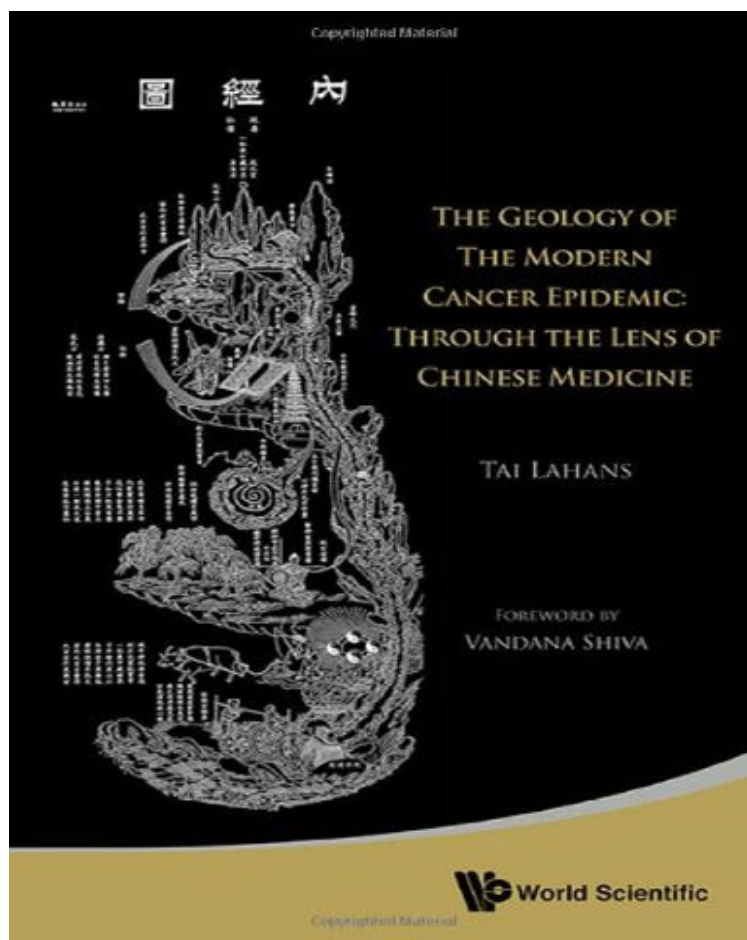




Tai Lahans

# The Geology of the Modern Cancer epidemic: Through the Lens of Chinese Medicine



***zum Bestellen [hier](#) klicken***

**by naturmed Fachbuchvertrieb**

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ISBN 978-981-270-111-1

內經圖

THE GEOLOGY OF  
THE MODERN  
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THROUGH THE LENS OF  
CHINESE MEDICINE

