

# LAB WORK DETAILS & RECOMMENDATIONS



Hello III-A Member,

It was a pleasure to meet you and take care of you at the recent III-A Wellness Clinic. On the following pages, you will find:

- Details on the specific labs we obtained
- How to interpret the lab results
- Provider recommendations

We advise you to please discuss your lab results with your Primary Care Provider (PCP). In the event you do not have a PCP, we would love to assist you and can be reached via III-A Telehealth line.\*

Sincerely, III-A Providers

Dustin Reno, NP-C (208) 203-0783

# Velma Seabold, NP-C (208) 271-4460

\*III-A Telehealth service is no cost to III-A members

If you have benefits related questions, please contact the III-A Benefits Line at (208) 938-8199 or Benefits@iii-a.org



For basic wellness and to improve your result, focus on:

- Getting 8 hours of rest each night
- Drinking at least 80-100 ounces of water per day
- Exercise for 30 minutes most days of the week
- Eat a diet full of lean proteins, healthy fats, vegetables, fruits, whole grains and low-fat/non-fat dairy
- Take a daily multivitamin

# **III-A Health Coaching**

- Focuses on the positive qualities of the individual and their strengths
- Facilitates change and helps overcome roadblocks to change
- Works with the individual's agenda
- Provides scientific and evidence-based materials when requested

To get started call or email: (208) 938-5632 or Wellness@iii-a.org

# COMPLETE BLOOD COUNT

TEST:	DESCRIPTION:	NORMAL LEVELS:	WHAT A LOW NUMBER MAY MEAN:	WHAT A HIGH NUMBER MAY MEAN:	TO PROMOTE A NORMAL LEVEL, PRACTICE BASIC WELLNESS AND:
White Blood Count (WBC)	Total number of white blood cells found within a sample of blood	Between 4 and 12	Viral infections, diseases of the bone marrow	Dehydration, infection, trauma, diseases of the bone marrow	Wash your hands and avoid touching your face after contact with dirty surfaces or after going into public places
Red Blood Cells (RBC)	Measurement of cells carrying oxygen and carbon dioxide through your veins	Between 3.6 and 5.2	Kidney disease, thyroid disorder, pregnancy, anemia	Heart disease, polycythemia vera (production of too many red blood cells), carbon monoxide exposure, high altitudes, tobacco use	Take a daily multivitamin supplement with Vitamin C & Vitamin B, consume a diet with foods containing iron, tobacco free
Hemoglobin (HGB)	Measurement of cells carrying oxygen and carbon dioxide through your veins	Between 11.3 and 15.3	Too much alcohol use, anemia, kidney disease, internal	High altitudes, dehydration, Polycythemia Vera (the body makes too much RBCs)	Tobacco free, consume a diet with foods containing iron, manage your medical conditions (ex: blood sugars/diabetes)
Hemocrit (HCT)	Measures the volume of red blood cells within the blood. This test is used to help dehydration status and to test for anemia	Between 38 and 44	bleeding, liver disease		
Platelets (PLTS)	Measures blood cells that are primarily responsible to develop blood clots to stop bleeding	Between 150 and 450	Recent surgery, Infection, Trauma/Injury, Polycythemia vera (the body makes too much blood cells)	Recent surgery, Infection, Trauma/Injury, Polycythemia vera (the body makes too much blood cells)	Consume a diet with foods containing irons, and manage your medical conditions (ex: blood sugars/diabe

### HEMOGLOBIN A1C (HGBA1C)

	TEST:	DESCRIPTION:	NORMAL LEVELS:	WHAT A LOW NUMBER MAY MEAN:	WHAT A HIGH NUMBER MAY MEAN:	TO PROMOTE A NORMAL LEVEL, PRACTICE BASIC WELLNESS AND:
	Hemoglobin A1C	This test shows the average blood glucose over a 12-week period or three months, and is used to assess risk for diabetes and also to determine how well a current diagnosis of diabetes is being managed.	Between 3.9% and 5.7% The goal for most adults with diabetes is less than 7%	Kidney disease, anemia, pregnancy	A1C levels between 5.7 and less than 6.5% = prediabetes range A1C levels of 6.5% or higher = diabetes range Iron deficiency/anemia, lead poisoning	Reduce consumption of refined sugars, processed foods and starchy carbohydrates, exercise daily, lose 10% of body weight and/or maintain a healthy weight, better control of your medical conditions (ex: manage your blood sugars/diabetes)
		5.79	%	e	6.5%	
[	NORMAL PREDIABETES				DIABETES	





