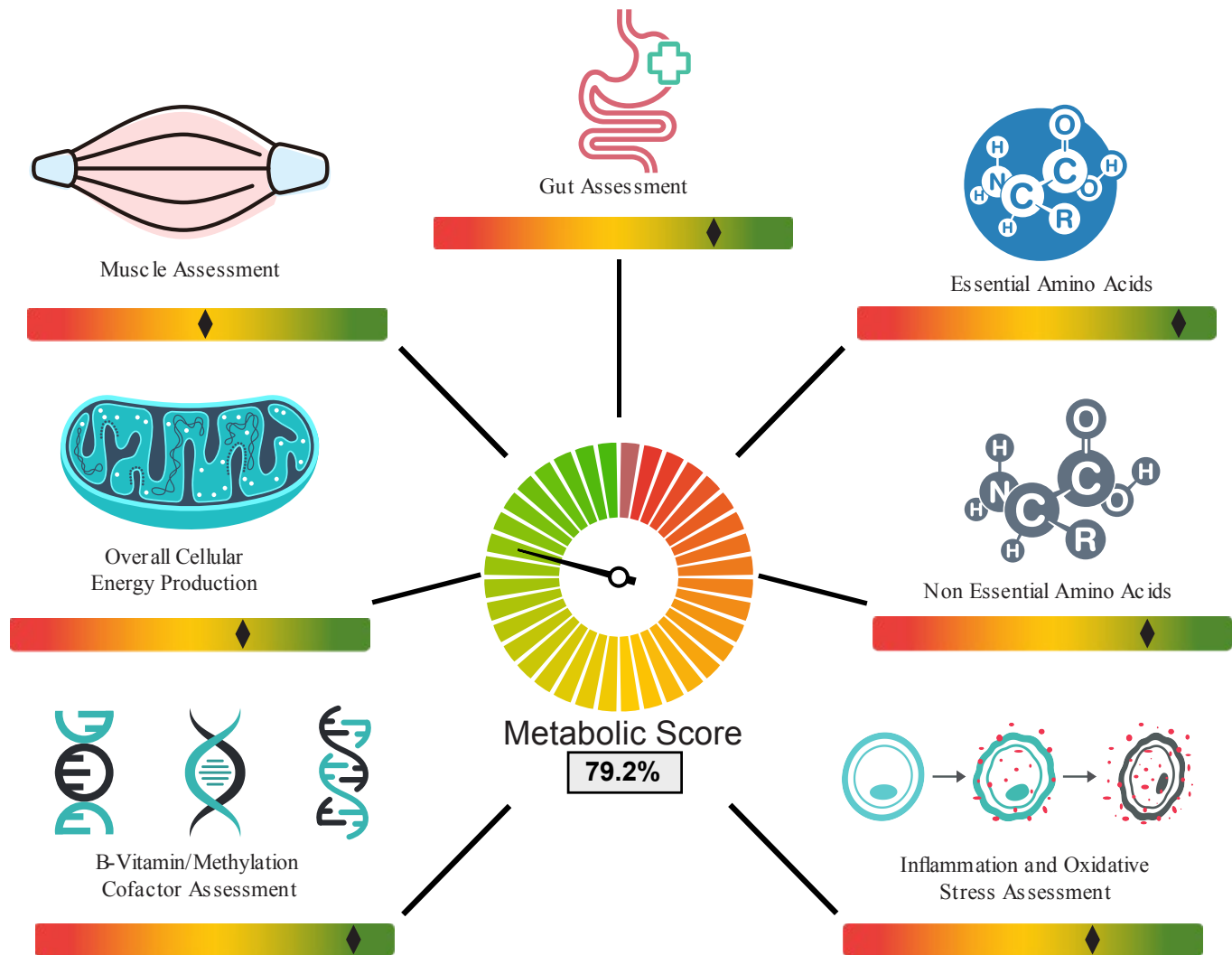


## Male Comprehensive Metabolic Performance Profile (Urine)

Patient Information	Clinician/Order Information	Sample Information
<b>Test Patient</b>  <b>DOB: 8/18/1974    Age: 49</b> Gender: Male Phone: 9547713685 Patient ID: 8142d714	<b>Test Provider</b>  Medical Group 9547713685  Order date: 11/2/2023	<b>Accession# 1123-0010146</b>  Collected: 11/6/2023 Received: 11/7/2023 Reported: 11/10/2023 2:25:05 PM  <u>Collection time:</u> <b>1st</b>  6:45 AM



The Metabolic Score is a calculated average of the patient's combined results of each category. The median Metabolic Score is 50%, which represents the healthy and non-diseased population. The Metabolic score indicates how far above or below the patient's results are compared to the population median of 50%.



ANALYTE		RECOMMENDATIONS	POTENTIAL CAUSES
<b>Inflammation and Oxidative Stress</b>			
3-Aminoisobutyric Acid	Above Detection Limit	Vitamin B6 Vitamin B12 Methylfolate	Elevated from B6, B12 deficiencies.
<b>Cellular Energy Production</b>			
Succinic Acid	Low	Amino Acid replacement Vitamin B12	Low from dietary leucine and isoleucine deficiency.
cis-Aconitic Acid	Low	Arginine	Low from arginine deficiency, low acetyl-CoA from fatty acid oxidation.
<b>Muscle Assessment</b>			
3-Aminoisobutyric Acid	Above Detection Limit	Vitamin B6 Vitamin B12 Methylfolate	Elevated from B6, B12 deficiencies.
Hydroxyproline	Low	Vitamin C Iron	Low from vitamin C and iron deficiencies.



