DOCTOR'S DATA INC

LAB #: H41022-2447-1
PATIENT:
ID:
SEX: Female
AGE: 6

CLIENT #: 35454
DOCTOR:

Toxic & Essential Elements; Hair

TOXIC METALS

		RESULT µg/g	REFERENCE INTERVAL
Aluminum	(Al)	22	< 8.0
Antimony	(Sb)	0.35	< 0.066
Arsenic	(As)	0.14	< 0.060
Barium	(Ba)	2.6	< 1.5
Beryllium	(Be)	< 0.01	< 0.020
Bismuth	(Bi)	0.029	< 2.0
Cadmium	(Cd)	0.96	< 0.070
Lead	(Pb)	3.5	< 0.80
Mercury	(Hg)	0.34	< 0.40
Platinum	(Pt)	< 0.003	< 0.005
Thallium	(Tl)	< 0.001	< 0.002
Thorium	(Th)	0.002	< 0.002
Uranium	(U)	0.008	< 0.060
Nickel	(Ni)	2.8	< 0.30
Silver	(Ag)	0.57	< 0.18
Tin	(Sn)	4.0	< 0.30
Titanium	(Ti)	1.0	< 0.70
Total Toxic Representation			

PERCENTILE: 68th, 95th

ESSENTIAL AND OTHER ELEMENTS

		RESULT µg/g	REFERENCE INTERVAL
Calcium	(Ca)	820	250- 800
Magnesium	(Mg)	61	25- 90
Sodium	(Na)	130	18- 180
Potassium	(K)	150	10- 90
Copper	(Cu)	42	11- 37
Zinc	(Zn)	180	120- 220
Manganese	(Mn)	1.2	0.08- 0.60
Chromium	(Cr)	0.70	0.40- 0.65
Vanadium	(V)	0.24	0.025- 0.10
Molybdenum	(Mo)	0.15	0.030- 0.090
Boron	(B)	3.9	0.30- 1.7
Iodine	(I)	5.4	0.25- 1.3
Lithium	(Li)	0.015	0.007- 0.020
Phosphorus	(P)	157	150- 220
Selenium	(Se)	0.81	0.70- 1.1
Strontium	(Sr)	3.5	0.37- 3.6
Sulfur	(S)	51600	44000- 51000
Cobalt	(Co)	0.10	0.005- 0.035
Iron	(Fe)	27	7.0- 16
Germanium	(Ge)	0.18	0.030- 0.040
Rubidium	(Rb)	0.18	0.008- 0.080
Zirconium	(Zr)	0.32	0.030- 0.40

PERCENTILE: 2.5th, 16th, 50th, 84th, 97.5th

SPECIMEN DATA

COMMENTS: results checked

Date Collected: 10/17/2014
Date Received: 10/22/2014
Date Completed: 10/27/2014
Methodology: ICP/MS

Sample Size: 0.195 g
Sample Type: Head
Hair Color: Brown
Treatment:
Shampoo: Kirkland Brand

RATIOS

ELEMENTS	RATIOS	RANGE
Ca/Mg	13.4	4- 30
Ca/P	5.22	1- 12
Na/K	0.867	0.5- 10
Zn/Cu	4.29	4- 20
Zn/Cd	188	> 800

DOCTOR'S DATA INC

HAIR TEST 1024 follow-up
SEX: Female
AGE: 7

Toxic & Essential Elements; Hair

TOXIC METALS		RESULT µg/g	REFERENCE INTERVAL
Aluminum	**(Al)**	**14**	< 8.0
Antimony	**(Sb)**	**0.029**	< 0.066
Arsenic	**(As)**	**0.028**	< 0.060
Barium	**(Ba)**	**1.0**	< 1.5
Beryllium	**(Be)**	**< 0.01**	< 0.020
Bismuth	**(Bi)**	**0.023**	< 2.0
Cadmium	**(Cd)**	**0.085**	< 0.070
Lead	**(Pb)**	**0.81**	< 0.80
Mercury	**(Hg)**	**0.03**	< 0.40
Platinum	**(Pt)**	**< 0.003**	< 0.005
Thallium	**(Tl)**	**< 0.001**	< 0.002
Thorium	**(Th)**	**< 0.001**	< 0.002
Uranium	**(U)**	**0.013**	< 0.060
Nickel	**(Ni)**	**0.69**	< 0.30
Silver	**(Ag)**	**0.18**	< 0.18
Tin	**(Sn)**	**0.54**	< 0.30
Titanium	**(Ti)**	**0.67**	< 0.70
Total Toxic Representation			