# COMPREHENSIVE METABOLIC PANEL

TEST:	DESCRIPTION:	NORMAL LEVELS:	WHAT A LOW NUMBER MAY MEAN:	WHAT A HIGH NUMBER MAY MEAN:	TO PROMOTE A NORMAL LEVEL, PRACTICE BASIC WELLNESS AND:	
Sodium (Na)	Measures the sodium molecule found outside of cell fluid and can be used to evaluate hydration	Between 137 and 145	Excessive water intake, internal bleeding, hypothyroidism (underactive thyroid), heart failure, liver disease, kidney disease	Excessive or inadequate fluid intake	Mange your medical conditions (ex: make sure your thyroid function is well controlled)	
Potassium (K+)	Measures molecules inside of a cell that are important in maintaining acid/base balance	Between 3.5 and 5.1	Prolonged vomiting, internal bleeding, hypothermia (too cold), increased urination (ex: taking a diuretic for your blood pressure)	Uncontrolled diabetes, excessive oral consumption of potassium, kidney disease	Manage your medical conditions (ex: make sure your blood sugars/ diabetes is well controlled)	
Glucose (Blood Sugar)	Measures blood sugar which is the basic energy source for our cells	Between 74 and 100	Hypothyroidism (low functioning thyroid), Hypopituitarism (low functioning pituitary gland), Gastrointestinal diseases (Crohn's, Ulcerative Colitis, Irritable Bowel Syndrome)	Kidney disease, diabetes, pancreatitis, chronic/ unmanaged stress, Hyperthyroidism (over-functioning thyroid)	Reduce consumption of refined sugars, processed foods and starchy carbohydrates, exercise daily, lose 10% of body weight and/or maintain a healthy weight, manage your medical conditions (ex: blood sugars/diabetes)	
Blood Urea Nitrogen (BUN)	Measures the waste products of protein breakdown found in our blood and is helpful to assess kidney function	Between 7 and 17	Liver disease, malnutrition or low protein intake, pregnancy	Internal bleeding, kidney disease, dehydration	Manage your medical conditions - make sure your blood pressure is in a healthy range	
Creatinine	Measures the amount of muscle breakdown that is directly proportional to muscle mass	Between 0.7 and 1.2	Low muscle mass or pregnancy	Hyperthyroidism (overactive thyroid function), Kidney disease, dehydration, high incidence of muscle breakdown	Manage your medical conditions	
Alanine Aminotransferase (ALT)	Monitors an enzyme produced by your liver that screens your liver for damage from disease, drugs, and injuries	Between 9 and 52	Generally not a concern	Liver disease, hepatitis, certain toxins such as excess acetaminophen or alcohol	Avoidance of alcohol, manage your medical conditions	
Aspartate Transaminase (AST)	Measures an enzyme made by the liver and is used to check for liver damage	Between 22 and 58	Generally not a concern	Liver damage, hepatitis, alcohol use, obesity, heart or kidney damage	(ex: blood sugar/diabetes)	

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TEST:	DESCRIPTION:	V ALUES:	WHAT A HIGH NUMBER MAY MEAN:	TO PROMOTE A NORMAL LEVEL, PRACTICE BASIC WELLNESS AND:
Total Cholesterol	Your total blood cholesterol score is calculated by adding your HDL and LDL cholesterol levels, plus 20 percent of your triglyceride level	Desirable: under 200 Borderline High: 200-239 High: 240 and above	"Normal ranges" are less important than your overall cardiovascular risk. Like HDL and LDL cholesterol levels, your total blood cholesterol score should be considered in context with your other known risk factors.	
Triglycerides	Measures the amount of fat in our blood	Desirable: under 150 Borderline High: 150-200 High: 200 and above	Alcohol use, diabetes, Hypothyroidism (low function- ing thyroid), recent high fat food consumption, kidney disease	Reduce consumption of saturated fats (fast food, processed foods and meats, full fat dairy, fatty cuts of red meat), manage your medical conditions (cholesterol and triglyceride levels are controlled)
HDL Cholesterol	Measures the high density lipoprotein (good fats) made in the liver and assists with removal of harmful cholesterol from your body, provides protection for your heart	Desirable: over 60 Near Desirable: 40-60 Increased Risk: 40 and below	The higher the better	Take a daily Omega-3 supplement or eat 2 servings of fish/week, eat healthy fats - nuts, seeds, avocado, extra virgin olive oil, reduce consumption of saturated fats, reduction or avoidance of alcohol
LDL Cholesterol	Measures the amount of lipoprotein (bad fats) made in the liver that has a negative effect on the heart	Desirable: under 100 Near Desirable: 100-129 Borderline High: 130-160 High: 160 and above	Kidney disease, diabetes, Hypothyroidism (low functioning thyroid)	Take a daily Omega-3 supplement or fish oil, reduction or avoidance of alcohol, reduce consumption of saturated fats (fast food, processed foods and meats, full fat dairy, fatty cuts of red meat), manage on-going high cholesterol with your PCP
Coronary Risk (Cholesterol/HDL Ratio)	Measures your risk for developing heart disease	Desirable for women: under 4.4 Desirable for men: under 4.97	Higher risk for developing heart disease	Reduction or avoidance of alcohol, reduce consumption of saturated fats, manage your medical conditions (blood sugars/diabetes & cholesterol)

