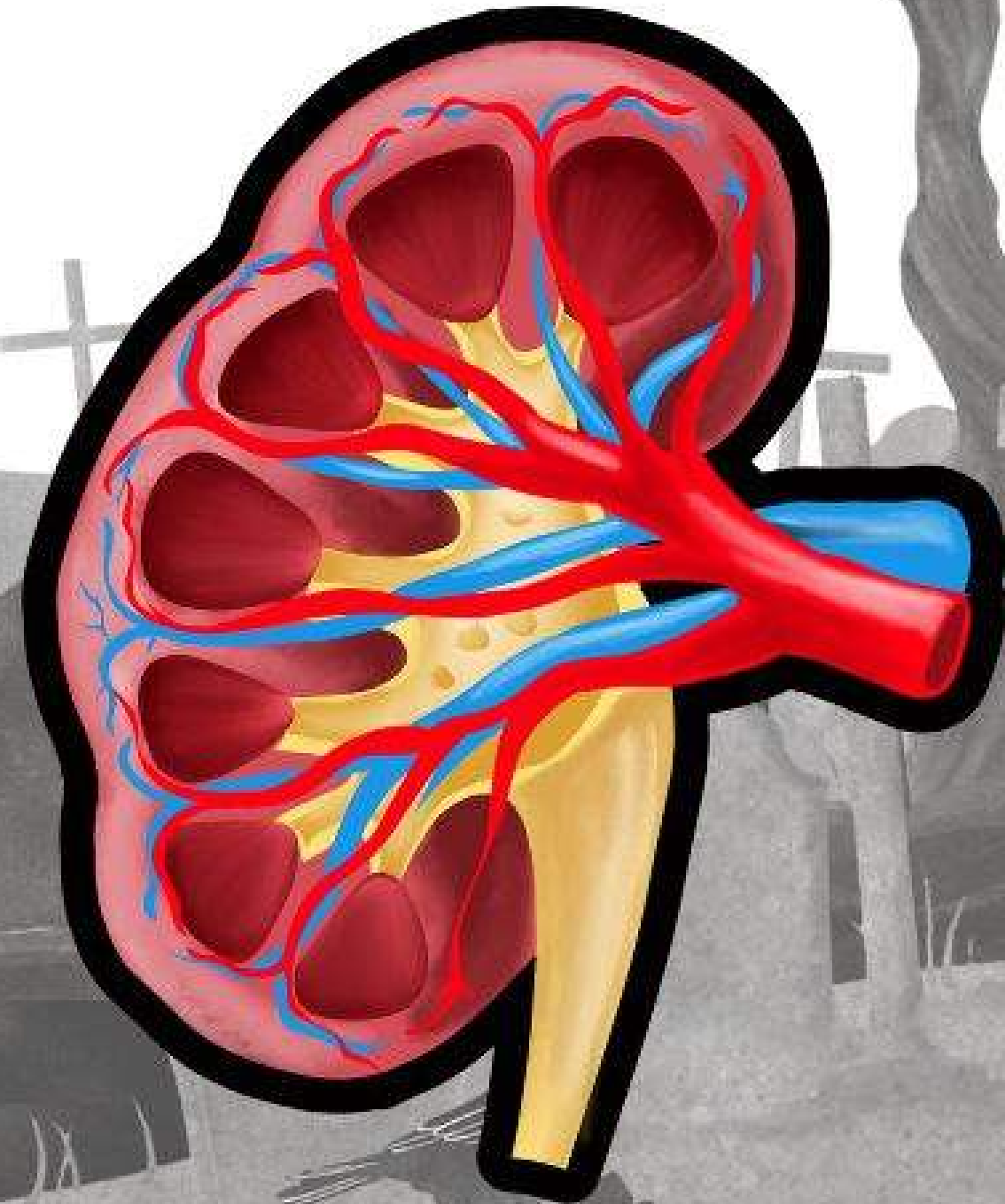
