**Individualized Treatment**

When seeking to address autism and other complex conditions, we have tended to assume that the same approach should work for all people—but it’s just not so. Even well-intentioned integrative practitioners tend to overlook the reality of genetic individuality and prescribe the same program for all sufferers of a health problem. That view fails to account for why some people react well to a given substance, while others do not. Whether it’s a food, a drug, or even a vitamin, people react differently, and as a scientist, I believe that it’s our job to understand why.

Why does one person react to a drug, while another does not? Why is someone allergic to a given food that another can eat without harm? We can’t begin to answer questions like these without taking many factors into account. As a result, our approaches haven’t fallen short, in that we really don’t understand why a program works for some and not for others. In the past, as scientific experts, in the face of different responses to treatments, we just had to shrug and walk away, without examining these differences and understanding their significance, or customizing our treatments to take them into account. If they worked for a certain percentage of people, that was considered good enough. But I believe that we need to constantly work at the frontiers of science and expand our approaches so that we are able to take individual differences into account and, by doing so, help each and every person who is affected. While I believe that one day all health care will be personalized, fortunately, as it relates to autism and related conditions, we already have new tools for that level of personalization.

Through the new science of Nutrigenomics, we can now begin to account for the underlying genetic propensities that are risk factors for conditions such as autism. After customizing a health recovery program based on the Nutrigenomic findings, we can next undertake follow-up biochemical testing to ascertain biochemical status and toxic load and monitor our progress in addressing health issues. Thanks to this new science, we can at last address people as individuals in accordance with the principle of genetic individuality. With the discovery of human uniqueness through the ongoing work of characterizing the human genome, a new vista opens to truly personalized medicine. Let’s go there together. With what we discover when we truly individualize our approaches, we can at last address autism and other complex conditions. Let’s take a look at what that entails.

**Understanding the Pieces of the Puzzle**

As I mentioned earlier, autism can be viewed as a puzzle created from a variety of biochemical, genetic, and physiological factors as they collide in the body of a developing child. To make informed decisions about undoing the damage that has been done in this “crash” of negative factors, each piece of this puzzle must be examined carefully, its function understood, and balance restored.

This book will look at each piece of this puzzle as I understand it at this time, and suggest programs of supplementation to address potential imbalances. The information presented reflects the most current view of the process of neurological inflammation that results in “autistic-like” behaviors, including the entire spectrum of autism-related conditions, including ADD and ADHD. This field is evolving almost daily with new information and new literature, and I will evolve with it. Future editions of this book will reflect new information as it comes to light.

First of all, customizing health programs requires that you get to know the many factors that act as toxic disruptors, contributing to imbalances. Here’s a brief list of some of the most common ones; a more detailed discussion can be found in later chapters:

- **Excitotoxins**: These are stimulating chemicals present in many common foods that overstimulate brain chemistry via the neurotransmitters and nerve receptors. This over-stimulation can trigger nerve cell death, which results in poor signaling, contributing to “stims,” and language difficulties.
- **Heavy metal toxicity**: Arising from environmental exposures, and compounded by metals in vaccines, heavy metals disrupt the immune system and the digestive organs, reduce energy, impair cognitive and neurological function, and weaken the individual.
- **Chronic viral and bacterial infections**: Arising from environmental exposures as well as the bacteria and viruses in vaccines, these chronic infections disrupt the immune, digestive, and respiratory systems, thus undermining the body’s ability to maintain and repair itself.
- **Methylation deficiencies**: Under—overactivation of methylation, a key cellular pathway that promotes detoxification, controls inflammation, and balances the neurotransmitters, can result in mood and emotional shifts as well as liver, pancreas, stomach, intestinal, adrenal, thyroid, and hormonal imbalances.

Taken together, these imbalances can result in impaired function throughout many bodily systems. But your child may not suffer from every single imbalance. That’s why we must customize the approach to match his or her specific health needs. The good news is that through this program it is possible to address all of these areas and rebalance these systems. However, this process takes time and patience. Success can be achieved by calmly correcting each imbalance.
I am convinced that all the symptoms we see arise from causes that can be addressed. From the many families with whom I’ve been privileged to work I know that children with autism have tremendous brainpower, and I am dedicated to helping them shine.

A Brief Review

Let’s take a moment to review some of the core understandings we’ve covered so far and add some new ones that will come back to time again and again throughout this book. If you ever wonder where you are as you delve into the science, I invite you to come back to this list for review, as it will help you grasp the main aspects of this approach.

