



3425 Corporate Way Duluth, GA 30096



Patient: SAMPLE PATIENT DOB: Sex: MRN:

3401 TRIAD[™] Bloodspot Profile - Blood and Urine

Methodology: LC/Tandem Mass Spectrometry, Colorimetric

Sum	Summary of Abnormal Findings						
Biomarkers	Findings	Metabolic Pathway					
Fatty Acid Metabolism							
Adipate	Borderline High	Fatty acid oxidation					
Ethylmalonate	Borderline High	Fatty acid oxidation					
Carbohydrate Metabolism							
L-Lactate	н	Glycolysis					
b-Hydroxybutyrate	Borderline High	Ketone production					
Energy Production Markers							
Citrate	Borderline High	Citric acid cycle					
Cis-Aconitate	Н	Citric acid cycle					
Isocitrate	Н	Citric acid cycle					
Succinate	Borderline High	Citric acid cycle					
Malate	Н	Citric acid cycle					
Hydroxymethylglutarate	Н	HMG-CoA pathway					
B-Complex Vitamin Markers	No Abnormality Found						
Methylation Cofactor Markers	No Abnormality Found						
Neurotransmitter Metabolism Markers							
Homovanillate	Н	Dopamine metabolism					
Oxidative Damage and Antioxidant Markers							
p-Hydroxyphenyllactate	Borderline High	Gut bacterial metabolism					
Detoxification Indicators							
Pyroglutamate	Borderline High	Glutathione pathway					

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Sun	mary of Abnormal Findings					
Biomarkers	Findings	Metabolic Pathway				
Sulfate	Borderline Low	Transsulfuration pathway				
Bacterial - General						
p-Hydroxybenzoate	Н	Gut bacterial metabolism				
p-Hydroxyphenylacetate	Borderline High	Gut bacterial metabolism				
Indican	Borderline High	Gut bacterial metabolism				
L. acidophilus/General Bacteria						
D-Lactate	Borderline High	Bacterial or human metabolism byproduct				
Clostridial Species	No Abnormality Found					
Yeast/Fungal						
D-Arabinitol	Н	Yeast product				

Patient: Sample Patient

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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

Desults			QUINTILE DISTRIBUTION				05% Deference		
	mcg/r	Results ng creatinin	е	1st	2nd	3rd	4th	5th	95% Reference Range
	- -	5	N	utriont M	arkore	1	1		l
Fatty (Carn	/ Acid Metabolism itine & B2)				arkers				
1.	Adipate	8.3			ŀ ł	ł	6. 	2	<= 11.1
2	, Cub curata	4.6				I	2.	1	- 4 6
Ζ.	Suberate	1.6					3.	6	<= 4.6
3.	Ethylmalonate	6.1						─	<= 6.3
Carb (B1, E	oohydrate Metabolism 33, Cr, Lipoic Acid, CoQ10)						3	q	
4.	Pyruvate	1.3		H		ł			<= 6.4
5.	L-Lactate	38.2	н				8. 	5	0.6 - 16.4
•				0			2.	1	
6.	β-Hydroxybutyrate	3.9		h			1		<= 9.9
Ener (B co	gy Production (Citric Acid Cycle) mp., CoQ10, Amino Acids, Mg)						60)1	
7.	Citrate	866			F	ł			56 - 987
8.	Cis-Aconitate	90	н					•	18 - 78
Q	Isocitrate	147	н			H	98	3	30 - 1/3
0.	ISOCILIACE	147					19	9.0	00 - 140
10.	α-Ketoglutarate	16.1		H			+ 11	.6	<= 35.0
11.	Succinate	14.5			-		-	♦	<= 20.9
12.	Fumarate	<dl< td=""><td></td><td>H</td><td></td><td></td><td>0. <mark> </mark></td><td>59 </td><td><= 1.35</td></dl<>		H			0. <mark> </mark>	59 	<= 1.35
10	Malata	4 5				I	1.	4	
13.	Malate	4.5	П				3.	6	<= 3.1
14.	Hydroxymethylglutarate	6.1	н				H		<= 5.1
B-Co (B1, E	omplex Vitamin Markers 32, B3, B5, B6, Biotin)						0	25	
15.	α-Ketoisovalerate	<dl< td=""><td></td><td>H</td><td></td><td></td><td></td><td></td><td><= 0.49</td></dl<>		H					<= 0.49
16	n-Ketoisocaproate	<di< td=""><td></td><td>•</td><td></td><td></td><td>0.</td><td>34</td><td><= 0.52</td></di<>		•			0.	34	<= 0.52
							0.	38	0.02
17.	α-Keto-β-Methylvalerate	0.17		u			-▼ 0.	34	<= 1.10
18.	Xanthurenate	<dl< td=""><td></td><td>•</td><td>F - H</td><td>ł</td><td></td><td>I</td><td><= 0.46</td></dl<>		•	F - H	ł		I	<= 0.46
19.	β-Hydroxyisovalerate	2.1		⊢♦		ł	/. 	l	<= 11.5

