GENOVA DIAGNOSTICS
3425 Corporate Way
Duluth, GA 30096

TRIAD PROFILE

Patient: **SAMPLE PATIENT**
DOB:
Sex:
MRN:

3400 TRIAD™ Profile - Blood and Urine

Methodology: LC/Tandem Mass Spectrometry, Colorimetric

Summary of Abnormal Findings

Biomarkers	Findings	Metabolic Pathway
Fatty Acid Metabolism		
Adipate	**Borderline High**	Fatty acid oxidation
Ethylmalonate	H	Fatty acid oxidation
Carbohydrate Metabolism		
L-Lactate	**Borderline High**	Glycolysis
b-Hydroxybutyrate	**Borderline High**	Ketone production
Energy Production Markers		
Succinate	H	Citric acid cycle
Hydroxymethylglutarate	**Borderline High**	HMG-CoA pathway
B-Complex Vitamin Markers	No Abnormality Found	
Methylation Cofactor Markers	No Abnormality Found	
Neurotransmitter Metabolism Markers		
5-Hydroxyindoleacetate	**Borderline High**	Serotonin metabolism
Kynurenate	**Borderline High**	Tryptophan pathway
Oxidative Damage and Antioxidant Markers		
p-Hydroxyphenyllactate	**Borderline High**	Gut bacterial metabolism
Detoxification Indicators		
2-Methylhippurate	**Borderline High**	Xylene exposure
Glucarate	**Borderline High**	Phase I and II detox
Pyroglutamate	**Borderline High**	Glutathione pathway
Bacterial - General		

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Summary of Abnormal Findings

Biomarkers	Findings	Metabolic Pathway
Hippurate	**Borderline High**	Gut bacterial metabolism
Phenylacetate	**Borderline High**	Gut bacterial metabolism
Indican	H	Gut bacterial metabolism
L. acidophilus/General Bacteria	No Abnormality Found	
Clostridial Species	No Abnormality Found	
Yeast/Fungal		
D-Arabinitol	**Borderline High**	Yeast product

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Organix® Comprehensive Profile - Urine

Methodology: LC/Tandem Mass Spectrometry, Colorimetric

This report is not intended for the diagnosis of neonatal inborn errors of metabolism.
Ranges: Ages 13 and over

		Results mcg/mg creatinine		QUINTILE DISTRIBUTION 1st 2nd 3rd 4th 5th	95% Reference Range
Nutrient Markers					
Fatty Acid Metabolism *(Carnitine & B2)*					
1.	Adipate	7.8		6.2	<= 11.1
2.	Suberate	0.9		2.1	<= 4.6
3.	Ethylmalonate	7.9	H	3.6	<= 6.3
Carbohydrate Metabolism *(B1, B3, Cr, Lipoic Acid, CoQ10)*					
4.	Pyruvate	<DL		3.9	<= 6.4
5.	L-Lactate	8.6		8.5	0.6 - 16.4
6.	β-Hydroxybutyrate	2.5		2.1	<= 9.9
Energy Production (Citric Acid Cycle) *(B comp., CoQ10, Amino Acids, Mg)*					
7.	Citrate	570		601	56 - 987
8.	Cis-Aconitate	35		51	18 - 78
9.	Isocitrate	91		98	39 - 143
10.	α-Ketoglutarate	<DL		19.0	<= 35.0
11.	Succinate	21.0	H	11.6	<= 20.9
12.	Fumarate	<DL		0.59	<= 1.35
13.	Malate	1.1		1.4	<= 3.1
14.	Hydroxymethylglutarate	3.6		3.6	<= 5.1
B-Complex Vitamin Markers *(B1, B2, B3, B5, B6, Biotin)*					
15.	α-Ketoisovalerate	<DL		0.25	<= 0.49
16.	α-Ketoisocaproate	<DL		0.34	<= 0.52
17.	α-Keto-β-Methylvalerate	<DL		0.38	<= 1.10
18.	Xanthurenate	<DL		0.34	<= 0.46
19.	β-Hydroxyisovalerate	4.5		7.6	<= 11.5

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Organix® Comprehensive Profile - Urine

Methodology: LC/Tandem Mass Spectrometry, Colorimetric

This report is not intended for the diagnosis of neonatal inborn errors of metabolism.
Ranges: Ages 13 and over