## Patient Result History

**Please Note: New Reference Ranges effective 11/06/2023**

Analyte	Unit	11/10/2023   (1123-0010146)		
		Observation	Results	Reference Range
Creatinine	mg/dL		168.996	30 - 300
<b>Gut Assessment</b>				
3-Hydroxy-3-methylglutaric Acid (HMG)	ng/mg CR		56.2	<=8548.6
Allantoin	ug/mg CR		3.6	2.7 - 16.4
Benzoic Acid	ug/mg CR		0	<=409.2
Glutamine	ug/mg CR		40.3	5.2 - 48.9
Hippuric Acid	ug/mg CR		118.7	<=779.6
Histidine	ug/mg CR		71.5	24.2 - 129.4
Lactic Acid	ug/mg CR	Low	0.9	2.5 - 7175.3
Pyruvic Acid	ng/mg CR		1357	355.2 - 6118.1
Tryptophan	ug/mg CR		5.4	2.5 - 3290.5
<b>Essential Amino Acids</b>				
Histidine	ug/mg CR		71.5	24.2 - 129.4
Isoleucine	ng/mg CR		889.4	122.2 - 1454.5
Leucine	ng/mg CR		2230.3	128.5 - 3349.4
Methionine	ng/mg CR		603.6	55.8 - 1505.1
Phenylalanine	ng/mg CR		3376.1	1449.1 - 6631.6
Threonine	ug/mg CR		6.9	0.8 - 14.0
Tryptophan	ug/mg CR		5.4	2.5 - 3290.5
Valine	ng/mg CR		2410	377.0 - 3738.8
<b>Non-Essential Amino Acids</b>				
Alanine	ug/mg CR		7.5	7.0 - 35.0
Asparagine	ug/mg CR		6.2	2.4 - 2844.5
GABA	ng/mg CR		48.1	<=547.3
Glutamine	ug/mg CR		40.3	5.2 - 48.9
Proline	ng/mg CR		219.6	181.2 - 1470.6
Tyrosine	ug/mg CR		5.4	0.5 - 964.0
Taurine	ug/mg CR		38	5.1 - 90.2
<b>Inflammation and Oxidative Stress</b>				
3-Aminoisobutyric Acid	ug/mg CR	Above Detection Limit	-	2.3 - 3528.4
6-Sulfatoxymelatonin	ng/mg CR		15.8	7.7 - 595.9
8-OH-dG	ng/mg CR		1.3	<=10.7
Allantoin	ug/mg CR		3.6	2.7 - 16.4
Benzoic Acid	ug/mg CR		0	<=409.2
Hippuric Acid	ug/mg CR		118.7	<=779.6
Pyroglutamic Acid	ug/mg CR	Low	15.6	21.6 - 27468.3
<b>B-Vitamin/Methylation Cofactor Assessment</b>				
2-Amino butyric Acid	ng/mg CR		993.7	560.5 - 2474.6
Glycine	ug/mg CR		37.9	26.8 - 169.5
Kynurenic Acid	ng/mg CR		731	<=2179.6
Methylmalonic Acid	ng/mg CR		414.7	<=2239.2
Sarcosine	ng/mg CR		38.1	<=262.8
Serine	ug/mg CR		15.8	0.3 - 4875.8
Homovanillic Acid	ng/mg CR		1872.1	1177.7 - 4675.4
S-Adenosylhomocysteine	ng/mg CR		219.7	<=533.4
Vanillylmandelic Acid	ng/mg CR		2040.8	933.5 - 6510.8
Xanthurenic Acid	ng/mg CR		115.3	<=5037.5
<b>Cellular Energy Production</b>				
Adipic Acid	ng/mg CR		552.4	<=4290.0
Carnitine	ug/mg CR		8.7	1.2 - 32.5
Suberic Acid	ng/mg CR		368.3	<=2524.2
3-Hydroxybutyric Acid	ng/mg CR		770.2	<=3771.9
Pyruvic Acid	ng/mg CR		1357	355.2 - 6118.1
3-Hydroxy-3-methylglutaric Acid (HMG)	ng/mg CR		56.2	<=8548.6



Analyte	Unit	11/10/2023   (1123-0010146)		
		Observation	Results	Reference Range
Lactic Acid	ug/mg CR	Low	0.9	2.5 - 7175.3
Succinic Acid	ug/mg CR	Low	1.3	2.0 - 4938.7
cis-Aconitic Acid	ug/mg CR	Low	4.5	8.5 - 11389.3
<b>Muscle Assessment</b>				
1-Methyl-Histidine	ug/mg CR		79.2	47.2 - 165.3
3-Aminoisobutyric Acid	ug/mg CR	Above Detection Limit	-	2.3 - 3528.4
3-Methyl-Histidine	ug/mg CR		145.5	21.2 - 403.7
Beta-Alanine	ng/mg CR		780.4	<=2406.0
Citrulline	ng/mg CR		182.7	96.0 - 853.9
Hydroxyproline	ng/mg CR	Low	630.1	876.2 - 3606.7
Proline	ng/mg CR		219.6	181.2 - 1470.6