Patient: Sample Patient

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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	1st	QUINTILE 2nd	DISTRIBUTION 3rd 4th	5th	95% Reference Range
		l l	Nutrient Ma	arkers			
Meth (B12, 1	ylation Cofactor Markers ^{Folate)}					1.7	
20.	Methylmalonate	1.4			· · · ·	-	<= 2.3
21.	Formiminoglutamate	0.2	 ♦ 			1.2	<= 2.2

Cell Regulation Markers Neurotransmitter Metabolism Markers (Tyrosine, Tryptophan, B6, Antioxidants) 1.6 3.9 2.6 22. Vanilmandelate 1.2 - 5.3 1.9 5.7 23. Homovanillate 9.2 н 1.4 - 7.6 2.1 5.6 24. 5-Hydroxyindoleacetate 2.9 1.6 - 9.8 1.0 25. **Kynurenate** 0.6 <= 1.5 4.0 26. Quinolinate 3.5 <= 5.8 8.0 27. Picolinate 4.5 2.8 - 13.5 **Oxidative Damage and Antioxidant Markers** (Vitamin C and Other Antioxidants) 0.39 28. 0.65 <= 0.66 p-Hydroxyphenyllactate 5.3 29. 8-Hydroxy-2-deoxyguanosine 4.5 <= 7.6 (Units for 8-hydroxy-2-dexoyguanosine are ng/mg creatinine)

Toxicants and Detoxification

Deto:	xification Indicators						
(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ine, ing, and and ing,				0.	.084	
30.	2-Methylhippurate	0.081		+ +	 + +	ll	<= 0.192
					0.	.69	
31.	Orotate	0.28	◆	+ +	 +	 	<= 1.01
					6.	.3	
32.	Glucarate	3.4		+ +	ł	 	<= 10.7
					0.	.3	
33.	α-Hydroxybutyrate	<dl< td=""><td>11</td><td></td><td></td><td>lil</td><td><= 0.9</td></dl<>	11			l i l	<= 0.9
					5	9	
34.	Pyroglutamate	86		+ +	 +	├─── ◆──1	28 - 88
			958			2,347	
35.	Sulfate	877	 	 	ł	l I	690 - 2,988

Patient: Sample Patient

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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

		Doculto							05% Deference
		mcg/mg creatinine	е	1st	2nd	3rd	4th	5th	95% Reference Range
		Compounds	of	Bacteria	l or Yeas	t/Funga	l Origin		
Bac	terial - General						0.6	3	
36.	Benzoate	<dl< td=""><td></td><td>H</td><td></td><td></td><td>-11</td><td></td><td><= 9.3</td></dl<>		H			-11		<= 9.3
37.	Hippurate	353		ŀ	ł	ł	54	8	<= 1,070
38.	Phenylacetate	0.07			1	ł	0. ²	1 	<= 0.18
39.	Phenylpropionate	<dl< td=""><td></td><td>H</td><td></td><td></td><td></td><td></td><td><= 0.06</td></dl<>		H					<= 0.06
40.	p-Hydroxybenzoate	3.6	н	ļ	ł	ł	1.1 	•	<= 1.8
41.	p-Hydroxyphenylacetate	31			+	ł	19	+	<= 34
42.	Indican	90			+	ł	64	•	<= 90
43.	Tricarballylate	0.47		ŀ	ł	+ +	0.7		<= 1.41
L. a	cidophilus / General Bacteria	I					2 (h	
44.	D-Lactate	3.5		ļ	+	 		, 	<= 4.1
Clos	stridial Species								
45.	3,4-Dihydroxyphenylpropiona	te <dl< td=""><td></td><td>╟────</td><td></td><td></td><td></td><td></td><td><= 0.05</td></dl<>		╟────					<= 0.05
Yea	st / Fungal						36		
46.	D-Arabinitol	80	н		ł	ł		•	<= 73
	Creatinine = 120mg/dL								