PERCENTILE: 68th, 95th

ESSENTIAL AND OTHER ELEMENTS		RESULT µg/g	REFERENCE INTERVAL
Calcium	**(Ca)**	**481**	250- 800
Magnesium	**(Mg)**	**26**	25- 90
Sodium	**(Na)**	**12**	18- 180
Potassium	**(K)**	**16**	10- 90
Copper	**(Cu)**	**42**	11- 37
Zinc	**(Zn)**	**140**	120- 220
Manganese	**(Mn)**	**0.38**	0.08- 0.60
Chromium	**(Cr)**	**0.39**	0.40- 0.65
Vanadium	**(V)**	**0.057**	0.025- 0.10
Molybdenum	**(Mo)**	**0.089**	0.030- 0.090
Boron	**(B)**	**1.4**	0.30- 1.7
Iodine	**(I)**	**1.9**	0.25- 1.3
Lithium	**(Li)**	**0.004**	0.007- 0.020
Phosphorus	**(P)**	**164**	150- 220
Selenium	**(Se)**	**0.68**	0.70- 1.1
Strontium	**(Sr)**	**1.8**	0.37- 3.6
Sulfur	**(S)**	**48400**	44000- 51000
Cobalt	**(Co)**	**0.028**	0.005- 0.035
Iron	**(Fe)**	**16**	7.0- 16
Germanium	**(Ge)**	**0.039**	0.030- 0.040
Rubidium	**(Rb)**	**0.023**	0.008- 0.080
Zirconium	**(Zr)**	**0.14**	0.030- 0.40

PERCENTILE: 2.5th, 16th, 50th, 84th, 97.5th

SPECIMEN DATA

COMMENTS:

Date Collected: **12/26/2015**
Date Received: **01/02/2016**
Date Completed: **01/05/2016**
Methodology: **ICP/MS**

Sample Size: **0.196 g**
Sample Type: **Head**
Hair Color: **Brown**
Treatment:
Shampoo: **Dove Soap**

RATIOS

ELEMENTS	RATIOS	RANGE
Ca/Mg	**18.5**	4- 30
Ca/P	**2.93**	1- 12
Na/K	**0.75**	0.5- 10
Zn/Cu	**3.33**	4- 20
Zn/Cd	**> 999**	> 800

DOCTOR'S DATA INC

SEX: Female
AGE: 8

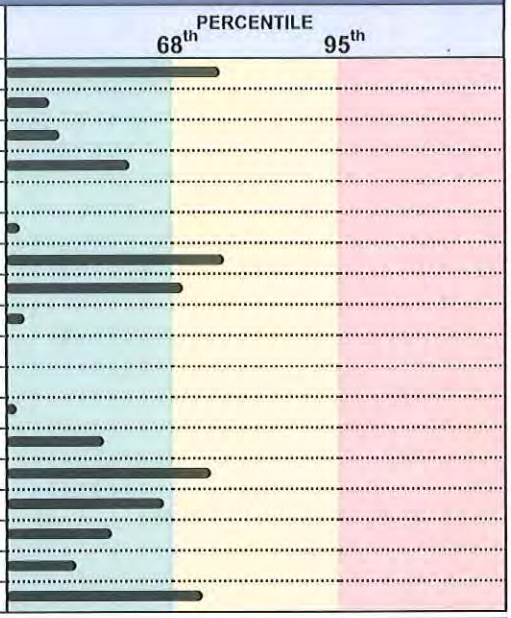
With love & ho

Rd
Bethel, ME 04217 U.S.A.

