FUNCTIONAL LAB GOALS



Fasting Blood Glucose

70-90 mg/dL

Fasting Insulin

<6 mIU/L

HOMA-IR

70-90.5-1.5

Triglycerides

80-130 mg/dL

HDL

59-100 mg/dL

Total Cholesterol

59-100 mg/dL

Vitamin D

50-75 ng/mL

Homocysteine

<7 Umol/L

Liver Enzymes AST&ALT

Below upper limits

Hemoglobin A1C

Less than 5.3

C-Reactive Protein

 $< 0.5 \, \text{mg/L}$

TSH

0.8-2.2 UIU/mL (or lower)

FT4

>1.0 NG/DL

FT3

>2.8 PG/mL

TPO

negative or <15

TgAb

negative or <8

Thyroglobulin

<40

Thyroxine binding globulin

14-31

FUNCTIONAL LA GOALS



Fasting Blood Glucose

Balance hormones with smooth blood sugar levels

Fasting Insulin
High insulin can lead to insulin resistance (fat storage) and high lipids

HOMA-IR

High levels for HOMA-IR indicate insulin resistance

Triglycerides

High levels caused by insulin resis., poor BS control, estrogen dom.

HDL

Labs above 60 can lower your risk for heart disease/stroke

Total Cholesterol

Low levels = low hormone output high levels = low thyroid function

Hemoglobin A1C

Provides insight for longterm glucose control

C-Reactive Protein

This is a measure of inflammation in the body

Liver Enzymes AST&ALT

If too high, may indicate fatty liver disease

Homocysteine

High levels associated with dementia and heart disease



Ratio of >5

Vitamin D

VitD helps keep bones, teeth, and muscles healthy

LABS TO REQUEST ANNUALLY

Full Thyroid Panel

TSH
Free T4
Free T3
Reverse T3
Thyroid Antibodies: TPO,
TgAb

Basics

Complete Blood Count (CBC) Complete Metabolic Panel (CMP) Lipid Panel C-reactive Protein (hs-crp)

Nutrients

Vitamin A (retinol)
Vitamin D (25-OH)
Red Blood Cell (RBC)
Magnesium
Vitamin B12

Blood Sugar

Fasting Glucose Fasting Insulin Hemoglobin A1C

ADVOCATE YOUR NEEDS / TIPS:

- Always request a copy of your results so you can add them to a personal physical wellness folder and review them with yourself and share with other practitioners under your care.
- There is a difference between a normal reference range and an optimal reference range so take a closer look and be curious on what you can do to improve symptoms you may be having.
- If you don't have an appointment coming up and want to have some labs drawn, I can assist by submitting a request with Labcorp. Click here to learn more.

 Kelly Schmidt

IMPORTANCE OF LAB TESTING & INTERPRETATION

Kelly Schnidt

- Blood tests are the most commonly ordered labs for health assessment worldwide.
- The normal range of your lab results is based on statistics and often represents the average for a (maybe more ill) population rather than the optimal level required to maintain the best health.
- Yet, normal is not always optimal. KSW's functional nutrition approach to using labs:
 - Uses more/specific markers to gain a bigger picture of your health,
 - Recognizes hidden health trends,
 - Detects early stages of dysfunction that might be overlooked,
 - Considers your "story" along with lab results, leading to a personalized solution.

Learn more about some of the functional labs Kel uses in practice and for her own health including stool tests, micronutrient tests, her Wheat Zoomer, and more.