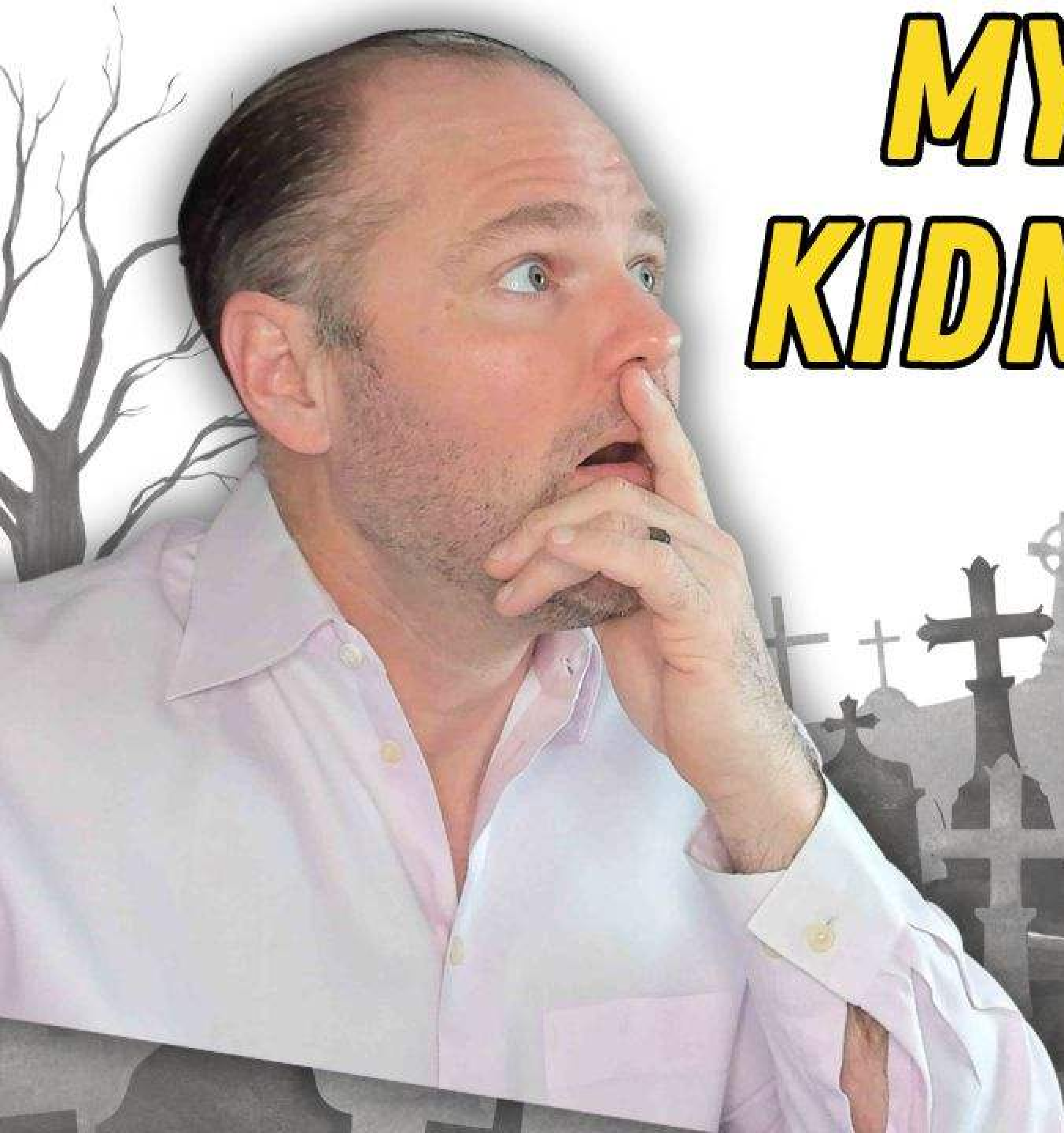