TAI LAHANS

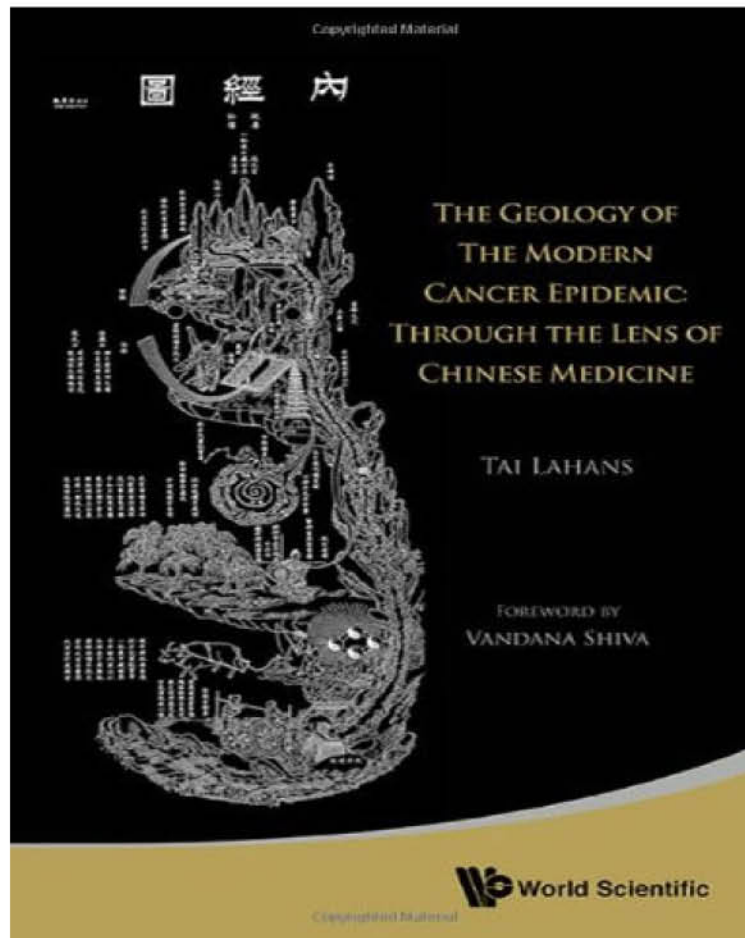
FOREWORD BY  
VANDANA SHIVA

 World Scientific



Tai Lahans

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# Contents

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<i>Dedication</i>	v
<i>Endorsement</i>	vii
<i>Foreword</i>	xiii
<i>Introduction</i>	1

<b>Chapter One:</b>	<b>Water: The <i>San Jiao</i></b>	<b>21</b>
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After the introduction, this chapter opens into the lowest common denominator of life and of pollution — water. It defines the status of waters across the earth and how they are constantly being attacked in terms of quantity, quality, and their ability to support life. The latter part of the chapter is a discussion on how water is the energetic and material equivalent of the *San Jiao* of Chinese medicine — one step up from the Source.

<b>Chapter Two:</b>	<b>Air — Lung Cancer</b>	<b>75</b>
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Following the discussion of water comes that of air and millions of ways that air is currently becoming contaminated. Then the chapter goes into the discussion of the lungs from a Chinese medicine perspective and how the lungs are connected to our immunity, to our emotions, and to the *San Jiao*.

<b>Chapter Three:</b>	<b>Earth — Colorectal Cancer</b>	<b>131</b>
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The Earth is the ground for life. We are sustained by water, air and earth. The equivalent



of earth within the human body is the entire gastrointestinal tract. Whatever happens to the Earth outside of us happens also to the earth within us. Loss of species, heritage crops, habitat, sustainability, and health are all one.

**Chapter Four:     *Yin and Qi* — Breast Cancer     199**

Women hold up the world. When the Earth is denigrated it is but an expression of how women are denigrated. Women live multitudes of lives within their one lifetime — wife, lover, caregiver, mother, career person, provider. The breast has become Mother Earth, Goddess, Seductress, life giver. How can the female breast be all of these things and remain healthy?

**Chapter Five     *Yin and Yang* — Prostate Cancer     301**

The flip side of the coin. If women are oppressed, so are men. Boys don't cry. Men must succeed. Only men go to war. Rage is male; depression is female. Only women raise children. Where is compassion? What happens to our male children? The Heart has been beaten out of men.

**Chapter Six     *Fire* — Chronic Viral Infection and Cancer     357**

Many cancers are caused by chronic viral infection. HCV and HBV are now the main causes of liver cancer. These viruses are considered epidemic worldwide. The public health system barely exists in the US. Some states do not have a public health cancer registry. In 1974 the NCI at the NIH was

mandated by the Congress to put 10% of its research dollars into prevention. Since then the NCI has never utilized more than 4% of its research dollars on prevention and it defines prevention only as early screening. Lung cancer kills more people than all other cancers combined but there is no early screen for lung cancer. We need to re-establish a broadened public health structure in the United States and globally.

**Chapter Seven: Epigenetics, the Source, and the Precautionary Principle** **401**

When the Native Americans speak of the Seventh Generation, they are speaking of prevention, conservation, and protection of all who are to come — human and animal and plant species. Epigenetics is showing that as far back now as five generations there are impacts on the yet to be born offspring of all of life. These impacts include environmental, emotional, climate, starvation, and so on. The San Jiao and the Source are deeper concepts of Chinese medicine that speak to and expose this perennial philosophy. The Precautionary Principle is a modern way of speaking to this perennially true way of viewing life.

