____ 4 hr post dexamethasone
<input type="checkbox"/> Cortisol, Post ACTH 200xx
_____ 1 hr or _____ 2 hr post ACTH
<input type="checkbox"/> Low-dose (0.01 mg/kg) Dexamethasone Suppression Test
<input type="checkbox"/> Cortisol, pre 20017
<input type="checkbox"/> Cortisol, post
Specify hr _____ post dex 200xx
Specify hr _____ post dex 200xx
<input type="checkbox"/> High-dose (0.1 mg/kg) Dexamethasone Suppression Test
<input type="checkbox"/> Cortisol, pre 20017
<input type="checkbox"/> Cortisol, post
Specify hr _____ post dex 200xx
Specify hr _____ post dex 200xx
<input type="checkbox"/> ACTH Response Test
<input type="checkbox"/> Cortisol, pre 20017
<input type="checkbox"/> Cortisol, post
Specify hr _____ post ACTH 200xx
Specify hr _____ post ACTH 200xx
<input type="checkbox"/> Aldosterone, pre 20002
<input type="checkbox"/> Aldosterone, post
Specify hr _____ post ACTH 200xx
<input type="checkbox"/> Urinary Cortisol - Creatinine Ratio 20019
<input type="checkbox"/> Equine Dexamethasone Suppression Test
<input type="checkbox"/> Cortisol, pre 20017
<input type="checkbox"/> Cortisol, post
Specify hr _____ post dex 200xx
Specify hr _____ post dex 200xx

Parathyroid Function (Includes Interpretation)
<input type="checkbox"/> Basic Parathyroid Profile 20033
(PTH and ionized calcium)
<input type="checkbox"/> Malignancy Profile 20030
(PTH, ionized calcium, PTHrP)
<input type="checkbox"/> Vitamin D Profile 20035
(PTH, ionized calcium, 25-hydroxyvitamin D)
<input type="checkbox"/> Parathyroid hormone related protein 20004
<input type="checkbox"/> 25-Hydroxyvitamin D 20001

Pancreatic Function
<input type="checkbox"/> Serum insulin and glucose, fasting 20008
<input type="checkbox"/> Glucose Tolerance Test (1 g/kg)
_____ Serum insulin and glucose, pre 20008
_____ 15, _____ 30, _____ 45, _____ 60 min post 200xx
<input type="checkbox"/> Insulin antibodies 20031

Pituitary Function (Includes Interpretation)
<input type="checkbox"/> Endogenous (plasma) ACTH 20006
<input type="checkbox"/> Insulin-like Growth Factor-1; IGF-1 20005

Gastric Function (Includes Interpretation)
<input type="checkbox"/> Gastrin, fasting baseline 20007
<input type="checkbox"/> Post, specify treatment and times 20025

Drug Monitoring
<input type="checkbox"/> Phenobarbital 20034

Reproductive Function
<input type="checkbox"/> Progesterone 20036
<input type="checkbox"/> Progesterone - Same Day 20037
<input type="checkbox"/> Testosterone, baseline 20038
<input type="checkbox"/> HCG Response Test (Testosterone)
Pre (Baseline) 20038
_____ 30 min; _____ 1 hr; _____ 2 hr post HCG 200xx

Delivery Service Address:
 DCPAH Endocrine Diagnostic Section
 4125 Beaumont Road
 Lansing, MI 48910-8104

U.S. Postal Address:
 DCPAH Endocrine Diagnostic Section
 P.O. Box 30076
 Lansing, MI 48909-7576