		Results mcg/mg creatinine	QUINTILE DISTRIBUTION (1st | 2nd | 3rd | 4th | 5th)	95% Reference Range
Nutrient Markers				
Methylation Cofactor Markers *(B12, Folate)*				
20.	Methylmalonate	0.6	1.7	<= 2.3
21.	Formiminoglutamate	0.5	1.2	<= 2.2
Cell Regulation Markers				
Neurotransmitter Metabolism Markers *(Tyrosine, Tryptophan, B6, Antioxidants)*				
22.	Vanilmandelate	3.8	1.6 – 3.9	1.2 - 5.3
23.	Homovanillate	4.3	1.9 – 5.7	1.4 - 7.6
24.	5-Hydroxyindoleacetate	6.8	2.1 – 5.6	1.6 - 9.8
25.	Kynurenate	1.1	1.0	<= 1.5
26.	Quinolinate	2.6	4.0	<= 5.8
27.	Picolinate	5.6	8.0	2.8 - 13.5
Oxidative Damage and Antioxidant Markers *(Vitamin C and Other Antioxidants)*				
28.	p-Hydroxyphenyllactate	0.47	0.39	<= 0.66
29.	8-Hydroxy-2-deoxyguanosine	4.9	5.3	<= 7.6

(Units for 8-hydroxy-2-dexoyguanosine are ng/mg creatinine)

Toxicants and Detoxification				
Detoxification Indicators *(Arg, NAC, Met, Mg, Antioxidants)*				
30.	2-Methylhippurate	0.111	0.084	<= 0.192
31.	Orotate	0.57	0.69	<= 1.01
32.	Glucarate	9.9	6.3	<= 10.7
33.	α-Hydroxybutyrate	<DL	0.3	<= 0.9
34.	Pyroglutamate	67	59	28 - 88
35.	Sulfate	1,531	958 – 2,347	690 - 2,988

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Organix® Comprehensive Profile - Urine

Methodology: LC/Tandem Mass Spectrometry, Colorimetric

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Ranges: Ages 13 and over

Compounds of Bacterial or Yeast/Fungal Origin

		Results mcg/mg creatinine		QUINTILE DISTRIBUTION (1st–5th)	95% Reference Range
Bacterial - General					
36.	Benzoate	<DL		0.6	<= 9.3
37.	Hippurate	709		548	<= 1,070
38.	Phenylacetate	0.17		0.11	<= 0.18
39.	Phenylpropionate	<DL			<= 0.06
40.	p-Hydroxybenzoate	0.5		1.1	<= 1.8
41.	p-Hydroxyphenylacetate	10		19	<= 34
42.	Indican	93	H	64	<= 90
43.	Tricarballylate	<DL		0.73	<= 1.41
L. acidophilus / General Bacterial					
44.	D-Lactate	0.2		2.0	<= 4.1
Clostridial Species					
45.	3,4-Dihydroxyphenylpropionate	<DL			<= 0.05
Yeast / Fungal					
46.	D-Arabinitol	40		36	<= 73

Creatinine = 48 mg/dL

<DL = less than detection limit
>UL = greater than upper linearity limit

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Amino Acids 20 Profile - Plasma

Methodology: High Performance Liquid Chromatography

Ranges: Ages 13 and over.

		Results µmol/L		QUINTILE DISTRIBUTION 1st 2nd 3rd 4th 5th	95% Reference Range
Essential Amino Acids					
Limiting Amino Acids					
1.	Lysine	100		117 – 203	99 - 234
2.	Methionine	14		16 – 26	14 - 30
3.	Tryptophan	25	L	35 – 59	30 - 67
Branched Chain Amino Acids					
4.	Isoleucine	30	L	40 – 72	33 - 89
5.	Leucine	57	L	80 – 137	68 - 161
6.	Valine	159		143 – 240	123 - 282
Other Essential Amino Acids					
7.	Phenylalanine	42		43 – 64	39 - 74
8.	Histidine	62		48 – 72	41 - 82
9.	Threonine	100		76 – 151	63 - 181
Conditionally Essential Amino Acids					
10.	Arginine	69		48 – 96	37 - 114
11.	Taurine	89		31 – 73	26 - 100
12.	Glycine	474	H	162 – 348	136 - 430
13.	Serine	94		66 – 115	57 - 133

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Amino Acids 20 Profile - Plasma

Methodology: High Performance Liquid Chromatography

Ranges: Ages 13 and over.

