

**A**t Ideal Health, we don't promise miracles; we offer breakthrough custom nutritional supplement programs based on sound science and years of research and clinical practice. We encourage your curiosity. We want to answer your questions before we ask you to try our breakthrough product, Custom Essentials®. Here are answers to some of the most common questions we hear.

**Q: How does my PrivaTest® urine sample determine what my body needs?**

**A:** *The PrivaTest takes nutritional testing to the next level. We don't just want to know what nutrients are in your body today. We want to know whether or not these nutrients are getting into your cells to do their work.*

*The PrivaTest does not involve a nutrient-by-nutrient, milligram-by-milligram analysis of your nutritional status. Instead, using your in-home urine collection and Metamatrix® Clinical Laboratory's analysis backed by many years of published science, the PrivaTest provides vital information about how three critical areas of your metabolism are using the nutrients you ingest.*

*These three areas were selected for testing because research has shown that poor or altered function in any of them contributes significantly to the causes of many modern degenerative diseases. This approach is more useful clinically than simply looking at the nutrients existing in your body today. For that reason, the PrivaTest analyzes the end by-products of your metabolism – the chemical compounds that are coming out (or NOT coming out) in your urine.*

**Q: How does my PrivaTest urinalysis compare to a blood nutrient test?**

**A:** *There are several different blood tests for nutrients, and they are generally very expensive. Most simply measure nutrient levels in the blood on the day you give the sample. While this is useful for some specific diagnostics, it provides no information about cell utilization of nutrients by the body - the answers everyone needs to know. Ideal Health's PrivaTest studies the by-products of cellular function in three biochemical pathways. This tells us how well the cells are using the nutrients, and whether the nutrients are even available to the cells. With that information and other data, your individual nutrient needs can be accurately determined.*

**Q: What scientific validation supports the PrivaTest?**

**A:** *The research methodology for your PrivaTest has been widely recognized in the scientific community as valid and*

*reliable. Metamatrix Clinical Laboratory is a world-class facility that uses the most advanced laboratory equipment and latest scientific methods to analyze your specimen. For more than 20 years, Metamatrix has serviced thousands of physicians and researchers who use their exacting scientific research methods as diagnostic and preventative treatment tools.*

**Q: How do you determine what specific nutrients go into my Custom Essentials®?**

**A:** *First, a foundation nutrient formulation of all known essential vitamins and minerals is selected for you based on your gender and age. Dosages are determined using data for persons of your sex and age group derived from thousands*

*of research studies evaluated by Metamatrix's staff of PhD's and clinical nutritionists. Next, your PrivaTest results are analyzed and applied against a sophisticated computer algorithm that is proprietary to Ideal Health. Each test category has certain sets of nutrients associated with it, which are known to influence the specific biochemical pathways described by your test result. Depending on your results, those nutrients are added to your foundation formulation in specific amounts.*

*The total mixture is then homogeneously blended in a stepped blending process under carefully controlled conditions to produce your Custom Essentials product. This special blend is the single, best-fitting combination for you out of 48 possible combinations of up to 55 essential nutrients*

*and accessory ingredients.*

**Q: Who manufactures my Ideal Health Custom Essentials?**

**A:** *Ideal Health aligned with HVL Laboratories, the premier formulary of quality nutritional supplements for over five decades. HVL Laboratories services healthcare professionals worldwide, including Western Europe, Australia, and the Pacific Rim. HVL Laboratories produces Custom Essentials exclusively for Ideal Health, using your PrivaTest results and joint proprietary technology.*

**Q: Are my Custom Essentials "cold-processed?"**

**A:** *Yes. Our formulary uses a true cold-processing technique that preserves nutrient potency. For capsules, this means that the product is processed at temperatures not to exceed room temperature (72-77 degrees). One of the primary reasons healthcare professionals recommend Custom Essentials is that the nutrients are chemically intact. Only intact nutrients give you maximum results.*

**Q: How are my Custom Essentials blended?**

**A:** *A major challenge in blending a multivitamin/mineral formula*

Rigorous  
Scientific  
Validation

is to insure that the many separate ingredients mix together evenly. Most manufacturers dump all the ingredients in together and blend away. With multiple-capsule daily doses, this can often result in too much of one nutrient (zinc for example) in a few capsules and too little in the others. This kind of uneven ingredient distribution does not supply consistent nutrition to the body and may promote accelerated nutrient interaction.