<DL = less than detection limit

>UL = greater than upper linearity limit



Bloodspot Amino Acids 20 Profile - Blood

Methodology: High Performance Liquid Chromotography

Ranges: Ages 13 and over.

		Results µmol/L		1st	QUIN 2nd	ITILE DISTRIB	UTION 4th	5th	95% Reference Range
			Esse	ntial Am	ino Aci	ds			
Limit	ing Amino Acids			02				183	
1.	Lysine	91			1	1			63 - 220
				12				28	
2.	Methionine	14			♦	1			10 - 33
3.	Tryptophan	33		28	+ •	+		45	24 - 52
Bran	ched Chain Amino Acids			35				77	
4.	Isoleucine	37		→	1	1			28 - 96
				71				139	
5.	Leucine	73		400	1				59 - 162
6.	Valine	128		126	+			229	105 - 266
Othe	r Essential Amino Acids								
-		40		43				72	07 00
1.	Phenylalanine	42		21	1	1	1	04	37 - 86
8.	Histidine	50			+	+ ♦	I I	04	22 - 99
				67				143	
9.	Threonine	53	L	•	1	1			54 - 169
Cond	litionally Essential Amino Acids			28				71	
10.	Arginine	41		20	+ +	+			17 - 91
				145	-			245	
11.	Taurine	190			+	+	1		124 - 282
12	Glycine	470		243	1	-		449	207 - 559
				95				219	20. 000
13.	Serine	99		├	1	1			79 - 310



Bloodspot Amino Acids 20 Profile - Blood

Methodology: High Performance Liquid Chromotography

Ranges: Ages 13 and over.

		Results µmol/L		1st	QUIN 2nd	TILE DISTRIB 3rd	UTION 4th	5th	95% Reference Range
			Fund	ctional C	ategorie	es			
Vase	cular Function			28				71	
14.	Arginine	41		445	◆		i I		17 - 91
15.	Taurine	190		145			i ł	245	124 - 282
Neu	rotransmitters and Precursors			40				70	
16.	Phenylalanine	42		43	1		 	12	37 - 86
17.	Tyrosine	49		44	! ♦	-		85	36 - 99
40	T. ()			28			ſ	45	04 50
18.	Iryptopnan	33		112				207	24 - 52
19.	Glutamic Acid	206		145	1		F F	245	97 - 258
20.	Taurine	190				 	i ł		124 - 282
Sulf	ur Amino Acids (Glutathione - rela	ted)		12				28	
21.	Methionine	14					 		10 - 33
22.	Taurine	190		145	ł	├	⊦	245	124 - 282
Urea	Cycle and Ammonia Detoxification	on		00				74	
23.	Arginine	41		28	 ◆		i i	/1	17 - 91
24	Citrulline	21		19	1			41	16 - 51
<u> </u>		21		68				158	50 010
25.	Ornithine	40	L	307				520	50 - 210
26.	Glutamine	412		10	1		├─── ╂	77	209 - 573
27.	Asparagine	47		49	1		⊦ ł		42 - 88
28.	Aspartic Acid	107		44			 ♦ 	180	26 - 233
Ratio) DS								
29.	Phenylalanine/Tyrosine	0.86					 		<= 1.19
30	Clutamic Acid/Clutamina	0 50		0.26	1		I	0.51	0.22 0.88
50.		0.50		0.061				0.093	0.22 - 0.00
31.	Tryptophan/LNAA*	0.100		F			ł	+ 1	0.050 - 0.105

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

IgG4 results:					
		Foods to Avoid			
Negative	Mild +1 and +2	Moderate +3 and +4	Severe +5		
Almond	Egg, Whole				
Aspergillus					
Beef					
Cantloupe					
Cashew					
Chicken					
Corn					
Crab					
Garlic					
Lobster					
Milk					
Mustard					
Oat					
Orange					
Pea, Green					
Peanut					
Pinto Bean					
Pork					
Rice					
Salmon					
Shrimp					
Soybean					
Strawberry					
Sunflower					
Tomato					
Tuna					
Turkey					
Walnut					
Wheat					

Commentary

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.