		Results µmol/L		QUINTILE DISTRIBUTION 1st 2nd 3rd 4th 5th	95% Reference Range
Functional Categories					
Vascular Function					
14.	Arginine	69		48 – 96	37 - 114
15.	Taurine	89		31 – 73	26 - 100
Neurotransmitters and Precursors					
16.	Phenylalanine	42		43 – 64	39 - 74
17.	Tyrosine	30		38 – 70	29 - 80
18.	Tryptophan	25	L	35 – 59	30 - 67
19.	Glutamic Acid	180	H	29 – 95	23 - 136
20.	Taurine	89		31 – 73	26 - 100
Sulfur Amino Acids (Glutathione - related)					
21.	Methionine	14		16 – 26	14 - 30
22.	Taurine	89		31 – 73	26 - 100
Urea Cycle and Ammonia Detoxification					
23.	Arginine	69		48 – 96	37 - 114
24.	Citrulline	48	H	20 – 38	15 - 44
25.	Ornithine	45		32 – 81	23 - 109
26.	Glutamine	339		397 – 585	338 - 630
27.	Asparagine	25	L	30 – 49	26 - 56
28.	Aspartic Acid	13.1	H	4.8 – 9.7	4.2 - 12.5
Ratios					
29.	Phenylalanine/Tyrosine	1.40			<= 1.44
30.	Glutamic Acid/Glutamine	0.53	H	0.06 – 0.21	0.05 - 0.35
31.	Tryptophan/LNAA*	0.079	L	0.100 – 0.106	0.095 - 0.106

*Large neutral amino acids (Leu+Ile+Val+Phe+Tyr)

NR = Not Reportable

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Allergix® IgG4 Food Antibodies Profile - Serum

Methodology: ELISA

IgG4 results:

	Results ng/mL	Response	Class
Dairy / Meat / Poultry			
Beef	<10		
Casein	<10		
Chicken	60	Mild	1+
Egg, White	<10		
Egg, Yolk	<10		
Lamb	160	Mod	3+
Milk	120	Mild	2+
Pork	160	Mod	3+
Turkey	48	Mild	1+
Fish / Shellfish			
Clam	<10		
Codfish	39		
Crab	20		
Flounder	120	Mild	2+
Halibut	36		
Lobster	48	Mild	1+
Mackerel	64	Mild	1+
Oyster	16		
Salmon	<10		
Shrimp	8		
Trout	8		
Tuna	40		
Fruits			
Apple	<10		
Apricot	<10		
Banana	40		
Blueberry	<10		
Cantaloupe	<10		
Cranberry	40		
Grape	40		
Grapefruit	80	Mild	1+
Honeydew	40		
Lemon	40		
Orange	16		
Peach	56	Mild	1+
Pear	72	Mild	1+
Pineapple	120	Mild	2+
Strawberry	8		
Watermelon	24		

Class Definitions	
Class	**Cutoffs**
Negative	0-40
Class 1	41 - 80
Class 2	81 - 150
Class 3	151 - 500
Class 4	501 - 900
Class 5	900+

	Results ng/mL	Response	Class
Grains			
Barley	40		
Corn	140	Mild	2+
Oat	16		
Rice	<10		
Rye	<10		
Wheat	48	Mild	1+
Legumes			
Bean, String	8		
Lentil	40		
Lima Bean	48	Mild	1+
Navy Bean	720	Mod	4+
Pea, Green	48	Mild	1+
Peanut	64	Mild	1+
Pinto Bean	128	Mild	2+
Soybean	8		
Miscellaneous			
Aspergillus	200	Mod	3+
Black Pepper	<10		
Chocolate	<10		
Cinnamon	<10		
Coffee	100	Mild	2+
Ginger	100	Mild	2+
Malt	72	Mild	1+
Tea	8		
Vanilla	32		
Yeast, Baker's	16		
Yeast, Brewer's	24		
Nuts / Seeds			
Almond	<10		
Cashew	80	Mild	1+
Coconut	<10		
Pecan	100	Mild	2+
Pistachio	144	Mild	2+
Sesame	120	Mild	2+
Sunflower	8		
Walnut	40		

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Allergix® IgG4 Food Antibodies Profile - Serum