Through years of research, our manufacturer has developed a "stepped" blending technique to insure uniform nutrient distribution for complex formulations. The process for Custom Essentials involves up to 15 separate blending steps. So you can be absolutely sure that what it says on your Custom Essentials label is actually in each daily dose.

**Q: How do you test for quality, purity, potency and freshness?**

**A:** At least 4 tests are performed on raw nutrients, depending on the material. Initially, raw biological materials are quarantined in a separate facility until microbiological assays for yeasts, molds, E. Coli, Salmonella and bacteria are all negative. On average, about 30% of raw materials are rejected routinely because they do not meet Ideal Health's incredibly rigorous standards.

The nutrients are then identified as being what they claim to be. This is done through High Pressure Liquid Chromatography (HPLC) and Inductively Coupled Plasma Emissions Spectrometry (ICP). These tests result in a biological signature for the tested compound, which is then compared to known biological signatures for the desired compound.

After manufacturing, the product is tested to make sure that it meets the USP XXIV standards for disintegration (how fast it breaks down in the stomach), dissolution (how easily the components go into solution), and stability (assurance of shelf life).

Finished products are also tested for weight variance and (for tablets) friability, or fragility. Capsules and tablets are analyzed with an automatic weight variance machine, which automatically rejects any capsule or tablet that is outside fill weight specifications. There is also a visual inspection by specially trained staff who use inhaling wands to remove any capsule or product from the batch that does not pass visual uniformity standards.

**Q: What emphasis does Metamatrix place on peer-reviewed scientific research?**

**A:** About 90% of our formulation information comes from peer-reviewed research studies. However, because we are on the cutting edge of nutritional science, we go a step further. We make formulation modifications based on real-life, clinical experience and feedback from physicians and other healthcare practitioners who use functional medicine in their practices.

**Q: Do you accept the certificate of analysis or do you do spot-lot checking?**

**A:** Our formulary maintains three sophisticated in-house laboratories to routinely perform their own in-house analysis of raw

materials and products. In addition, a vendor audit system is in place whereby the professional Ph.D. staff annually screens new and existing vendors to make sure they qualify and continue to qualify for our stringent raw materials standards. If they do not, they are dropped from the preferred vendor list.

**Q: How absorbable - and bioavailable - are Ideal Health's Custom Essentials® formulations?**

**A:** We use information from research that has been performed for specific forms of nutrients showing the relative bioavailabilities of each form. For instance, industry research has found that the amino-acid chelate minerals that we use in our products are 30-50% more absorbable than inorganic mineral forms such as carbonates or oxides. In addition, the USP standards used for disintegration, dissolution, and pH ionization also provide a good indicator of how well a product will be utilized.

However, the best indicators of bioavailability are the results produced in the human body. Years of use by thousands of practicing healthcare professionals has given HVL Laboratories and Metamatrix the valuable real-world feedback as to what nutrient forms work most effectively. Improved clinical symptoms and normalized laboratory values are powerful evidence that Ideal Health products are being recognized and utilized by the human body.

**Q: How would you describe the uniqueness of Custom Essentials?**

**A:** Custom Essentials is the cutting-edge multivitamin/mineral supplement, providing all known essential nutrients that have been customized to the specific needs of age, gender and the individualized targeted nutrition based on the three vital metabolic areas evaluated in the PrivaTest.

It is simply the best supplemental nutrition that science has to offer. And our formulas will remain on the cutting edge of science as

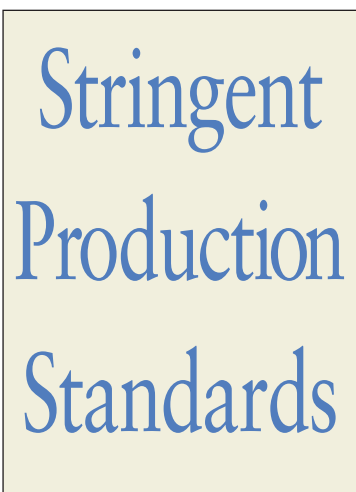
new discoveries continue to be made.

**Q: What about gene testing? How is functional testing different from gene testing?**

**A:** In the year 2000, Ideal Health began investigating the scientific merit of adding genetic testing to the Ideal Health testing menu. Since that time, we have continued to evaluate the current science and the methodologies of new companies who have positioned themselves in this arena. In the final analysis, Ideal Health's Scientific Team remains unconvinced of the soundness of this tool for use in predicting the need for nutritional supplementation.