3401 TRIAD[™] Bloodspot Profile - Blood and Urine

Triad Profile	Analyta	Pattern	Analysis
Inau Frome	Allalyte	rallem	Allalysis

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.

ID:

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 \uparrow or \downarrow 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 (I	Mitoch	ondrial Impairment)			
Isoleucine	Leucine		Phenylalanine	¥	Adipate	1
Suberate	α-Ketoglutarate		Succinate	1	Malate	1
Xanthurenate	Methylmalonate		Formiminoglutamate			
•						
Low Significance					High	Significance
		Mental	/Emotional			
Tryptophan	Tyrosine		Xanthurenate		Methylmalonate	
Formiminoglutamate	Quinolinate		Vanilmandelate		5-Hydroxyindole	acetate
Homovanillate	↑					
•						
Low Significance					High	Significance
,				43	, , , , , , , , , , , , , , , , , , ,	-
Desitive InC secres of 1	Intestinal Hy	yperpe	rmeability (Leaky Gu	t)		
Positive IgG scores of I	I+ or higher were found for 1 to	bous.				
Low Significance					High	Significance
	Dia	lestive	Insufficiency			
Histidine	Isoleucine		Leucine		Lysine	Ļ
Methionine	Threonine	Ļ	Valine		Methylmalonate	
Pyruvate	α-Keto-β-Methylvalera	ate	Glutamine			
• 						
Low Significance					High	Significance
Low Organication					r ngi	- orgrimodilice
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Patient: Sample Pa	atient
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		Τοχί	c Exposure			
2-Methylhippurate		Glucarate	Sulfate	Ļ	Orotate	
Citrate	1	Cis-Aconitate	Isocitrate	1	Quinolinate	
•						
Low Significance					Hig	h Significance
		Mitochondrial I	-unctional Impairmer	nt		
Adipate	↑	Suberate	Ethylmalonate	1	Pyruvate	
L-Lactate	1	β-Hydroxybutyrate	Succinate	1	Fumarate	
Valate	1	Hydroxymethylglutarate ↑				
Low Significance					Hig	h Significance
A · ·		Amino A	cid Insufficiency		. ·	
Arginine		Histidine	Isoleucine		Leucine	
Lysine	¥	Methionine	Phenylalanine	+	Inreonine	
l ryptopnan		Valine	a-Ketoglutarate		Succinate	1
	¥					
Low Significance					Hig	h Significance
		Gut	Dysbiosis			
D-Arabinitol	1	Phenylacetate	Phenylpropionate		p-Hydroxyphen	vlacetate
ndican	1	Tricarballylate	D-Lactate	1	3,4-DHPP*	
•						
Low Significance					Hig	h Significance
		Detoxific	cation Capacity			
Vethionine		Glycine	Taurine		Sulfate	1
^{>} yroglutamate	1	α-Hydroxybutyrate				

3401 TRIAD[™] Bloodspot Profile - Blood and Urine

Methylation						
Xanthurenate	Methylmalonate	Formiminoglutamate				
•						
Low Significance			High Significance			

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

3401 TRIAD[™] Bloodspot 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	Optional: 0-1000 mg	
Vitamin E (mixed tocopherols)	Optional: 0-100 IU	
Vitamin B-1 (Thiamin)	Low: 10-25 mg	
Vitamin B-2 (Riboflavin)	Low: 10-25 mg	
Vitamin B-3 (Niacin)	Low: 10-50 mg	
Vitamin B-5 (Pantothenic Acid)	Low: 10-25 mg	
Magnesium	Optional: 0-200 mg	
Carnitine	Optional: 0-500 mg	
Coenzyme Q10	Moderate: 60-100 mg	
Lipoic Acid	Low: 50-100 mg	
N-Acetylcysteine	Optional: 0-200 mg	
L-Lysine	Low: 500-1000 mg	
L-Phenylalanine	Low: 250-500 mg	
L-Threonine	Moderate: 500-1000 mg	

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

TRIADSM BLOODSPOT PROFILE

BLOOD SPOT SPECIMEN COLLECTION INSTRUCTIONS

Step I

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

0410 TRIAD BLOODSPOT PROFILE - Urine and Blood Spot

PLEASE NOTE:

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, and date of collection must be recorded on the Test Requisition Form as well as on the collection card, using an ink pen, or the test may not be processed.