Toxic & Essential Elements; Hair

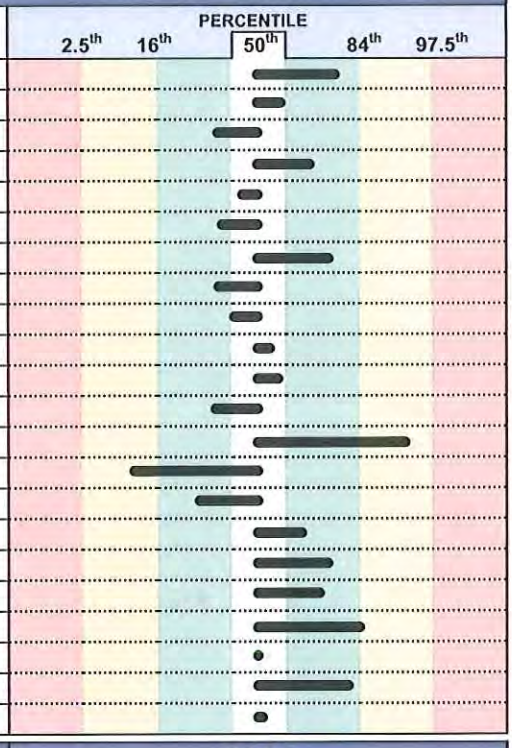
TOXIC METALS

		RESULT µg/g	REFERENCE INTERVAL
Aluminum	(Al)	12	< 8.0
Antimony	(Sb)	0.022	< 0.066
Arsenic	(As)	0.024	< 0.060
Barium	(Ba)	1.1	< 1.5
Beryllium	(Be)	< 0.01	< 0.020
Bismuth	(Bi)	0.046	< 2.0
Cadmium	(Cd)	0.11	< 0.070
Lead	(Pb)	1.0	< 0.80
Mercury	(Hg)	0.05	< 0.40
Platinum	(Pt)	< 0.003	< 0.005
Thallium	(Tl)	< 0.001	< 0.002
Thorium	(Th)	0.001	< 0.002
Uranium	(U)	0.034	< 0.060
Nickel	(Ni)	0.46	< 0.30
Silver	(Ag)	0.17	< 0.18
Tin	(Sn)	0.19	< 0.30
Titanium	(Ti)	0.29	< 0.70
Total Toxic Representation			



ESSENTIAL AND OTHER ELEMENTS

		RESULT µg/g	REFERENCE INTERVAL
Calcium	(Ca)	745	250- 800
Magnesium	(Mg)	52	25- 90
Sodium	(Na)	37	18- 180
Potassium	(K)	60	10- 90
Copper	(Cu)	22	11- 37
Zinc	(Zn)	150	120- 220
Manganese	(Mn)	0.48	0.08- 0.60
Chromium	(Cr)	0.46	0.40- 0.65
Vanadium	(V)	0.044	0.025- 0.10
Molybdenum	(Mo)	0.055	0.030- 0.090
Boron	(B)	0.91	0.30- 1.7
Iodine	(I)	0.42	0.25- 1.3
Lithium	(Li)	0.054	0.007- 0.020
Phosphorus	(P)	143	150- 220
Selenium	(Se)	0.78	0.70- 1.1
Strontium	(Sr)	2.4	0.37- 3.6
Sulfur	(S)	49900	44000- 51000
Cobalt	(Co)	0.027	0.005- 0.035
Iron	(Fe)	17	7.0- 16
Germanium	(Ge)	0.035	0.030- 0.040
Rubidium	(Rb)	0.076	0.008- 0.080
Zirconium	(Zr)	0.17	0.030- 0.40



SPECIMEN DATA

COMMENTS:

Date Collected: 01/03/2017
Date Received: 01/09/2017
Date Completed: 01/11/2017
Methodology: ICP/MS

Sample Size: 0.199 g
Sample Type: Head
Hair Color: Brown
Treatment:
Shampoo: Dove Soap

RATIOS

ELEMENTS	RATIOS	RANGE
Ca/Mg	14.3	4- 30
Ca/P	5.21	1- 12
Na/K	0.617	0.5- 10
Zn/Cu	6.82	4- 20
Zn/Cd	> 999	> 800

DOCTOR'S DATA INC

SEX: Female
AGE: 9

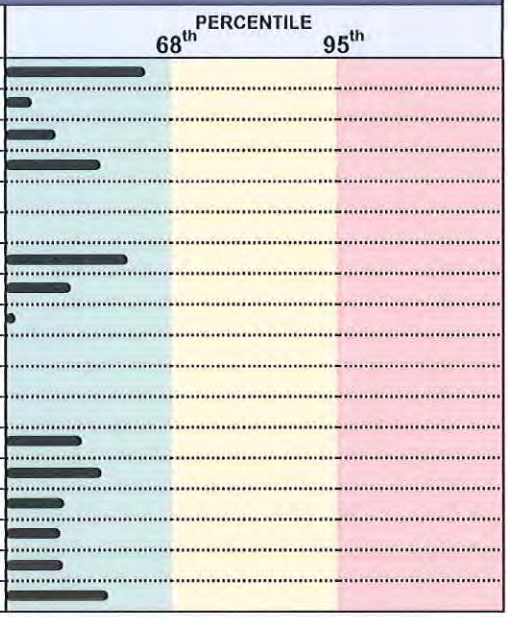
Suggestions for your consideration
As always, work with your Doctor.
With love & hope, Dr. Amy

CLIENT #: 39238
DOCTOR: , MD
Neurological Research Institute Llc
279 Walkers Mills Rd
Bethel, ME 04217 U.S.A.