# ADDITIONAL LABS

TEST:	DESCRIPTION:	NORMAL LEVELS:	WHAT A LOW NUMBER MAY MEAN:	WHAT A HIGH NUMBER MAY MEAN:	TO PROMOTE A NORMAL LEVEL, PRACTICE BASIC WELLNESS AND:
Thyroid Stimulating Hormone (TSH)	Measures the hormone secreted by the pituitary gland that stimulates the thyroid to produce thyroid hormones, used to screen for thyroid disease and to monitor therapy	Between 0.3 and 3.0	Prolonged vomiting, Hyperthyroidism, liver disease, malnutrition	Hypothyroidism (low functioning thyroid), Pituitary disease, Scleroderma (skin disease)	Manage your medical conditions - make sure your thyroid function is well controlled
Prostate Specific Antigen (PSA)	Measures a protein produced by the prostate in males and is used for screening and manage- ment of prostate cancer	Between 0 and 4	N/A	Benign Prostatic Hypertrophy (BPH) or enlarged prostate, Prostate Cancer, Prostatitis (inflammation of the prostate)	Avoidance or reduction of alcohol intake, manage your medical conditions - if you have BPH, make sure its well controlled

## **BLOOD PRESSURE CATEGORIES**

BLOOD PRESSURE CATEGORY	SYSTOLIC mm Hg (upper number)		DIASTOLIC mm Hg (lower number)
NORMAL	LESS THAN 120	and	LESS THAN 80
ELEVATED	120 - 129	and	LESS THAN 80
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 1	130 - 139	or	80 – 89
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 2	140 OR HIGHER	or	90 OR HIGHER
HYPERTENSIVE CRISIS (consult your doctor immediately)	HIGHER THAN 180	and/or	HIGHER THAN 120

### What do these numbers mean:

#### Systolic blood pressure:

(the first number) Indicates how much pressure your blood is exerting against your artery walls when the heart beats.

#### Diastolic blood pressure:

(the second number) Indicates how much pressure your blood is exerting against your artery walls while the heart is resting between beats.

Normal:	Blood pressure of less than 120/80 are considered within the normal range.
Elevated:	Elevated blood pressure is when readings consistently range from 120-129 systolic and less than 80 diastolic. People with elevated blood pressure are likely to develop high blood pressure unless steps are taken to control the condition.
Hypertension Stage 1:	Hypertension Stage 1 is when blood pressure consistently ranges from 130-139 systolic or 80-89 diastolic. At this stage of high blood pressure, doctors are likely to prescribe lifestyle changes and may consider adding blood pressure medication based on your risk of atherosclerotic cardiovascular disease (ASCVD), such as heart attack or stroke.
Hypertension Stage 2:	Hypertension Stage 2 is when blood pressure consistently ranges at 140/90 or higher. At this stage of high blood pressure, doctors are likely to prescribe a combination of blood pressure medications and lifestyle changes.
Hypertensive Crisis:	This stage of high blood pressure requires medical attention. If your blood pressure readings suddenly exceed 180/120, wait five minutes and then test your blood pressure again. If your readings are still unusually high, contact your doctor immediately. You could be experiencing a hypertensive crisis. <i>If your blood pressure is higher than 180/120 mm Hg and you are experiencing signs of possible organ damage such as chest pain, shortness of breath, back pain, numbness/weakness, change in vision or difficulty speaking, do not wait to see if your pressure comes down on its own. Call 911.</i>

# LIFESTYLE CHANGES THAT CAN HELP LOWER YOUR BP:

- Eat a well-balanced diet that is low in salt
- Limit your alcohol intake
- Participate in exercise or physical activity regularly
- Manage your stress

- Maintain a healthy weight
- Quit smoking
- Take your medications properly
- Work closely with your PCP or other doctors