Specimen

Blood spot, non-fasting

COLLECTION MATERIALS

- IgG Foods absorbent collection card (on specimen collection insert page)
- 2 Disposable lancets
- Yellow rubber band
- 2 Sterile alcohol prep pads
- Adhesive bandage
- Absorbent pad

Shipping Materials*

- Test Requisition Form
- Resealable plastic bag
- Specimen collection kit box
- FedEx® Express Clinical Lab Pak and Billable Stamp

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





Call 800.221.4640 or visit our website at www.gdx.com

Please read all instructions carefully before beginning.

PATIENT PREPARATION

- It is best to **ship your specimen within 48 hours of collection**. Please refer to the enclosed shipping instructions **before** you collect to determine what days you can ship your specimen.
- It is not necessary for the patient to fast
- It is not necessary to discontinue nutritional supplements prior to this test. Abnormalities that may be found will reveal special needs that have not been met by recent dietary and supplemental intake.
- The use of immunosuppressive drugs, such as cortisone, can give false negative results. Discontinue the use of such drugs for 60 days before testing to allow antibody reactions to be seen.

BLOOD SPOT COLLECTION

- 1. WRITE patient's first and last name, date of birth, and date of collection on the Test Requisition Form (located in the pouch on top of the Specimen Collection Kit Box), as well as where indicated on the IgG Foods absorbent collection card with the four circles, using an ink pen.
- **2. COMPLETE** the Test Requisition Form. Fill in "Date Specimen Collected" on the Test Requisition Form under section #4. Fold and place the form inside the specimen collection kit box with payment.



- **REMOVE** the clear cover from the lancet. One end of the lancet has a small hole in the center; this will be the end that you push against your finger to engage the needle.
- **WARM** your hands under warm water for a few minutes. Dry hands, then select your middle finger. Gently massage the entire length of the finger to increase the temperature and improve circulation.



- **5. CLEAN** the tip of your finger with the alcohol pad.
- **6. HANG** your arm down and gently shake your fingers a few seconds to increase blood pools in the finger.
- **7. HOLD** your hand lower than heart level; again gently massage the lower portion of the finger. Firmly grasp the lower portion of the finger for a few seconds to restrict return circulation.



- **CHOOSE** a site on the middle fingertip. Push the red tip end of the lancet firmly against your fingertip to depress the tip and release the needle. The needle will immediately retract safely after depression.
- **DISPOSE** of the lancet in a suitable container (out of the reach of children and pets).



10. USING your thumb, **GENTLY MASSAGE** entire length of the pricked finger to form repeated blood drops. As each drop forms, touch the **tip of the drop** to a circle on the absorbent collection card. Do not smear.

DO NOT TOUCH FINGERTIP TO THE CARD.



- **11. REPEAT** until blood has soaked to the border of the circle on the absorbent collection card. Continue this procedure for all **FOUR** circles. Check the back of the card. Compare all blood saturated circles to the illustration shown as "YES" (see insert). Both the front and back of the card should look the same as the "YES" illustration.
- 12. If you are unable to get sufficient blood from the first collection, RETURN to STEP 3 using a different finger. To increase blood pools in the finger, the yellow rubber band may be used. After you warm your hands under water for a few minutes, WRAP the yellow rubber band twice around your forearm about where you would wear a watch, then PROCEED to STEP 5. When finished, remove the yellow rubber band.
- **13.** If necessary, use the absorbent pad to **DRy** the site on your finger after your collection. Use the enclosed adhesive bandage as needed.
- **14. ALLOW** absorbent collection card to air dry overnight, approximately 24 hours, before placing in the resealable plastic bag for shipping. If the card is not completely dry, your sample may be unusable.
- **15. CONTINUE** to Step 2, the urine specimen collection.