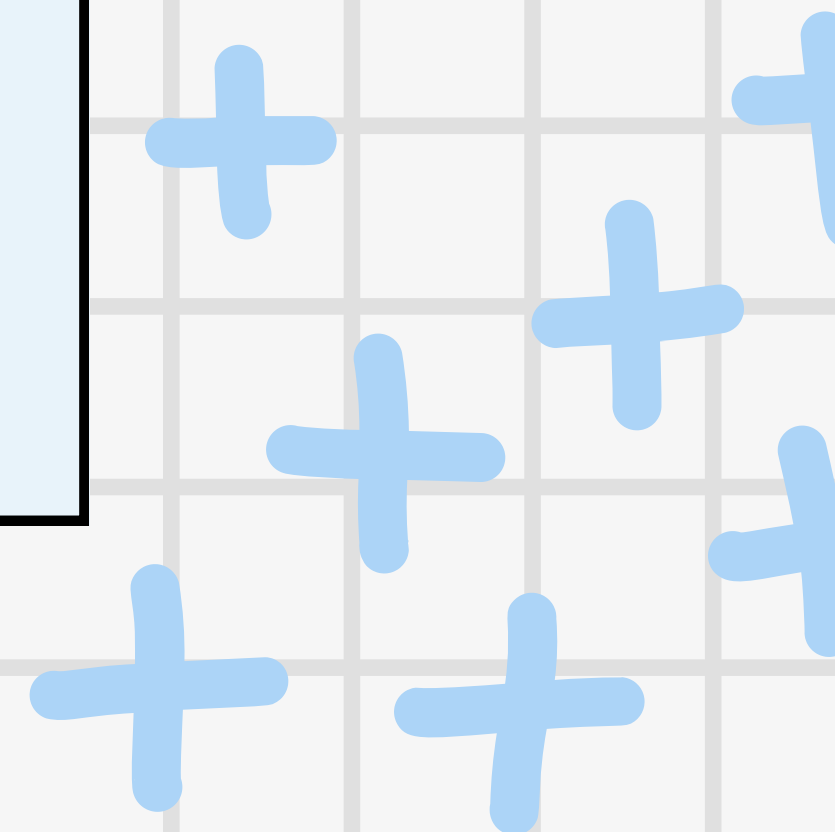