Methodology: ELISA

IgG4 results:

	Results ng/mL	Response	Class
Vegetables			
Asparagus	<10		
Avocado	8		
Broccoli	40		
Cabbage	<10		
Carrot	<10		
Cauliflower	400	Mod	3+
Celery	200	Mod	3+
Cucumber	40		
Garlic	<10		
Lettuce	48	Mild	1+
Mushroom	100	Mild	2+
Mustard Seed	140	Mild	2+
Olive	16		
Onion	16		
Pepper, Green	104	Mild	2+
Potato	100	Mild	2+
Spinach	8		
Sweet Potato	8		
Tomato	8		
Zucchini	40		

Class Definitions

Class	Cutoffs
Negative	0-40
Class 1	41 - 80
Class 2	81 - 150
Class 3	151 - 500
Class 4	501 - 900
Class 5	900+

This test has been developed and its performance characteristics determined by Genova Diagnostics, Inc. It has not been cleared by the U.S. Food and Drug Administration.

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3400 TRIAD™ Profile - Blood and Urine

TRIAD Profile Analyte Pattern Analysis

A multi-analyte report can provide greater insight about health risks and special nutrient needs. Patterns of abnormalities can reinforce the degree of significance indicated by a single measurement. Analytes from the various profiles in the TRIAD report are combined below into categories associated with clinical/metabolic conditions.

The categories included cover the most common areas of concern relevant to these profiles. Above each thermometer are listed the analytes used to calculate the degree of significance. An ↑ or ↓ appears when the patient result is outside the fourth quintile of the population.

The thermometer advances to the right as the number and severity of relevant abnormalities increases. The longer the filled bar, the greater the degree of significance or likelihood that a health threat may exist in that category. The preceding laboratory reports provide the detail upon which these thermometers are based.

Fatigue (Mitochondrial Impairment)

Isoleucine ↓	Leucine ↓	Phenylalanine ↓	Adipate ↑
Suberate	α-Ketoglutarate	Succinate ↑	Malate
Xanthurenate	Methylmalonate	Formiminoglutamate	
IgG* ↑			

Low Significance High Significance

Mental/Emotional

Tryptophan ↓	Tyrosine ↓	Xanthurenate	Methylmalonate
Formiminoglutamate	Quinolinate	Vanilmandelate	5-Hydroxyindoleacetate ↑
Homovanillate			
IgG* ↑			

Low Significance High Significance

Intestinal Hyperpermeability (Leaky Gut)

Positive IgG scores of 1+ or higher were found for 34 foods.

Low Significance High Significance

Digestive Insufficiency

Histidine	Isoleucine ↓	Leucine ↓	Lysine ↓
Methionine ↓	Threonine	Valine	Methylmalonate
Pyruvate	α-Keto-β-Methylvalerate	Glutamine ↓	
IgG* ↑			

Low Significance High Significance

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3400 TRIAD™ Profile - Blood and Urine

Toxic Exposure

2-Methylhippurate ↑	Glucarate ↑	Sulfate	Orotate
Citrate	Cis-Aconitate	Isocitrate	Quinolinate
IgG* ↑			

Low Significance High Significance

Mitochondrial Functional Impairment

Adipate ↑	Suberate	Ethylmalonate ↑	Pyruvate
L-Lactate ↑	β-Hydroxybutyrate ↑	Succinate ↑	Fumarate
Malate	Hydroxymethylglutarate		

Low Significance High Significance

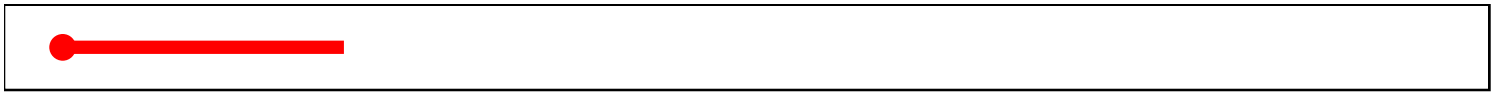
Amino Acid Insufficiency

Arginine	Histidine	Isoleucine ↓	Leucine ↓
Lysine ↓	Methionine ↓	Phenylalanine ↓	Threonine
Tryptophan ↓	Valine	a-Ketoglutarate	Succinate ↑
Sulfate			