Toxic & Essential Elements; Hair

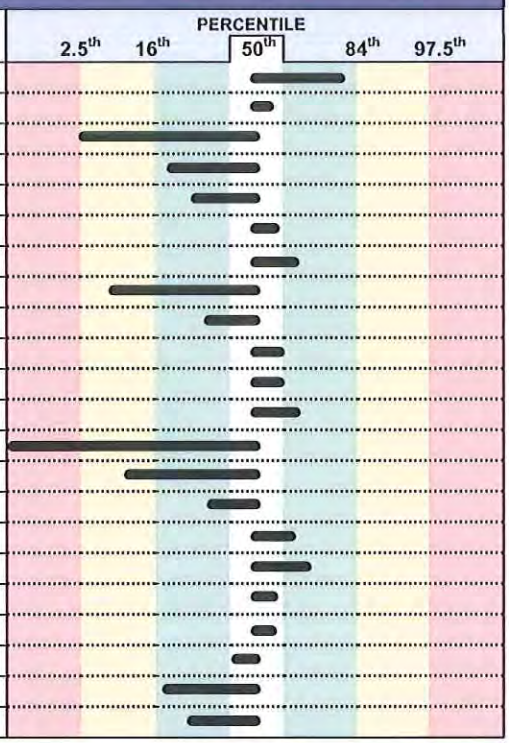
TOXIC METALS

		RESULT µg/g	REFERENCE INTERVAL
Aluminum	(Al)	6.7	< 8.0
Antimony	(Sb)	0.016	< 0.066
Arsenic	(As)	0.023	< 0.060
Barium	(Ba)	0.84	< 1.5
Beryllium	(Be)	< 0.01	< 0.020
Bismuth	(Bi)	< 0.002	< 2.0
Cadmium	(Cd)	0.053	< 0.070
Lead	(Pb)	0.29	< 0.80
Mercury	(Hg)	0.03	< 0.40
Platinum	(Pt)	< 0.003	< 0.005
Thallium	(Tl)	< 0.001	< 0.002
Thorium	(Th)	< 0.001	< 0.002
Uranium	(U)	0.026	< 0.060
Nickel	(Ni)	0.17	< 0.30
Silver	(Ag)	0.06	< 0.18
Tin	(Sn)	0.10	< 0.30
Titanium	(Ti)	0.24	< 0.70
Total Toxic Representation			



ESSENTIAL AND OTHER ELEMENTS

		RESULT µg/g	REFERENCE INTERVAL
Calcium	(Ca)	765	250- 800
Magnesium	(Mg)	47	25- 90
Sodium	(Na)	6	18- 180
Potassium	(K)	12	10- 90
Copper	(Cu)	16	11- 37
Zinc	(Zn)	180	120- 220
Manganese	(Mn)	0.33	0.08- 0.60
Chromium	(Cr)	0.37	0.40- 0.65
Vanadium	(V)	0.038	0.025- 0.10
Molybdenum	(Mo)	0.060	0.030- 0.090
Boron	(B)	0.95	0.30- 1.7
Iodine	(I)	0.86	0.25- 1.3
Lithium	(Li)	< 0.004	0.007- 0.020
Phosphorus	(P)	142	150- 220
Selenium	(Se)	0.81	0.70- 1.1
Strontium	(Sr)	2.2	0.37- 3.6
Sulfur	(S)	49100	44000- 51000
Cobalt	(Co)	0.017	0.005- 0.035
Iron	(Fe)	11	7.0- 16
Germanium	(Ge)	0.034	0.030- 0.040
Rubidium	(Rb)	0.009	0.008- 0.080
Zirconium	(Zr)	0.074	0.030- 0.40



SPECIMEN DATA

COMMENTS:

Date Collected: 01/02/2018
Date Received: 01/08/2018
Date Completed: 01/09/2018
Methodology: ICP/MS

Sample Size: 0.197 g
Sample Type: Head
Hair Color: Brown
Treatment:
Shampoo: Dr Bronners

RATIOS

ELEMENTS	RATIOS	RANGE
Ca/Mg	16.3	4- 30
Ca/P	5.39	1- 12
Na/K	0.5	0.5- 10
Zn/Cu	11.3	4- 20
Zn/Cd	> 999	> 800