# MY STAGE 3 KIDNEY DISEASE



# Lab Report

Dr. Hugh Wegwerth



# December 5th 2024

## Comp. Metabolic Panel (14)

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Glucose <sup>01</sup>	90		mg/dL	70-99
BUN <sup>01</sup>	19		mg/dL	6-24
▲ <b>Creatinine</b> <sup>01</sup>	<b>1.43</b> <b>High</b>		mg/dL	0.76-1.27
▼ <b>eGFR</b>	<b>59</b> <b>Low</b>		mL/min/1.73	>59
BUN/Creatinine Ratio	13			9-20
Sodium <sup>01</sup>	142		mmol/L	134-144
Potassium <sup>01</sup>	4.7		mmol/L	3.5-5.2
▲ <b>Chloride</b> <sup>01</sup>	<b>107</b> <b>High</b>		mmol/L	96-106
▼ <b>Carbon Dioxide, Total</b> <sup>01</sup>	<b>18</b> <b>Low</b>		mmol/L	20-29
Calcium <sup>01</sup>	9.7		mg/dL	8.7-10.2

# December 12th 2024

## Comp. Metabolic Panel (14)

Test	Current Result and Flag		Previous Result and Date		Units	Reference Interval
▲ <b>Glucose</b> <sup>01</sup>	<b>102</b>	<b>High</b>	90	12/05/2024	mg/dL	70-99
▲ <b>BUN</b> <sup>01</sup>	<b>25</b>	<b>High</b>	19	12/05/2024	mg/dL	6-24
▲ <b>Creatinine</b> <sup>01</sup>	<b>1.53</b>	<b>High</b>	<b>1.43</b>	12/05/2024	mg/dL	0.76-1.27
▼ <b>eGFR</b>	<b>55</b>	<b>Low</b>	<b>59</b>	12/05/2024	mL/min/1.73	>59
BUN/Creatinine Ratio	16		13	12/05/2024		9-20
Sodium <sup>01</sup>	139		142	12/05/2024	mmol/L	134-144
▲ <b>Potassium</b> <sup>01</sup>	<b>5.3</b>	<b>High</b>	4.7	12/05/2024	mmol/L	3.5-5.2
Chloride <sup>01</sup>	104		<b>107</b>	12/05/2024	mmol/L	96-106
Carbon Dioxide, Total <sup>01</sup>	20		<b>18</b>	12/05/2024	mmol/L	20-29

**THIS IS NOT LAB ERROR**

Stage of CKD	eGFR result	What it means
Stage 1	90 or higher	<ul style="list-style-type: none"> <li>- Mild kidney damage</li> <li>- Kidneys work as well as normal</li> </ul>
Stage 2	60-89	<ul style="list-style-type: none"> <li>- Mild kidney damage</li> <li>- Kidneys still work well</li> </ul>
Stage 3a	45-59	<ul style="list-style-type: none"> <li>- Mild to moderate kidney damage</li> <li>- Kidneys don't work as well as they should</li> </ul>
Stage 3b	30-44	<ul style="list-style-type: none"> <li>- Moderate to severe damage</li> <li>- Kidneys don't work as well as they should</li> </ul>
Stage 4	15-29	<ul style="list-style-type: none"> <li>- Severe kidney damage</li> <li>- Kidneys are close to not working at all</li> </ul>
Stage 5	less than 15	<ul style="list-style-type: none"> <li>- Most severe kidney damage</li> <li>- Kidneys are very close to not working or have stopped working (failed)</li> </ul>

## eGFR levels and stages of chronic kidney disease

### Stage 1

eGFR remains within a normal range, but other test results suggest signs of kidney damage

