

The prevention mindset

Living a healthy, long life needs more than following a list of things to do or avoid

Prevention means the process of anticipating something by holding it back. In the medical sense, this means stopping something—be it a pre-defined pathogen, an irritant, or a stressor—before it manifests itself as disease. In *The Art of War*, Chinese philosopher and strategist, Sun Tzu, said, “If you want peace, prepare for war.” Sun Tzu’s thought spread west to Rome over 2,000 years ago, and has been applied in military contexts in every century until modern times as “peace through strength”. However, in relation to the prevention of disease, this concept has been internalised only in the East as “health through strength”. We can protect ourselves from the siege of sickness only by taking responsibility for strengthening ourselves, our personal fortresses, before the battle.

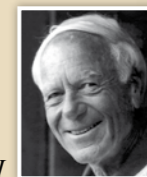
Thus, the way to prevent chronic diseases, or at least to lower your risk of getting them, is to keep two general principles of health in mind: lower your risk factors and increase your functionality.

Lowering risk factors

Your risk factors are:

- tobacco use
- unhealthy diet
- stress [including environmental stressors]
- alcohol abuse
- lack of physical exercise.

While almost every healthcare professional will agree that no tobacco use is the best use of tobacco as a preventive practice, it is beyond the scope of this article to prescribe what is the best diet for you, how much alcohol you should



By Walter M Bortz II

or should not consume, or exactly how much physical exercise you should get [although you probably need a lot more exercise than you are getting now]. Meanwhile, what is considered to be a harmful level of stress can vary from individual to individual, and stress takes many forms—physical, physiological and psychological. You will need to search more, in this magazine and elsewhere, for how to balance these risk factors into a lifestyle that is best for you.

Increasing our functionality

While getting more exercise is a way of reducing your risk of contracting chronic diseases, the concept of increasing your physical functionality goes beyond that, to performing important survival functions, to embrace the essence of life itself. Much of what we associate with old age and frailty is actually the result of disuse. As with any skill or craft, we lose our ability and functionality without practice. Thus, in life we must also move, with sustained effort to be able to keep on moving. After the age of 30, remaining functional requires approaching our bodies and our minds with a “use it or lose it” mentality. Disuse is not a survival option.

The words ‘health’ and ‘function’ are inseparable aspects of remaining physically and socially engaged in life. A healthy body is one that is working well. So too, a healthy intestine, leg, or brain are each an organ that performs its dedicated duties in the most functional fashion.

Endowed with more than we need

We are blessed with much redundant extra functions—we have two eyes, two ears, two lungs, two kidneys, two sex glands, when we really only need one to get by. I can run a Marathon with one lung; I can excrete my waste material with one kidney, or overpopulate the world with one testicle. The Darwinian reason for this apparent excess of function stems from the fact that we do not simply live in the idle gear. The environment delivers constant challenges that force us to do more than merely “get by”. Hence, we have the survival imperative of “extra health” or “reserve health.” In this regard, scientists have even found that pieces of the “junk DNA”

in the human genome can turn themselves on under certain circumstances, as if they are there as a “rainy-day reserve,” to insure that we have the genetic capacity to adapt to a changed environment in the future, with completely new demands on our bodies.

Dynamics of usage and function

Consequently, our biological system is one of excess capacity, allowing us to surrender at least half of our original capacity with no apparent functional loss. At 60 per cent loss there is still no problem with any deterioration of function. However, when only 30 per cent of our original functionality is left, we start to have symptoms of shortness of breath or a pileup of waste materials, and we develop chronic diseases. With another 10 per cent debit from our 100 per cent, we are brought down to 20 per cent of our starting total. This means either a profound loss of function, or death. But we do not die in our sleep from old age; we die from lack of function. This is, therefore, a good-news/bad-news story, as with a bank account. When you have extra cash in the bank, you can be a big spender. But when your balance declines below your debts, you become bankrupt.

However, if we increase our physical strength and our aerobic capacity, we can gain the extra margin needed to remain healthy and functional until at least age 100. The extra fitness margin that we accumulate makes all the difference when it comes to handling the next debt—that next stress or challenge—be it running up the stairs, lifting a child, avoiding the flu, or sleeping through another night. The vast majority of medical encounters and expenditures are in this narrow 20 – 30 per cent margin of our starting function. Prevention involves making the efforts to remain as far above this level as possible.

Enhanced function facilitates prevention

Thus, one of the two main principles of prevention is to preserve and enhance function. This is accomplished by good preventive maintenance, thereby avoiding the trouble and expense of being sick. Health, and the extra margin afforded us by increased fitness, trumps illness by

any possible measure. Western Medicine spends all its intellectual and fiscal capital in trying to repair the damage or loss of function. Eastern medicine places its emphasis on retaining health and function.