DOCTOR'S DATA INC

SEX: Female
DOB: 10/07/2008 **AGE: 11**

Toxic & Essential Elements; Hair

TOXIC METALS		RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 68th 95th
Aluminum	(Al)	3.7	< 8.0	
Antimony	(Sb)	< 0.01	< 0.066	
Arsenic	(As)	0.020	< 0.060	
Barium	(Ba)	1.4	< 1.5	
Beryllium	(Be)	< 0.01	< 0.020	
Bismuth	(Bi)	< 0.002	< 2.0	
Cadmium	(Cd)	0.031	< 0.070	
Lead	(Pb)	0.38	< 0.80	
Mercury	(Hg)	0.06	< 0.40	
Platinum	(Pt)	< 0.003	< 0.005	
Thallium	(Tl)	< 0.001	< 0.002	
Thorium	(Th)	< 0.001	< 0.002	
Uranium	(U)	0.031	< 0.060	
Nickel	(Ni)	0.10	< 0.30	
Silver	(Ag)	0.05	< 0.18	
Tin	(Sn)	0.07	< 0.30	
Titanium	(Ti)	0.22	< 0.70	
Total Toxic Representation				

ESSENTIAL AND OTHER ELEMENTS		RESULT µg/g	REFERENCE INTERVAL	PERCENTILE 2.5th 16th 50th 84th 97.5th
Calcium	(Ca)	1050	250- 800	
Magnesium	(Mg)	190	25- 90	
Sodium	(Na)	57	18- 180	
Potassium	(K)	27	10- 90	
Copper	(Cu)	22	11- 37	
Zinc	(Zn)	170	120- 220	
Manganese	(Mn)	0.48	0.08- 0.60	
Chromium	(Cr)	0.35	0.40- 0.65	
Vanadium	(V)	0.034	0.025- 0.10	
Molybdenum	(Mo)	0.040	0.030- 0.090	
Boron	(B)	1.5	0.30- 1.7	
Iodine	(I)	0.41	0.25- 1.3	
Lithium	(Li)	0.004	0.007- 0.020	
Phosphorus	(P)	143	150- 220	
Selenium	(Se)	0.59	0.70- 1.1	
Strontium	(Sr)	5.3	0.37- 3.6	
Sulfur	(S)	47200	44000- 51000	
Cobalt	(Co)	0.008	0.005- 0.035	
Iron	(Fe)	8.2	7.0- 16	
Germanium	(Ge)	0.031	0.030- 0.040	
Rubidium	(Rb)	0.031	0.008- 0.080	
Zirconium	(Zr)	0.011	0.030- 0.40	

SPECIMEN DATA

COMMENTS:

Date Collected: **09/19/2020**
Date Received: **09/25/2020**
Date Reported: **09/28/2020**
Methodology: **ICP/MS**

Sample Size: **0.203 g**
Sample Type: **Head**
Hair Color: **Brown**
Treatment:
Shampoo: **Kirks**

RATIOS

ELEMENTS	RATIOS	RANGE
Ca/Mg	**5.53**	4- 30
Ca/P	**7.34**	1- 12
Na/K	**2.11**	0.5- 10
Zn/Cu	**7.73**	4- 20
Zn/Cd	**> 999**	> 800

1. Eczema as toddler (milk related I think), SIBO, very occasional diarrhea, dysbiosis, gets very easily frustrated, reflux (constant clearing of throat in am) + teeth grinding at night as 4, 5, 6 year old (fructose seems to really make reflux worse), hard time waking up early in morning for school…but full of energy at 9/10pm at night
2. No cavities, no dental treatments
3. So…No dental work in place
4. Mother had 3 or 4 amalgam fillings while pregnant and nursing. Mother had amalgams removed with no precautions taken when subject was a young nursing baby.
5. No vaccines ever
6. No supplements taken at time of test
7. Currently 6 years, 45 pounds, 47 inches
8. Subject born and lived in Mexico City for first 4 years of life….status of drinking water/pipes/paint in house unknown…but mother suspects toxic burden mostly came from her…as opposed to having come from the environment

TEST REPORT

8605 SW Creekside Place
Beaverton, OR 97008
Phone: 503-466-2445 Fax: 503-466-1636

ZRT LABORATORY

 # 2019 04 17 652 S

Ordering Provider: [redacted]