### Stage 2

Slightly reduced kidney function with other tests suggesting kidney damage

### Stage 3

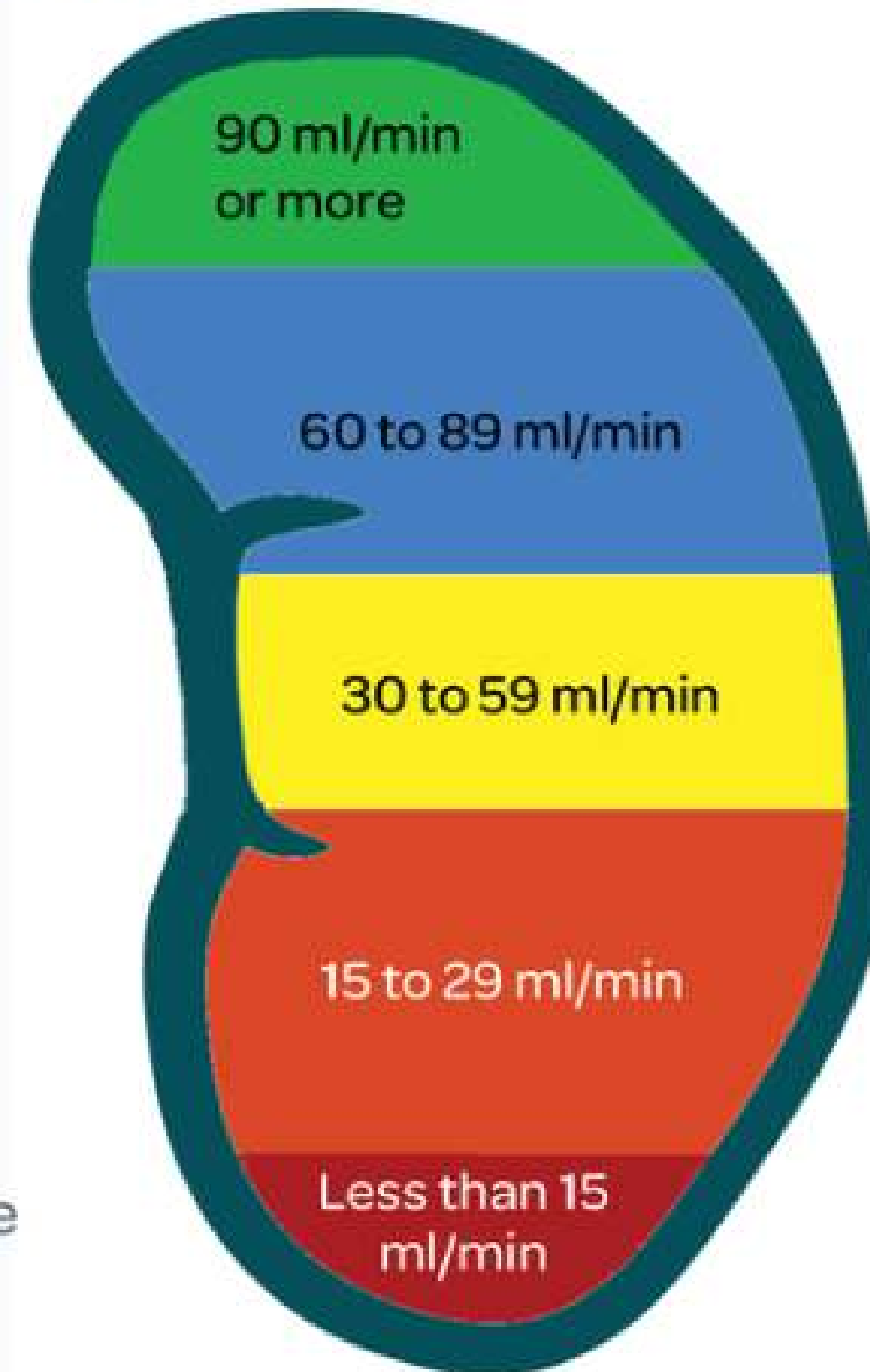
Moderately reduced kidney function

### Stage 4

Severely reduced kidney function

### Stage 5

Very severe or end-stage kidney failure



# December 5th 2024

## Homocyst(e)ine

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Homocyst(e)ine <sup>01</sup>	12.1		umol/L	0.0-14.5

## Uric Acid

## Ferritin

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Ferritin <sup>01</sup>	235		ng/mL	30-400

## ✦ AI Overview

High ferritin levels are commonly found in patients with chronic kidney disease (CKD) and can be a risk factor for poor outcomes: [🔗](#)

### **Ferritin as a marker of inflammation**

Ferritin is an acute-phase reactant that increases in response to inflammation, which is common in CKD. High ferritin levels can be a sign of inflammation rather than iron overload. [🔗](#)

### **Ferritin and risk of CKD**

High ferritin levels are associated with an increased risk of CKD in men, but not in women. [🔗](#)

### **Ferritin and renal progression**

Ferritin levels are a significant risk factor for rapid renal progression in CKD and hemodialysis patients. [🔗](#)

## ◆ AI Overview

High levels of homocysteine are associated with chronic kidney disease (CKD) and can indicate a decline in renal function. Homocysteine is an amino acid that contains sulfur. [🔗](#)