Dr. J. Alexander Bralley, of MetaMatrix Clinical Laboratory, states:

"The genetic tests are good for revealing a person's tendencies for various needs. But they don't tell you whether the tendency is expressing itself and to what degree or how effective any intervention is. The other problem is that there are hundreds of different genes which could influence a particular health parameter and just a few are being measured. Other genetic influences have not even been discovered yet.



So, for example, say they have a gene marker for oxidant-stress risk and they find you have this tendency and they recommend more antioxidants; fine. How much do you take? How do you know you are effectively making up for your defect? Are there other issues which would increase the need for antioxidants? You don't know the answer to any of these questions unless you actually measure your oxidant stress level with, for instance, a lipid peroxide (LP) test. The LP level not only tells you that you need more antioxidants, but will help you titrate the proper amount for optimal protection. This is the basic difference. You need to know in real time what your current needs are and that can best be done with functional metabolic testing. Genetic tests simply are not complete enough to encompass all the issues which might affect a particular function."

This is the basic problem that the Scientific Team ran into years ago when initially evaluating the use of genetic testing and remains true today.

Just because you have a gene, it does not mean that the gene will ever be "turned on" (called expression). Therefore, as Dr. Bralley says, you need to measure function in order to determine what is actually happening to you in "real time," right now. Functional testing lets you know how your environment, lifestyle, AND genetics are combining to affect the physical and biochemical function of your body today, allowing you to see the effects of any actions you take.

Additionally, there is a real danger that (at this stage of development in genetic testing) these tests can be misleading, providing a false sense of security if you don't show "a risk" for a certain genetic predisposition and causing undue worry if you do. There are just too many unknown factors at this stage of genetic research to link a genetic predisposition to the definite risk of disease. Most of the disorders currently evaluated by these consumer genetic tests are far more heavily influenced by environmental and lifestyle factors than by genes.

And, if you examine many of the recommendations made after these genetic test results are evaluated, you will see that they are usually the same "common sense" recommendations that are made to the general population to promote good health.

In 2004, the American College of Medicine Genetics Board of Directors issued a policy statement in which they stated, "Due to the complexities of genetic testing and counseling, the self-ordering of genetic tests by patients over the telephone or the Internet, and their use of genetic 'home testing' kits, is potentially harmful."

The Director of the National Human Genome Research Institute (NHGRI), Dr. Francis Collins, has expressed concern over the premature marketing of in-home genetic testing. In 2004, a meeting was held at the Institute specifically to discuss the Direct-to-Consumer marketing of genetic testing. Some of the NHGRI's concerns (excerpted from the summary of the meeting found on the website) include:

- Lack of validated tests
- Lack of consensus on methods for validating genetic tests
- Little data regarding harms or benefits of tests
- Broad range of intended use for tests
- Misinformation in public sector about genetic testing
- Existing oversight is technology drive – not public health oriented (emphasis added)

In addition, concern was expressed for the consumer regarding:

- Consumer confusion
- False hope
- False anxiety
- Missed opportunities to pursue other health interventions

In the NHGRI 2005 Budget paper (also on the website), this statement is made, "So far, researchers have found that many direct-to-consumer (DTC) advertisements exaggerate the scientific basis of the claims made and/or fail to effectively communicate the limitations of the specific genetic knowledge discussed."

Finally, Dr. Collins is quoted by the Associated Press as stating, "[T]he majority of claims that are made on those Web sites aren't scientifically sound."

We at Ideal Health are aware that it is not always practical to wait on the "stamp of approval" by traditional scientific bodies for progressive technologies. Medical science has a long history of dragging its feet in accepting beneficial innovations in human health. For instance, although it is now changing rapidly, we know that many traditional physicians still have not yet been educated as to the clinical usefulness of functional testing. This reality is one of Ideal Health's motivating factors in making the PrivaTest and our other functional tests directly available to the consumer.

However, in the case of in-home genetic testing, the Ideal Health Scientific Team is in agreement with the NHGRI. It is just too early to use this testing in the way it is currently being promoted in the consumer marketplace.

We continue to keep a close eye on the progress in genetic testing as a tool for predicting preventive supplementation. You may be assured that Ideal Health will offer this type of testing to our Ideal Health family if — and only if — our Scientific Team eventually becomes convinced of its value.

**Note:** The PrivaTest and Custom Essentials are not intended to treat, cure or prevent any disease. The Food and Drug Administration has not evaluated statements in this document.

## Evaluated Scientific Studies



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