Samples Received
04/17/2019

Report Date
04/24/2019

Samples Collected
Saliva - 04/14/19 08:00
Saliva - 04/14/19 12:00
Saliva - 04/14/19 18:00
Saliva - 04/14/19 21:10

Patient Name: [redacted]
Patient Phone Number: [redacted]

Gender	Last Menses	Height	Waist
Female	Unspecified	4 ft 10 in	24 in
DOB	**Menses Status**	**Weight**	**BMI**
10/7/2008 (10 yrs)	Pre-Menopausal	70 lb	14.6

TEST NAME	RESULTS | 04/14/19	RANGE
Salivary Steroids		
Cortisol	4.9	3.7-9.5 ng/mL (morning)
Cortisol	1.4	1.2-3.0 ng/mL (noon)
Cortisol	1.1	0.6-1.9 ng/mL (evening)
Cortisol	0.8	0.4-1.0 ng/mL (night)

*<dL = Less than the detectable limit of the lab. **N/A** = Not applicable; 1 or more values used in this calculation is less than the detectable limit. **H** = High. **L** = Low.*

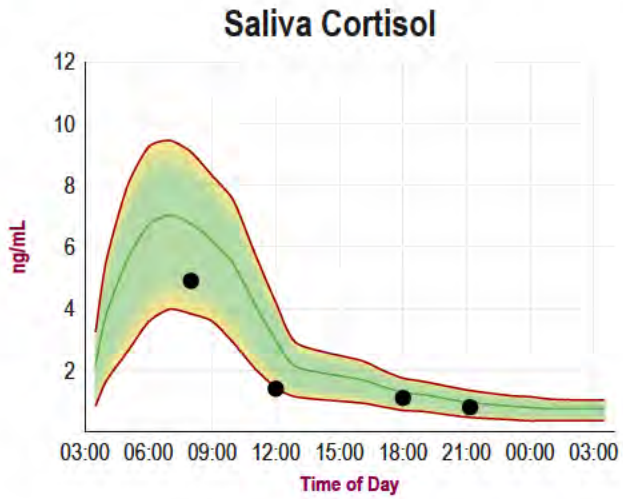
Therapies

None Indicated

Graphs

Disclaimer: Graphs below represent averages for healthy individuals not using hormones. Supplementation ranges may be higher. Please see supplementation ranges and lab comments if results are higher or lower than expected.

Average ▼▲ Off Graph



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The above results and comments are for informational purposes only and are not to be construed as medical advice. Please consult your healthcare practitioner for diagnosis and treatment.