### Explanation

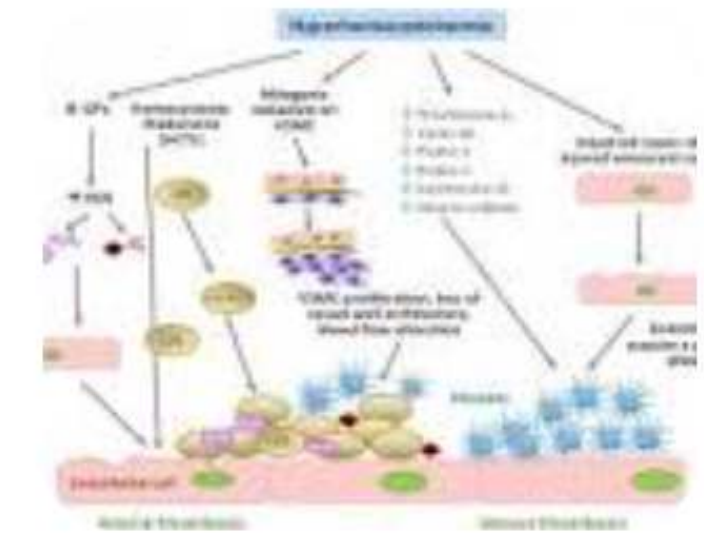
#### Homocysteine levels and kidney function

Homocysteine levels increase as kidney function declines. This is true even for people with normal or high glomerular filtration rates. [🔗](#)

#### Homocysteine and CKD

People with high homocysteine levels are more likely to develop CKD. [🔗](#)

#### Homocysteine and cardiovascular disease



# December 5th 2024

## Hemoglobin A1c

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Hemoglobin A1c <sup>01</sup>	5.6		%	4.8-5.6
Please Note: <sup>01</sup>	Prediabetes: 5.7 - 6.4 Diabetes: >6.4 Glycemic control for adults with diabetes: <7.0			

## DHEA-Sulfate

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
▼ DHEA-Sulfate <sup>01</sup>	69.6 Low	81.9 12/13/2021	ug/dL	71.6-375.4

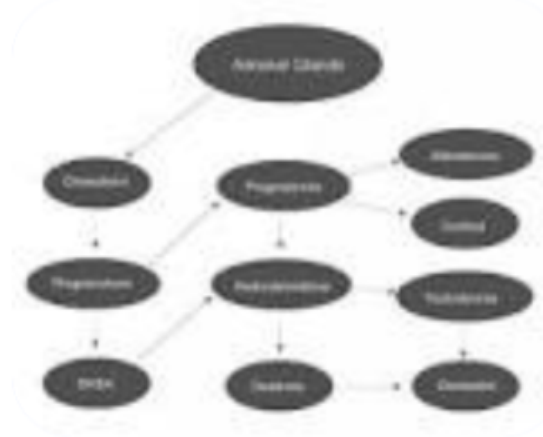
## Testosterone

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Testosterone <sup>01</sup>	783	740 12/13/2021	ng/dL	264-916
Adult male reference interval is based on a population of healthy nonobese males (BMI <30) between 19 and 39 years old. Travison, et.al. JCEM 2017,102;1161-1173. PMID: 28324103.				

## TSH

## ◆ AI Overview

Low levels of dehydroepiandrosterone (DHEA) and dehydroepiandrosterone sulfate (DHEA-S) are associated with chronic kidney disease (CKD). DHEA is a steroid hormone that helps with endothelial cell function, inflammation, and vascular remodeling. [🔗](#)



## Explanation

- Low DHEA levels are associated with an increased risk of cardiovascular disease (CVD) and all-cause mortality. [🔗](#)
- DHEA levels decrease with age in both men and women. [🔗](#)
- Reduced renal function decreases the renal clearance of DHEA-S. [🔗](#)
- Low DHEA levels are associated with diabetic kidney disease (DKD) in people with type 2 diabetes. [🔗](#)
- Low DHEA levels may also be a sign of Addison disease or hypopituitarism. [🔗](#)

Other conditions associated with low DHEA Coronary heart disease, Type 2 diabetes mellitus, and Poor cardiovascular outcomes. [🔗](#)

# December 5th 2024

## Magnesium, RBC

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Magnesium, RBC <sup>A, 03</sup>	5.2	5.2* 12/13/2021	mg/dL	3.7-7.0

\* Previous Reference Interval: (Magnesium, RBC: 4.2-6.8 mg/dL)