**Chapter Eight The Geology of Hope** **439**

Science and religion have been at odds for a long time. They have been placed at odds with one another, and used by modern corporate economics to mire us all in a profit-driven world where contamination is possible

because of free speech laws applied to corporations. The reductionist science of the Enlightenment has taken single pieces of the universe and of life out of relationship to the ecosystem and sacred universe in which they live. The knowing side of life must come together with the meaning side of life. It is a immensely necessary first step in saving ourselves.

<b>Chapter Nine</b>	<b>Connections</b>	<b>489</b>
	What is health? How we can remake our world.	
<b>Addendum: Books and websites that are worth reading and monitoring</b>		<b>517</b>
<b><i>Index</i></b>		<b>521</b>

## CHAPTER 2

# Air — Lung Cancer

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The lesser physician treats and protects the physical form while the superior physician protects and treats the spirit.

— from the *Ling Shu: Jiu Shen Shi Er Yuan*

## Introduction

### *Epidemiology and History*

Currently there are only two cancers whose incidence is decreasing in the United States: lung and cervical.<sup>1</sup> Cervical cancer incidence has been steadily decreasing in the developed world because of the P&P smear, which finds preinvasive CINs (cervical intraepithelial neoplasms), allowing very early interventions.<sup>2</sup> In the developing world, where there are limited public health delivery systems, cervical cancer is a major health problem and is ranked third in mortality for women.<sup>3</sup> Lung cancer incidence has decreased in the US because a grassroots-driven governmental attack on smoking, smoking in public places, and advertising targeting young people has lowered the number of people who smoke. However, lung cancer continues to kill more people than all other cancers combined worldwide.<sup>4</sup> The number of people who die from smoking-related deaths other than cancer compounds this data. In other parts of the world the rates of lung cancer are increasing. In fact, American tobacco growers now export a large portion of their crop to Asia and Southeast Asia.<sup>5</sup>

The main risk factor for lung cancer is smoking. Tobacco use is considered a risk factor for many other cancers, including esophageal, stomach, pancreatic, cervical, mouth, bladder, ureter, renal, laryngeal



and pharyngeal cancers, and leukemia.<sup>6</sup> Smoking-related diseases are reversible much more rapidly after quitting smoking,<sup>7</sup> and cardiovascular disease (a smoking-related disease) in the developed world remains the main killing disease, with cancer running a close second.

There are several historical pieces of information that are important to take into account regarding the smoking of tobacco:

- The tobacco industry worked to develop a product that was more addictive than the natural form of tobacco while concurrently denying that tobacco is addictive.<sup>8</sup>
- The tobacco industry has done its own research on second-hand smoke and this research states that second-hand smoke is not a risk factor for lung cancer.<sup>9,10</sup>
- At the same time, many other researchers have shown that second-hand smoke is a risk for lung cancer; in fact, people who do not smoke and live with smokers have a 30% increased risk of lung cancer.<sup>11</sup>
- At the present time, after a period of decline the use of tobacco is rising in American youth.<sup>12</sup>

These historical facts would seem to indicate that the tobacco industry is dedicated to its own survival rather than that of its consumers. Because lung cancer can take 20–40 years to actually become symptomatic, be diagnosed, and kill someone, the industry itself has steadily refused to admit, starting in the 1950s, that the smoking of tobacco is an addictive and continuously carcinogenic event.<sup>13</sup> And it is convenient that addicts of tobacco can live 20–40 years before they die from the effects of the addiction. Tobacco is a perfect product.