David T. Zava, Ph.D.
Laboratory Director

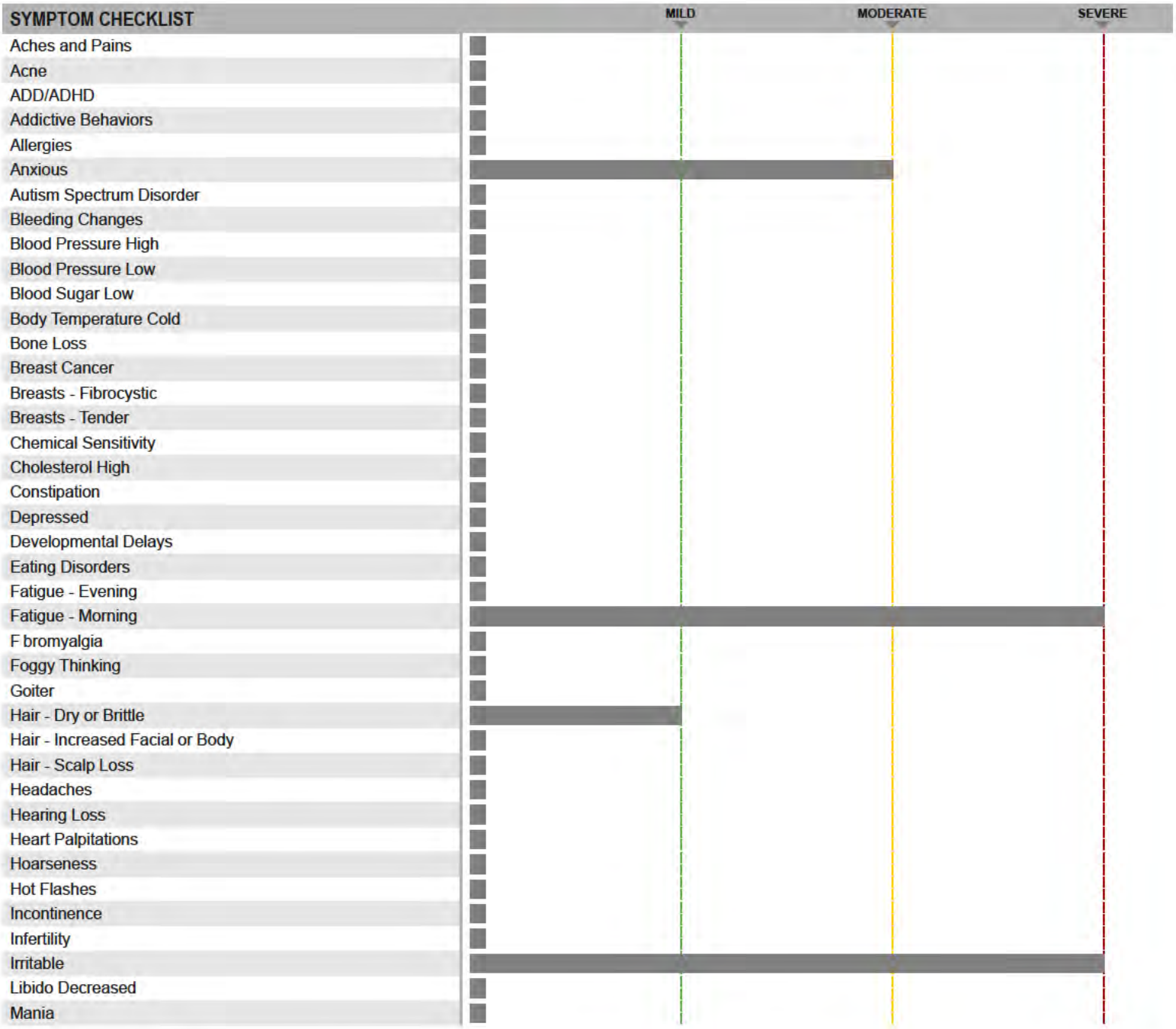
Alison McAllister, ND.
(Ordering Provider unless otherwise specified on page 1)

TEST REPORT | Patient Reported Symptoms

#

Disclaimer: Symptom Categories below show percent of symptoms self-reported by the patient compared to total available symptoms for each category. For detailed information on category breakdowns, go to www.zrtlab.com/patient-symptoms.

SYMPTOM CATEGORIES	RESULTS | 04/14/19
Estrogen / Progesterone Deficiency	2%
Estrogen Dominance / Progesterone Deficiency	7%
Low Androgens (DHEA/Testosterone)	6%
High Androgens (DHEA/Testosterone)	3%
Low Cortisol	25%
High Cortisol	15%
Hypometabolism	9%
Metabolic Syndrome	0%



