Why A Simple Blood Test is Not Enough

by Kristin Grayce McGary

Kristin Grayce McGary brings 14 years of experience to leading women's retreats around the world. Powerful, compassionate, grounded; her presence creates deep and lasting transformation. Kristin Grayce listens with her entire being, meeting you where you are, lovingly guiding you and celebrating your magnificence.

It's your annual medical exam, and you know the routine: you spend 5-10 minutes with your doctor or the nurse practitioner/physician's assistant, they weigh you, then measure your blood pressure and body temperature. If you're lucky, they order a basic lab panel for 10-30 blood markers, which is fewer than half of what you really need for quality insight into your health, but that's the most your insurance will cover. A comprehensive panel of 68+ markers is necessary to thoroughly assess what is happening inside your body and evaluate how your current nutrition and lifestyle is impacting you. In my experience, the basic panel has too many gaps, while the comprehensive panel illuminates the blind spots and empowers you to make wise healthcare choices supporting a long and happy life. In this article, I will explain how a comprehensive bloodwork panel when interpreted functionally is a superhero of preventative health care.

Western medicine is primarily focused on remedial sick care rather than preventative health care. One of the most powerful tools in medicine is bloodwork, which can be used to help diagnose disease, or better yet, to detect and prevent developing disease long before damage to your body occurs and symptoms appear. Western doctors both MDs and Naturopaths—are trained (and constrained by insurance companies) to order simple panels with few markers, and to use them to guide simple interventions rather than for prevention.

Three factors make functional blood chemistry analysis superior to conventional analysis: number of markers, reference ranges, and inter-connections. Functional panels typically measure 2-6 times more markers. The baseline lab panel I prefer for patients has 68 markers plus urinalysis—5 or 6 full pages of results. You won't get that level of detail from your typical MD's or Naturopath's office. For each marker, there is a statistically-compiled



range of values that are considered normal, called the reference range.

Conventional reference ranges are compiled from a huge population of people, many of whom had their blood analyzed because they were already sick! Functional reference ranges are compiled from a much smaller population of healthy people whose bodies are functioning optimally. The functional ranges are tighter. If a marker falls inside the tighter functional range, it compares favorably with healthy people and is a green flag. If a marker falls outside the wider conventional range, it compares poorly with sick people, and is a red flag. If a marker falls in between, it is a yellow flag: neither healthy nor very sick ... yet. Conventional analysis notices red flags, and largely ignores the rest. Functional analysis is on the lookout for yellow flags, the early warning signs you can't see or feel yet as symptoms—now that is a superpower!

Conventional analysis typically considers markers in isolation and often prescribes pharmaceuticals to address just that marker (for example, statin drugs to reduce elevated cholesterol). Functional analysis recognizes multiple causes for any single marker to be abnormal and looks for patterns among multiple markers to more accurately discern root causes.

Functional blood chemistry analysis saved my life. I was sick with multiple debilitating symptoms, many of which could have been prevented, but instead went undiagnosed or misdiagnosed for years. Once I found someone who was truly skilled at ordering and interpreting a functional blood chemistry panel I discovered so much about the root of my symptoms and I was able to take an accurate and individualized approach to my healing. I'm passionate about preventing others from suffering. I want to empower you with the knowledge you deserve so that you can make informed choices about your health, nutrition, exercise, and lifestyle that can dramatically improve your life.

In one-year, functional blood chemistry analysis saved the lives of two of my patients, both of whom had the potentially life-threatening blood disorder called hemochromatosis, or "iron overload". If left untreated it causes organ damage, failure and death. In both cases, their doctors never tested a full iron panel, so the condition went undiagnosed. I was able to quickly identify their iron overload by reviewing a comprehensive blood panel with all of the important iron markers. One patient underwent emergency pacemaker surgery just days before his functional blood chemistry panel results told me that his cardiac arrhythmia symptoms could have been properly addressed by simply donating blood to lower his iron levels. The ER never ordered a single iron marker in his pre-operative blood panel!

My other patient's functional blood panel also showed that all of her iron markers were abnormally high even by conventional standards. I knew what it was and explained how to best work with this condition. I referred her to her primary care physician for further tests to determine the cause. She had to argue and even plead with her physician to order the follow-up test which proved her hemochromatosis was genetic and that she should also test her two children. That year, I learned a great deal about the preventative power of functional blood chemistry analysis.

I once had a patient whose VA doctor ordered their standard annual-checkup blood test, told him everything looked great, and that he was in perfect health. Although the panel had only 11 markers, far fewer than a truly comprehensive panel, I could still see important details that his doctor had missed. I found that his cholesterol was abnormally low due to overmedication with a statin drug, while several other markers all indicated insulin resistance and pre-diabetes. Moreover, he had symptoms of pre-diabetes that no one had ever brought to his attention! This case shows the power of reading lab markers holistically (looking for patterns in combinations of makers) and functionally (noting when markers fall in a grey area outside of "healthy", but not yet severely "sick"). Armed with this knowledge, he could make nutrition and lifestyle shifts and avoid dependency on diabetes and cholesterol medications and their unwanted side effects.

I have seen patients who were prescribed thyroid medications based on results of very few thyroid markers (typically TSH and sometimes one or more of T3/T4/free T4). The full thyroid panel I prefer has 10 markers, including two for antibodies. How can a physician prescribe a medication without fully investigating the functioning of the gland or organ for which that medication is meant to treat?

The Western medical standard of care, to which MDs and NMDs are bound, states that if Thyroid Stimulating Hormone (TSH) is high, they must prescribe a T4 hormone, usually a synthetic such as Synthroid. This is one-size-fits-all symptom treatment. A full thyroid panel interpreted functionally can sort through the many reasons why TSH might be out of range, so that the root cause can be addressed balance restored to the body's systems, so the patient can feel amazing!

I hope you now appreciate that a simple blood test is insufficient. Many doctors order bloodwork only when you are already sick, their panels are incomplete, and they interpret the markers in isolation according to reference ranges compiled from populations of primarily sick people, without considering your unique history, nutrition, and lifestyle. Maybe your bloodwork is processed by software, and all you get is a nice colorful report without personal consultation.

You are a whole person situated within family, profession, and community. You deserve a healthcare practitioner who gets to know you through extensive intake, has specialized training and experience to order a comprehensive bloodwork panel, interpret it using functional ranges, look for patterns that characterize root causes, and then offer education and guidance about nutrition, lifestyle and the direct connection between your mind, body and spirit. I wish I could say they are common and easy to find. Even many who generally practice functional medicine lack the specialized training in functional blood chemistry analysis.

My passion is working with you to discover what is really going on inside your body and solving your unique health puzzle. I encourage you to learn more, ask questions, and take charge of your health. If you don't, then who will?

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