

The Six Pillars of Health

By Deepak Chopra, M.D.

For decades, medical scientists believed that genes determined our biological destiny. If cancer, heart disease, or diabetes were part of our family history, developing these diseases seemed inevitable. However, thanks to a growing body of genetic research, we now know that genes are not our destiny. While we can't alter the structure of our genes or the sequence of our DNA, we can influence the activity of our genes to create good health and well-being.

We all inherit between 20,000 and 25,000 genes from our parents. Some of these genes include genetic mutations, which are variations of a gene that can affect how that gene expresses itself in your body. While 95 percent of disease-related gene mutations increase your risk factors for disease, they don't predict the disease. In other words, simply because you carry a genetic mutation that predisposes you to heart disease, you are not destined to develop it. Only 5 percent of disease-related gene mutations are fully penetrant, which means that the gene directly causes a disorder. Here's even more good news: You have the ability to influence the expression of 95 percent of disease-related gene mutations, including genes for Alzheimer's disease, heart disease, diabetes, and many types of cancer.

Through your daily lifestyle choices, you can optimize how your genes behave, helping to "turn on" the genes that promote good health and "turn off" the genes that promote illness. Here are what I consider the six most important pillars of health.

1. Sleep

During deep sleep, your body releases accumulated stress and physical toxins, balances hormones, strengthens the immune system, and repairs and regenerates cells and tissues. If you're perpetually sleep deprived, you are more likely to have a weakened immune system and chronic inflammation, which is associated with many diseases, including Alzheimer's, obesity, fibromyalgia, digestive disorders, and some kinds of cancer. Recent studies of sleep and genes are finding that even just a few days of sleep deprivation can have a profound effect on your genes. For example, one study by U.K. researchers found that after only one week of getting fewer than six hours of sleep a night, study participants experienced changes in more than 700 genes, including genes that affect metabolism and inflammatory, immune, and stress responses.

Most adults need between 7 to 9 hours of sleep every night (sleep that is not induced by pharmaceutical drugs or alcohol).



2. Meditation

Meditation is a simple practice that takes us to a state of profound relaxation that dissolves fatigue and the accumulated stress that accelerates aging and the development of disease. Research shows that people who meditate regularly develop less hypertension, heart disease, anxiety, and other stress-related illnesses. For example, a recent study conducted at the Chopra Center found that after just a few days of meditation, participants experienced a two- to three-fold suppression of gene activity associated with viral infection and wound healing. There were also beneficial changes in the genes associated with the risk for Alzheimer's disease. Perhaps the most astonishing result was that the meditators experienced a dramatic increase in the anti-aging activity of telomerase. Telomerase is an enzyme that is found inside our cells and replenishes and repairs telomeres, the caps at the ends of our chromosomes that protect our genes. Longer telomeres are associated with greater longevity and health.

Keep in mind that these benefits happened quickly, within a few days. By meditating daily, even if just for a few minutes, you will experience many immediate and long-term benefits for your health and well-being.

3. Movement and Mind-Body Coordination

Your body is meant to move, and regular exercise is a key to health and longevity. The risk of disease rises sharply as you age if you lead a sedentary lifestyle. In fact, drastic inactivity eventually leads to a 30 percent higher mortality rate for men, and double the mortality rate for women. The benefits of regular physical activity are numerous, including increased muscle mass, bone density, aerobic capacity, and strength. Not only does exercise keep the body young, but it also releases stress, improves your mood, and increases the brain's ability to learn, adapt, and perform other cognitive tasks. If I had to choose a single activity that does the most for the mind and body together, it would be yoga, which here refers to both the practice of asana or postures, and pranayama, conscious breathing. Yoga improves your body awareness, sharpens your focus, and builds strength, flexibility, and endurance. There is a rapidly growing body of research showing the benefits of yoga for specific health conditions, such as cancer, cardiovascular disease, and depression.

It's important to find physical activities you enjoy and do them regularly. If you've been leading a sedentary life, start slowly. If the most you can do right now is walk around the block, do that, and you will be surprised how quickly you increase your endurance and enthusiasm for moving and breathing.



4. Healthy Emotions

Your body is deeply affected by your moods. Chemical messages tell every cell how you feel. In its own way, a cell can be happy or sad, agitated or content, joyous or despairing. When you feel fear or anxiety, your body responds with the fight-or-flight response, which raises your heart rate and increases the production of cortisol, adrenaline, and other so-called stress hormones. Living in a state of chronic stress can lead to increased inflammation in your body and the development of chronic illness. On the other hand, when you cultivate healthy emotions, you promote self-healing and self-regulation in your body. Healthy emotions include love, kindness, joy, compassion, equanimity, gratitude, and peace.

There are countless ways to cultivate healthy emotions. You can begin by making a list of the healthy emotions and writing down one activity or experience that expands that emotion in your life. Then each day devote a little time to engaging in that activity with the intention of expanding your emotional well-being and happiness.

5. Grounding

Do you remember the last time you walked barefoot outside, feeling a surge of energy and well-being as you connected with the earth beneath your feet? There are now scientific studies showing that this act of grounding or earthing not only feels good but also has major benefits for your health, including:

- Stress relief
- Decreased inflammation
- Alleviation of muscles soreness
- Improved circulation and enhanced skin tissue repair

Every living organism, including human beings, has a biofield, which is an electromagnetic field. When your bare feet touch the earth, which is also electromagnetic, the negative ions from the earth's surface flow into your body to discharge the many unpaired positive ions (or free radicals) you've accumulated from living in the modern world. These free radicals come from regular exposure to environmental toxins, heavy metals, radiation, and chemicals in the food supply. Free radicals are associated with disease, inflammation, and accelerated aging. By walking barefoot on the sand, earth, or grass, the healing powers of the earth neutralize free radicals and recharge your energy. Grounding is a simple, enjoyable practice. All you need to do is touch the earth whenever and as much as you can.



6. Optimal Nutrition

The key to optimal nutrition is to favor a variety of fresh, whole foods (including plenty of vegetables, fruits spices, and herbs)—while eliminating refined, processed foods, which are stripped of vital nutrients and contain a lot of sugar, artificial ingredients, and other harmful chemicals. Processed foods are a major source of chronic inflammation, which is an underlying cause of many serious diseases. On the other hand, whole, fresh foods decrease inflammation and provide valuable vitamins, minerals, and fiber. Here are a few more guidelines to ensure that your food choices optimize your genetic expression and health:

- Eat organic foods whenever possible.
- Eat locally grown fresh vegetables and fruits when they're in season where you live.
- Eat only when you're hungry and enjoy reasonable portions.

Also pay attention to how you feel when you eat a particular food. If you feel energetic and joyful, that's a sign of decreasing inflammation. But if you feel dull, lethargic, restless, or irritated after eating, that is a sign that what you are eating is increasing inflammation.

About the Author

Deepak Chopra, M.D., F.A.C.P. is the co-founder of the Chopra Center for Wellbeing, the founder of the Chopra Foundation, and a world-renowned pioneer in integrative medicine and personal transformation. He is board certified in internal medicine, endocrinology, and metabolism. He is a Fellow of the American College of Physicians, a member of the American Association of Clinical Endocrinologists, and a clinical professor in the Family Medicine and Public Health Department at the University of California, San Diego. He is the author of more than 85 books translated into over 43 languages, including numerous *New York Times* bestsellers. His recent books include *You Are the Universe*, co-authored with Menas Kafatos, Ph.D.; and *Quantum Healing (Revised and Updated): Exploring the Frontiers of Mind/Body Medicine*.