

Environmental Inputs

I've explained how our current model of medicine ignores the real causes of disease. Now we'll examine the first of 7 keys to Functional Medicine.

Our thinking about how we get sick is completely wrong. You can't "catch" disease. You can't "get" cancer or heart disease, diabetes or dementia. Our medical system is based on the idea that diseases just show up, like an unwanted visitor. That it's unpredictable and mysterious. This may have seemed true 150 years ago when Louis Pasteur came up with the germ theory of disease: There were germs out there and some people, by a stroke of bad luck, just "caught" them. There was not much you could do except hope that the germ (or disease) didn't show up on your doorstep. Then we found a drug for the bug with the discovery of antibiotics—and voila—modern medicine could finally do something about disease. In the 70 years since the discovery of antibiotics, we've been on a relentless search for a drug for every bug, a pill for every ill. The problem is, this completely ignores the *real* cause of disease.

The only way to get to the root of disease is to understand how *your* personal environment (your diet, stress, exercise, radiation, trauma and toxins in food, air and water) interacts with *your* genes to determine your state of health or disease.

What you *can* do

Your genes are fixed. You can't change them. That is called your genotype. But you can change which genes get turned on or off, and how that affects your physiology, by changing those environmental inputs. Your environment interacting with your genes creates who you are at this moment—your phenotype—that you can change!

Every environmental input, from diet to toxins to stress, all determine the healthiness of your body. It is like preparing healthy soil for plants. To have

vibrant growth you must mix the right amount of organic matter, the right pH balance, the right amount of nutrients, water and light and air. Our bodies are the same; we need to have healthy soil in order to be healthy. In fact, Louis Pasteur, on his deathbed, realized this. It's the terrain, not the germ that is the most important determinant of health. This explains why giving zinc to malnourished children in the third world can reduce death from infections by over 75 percent. It doesn't stop exposure to bugs, but zinc boosts immunity, helping the children stay healthy.

So, by believing in this "germ theory" of disease, medicine has ignored one of the most important scientific ideas of the last century, that our health is determined by the interaction of our genes and our environment.

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In their article "Diet, Lifestyle and Longevity – The Next Steps?" in the *Journal of the American Medical Association*, two leading Harvard epidemiologists, Rim and Stampfer agree. They tell us that the benefits of studying and addressing fundamental dietary, lifestyle and environmental factors is more effective and economically sound than trying to find the latest drug or surgical treatment for chronic diseases.

As a society, the United States spends billions on chronic disease treatments and interventions for risk factors. Although these are useful and important, a fraction of that investment to promote healthful lifestyles for individuals at all ages would yield greater benefit. Simply looking at what we put in and around our bodies every day would be more effective and much cheaper. If the leading causes of death are smoking (435,000 deaths per year) and poor diet and lack of exercise (400,000 deaths), followed by alcohol, toxins, car accidents, sexual behaviors, and the use of illicit drugs, then that is where we should put our efforts as individuals and as a society.

Get Started

I ask every patient detailed questions about all their environmental inputs such as:

1. What is the quality of your diet? Do you eat whole foods? Is yours a plant-based diet? Or are you following a disease-promoting SAD (Standard American Diet) that makes you malnourished and unable to self repair, regulate and heal?
2. What are the stressors in your life: your relationships, work, societal pressures, family, and money?
3. Have you been exposed to toxins in the air, water or in food and has that disturbed the balance of your health?
4. Have you experienced physical trauma?
5. Do you misuse or under use your body and not provide the regular benefits of moving, stretching, and strengthening that allows your organs, joints and muscle to function as they were designed?

These are the real factors that influence and affect every system, function and process in our bodies. If we don't deal with them directly we are just dealing with the effects, not addressing the real causes of disease. Getting to the root of the environmental influences on your health and your life is the beginning of the possibility of your achieving Optimal Wellness—something we all are capable of enjoying.