Low Significance High Significance

Gut Dysbiosis

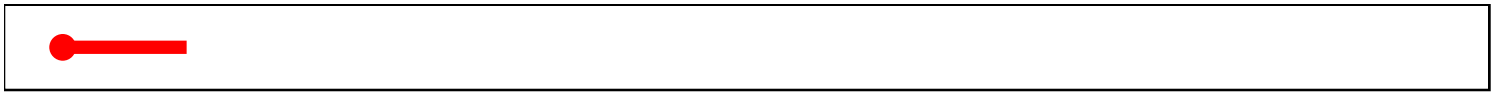
D-Arabinitol ↑	Phenylacetate ↑	Phenylpropionate	p-Hydroxyphenylacetate
Indican ↑	Tricarballylate	D-Lactate	3,4-DHPP*



Low Significance High Significance

Detoxification Capacity

Methionine ↓	Glycine	Taurine	Sulfate
Pyroglutamate ↑	α-Hydroxybutyrate		



Low Significance High Significance

*3,4-DHPP = 3,4-Dihydroxyphenylpropionate

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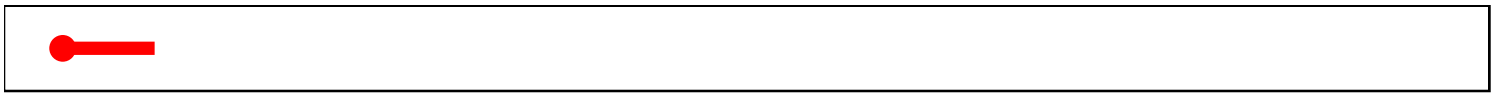
3400 TRIAD™ Profile - Blood and Urine

Methylation

Methionine ↓ Xanthurenate Methylmalonate Formiminoglutamate



Low Significance High Significance

*Thermometers are affected when more than nine foods cause reactions of +1 or higher.

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3400 TRIAD™ Profile - Blood and Urine

Additional Considerations

This page is provided as a starting point that may guide decisions about medical treatment based on the test results. It is derived only from the laboratory results included in this report. Final recommendations should be based on consideration of the patient's medical history and current clinical condition.

Nutrient	Nutrient Need	Clinician Recommendations
Vitamin C	Low: 250-500 mg	
Vitamin E (mixed tocopherols)	Low: 50-100 IU	
Vitamin B-1 (Thiamin)	Optional: 0-10 mg	
Vitamin B-2 (Riboflavin)	Low: 10-25 mg	
Vitamin B-3 (Niacin)	Optional: 0-10 mg	
Vitamin B-5 (Pantothenic Acid)	Optional: 0-10 mg	
Vitamin B-6 (Pyridoxine)	Optional: 0-25 mg	
Magnesium	Moderate: 200-300 mg	
Carnitine	Low: 100-250 mg	
Coenzyme Q10	Moderate: 60-100 mg	
Lipoic Acid	Optional: 0-100 mg	
N-Acetylcysteine	Optional: 0-200 mg	
Need for other antioxidants	Optional	
L-Glutamine	Low: 500-1000 mg	
L-Isoleucine	Moderate: 500-750 mg	
L-Leucine	Moderate: 1000-2000 mg	
L-Lysine	Low: 500-1000 mg	
L-Methionine	Low: 250-500 mg	
L-Phenylalanine	Low: 250-500 mg	
L-Tryptophan	Moderate: 500-1000 mg	
L-Tyrosine	Low: 250-500 mg	

Various conditionally essential nurients and other potentially beneficial interventions appear in this section only if relevant abnormalities are present.

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TRIAD^{SM} Profile - Clinician

Blood Specimen Collection Instructions

This specimen collection kit can be used for the following test(s):

***0400 TRIAD Profile** - Blood/Urine

***0088 Neopterin/Biopterin Profile** - Urine

***0030 UMFA Profile** - Serum

Please Note: The TRIAD Profile requires the patient to collect urine at home. This should be done prior to the blood collection. **All specimens, urine and blood, must be shipped together.** Patient must be fasting for blood draw. (Urine collection instructions are explained in the TRIAD Profile - Patient Specimen Collection Instructions.)

IMPORTANT:

All patient specimens require two unique identifiers
patient's name and date of birth, as well as ***date of collection***.
Patient's first and last name, date of birth, gender, and **date of collection** must be recorded on the **Test Requisition Form** as well as on all tube(s) and/or vial(s), using a permanent marker, or the test may not be processed.