Health and the whole

Aristotle observed the truth, “Man is by nature a social animal.” As such, our social life determines our health, as, in turn, our health determines our ability to have a social life.

In the Eastern concept of health, remaining socially engaged is an integral part of our health, harking back to

the root word of “health,” in the Proto-Indo-European word *kailo*, meaning “whole.”

Thus, the Eastern concept of being in good health means to be in balance with one’s entire environment, to remain whole, physically, spiritually and socially. No matter what our age, our physical and psychological wellbeing also depends on us remaining socially engaged, doing things that we are passionate about and interacting with others.

This prevents loneliness and boredom, and increases our general feeling of wellbeing. It also increases the flow of endorphins, which boosts our immune system.



Find something you love to do; it will keep ageing and illness at bay

The path to complete wellbeing

To maintain our psychological wellbeing and in turn physical wellbeing, each of us must find our path to what renowned psychologist Mihaly Csikszentmihali, wrote about in many articles and books, including *Flow: The Psychology of Optimal Experience*.

Csikszentmihali’s studies have shown that people are happiest when they are extremely focused on an all-absorbing task that is difficult enough to be challenging, but not so easy as to instil apathy. Great athletes are said to be “in the zone” when they are in a state of flow. What they do is a result of thousands of hours of training and

experience, to be “naturally” in a state of peak performance. In this regard, American mythologist Joseph Campbell had one mandate for life and the prevention of illness, “Follow your bliss.”

If we cannot find our bliss or flow at work or at home, we can often find it in our hobbies or in volunteer work, or in amateur activities [the things we do, by definition, for our love of them] in a path that can help us fulfil our interests and our passions, to realise our human potential.

Thus, the path to prevention of disease is the same as the way to complete wellbeing.

An integrated approach

For millennia, the East and the West have followed divergent maps to guide them in their practice of medicine—preventing and treating disease. The difference between the two approaches extends far beyond the physical territories demarcated by their geography and languages. The East and the West have been guided by vastly different mental constructs of the concepts of medicine and health. The West has illuminated components and events as integral landmarks of its territory, while Eastern medicine has highlighted systems and processes as fundamental focal points of its provinces.

The East focuses on the whole

In Eastern Medicine, the main focus is on life-energy, or *Qi* [also called *chi*, *prana*, and life force]. Eastern medicine defines health as a state of wellbeing, in which the *Qi* is the invisible essence of life, maintaining itself in harmonic equilibrium with its environment, through the balancing forces of *Yin* and *Yang*. The Eastern approach has embraced the principle of emergence, insisting that the whole is much more than just the sum of its parts. In this formulation $1 + 1 = 3$, the final result of the energy forces emerging in a non-reductionist response to inputs, as extolled by the spirits of Aristotle and Confucius.

Huang Di, China’s legendary Yellow Emperor, who reigned from about 2,697 BC to 2,597 BC, is credited as the founder of traditional Chinese Medicine. He emphasised prevention as the best way to ensure that one remained in a state of good health. One of his more-profound expressions in this regard is, “To fight a disease after it has occurred is like trying to dig a well when one is thirsty or forging a weapon once a war has begun.”

Eastern medicine uses ancient techniques and is high on touch. It carefully looks at changes in the patient, palpating and touching, listening, asking questions, smelling, and using the senses to locate and treat subtle changes, taking in the entire body, in all its complexity, as a whole system.

The West concentrates on the parts

Western Medicine has taken a different approach to medicine, defining health as “the absence of disease, pain, defect, or symptoms of illness.” The West has no holistic theory of health. Instead, Western medicine has emphasised reductionism as its primary scientific methodology, by taking the body apart, breaking it into ever-smaller units. The Western approach has yielded the genome and molecular probes. Yet, these do not show us how to live better or to prevent illnesses.

In regard to disease, the Western orthodoxy has centred on the extrinsic agencies; throughout the West’s recent history, the major threats to human health were thought to be the by-products of adverse encounters with external hostile threats. Technological advances have allowed Western Medicine to address and redress countless states of illness that were unapproachable just a few decades ago. The conventions of Western Medicine yield quantitative metrics derived from empirical experimentation, with the dominant mantra being evidence-based medicine. Western medicine is high-tech and low-touch.

The key difference

Underlying all of the important divergences between the continents is the fact that Western Medicine has had

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‘disease’ as its primary compass setting while the East has steered towards ‘health’. Thus, the West has pointed to what makes us sick, while the East has been guided towards what keeps us well.