Test	Sample Required	Volume Required	Protocol	Shipping and Handling	Special Instructions/Comments (The submitter is responsible for adherence to sample shipping regulations)
ACTH Response Test, Cortisol	EDTA plasma (preferred); serum can be used	0.5 mL each sample	For dogs or cats: Collect baseline sample. If using Cortrosyn, administer 5 ug/kg IV and obtain post sample 1 hr later. If using ACTH gel, administer 2.2 U/kg IM and collect post sample at 2 hr for dogs, or 1 hr for cats.	Refrigerate or freeze, ship w/cold pack. Should arrive either overnight or 2 nd day.	Separate samples within 30 min of collection. This test is used to diagnose hypoadrenocorticism, hyperadrenocorticism and to monitor Lysodren therapy. It is also the best adrenal function test for diagnosis of iatrogenic hyperadrenocorticism.
ACTH Response Test, Aldosterone	EDTA plasma or serum	0.5 mL each sample	Follow ACTH Response Test protocol.	Refrigerate or freeze, ship w/cold pack.	Separate EDTA plasma within 30 min of sampling.
ACTH, Endogenous	EDTA plasma	1.0 mL	Fasting sample. Centrifuge EDTA tube immediately after collection, pipet plasma into a PLASTIC tube, freeze.	Freeze, ship w/cold pack or dry ice via overnight courier. Must arrive below 60 F.	Endogenous ACTH is used to differentiate adrenal-based from pituitary-based hyperadrenocorticism. Diagnosis of hyperadrenocorticism using a LDST or ACTH response test should be confirmed prior to aACTH determination.
Combined Dexamethasone Suppression Test/ACTH Response Test	EDTA plasma (preferred); serum can be used	0.5 mL each sample	For dogs or cats: Collect baseline sample, administer 0.1 mg dexamethasone/kg IV. Obtain second sample 2-4 hr later, then follow ACTH Response Test protocol.	Refrigerate or freeze, ship w/cold pack. Should arrive either overnight or 2 nd day.	Separate samples within 30 min of collection. This test is used to screen for hyperadrenocorticism. Some pituitary tumors will suppress normally with this high dose of dexamethasone. Followed by an ACTH response test.
Equine Dexamethasone Suppression Test	EDTA plasma (preferred); serum can be used	0.5 mL each sample	For horses: Collect baseline sample at approx 5pm; administer 10 mg dexamethasone/500 kg BW IM; collect post samples 15 and 19 hr later.	Refrigerate or freeze, ship w/cold pack. Should arrive either overnight or 2 nd day.	Separate samples within 30 min of collection. This is the test of choice for diagnosis of equine hyperadrenocorticism.
Gastrin	Serum	0.5 mL	Fasting sample.	Refrigerate or freeze, ship w/cold pack.	May be falsely elevated if the animal is receiving omeprazole.
High Dose Dexamethasone Suppression Test (HDST)	EDTA plasma (preferred); serum can be used	0.5 mL each sample	For dogs: Collect baseline sample, administer 0.1 mg dexamethasone/kg IV or IM. Obtain samples at 4 hr and at 8 hr post dexamethasone (total of 3 samples).	Refrigerate or freeze, ship w/cold pack. Should arrive either overnight or 2 nd day.	Separate samples within 30 min of collection. This test is used to differentiate pituitary-based hyperadrenocorticism.
IGF-1	Serum	0.5 mL	Fasting not necessary.	No special requirements.	Provides indirect assessment of growth hormone production.
Insulin/Glucose Ratio	Serum	1.0 mL	Fasting sample. For glucose tolerance testing, obtain fasting sample, infuse glucose 1.0 g/kg IV over 30 sec, obtain post samples at 15, 30, 45, and 60 min.	Refrigerate or freeze, ship w/cold pack.	Separate serum within 30 min of collection. Used to diagnose insulinoma. Also used to document insulin resistance, especially in horses.
Low Dose Dexamethasone Suppression Test (LDST)	EDTA plasma (preferred); serum can be used	0.5 mL each sample	For dogs: Collect baseline sample, administer 0.01 mg dexamethasone/kg IM. Obtain samples at 4-6 hr and at 8 hr post dex (total of 3 samples).	Refrigerate or freeze, ship w/cold pack. Should arrive either overnight or 2 nd day.	Separate samples within 30 min of collection. This test is used to diagnose hyperadrenocorticism and may differentiate pituitary-based hyperadrenocorticism. May be followed by an ACTH response test.
Malignancy Profile (PTH, Ionized calcium, and PTHrP)	Serum AND EDTA plasma	1.0 mL serum AND 0.5 mL plasma	Fasting samples. Allow serum to clot at room temp for 30 to 60 min prior to separation. Centrifuge EDTA tube and pipet plasma into a plain tube (label as plasma).	Refrigerate or freeze, ship w/cold pack via overnight courier. Must arrive below 60 F.	Avoid hyperlipemia and hemolysis. DO NOT SEND an EDTA tube without separating the plasma.