Specimen

Serum, 3 ml, refrigerated

Plasma, 2.5-3 ml, frozen

Overnight Urine, 12 ml, frozen

Collection Materials

- Red/gray top serum separator tube
- Lavender top EDTA tube
- Red top amber transfer tube
- Lavender top clear transfer tube
- 2 disposable pipettes

Shipping Materials

- Plastic shell tube tray
- Absorbent pad
- 3 ice packets
- Test Requisition Form
- Personal Health Assessment Form
- Biohazard bag with side pocket
- Specimen collection kit box
- FedEx® Clinical Lab Pak and Billable Stamp

International shipping may vary, please see shipping instructions for more details.

Please read all instructions carefully before you begin.

Patient Preparation

- It is best to **ship the specimen within 48 hours of collection**. Please refer to the enclosed shipping instructions before you collect to determine the days that the specimen can be shippped.
- Please check to make sure the patient has fasted prior to drawing blood.
- The use of immunosuppressive drugs, like cortisone, can give false negative test results. The use of such drugs should be discontinued for 60 days before testing to allow antibody reactions to be seen.

Blood Collection

1. **Write** patient's **first and last name, date of birth**, **gender**, and **date of collection** on the Test Requisition Form (located in the pouch on top of the Specimen Collection Kit Box), as well as on all tube(s) and/or vial(s), using a permanent marker.
   - **IMPORTANT**: To ensure accurate test results you **MUST** provide the requested information.
2. **Freeze** the ice packets.
3. **Red/gray top serum separator tubes and red top amber transfer tube**
   - **Draw** the red/gray top serum separator tube.
   - **Place** upright in a rack at room temperature for 20 to 30 minutes to clot blood.
   - **Centrifuge** the red/gray top serum separator tubes for 15 minutes. The serum must be free of hemolysis or red blood cells.
   - **Pipette** 3 ml serum, using a fresh disposable pipette, from the red/gray top serum separator tube into the red top amber transfer tube. **Cap** tightly.
   - **Refrigerate** the red top amber transfer tube.
4. **Lavender top EDTA tube and lavender top clear transfer tube**
   - **Draw** the lavender top EDTA tube completely.
   - **Invert** the lavender top EDTA tube 10 times to mix the EDTA with the blood.
   - **Centrifuge** immediately for 15 minutes. The plasma must be free of hemolysis or red blood cells.
   - **Remove** the lavender top EDTA tube after centrifuging; **DO NOT INVERT TUBE**.
   - **Pipette** plasma, using a fresh disposable pipette, 2.5-3 ml into the lavender top clear transfer tube.
   - **Freeze** the lavender top transfer tube.

Specimen Preparation

5. **Place** the frozen transfer tube, refrigerated red top amber transfer tube, and frozen urine collection into the slots or the ends of the plastic shell tube tray (an exact fit is not necessary). **Place** absorbent pad over tubes. **Place** frozen ice packets at each end of tubes in tray. **Snap** the tray closed.
6. **Place** the tray into the biohazard bag.
7. **Staple** payment to the bottom right-hand corner of the completed Test Requisition Form and **complete** the Personal Health Assessment Form; **Fold and Place** them in the side pocket of the biohazard bag.
8. **Seal** the biohazard bag; **Place** it into the specimen collection kit box and close the box.

Checklist (Prior to Shipping)

Includes Blood & Urine Specimens

1. Tubes

- ❑ Patient's first and last name, date of birth, gender and date of collection are written on all tubes and vials
- ❑ All the tubes and vials are capped tightly

2. Frozen

- ❑ Clear cap plastic vial (urine)
- ❑ Lavender top clear transfer tube
- ❑ 3 ice packets

3. Refrigerate

- ❑ Red top amber transfer tube

5. Test Requisition Form with Payment

- ❑ Test Requisition Form is complete
- ❑ Personal Health Assessment Form is complete
- ❑ Payment is included

*Not Available in New York

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TRIAD^{SM} Profile - Patient

Urine Specimen Collection Instructions

This specimen collection kit can be used for the following test(s):

***0400 TRIAD Profile** - Blood/Urine

***0088 Neopterin/Biopterin Profile** - Urine

***0030 UMFA Profile** - Serum

Please Note: The TRIAD Profile requires the patient to collect urine at home. This should be done prior to the blood collection. **All specimens, urine and blood, must be shipped together.** Patient must be fasting for blood draw. (Blood collection instructions are explained in the TRIAD Profile - Clinician Specimen Collection Instructions.)

