THE ESSENTIAL BIOMARKER CHECKLIST

WHAT TO KNOW · WHAT TO TRACK · WHY IT MATTERS

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Integrative Medicine · Clinical Nutrition · Microbiome · Metabolic Health

> Your labs are not just numbers. They are a baseline - a way to understand patterns, follow change over time, and connect what may otherwise remain fragmented.

A routine annual panel can provide valuable information, but it may not include every biomarker relevant to cardiovascular risk, metabolic health, nutrient status, thyroid function, hormonal transitions, gastrointestinal health or healthy aging. The goal is not to order everything. It is to know your baseline, choose testing purposefully, and understand trends in the context of your history, symptoms, medications, nutrition and lifestyle.

Use this checklist as a conversation guide with your licensed healthcare professional. Not every test is appropriate for every person.

FOUNDATIONAL / GENERAL HEALTH

A broad baseline for blood cells, kidney and liver function, electrolytes, protein status and overall physiology.

CBC with differential	Screens red and white blood cells and platelets; useful for anemia, infection patterns and hematologic changes.
Comprehensive Metabolic Panel (CMP)	Reviews glucose, electrolytes, kidney and liver markers, calcium and protein status.
Urinalysis	Can add information about hydration, kidney/urinary health and glucose or protein loss when appropriate.

METABOLIC HEALTH & GLUCOSE REGULATION

Helps identify metabolic change earlier than glucose alone and provides a baseline to follow over time.

Fasting glucose	Snapshot of blood glucose after fasting.
Hemoglobin A1c	Estimates average glucose exposure over roughly the prior 2-3 months.
Fasting insulin	Adds context about insulin demand and may help characterize insulin resistance when interpreted appropriately.
C-peptide - when indicated	Reflects endogenous insulin production; useful in selected metabolic or diabetes evaluations.
Uric acid	Relevant to gout and may add context in cardiometabolic assessment.
Weight, waist circumference & body composition	Not blood tests, but important longitudinal measures of metabolic health and lean mass.

CARDIOVASCULAR & LIPID RISK

Standard cholesterol is only part of the picture. These markers can better characterize atherogenic particle burden and inherited risk.

Lipid panel: total cholesterol, LDL-C, HDL-C, triglycerides	Core lipid profile and starting point for cardiovascular risk assessment.
Apolipoprotein B (ApoB)	Estimates the number of atherogenic lipoprotein particles.
Lipoprotein(a) [Lp(a)]	Largely inherited cardiovascular risk marker; often useful to measure at least once in adulthood.
High-sensitivity CRP (hs-CRP)	Nonspecific inflammatory marker that can contribute to cardiovascular risk assessment when clinically appropriate.
Blood pressure	Essential cardiovascular risk marker that should be tracked alongside laboratory data.

NUTRITIONAL STATUS

Useful when symptoms, dietary pattern, medications, life stage or medical history raise concern for deficiency or altered requirements.

25-OH Vitamin D	Assesses vitamin D status; interpretation should consider bone health, risk factors and clinical context.

Vitamin B12	Important for neurologic function and red blood cell production.
Methylmalonic acid (MMA) - when indicated	Can clarify functional B12 status when serum B12 is borderline or discordant.
Folate	Supports cell division and blood formation; interpretation depends on clinical context.
Iron studies: ferritin, serum iron, TIBC/transferrin, transferrin saturation	A fuller picture of iron stores, transport and availability than ferritin alone.
Magnesium - serum; RBC selectively	Serum magnesium is standard; additional assessment may be considered selectively.
Zinc - when indicated	May be useful with restricted diets, malabsorption or other specific clinical concerns.
Omega-3 Index - optional	Reflects EPA/DHA status in red blood cells; useful selectively rather than as a universal screening test.

THYROID

Thyroid testing should be driven by symptoms, history, medications and clinician judgment rather than automatically ordering every marker.

TSH	Primary screening marker for thyroid function in most people.
Free T4	Adds information about circulating thyroxine when clinically appropriate.
Free T3 - when indicated	May add context in selected thyroid evaluations; not required for routine screening in everyone.
TPO & thyroglobulin antibodies - when indicated	Can support evaluation for autoimmune thyroid disease when clinically appropriate.

INFLAMMATION & IMMUNE CONTEXT

Inflammatory and autoimmune testing is most useful when there is a specific clinical question; broad screening can create false positives.

hs-CRP / CRP	Nonspecific measure of inflammation; trends and clinical context matter.
ESR - when indicated	Another nonspecific inflammatory marker often used in selected inflammatory conditions.
ANA / disease-specific antibodies - only when indicated	Should be ordered and interpreted in the context of symptoms and medical evaluation, not as routine wellness screening.

WOMEN'S / HORMONAL HEALTH

Hormones are dynamic. Testing should be selected according to age, menstrual status, symptoms, medications and the clinical question.