- **Q**. I have used the lancet, but I didn't produce enough blood to fill all 4 circles. What do I do?
- **A**. Simply repeat the procedure using the second lancet we enclosed. Warming hands under warm water for a few minutes can also increase blood supply to the fingertips. Using the rubber band can help keep the blood in the fingertips.
- **Q**. I'm afraid to stick myself. Are there any other options?
- A. No, we must have this tiny amount of blood to perform these tests. Once you try this new lancet, you will be surprised how quick and painless this process is. We have tested dozens of devices to offer you the easiest and most painless method of blood collection. Alternatively, you may want to ask a friend to help you.

SPECIMEN PREPARATION

- **1. ALLOW** absorbent collection card to air dry for approximately 24 hours before placing in the resealable plastic bag for shipping. If it is not completely dry, your sample may be unusable.
- **2. FOLD** the insert page in half, enclosing the dry absorbent collection card. Place inside the resealable plastic bag and seal.
- 3. SEE Step 3 for additional packaging instructions.

TRIADSM BLOODSPOT PROFILE

URINE SPECIMEN COLLECTION INSTRUCTIONS

Step 2

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

0410 TRIAD BLOODSPOT PROFILE - Urine and Blood Spot

Please Note:

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, and date of collection must be recorded on the Test Requisition Form as well as all tube(s) and/or vial(s), using a permanent marker, or the test may not be processed.

Specimen

Overnight Urine, 12 ml, frozen

COLLECTION MATERIALS

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

SHIPPING MATERIALS*

- Absorbent pad
- Ice pack
- Test Requisition Form
- Biohazard bag with side pocket
- Specimen collection kit box
- FedEx® Express Clinical Lab Pak and Billable Stamp

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





Call 800.221.4640 or visit our website at www.gdx.com

Please read all instructions carefully before beginning. PATIENT PREPARATION

- It is best to **ship your specimen within 48 hours of collection**. Please refer to the enclosed shipping instructions **before** you collect to determine what days you can ship your specimen.
- **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 this is consumed after 8:00 PM the evening prior to urine collection
- Do NOT collect urine during menstruation
- Vial contains preservative Do Not Rinse

URINE COLLECTION

- **1. WRITE** patient's first and last name, date of birth, 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 clear cap plastic vial, using a permanent marker.
- 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 remaining urine.
- 6. FREEZE the clear cap plastic vial and ice pack.
- 7. CONTINUE to Step 3, the fasting blood spot specimen collection.

TRIADSM BLOODSPOT PROFILE

BLOOD SPOT SPECIMEN COLLECTION INSTRUCTIONS

Step 3

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

0410 TRIAD BLOODSPOT PROFILE - Urine and Blood Spot

PLEASE NOTE:

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, and date of collection must be recorded on the Test Requisition Form as well as on the collection card, using an ink pen, or the test may not be processed.

SPECIMEN

Blood spot, fasting

COLLECTION MATERIALS

• Amino Acid absorbent collection card (on specimen collection insert page)

- 2 Disposable lancets
- Yellow rubber band
- 2 Sterile alcohol prep pads
- Adhesive bandage
- Absorbent pad

SHIPPING MATERIALS*

- Test Requisition Form
- Resealable plastic bag
- Specimen collection kit box
- FedEx® Express Clinical Lab Pak and Billable Stamp

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





Call 800.221.4640 or visit our website at www.gdx.com

Please read all instructions carefully before beginning.

PATIENT PREPARATION

- It is best to **ship your specimen within 48 hours of collection**. Please refer to the enclosed shipping instructions **before** you collect to determine what days you can ship your specimen.
- Patient must be fasting for 8 hours. Patient may have water.
- It is not necessary to discontinue nutritional supplements prior to this test. Abnormalities that may be found will reveal special needs that have not been met by recent dietary and supplemental intake.

BLOOD SPOT COLLECTION

- 1. WRITE patient's first and last name, date of birth, and date of collection on the Test Requisition Form, as well as where indicated on the amino acid absorbent collection card with the four circles, using an ink pen.
- **2. COMPLETE** the Test Requisition Form. Fill in "Date Specimen Collected" on the Test Requisition Form under section #4. Fold and place the form inside the specimen collection kit box with payment.
- **3. REMOVE** the clear cover from the lancet. One end of the lancet has a small hole in the center; this will be the end that you push against your finger to engage the needle.