- **The multifactorial nature of disease.** We’ve been taught that disease management is just a matter of taking one pill, but it’s far more complex than that. I want you to begin to see health conditions differently so that you can individualize the approach and access what you need to do. In this protocol, we’ll take into account a range of factors contributing to all health conditions, including genetic, environmental, and toxic burden. The protocol aims to supply the key nutrients needed to address these factors and manage the factors undermining health.

- **Individualized approach.** The need to recognize “genetic individuality” and develop customized programs.

- **Nutrigenomic testing.** New services only developed in the last several years permit us to examine an individual’s genetic uniqueness and customize protocols for him or her. In the next chapter, I’ll reveal the opportunities for individualization that open when we take genetics into account.

- **Genetic bypass.** Using specific natural supplements to support areas of identified genetic weakness to create balance and full functioning of all bodily systems is a key to this program, in this book, you’ll learn ways to do that and get to know the supplements useful for the range of issues and genetic profiles commonly seen in children with autism.

- **Methylation pathway or cycle.** This is a crucial biochemical pathway that we aim to optimize through this approach. In the next chapter, I’ll delve further into how dysfunctions on this pathway create health problems, and how we can restore optimal methylation function.

- **Neurological inflammation.** When the methylation cycle is not functioning optimally, instead of producing components needed for DNA, cellular repair, detoxification, psychological well-being, focus, and speech, the body will produce inflammatory substances that produce a range of health symptoms we need to address.

- **Toxins.** These are the various foreign substances that enter the human body and remain lodged there, disturbing function and producing imbalances and symptoms.

- **Detoxification.** This is the process of supporting the methylation cycle and organs to gently release toxins.

- **Biochemical Testing.** In this program, we test key areas that help us track progress of our individualized genetically-based programs.

- **Remyelination.** This is the final stage of the recovery process, in which we support the body with key substances needed to repair nerves.

Book Overview

In Part One, I’ll introduce you to the scientific foundations of this approach, which is based on addressing the multiple factors that come together in any form of disease presentation. In addition, I’ll reveal certain key areas of our genetics and biochemistry that are impacted in both autism spectrum disorders and a wide range of other conditions.

Following years of research and clinical practice, it’s my conviction that a one-size-fits-all approach is inadequate to address a complex ailment like autism because of the diversity of factors involved. Moreover, one-size-fits-all is a less than an optimal approach for other chronic and serious disease syndromes. At this point in history, we are standing on the threshold of personalized medicine, and the philosophy and approach detailed in this book will become your entryway into that world.

Although personalization is new, in my experience, it can create better outcomes. Here’s why: Personalized medicine is based on a deeper understanding of an individual’s uniqueness and customizes approaches to achieve the best possible combination for that person. Customization begins with a genetic profile, focusing on a range of key genes, with programs targeted to achieve the best results given the specific needs and/or weaknesses of a person with that unique combination of genes.
In the next chapter, “Nutrigenomics and the Methylation Cycle,” I’ll introduce you to the evolving science of genetic testing and supplementation to optimize genetic shortfalls. I’ll also focus on the biochemical pathway that I consider crucial to identifying areas of dysfunction and optimizing function—the methylation cycle.

Addressing toxins and infections through a careful and safe approach to systemic detoxification is key to healing. In chapter 3, “Promoting Detoxification Safely,” I’ll explore the rationale for detoxification, reveal obstacles to the detox process, and examine the key toxins we need to detoxify.

With all of this foundation in place, in Part Two I’ll orient you to how to use this book to undertake specific protocols. Chapter 4, “Step One, Part One—Building a Foundation for Health Balance” will introduce you to an overview of the Three-Step Program, and also reveal the foundational elements of the protocol that anyone can and should begin at once, even before they have received their genetic test results. In this chapter, you will learn which foods and ingredients to eliminate because they tend to exacerbate neurological inflammation. In chapter 5, “Promoting Healthy Digestion,” you’ll learn how to ready the bodily systems to undergo the health restoration that occurs in Step Two. Key to this approach is accessing customized supplement protocols for your child (or yourself, if you are an adult following this program). Chapter 6, “Step Two, Part One—Optimizing the Methylation Cycle,” and chapter 7, “Step Two, Part Two—Increasing Detoxification,” will take you through the program sequence and offer some of the foundational protocols you can consider. In chapter 8, “Remyelinating Nerves,” I offer the program sequence for restoring damaged nerves.

My Promise to You

I will not give up until every child is given the chance to recover; until all of the pieces of the puzzle fit together, and this chronic condition no longer threatens the next generation.