## Sex Horm Binding Glob. Serum

## ◆ AI Overview

**Low magnesium levels (hypomagnesemia) are closely linked to kidney disease**, particularly chronic kidney disease (CKD), as impaired kidney function can lead to difficulty excreting magnesium, resulting in a deficiency that can further worsen kidney damage and contribute to disease progression; research suggests that maintaining adequate magnesium levels may be beneficial for individuals with CKD by mitigating complications like vascular calcification and phosphate toxicity. [🔗](#)

### Key points about low magnesium and kidney disease:

#### **Mechanism:**

The kidneys play a crucial role in regulating magnesium balance, so when kidney function declines, the body can't effectively reabsorb magnesium, leading to low serum levels. [🔗](#)

#### **Consequences of low magnesium in CKD:**

- **Progression of kidney disease:** Studies show that low magnesium levels are associated with a faster decline in kidney function and increased risk of progressing to end-stage kidney disease. [🔗](#)



# December 12th 2024

## Comp. Metabolic Panel (14)

Test	Current Result and Flag		Previous Result and Date		Units	Reference Interval
▲ <b>Glucose</b> <sup>01</sup>	<b>102</b>	<b>High</b>	90	12/05/2024	mg/dL	70-99
▲ <b>BUN</b> <sup>01</sup>	<b>25</b>	<b>High</b>	19	12/05/2024	mg/dL	6-24
▲ <b>Creatinine</b> <sup>01</sup>	<b>1.53</b>	<b>High</b>	<b>1.43</b>	12/05/2024	mg/dL	0.76-1.27
▼ <b>eGFR</b>	<b>55</b>	<b>Low</b>	<b>59</b>	12/05/2024	mL/min/1.73	>59
BUN/Creatinine Ratio	16		13	12/05/2024		9-20
Sodium <sup>01</sup>	139		142	12/05/2024	mmol/L	134-144
▲ <b>Potassium</b> <sup>01</sup>	<b>5.3</b>	<b>High</b>	4.7	12/05/2024	mmol/L	3.5-5.2
Chloride <sup>01</sup>	104		<b>107</b>	12/05/2024	mmol/L	96-106
Carbon Dioxide, Total <sup>01</sup>	20		<b>18</b>	12/05/2024	mmol/L	20-29

# December 12th 2024

## DHEA-Sulfate



Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
▲ DHEA-Sulfate <sup>01</sup>	475.0 High	69.6 12/05/2024	ug/dL	71.6-375.4

## Homocyst(e)ine

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Homocyst(e)ine <sup>01</sup>	11.5	12.1 12/05/2024	umol/L	0.0-14.5

## Ferritin

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Ferritin <sup>01</sup>	204	235 12/05/2024	ng/mL	30-400

## Disclaimer

The information provided here is for informational purposes only and is not intended to be used for medical diagnosis or treatment. It is not a substitute for professional medical advice. Please consult your healthcare provider for more information.



# December 17th 2024

## Cystatin C with eGFR

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Cystatin C <sup>02</sup>	1.14		mg/L	0.67-1.14
eGFR	68		mL/min/1.73	>59

## DHEA-Sulfate

# December 17th 2024

## DHEA-Sulfate

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
DHEA-Sulfate <sup>01</sup>	164.0	<b>475.0</b> 12/12/2024	ug/dL	71.6-375.4

## Testosterone

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Testosterone <sup>01</sup>	838	783 12/05/2024	ng/dL	264-916

Adult male reference interval is based on a population of healthy nonobese males (BMI <30) between 19 and 39 years old. Travison, et.al. JCEM 2017,102;1161-1173. PMID: 28324103.

# December 17th 2024

## Ferritin

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Ferritin <sup>01</sup>	180	204 12/12/2024	ng/mL	30-400

**235**

## Disclaimer



# Changes I Implemented

- I look my labs seriously
- Gave blood
  - will give again in 56 days (February)
- Started to weigh myself weekly
  - need to loss 30lbs
- Started a specific supplement program
- Being more consistant with my sauna use