IMPORTANT:

All patient specimens require two unique identifiers
patient's name and date of birth, as well as ***date of collection***.
Patient's first and last name, date of birth, gender, and **date of collection** must be recorded on the **Test Requisition Form** as well as on all tube(s) and/or vial(s), using a permanent marker, or the test may not be processed.

Specimen

Serum, 3 ml, refrigerated

Plasma, 2.5-3 ml, frozen

Overnight Urine, 12 ml, frozen

Collection Materials

- Clean collection container (NOT included in this kit)
- Clear cap plastic vial with thymol preservative
- Disposable pipettes

Shipping Materials

- Plastic shell tube tray
- Absorbent pad
- 3 ice packets
- Test Requisition Form
- Personal Health Assessment Form
- Biohazard bag with side pocket
- Specimen collection kit box
- FedEx® Clinical Lab Pak and Billable Stamp

International shipping may vary, please see shipping instructions for more details.

Please read all instructions carefully before you begin.

Patient Preparation

- It is best to **ship the specimen within 48 hours of collection**. Please refer to the enclosed shipping instructions before you collect to determine the days that the specimen can ship.
- It is not necessary to discontinue nutritional supplements prior to this specimen collection. Abnormalities that may be found will reveal special needs that have not been met by recent dietary and supplemental intake.
- **Decrease** fluid intake to avoid excessive dilution of the urine.
  - For adults, restrict intake to three 8 oz. glasses or less for 24 hours
  - Make sure that no more than 8 oz. of the fluid is consumed after 8:00 the evening prior to urine collection.
- **Do Not collect** urine during menstruation.
- **Please check** to make sure the patient has fasted prior to drawing blood
- The use of immunosuppressive drugs, like cortisone, can give false negative test results. Discontinue the use of such drugs for 60 days before testing to allow antibody reactions to be seen.
- Vial contains preservative - **Do Not Rinse**.

Urine Collection

1. **Write** patient's **first and last name, date of birth**, **gender,** and **date of collection** on the Test Requisition Form (located in the pouch on top of the Specimen Collection Kit Box), as well as on all tube(s) and/or vial(s), using a permanent marker.
   - **IMPORTANT**: To ensure accurate test results you **MUST** provide the requested information.
2. **Empty** bladder before going to bed at night. **DO NOT** collect this urine.
3. **Collect** urine (if any) during the night and first morning urine into a clean container.
4. **Pipette** urine, using a fresh disposable pipette, into the clear cap plastic vial to the 12 ml mark (**DO NOT OVERFILL**). **Screw** the cap on tightly.
5. **Dispose** of the remaining urine.
6. **Freeze** the clear cap plastic vial and the ice packet.

Blood Collection Preparation

7. **Schedule** the blood drawing appointment on a **Monday, Tuesday, Wednesday,** or **Thursday** morning. Inform the doctor or lab that a centrifuge is needed to prepare the blood specimens. The kit contains all of the tubes required for collection.
8. **Do not have anything to eat or drink** (other than water) after 9:00, the night before your blood is drawn.
9. **Staple** payment to the bottom right-hand corner of the completed Test Requisition Form and **complete** the Personal Health Assessment Form; **Fold and Place** them in the side pocket of the biohazard bag.
10. **Take** frozen urine specimens (placed in biohazard bag with the frozen ice packet) and ALL collection and shipping materials with you to the blood drawing site. This will allow the blood and urine specimens to be shipped together to the lab.

Checklist (Prior to Shipping)

Includes Blood & Urine Specimens

1. Tubes

- ❑ Patient's first and last name, date of birth, gender and date of collection are written on all tubes and vials
- ❑ All the tubes and vials are capped tightly

2. Frozen

- ❑ Clear cap plastic vial (urine)
- ❑ Lavender top clear transfer tube
- ❑ 3 ice packets

3. Refrigerate

- ❑ Red top amber transfer tube

5. Test Requisition Form with Payment

- ❑ Test Requisition Form is complete
- ❑ Personal Health Assessment Form is complete
- ❑ Payment is included

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