OFA Canine Thyroid Registry	Serum	2.0 mL	Fasting sample.	Refrigerate or freeze, ship w/cold pack via overnight courier. Must arrive below 60 F.	Avoid hyperlipemia and hemolysis. DO NOT SEND an EDTA tube without separating the plasma.
Parathyroid Profile, Basic (PTH and ionized calcium)	Serum (required for ionized calcium)	1.0 mL	Fasting sample. Allow serum to clot at room temp for 30 to 60 min prior to separation.	Refrigerate or freeze, ship w/cold pack via overnight courier. Must arrive below 60 F.	Avoid hyperlipemia and hemolysis.
Parathyroid hormone related protein (PTHrP)	EDTA plasma	0.5 mL	Fasting sample. Centrifuge EDTA tube and pipet plasma into a plain tube (label as plasma).	Refrigerate or freeze, ship w/cold pack via overnight courier. Must arrive below 60 F.	Avoid hyperlipemia and hemolysis. DO NOT SEND an EDTA tube without separating the plasma.
Phenobarbital	Serum	0.5 mL	Take sample 2 or more hours post phenobarbital.	No special requirements.	Phenobarbital concentrations are slightly lower in samples in serum separator tubes. Steady state concentrations are reached after 2-3 wks of treatment.
Progesterone	Serum	1.5 mL	For ovarian remnant determination: Dog Sample 7-14 days after signs of estrus end; Cat Sample 7-14 days after induction of ovulation by manual stimulation or giving HCG 500 U/kg IM.	Refrigerate or freeze, ship w/cold pack.	Samples submitted for same-day progesterone assay must be received by 12:30 p.m. to have result reported on the same day.
T3 Suppression Test, Feline-Standard or Premium	Serum	1.5 mL (standard); 2.0 mL (premium)	Collect baseline sample. Give 25 ug T3 (Cytone) at 8-hr intervals for 6 or 7 treatments. Collect post sample 2-4 hr after last treatment.	If standard, may be shipped via regular mail. If premium, refrigerate or freeze and ship w/cold pack to arrive overnight or 2 nd day.	Baseline serum sample may be kept refrigerated or frozen so that both samples may be shipped together.
Testosterone	Serum	1.5 mL	For dog or cat: Baseline sample usually sufficient. For horse: Baseline, 30 min, 1 and 2 hr post HCG injection (6,000-12,000 IU/horse IV or IM). For dog GnRH response test: Baseline, 1 and 2 hr post GnRH (0.22 ug/kg IV).	Refrigerate or freeze, ship w/cold pack.	A baseline sample is often adequate in dogs and cats. An HCG response test is often needed in horses.
Thyroid Profile, Canine (Diagnostic or Monitoring)-Standard	Serum	2.0 mL	For monitoring thyroid supplementation, collect sample 3-8 hr post pill & specify type of therapy, dose, & time post pill.	May be shipped via regular mail.	Avoid hemolysis.
Thyroid Profile, Canine (Diagnostic or Monitoring)-Premium	Serum	2.0 mL	For monitoring thyroid supplementation, collect sample 3-8 hr post pill & specify type of therapy, dose, & time post pill.	Refrigerate or freeze, ship w/cold pack. Should arrive either overnight or 2 nd day.	Avoid hemolysis and hyperlipemia.
Thyroid Profile, Feline or Other-Standard	Serum	1.5 mL	Timing of sample not important.	May be shipped via regular mail.	Avoid hemolysis.
Thyroid Profile, Feline or Other-Premium	Serum	2.0 mL	Timing of sample not important.	Refrigerate or freeze, ship w/cold pack. Should arrive either overnight or 2 nd day.	Avoid hemolysis and hyperlipemia.
Urinary Cortisol/Creatinine Ratio	Urine	2 mL	Have owner collect urine at home under non-stressful conditions.	Refrigerate or freeze, ship w/cold pack.	The urinary cortisol/creatinine ratio is a screening test for hyperadrenocorticism. It is also positive with stress and in many non-adrenal illnesses.
Vitamin D, 25-hydroxy	Serum	0.5 mL	Fasting sample. Allow serum to clot at room temp for 30 to 60 min prior to separation.	Refrigerate or freeze, ship w/cold pack via overnight courier.	Avoid exposure to light. Measured if inadequate or excessive vitamin D ingestion is suspected.
Vitamin D Profile (PTH, ionized calcium, and 25-hydroxyvitamin D)	Serum	1.5 mL	Fasting sample. Allow serum to clot at room temp for 30 to 60 min prior to separation.	Refrigerate or freeze, ship w/cold pack via overnight courier. Must arrive below 60 F.	Avoid hyperlipemia and hemolysis.

The DCPAH reserves the right to subcontract any work required to complete testing of any and all submissions. Any work subcontracted will be indicated as such on the laboratory report.