- **WARM** your hands under warm water for a few minutes. Dry hands, then select your middle finger. Gently massage the entire length of the finger to increase the temperature and improve circulation.
- **CLEAN** the tip of your finger with the alcohol pad.
- **6. HANG** your arm down and gently shake your fingers a few seconds to increase blood pools in the finger.
- **7. HOLD** your hand lower than heart level; again gently massage the lower portion of the finger. Firmly grasp the lower portion of the finger for a few seconds to restrict return circulation.
- **8. CHOOSE** a site on the middle fingertip. Push the red tip end of the lancet firmly against your fingertip to depress the tip and release the needle. The needle will immediately retract safely after depression.
- **9. DISPOSE** of the lancet in a suitable container (out of the reach of children and pets).



10. USING your thumb, **GENTLY MASSAGE** entire length of the pricked finger to form repeated blood drops. As each drop forms, touch the **tip of the drop** to a circle on the absorbent collection card. Do not smear.

DO NOT TOUCH FINGERTIP TO THE CARD.



- **11. REPEAT** until blood has soaked to the border of the circle on the absorbent collection card. Continue this procedure for all **FOUR** circles. Check the back of the card. Compare all blood saturated circles to the illustration shown as "YES" (see insert). Both the front and back of the card should look the same as the "YES" illustration.
- 12. If you are unable to get sufficient blood from the first collection, RETURN to STEP 3 using a different finger. To increase blood pools in the finger, the yellow rubber band may be used. After you warm your hands under water for a few minutes, WRAP the yellow rubber band twice around your forearm about where you would wear a watch, then PROCEED to STEP 5. When finished, remove the yellow rubber band.
- **13.** If necessary, use the absorbent pad to **DRy** the site on your finger after your collection. Use the enclosed adhesive bandage as needed.
- **14. ALLOW** absorbent collection card to air dry overnight, approximately 24 hours, before placing in the resealable plastic bag for shipping. If the card is not completely dry, your sample may be unusable.

FREQUENTLY ASKED QUESTIONS

- **Q**. I have used the lancet, but I didn't produce enough blood to fill all 4 circles. What do I do?
- *A*. Simply repeat the procedure using the second lancet we enclosed. Warming hands under warm water for a few minutes can also increase blood supply to the fingertips. Using the rubber band can help keep the blood in the fingertips.
- **Q**. I'm afraid to stick myself. Are there any other options?
- A. No, we must have this tiny amount of blood to perform these tests. Once you try this new lancet, you will be surprised how quick and painless this process is. We have tested dozens of devices to offer you the easiest and most painless method of blood collection. Alternatively, you may want to ask a friend to help you.

SPECIMEN PREPARATION

- **1. ALLOW** absorbent collection card to air dry for approximately 24 hours before placing in the resealable plastic bag for shipping. If it is not completely dry, your sample may be unusable.
- **2. FOLD** the insert page in half, enclosing the dry absorbent collection card. Place inside the resealable plastic bag and seal.
- 3. EACH blood spot card should be in a separate bag.
- **4. PLACE** the frozen urine collection, frozen ice pack, and absorbent pad from Step 2 into the biohazard bag and seal.
- **5. STAPLE** payment to the bottom right-hand corner of the completed Test Requisition Form. **FOLD** and **PLACE** them in the side pocket of the biohazard bag, containing the frozen urine collection.
- 6. PLACE all bags (3 total) into the specimen collection box.
- 7. **REFER** to enclosed Shipping Instructions for return shipping.

CHECKLIST (PRIOR TO SHIPPING)

1. VIAL (STEP 2)

- Patient's first and last name, date of birth, and date of collection are written on the vial
- □ The vial is capped tightly

2. FROZEN (STEP 2)

- Clear cap plastic vial
- □ Ice pack

3. Absorbent Collection Cards (Steps 1 and 3)

- Patient's first and last name, date of birth, and date of collection are written on the collection cards
- □ Absorbent collection cards have dried for 24 hours
- Absorbent collection cards are in separate bags

4. Test Requisition Form

- □ Test Requisition Form is complete
- Payment is included