Opening up to the Eastern way

At the beginning of the 20th century, eight of the top 10 causes of death were infectious diseases. Since then, Western medicine has largely eliminated these. At the beginning of the 21st century, those eight leading causes of death have been replaced by chronic diseases. Unfortunately, these diseases cannot be eradicated, as smallpox was in 1978, or banished by a pill or medical intervention. Indeed the causes of these diseases emanate largely from our lifestyle and our man-made environment.

As healthcare costs accelerate in the West at unsustainable rates, carving out a larger share of the total economy, the West is starting to realise that it cannot rely on expensive new technological interventions to solve all of its healthcare needs. The West is slowly recognising that the progressive dissection of the body into its finer parts is insufficiently relevant to the concept of health. This is particularly evidenced by the two epidemics of ageing and type-2 diabetes. These two conditions affect East and West alike. But their adequate treatment is more in accord with the Eastern medical model with its approach toward treating the whole person.

Ageing and type-2 diabetes are not conditions that lend themselves to cure and repair, but they present magnificent opportunities for prevention. The operational tools in Western medicine’s black bag are pharmaceutical and surgical interventions. But these two tools are simply not relevant to ageing or diabetes.

In the West, the issue of prevention has only recently been presented as a health-determining agent, though less than five per cent of the West’s healthcare spending is currently allocated toward prevention. According to the WHO, chronic disease accounts for at least 60 per cent of all deaths. The WHO reports that most of these diseases are preventable, or their onset can be considerably delayed. The prevention of these diseases is not only cheaper, but is far more preferable than curing them after the fact. Addressing this point, American physician Oliver Wendell Holmes said, “To guard is better than to



Our social interactions are an important part of our health and wellbeing

heal—the shield is nobler than the spear!” The insistence of the West on repair, with its obvious financial implications, cannot resolve the current and increasing challenge that medicine faces. It inevitably must look to the East for answers.

What took West so much time?

Though the Eastern preventive approach to Medicine dominates good sense, why does the West emphasise repair instead of prevention? It is because repair pays well, while prevention does not. Zimmerman’s Law asserts, “Nobody notices when things go right.” Such a perverse reality is now coming under increasing scrutiny as the costs of Western healthcare [read illness care] begin to threaten the fiscal solvency of the nations that have embraced the repair model of Medicine. The West has started to look to the East for an alternative solution.

A broader view

At the end of World War II, the United Nations was already taking a broader view of health than most medical doctors in the West. It was looking East and West to insure global health. The World Health Organization [WHO] was formally launched in 1948, with its definition of health as follows:

“Health is a state of complete physical, mental, and

social well-being and not merely the absence of disease or infirmity.”—Signed by representative of 61 nation-states in 1946. Entered into force by the World Health Organization, April 7, 1948 [Not amended to date].

The WHO saw global peace and global health as integral parts of its goal, since war was seen as a disruptor of social wellbeing, and therefore of health. Thus, while wars and diseases continue, the United Nation and the WHO have tried to have fewer of them, and to alleviate their impact, largely through efforts of prevention.

The choice is ours

Fortunately, on a global scale, medical science is slowly maturing sufficiently to provide a rigorous, more inclusive, science of health. Health is no longer a bland platitude, but a firm format. Health is not simply the absence of disease but a physical state of specified content. The determinants of lifelong health are not to be found in hospitals or pharmacies, but in our everyday lifestyles. We must either select health or illness. We can either deliberately select the path to health or neglect it—it is our choice.

The ancient precepts of self-knowledge and moderation in all things have been rediscovered, uniting the East and the West. The future will decree how effective we will be in the integration and broadening of our curriculum for health. We must reduce the harmful risks to

our health, while taking personal responsibility for preserving and increasing our functionality—physically, physiologically, socially, and even spiritually.

Welcome World Medicine

Now that the notion of East-West convergence is gathering momentum, a major ideological gulf no longer separates the two. The mysterious and elusive Qi, drives both systems, and will ultimately provide the paradigm shift that will unite us. No longer can we afford to have just Eastern Medicine or Western Medicine as separate practices. The ultimate approach unites them into the notion of World Medicine, as envisioned in part by the WHO.

This approach is gradually capturing the hearts and minds of the medical fraternity across the globe. Instead of the highly-restricted, reductionist emphasis on disease, as I experienced in my years as a medical student 50 years ago—and was the prevalent Western attitude even 10 years ago—World Medicine promises a much more holistic approach, with broader horizons.

As the hemispheres and continents connect by building bridges and isthmuses, the universal hope for world peace and world health will inevitably come closer to realisation under the rubric of prevention. In this process, we must banish health illiteracy wherever it exists, since it is inconsistent with the concepts of prevention and world health.

Enlightenment and enrichment remain for us all, as new hope for health and the prevention of disease arise from convergence.

Stay Well

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