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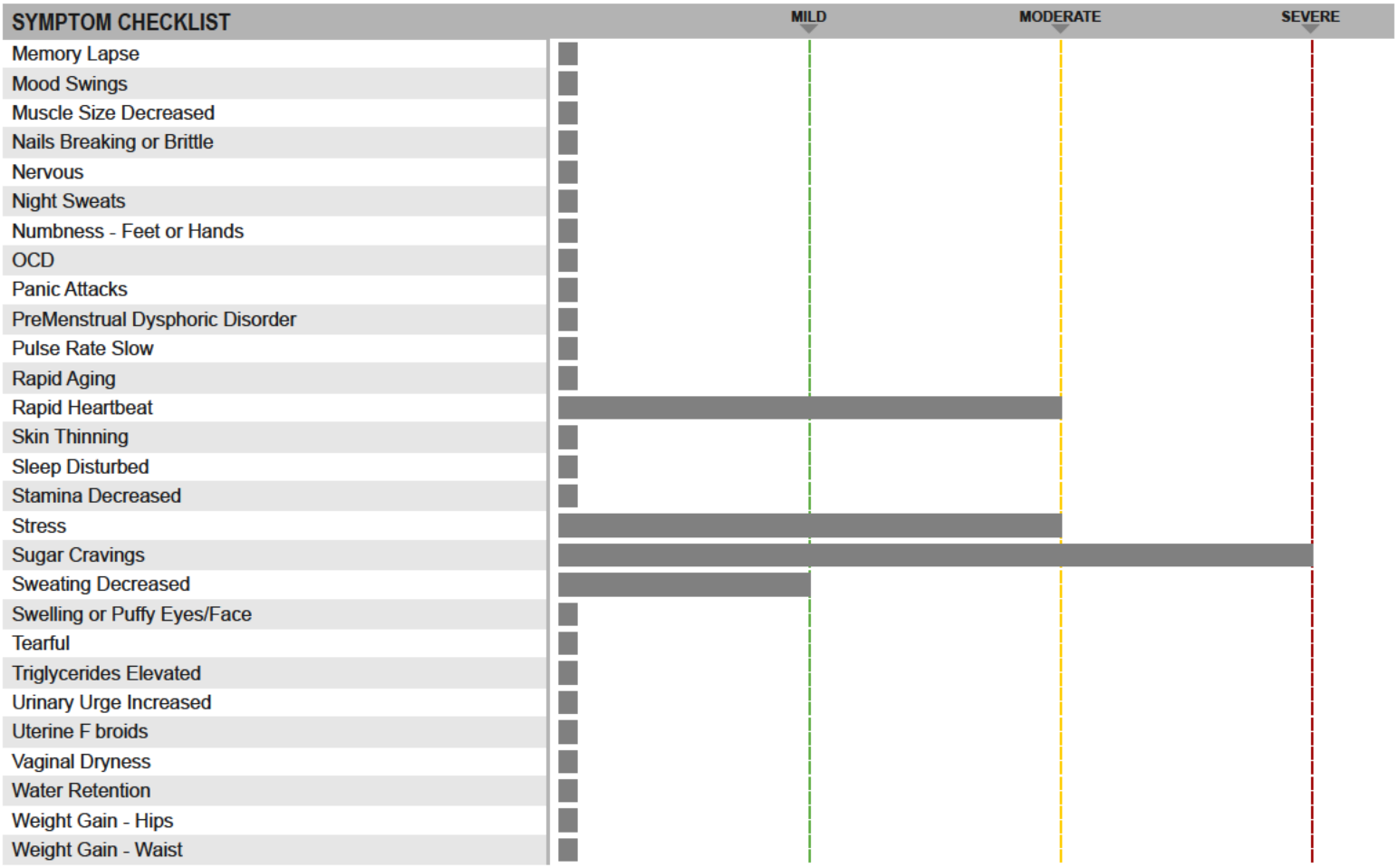
David T. Zava, Ph.D.
Laboratory Director

Alison McAllister, ND.
(Ordering Provider unless otherwise specified on page 1)



Lab Comments

This is a child. Comments are provided as a guideline and can not replace clinical decision making. Please review any suggestions of supplements, lifestyle, or hormone replacement with this patient's clinical health in mind. Hormone supplementation is generally not warranted in this population based solely on lab results.

Cortisol is within expected range throughout the day and is following a normal circadian rhythm; however, symptoms of low cortisol are reported. Under stress situations the adrenal glands respond by increasing cortisol output. However, when cortisol levels are within normal range under situations of excessive stress, as reported herein, this suggests that the adrenal glands may be overworking to keep up with the demands of the stressors, which could eventually lead to adrenal exhaustion. HPA axis dysfunction is most commonly caused by stressors which include: psychological stress (emotional), sleep deprivation, poor diet (low protein-particularly problematic in vegetarians), nutrient deficiencies (particularly low vitamins C and B5), physical insults (surgery, injury), diseases (cancer, diabetes), chemical exposure (environmental pollutants, excessive medications), low levels of cortisol precursors (pregnenolone and progesterone) and pathogenic infections (bacteria, viruses and fungi). A normal daily output of cortisol is essential to maintain normal metabolic activity, help regulate steady state glucose levels (important for brain function and energy production), and optimize immune function. Depletion of adrenal cortisol synthesis by a chronic stressor, sleep deprivation, and/or nutrient deficiencies (particularly vitamins C and B5) often leads to symptoms such as fatigue, allergies (immune dysfunction), chemical sensitivity, cold body temp, and sugar craving. For additional information about strategies for supporting adrenal health and reducing stress(ors), the following books are worth reading: "Adrenal Fatigue; The 21st Century Stress Syndrome", by James L. Wilson, N.D., D.C., PhD; "The Cortisol Connection", by Shawn Talbott, Ph.D.; "The End of Stress As We Know It" by Bruce McEwen; "Awakening Athena" by Kenna Stephenson, MD.

The above results and comments are for informational purposes only and are not to be construed as medical advice. Please consult your healthcare practitioner for diagnosis and treatment.

David T. Zava, Ph.D.
Laboratory Director

Alison McAllister, ND.
(Ordering Provider unless otherwise specified on page 1)