Estradiol - when indicated	May be useful in selected reproductive, menopausal or endocrine evaluations.
FSH / LH - when indicated	Can help answer specific reproductive or menopausal questions.

■ **Progesterone - when indicated**	Timing within the menstrual cycle is critical for interpretation.
■ **Total & free testosterone / SHBG - when indicated**	Useful selectively for androgen-related symptoms or endocrine evaluation.
■ **DHEA-S - when indicated**	Adrenal androgen marker used for specific clinical questions.
■ **Prolactin - when indicated**	Relevant to selected menstrual, fertility, breast or pituitary-related concerns.

MEN'S / HORMONAL HEALTH

Testing should be symptom-driven and interpreted with age, medications, timing and medical history.

■ **Total testosterone - when indicated**	Typically interpreted with symptoms and appropriate morning sampling.
■ **Free testosterone / SHBG - when indicated**	Can clarify androgen status when total testosterone alone is insufficient.
■ **LH / FSH / prolactin - when indicated**	Helps evaluate selected causes of altered testosterone or reproductive function.
■ **PSA - age/risk appropriate, with clinician**	Screening decisions should be individualized through shared decision-making.

BONE, MUSCLE & HEALTHY AGING

Especially relevant with menopause, aging, weight loss, GLP-1 use, restricted intake or risk of sarcopenia/osteoporosis.

■ **DEXA - when age/risk appropriate**	Assesses bone density; body-composition information may also be available depending on the scan.
■ **Calcium, albumin, alkaline phosphatase**	Foundational markers that contribute to bone/mineral assessment.
■ **PTH - when indicated**	Helps evaluate calcium and parathyroid physiology in selected cases.
■ **Creatine kinase (CK) - when indicated**	Used selectively for muscle symptoms, medication effects or specific clinical questions.

GI / MALABSORPTION / MICROBIOME - WHEN INDICATED

These are not universal annual screening tests. They should be chosen only when symptoms or history justify them.

■ **Celiac serology**	Useful when celiac disease is suspected; testing should generally occur while consuming gluten.
■ **Fecal calprotectin**	Helps distinguish intestinal inflammation from functional symptoms in appropriate clinical settings.
■ **Pancreatic elastase**	Assesses pancreatic exocrine function when maldigestion or malabsorption is suspected.
■ **H. pylori testing**	Used when symptoms/history warrant evaluation; test choice and medication timing matter.

Stool pathogen testing	Appropriate for selected acute or persistent gastrointestinal presentations.
Comprehensive stool / microbiome analysis	May be considered selectively; clinical utility varies by assay and should not replace validated diagnostic testing.

MEDICATION / TREATMENT-SPECIFIC MONITORING

The most useful monitoring is individualized to the medication, diagnosis and treating clinician's plan.

GLP-1 therapy	Track nutritional adequacy, lean mass, GI tolerance, hydration and appropriate metabolic markers with the prescribing clinician.
Hormone therapy	Monitoring depends on indication, formulation, symptoms and clinician guidance; cardiometabolic risk factors remain important.
Cancer treatment	CBC/CMP and treatment-specific labs are directed by oncology; integrative support should coordinate with the oncology team.
Statins / lipid-lowering therapy	Lipids and treatment-specific safety monitoring should follow the prescribing clinician's plan.

SELECTIVE / ADVANCED TESTING

More testing is not always better. These tests should answer a specific question and change management.

Homocysteine	May add context to B-vitamin status or selected cardiovascular questions.
ApoA1 or advanced lipoprotein testing	Occasionally useful when standard lipids and ApoB do not answer the clinical question.
Cortisol testing	Should be reserved for appropriate endocrine or symptom-driven evaluation; random testing has important limitations.
Heavy metals	Only with a credible exposure history or clinical indication; broad screening can be misleading.
Genetic testing	Useful selectively when results are actionable and interpreted with appropriate counseling.

HOW I USE LABS

DATA · CONTEXT · TRENDS

I do not believe in chasing isolated numbers or ordering broad panels without a reason. I look at how your biomarkers relate to one another - and how they fit with your symptoms, medications, health history, nutrition, sleep, movement, stress and life stage.

1. **Establish a baseline**
   Know where you are before deciding what needs attention.
2. **Connect the data**
   A single marker rarely tells the whole story. Patterns matter.
3. **Track direction**
   Change over time can be more informative than one isolated result.
4. **Test with purpose**
   Every test should answer a useful question or influence a decision.
5. **Work alongside medical care**
   Diagnosis, medication decisions and disease-specific testing remain with the appropriate licensed medical professional.

IMPORTANT MEDICAL NOTE

This checklist is educational and is not a prescription, diagnosis, laboratory order or substitute for individualized medical care. Testing should be selected and interpreted by the appropriate licensed healthcare professional. Reference intervals and treatment targets vary by laboratory, age, sex, medications, medical history and individual risk. Do not start, stop or change prescription medication or medical treatment based on this document. Integrative care is designed to complement - not replace - conventional medical care.

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