It is important for the tobacco industry to have an ongoing pool of new smokers who become hooked for life. Hence, advertising aimed at children is an important part of getting young people addicted before they are wise enough to make better, life-affirming decisions about their own health and lifestyle. Children get hooked because they believe that smoking makes them adult and cool; Joe Camel,

like a street thug and dealer, is the messenger of coolness. Manipulative advertising in the tobacco industry taps into youth themes and cutting-edge antisocial themes that drive inner city youth and suburban wannabes.<sup>14</sup>

Given that tobacco smoking is addictive, carcinogenic, and creates so many other health problems, costing us tremendous amounts of health care dollars, it is amazing that it is still a legal substance.<sup>15</sup> The history of the lobby to keep tobacco legal is long and complex but one can be assured that it is not coming from the public. It is coming from the industry and with a tremendous amount of money behind it. It remains emblematic of the overall problem of tobacco that conventional medicine does not lobby against tobacco, thus demonstrating its own addiction to treatment and not to prevention.

On the other side of the coin, some people who have smoked all of their lives are never diagnosed with lung cancer. We should be studying these people. What do they have that others do not? And why do people who have never smoked or even lived with those who do smoke die from this disease? It remains true that 10%–15% of people diagnosed with lung cancer have never smoked or shared any other currently known risk factors for lung cancer.<sup>16,17</sup> Beverly Sills, the Metropolitan opera diva with *lungs* the size of the Amazon forest, is an example of someone who died of lung cancer but never smoked in her their life or lived with anyone who did.

### ***The Medium is the Messenger — Air Pollution***

Like water, air is a medium. When seen through slanting light the amount of visible particles in the air makes it look like a soup through which we swim upright. This soup is now more and more contaminated with gaseous and particulate matter that causes harm to the lungs.<sup>18,19</sup> New research has found that the tiniest pollutants in air disrupt basic cellular functions.<sup>20</sup> Currently, environmental regulations try to limit particles that are 10 microns in diameter and smaller particles in the 2.5-micron range.<sup>21</sup> But the particles that caused the most damage in the new study are one-tenth of a micron.<sup>22</sup> All

combustion processes release particles less than 0.1 micron. These tiny particles float in the air longer, travel farther, and are more easily inhaled than larger ones. Some are more problematic than others but the obvious truth is that the lungs are truly the "delicate organ" and cannot survive unharmed without clean pure air.

The researchers found that 0.1-micron particles accumulated inside cell structures of the deep tissue of the lungs and of macrophages.<sup>24</sup> The mitochondria of these cells were damaged, causing the cells to stop producing ATP, the fuel that drives cellular function, and to start producing other chemicals that lead to inflammation and cell damage. Since macrophages are part of immune surveillance, and the mitochondria drive cellular fuel, it would seem that this damage contributes to lowered surveillance and concurrent lung pathologies that are *Qi-deficient* in nature and may include injuries to the *San Jiao*. I refer you back to the previous chapter.

The World Health Organization estimates that 4.6 million people die each year from causes attributable to air pollution.<sup>25</sup> Worldwide, more deaths occur as a result of air pollution than automobile accidents. In 2005, 310,000 Europeans died from diseases directly caused by air pollution.<sup>25</sup> The direct causes include asthma, bronchitis, emphysema, lung and heart disease, and respiratory allergies. People with diabetes, heart failure, chronic obstructive pulmonary disease (COPD), and inflammatory diseases like rheumatoid arthritis (RA) are at increased risk of death when exposed to particulate air pollution for one or more years.<sup>25</sup>

### **Examples**

*Ground level ozone pollution* is now a burgeoning health issue, made especially worse by climate change and warming at ground level. It is primarily a result of vehicle exhaust and the combustion of fuels to produce energy, as in coal burning to produce electricity. It is created when sunlight and heat react with various chemicals found in air pollution. Volatile organic compounds (VOCs) and nitrogen oxides form ozone in the presence of heat and sunlight.<sup>26</sup> Ground level ozone and microscopic particulates, small enough to be

breathed into the lungs and sticky enough to attract pollen and other allergens, contribute to asthma and allergy attacks, and other chronic lung conditions like COPD and emphysema. The lung function is measurably decreased. And sometimes the symptoms of injury from ground-level ozone exposure occur several days or even a week after the time of initial exposure.<sup>27</sup>

*Indoor pollution* also contributes to the toxic soup in which we walk. *Formaldehyde* is a major indoor pollutant. Worldwide, 46 billion pounds of formaldehyde were produced in 2004.<sup>28</sup> It is used as a preservative, in embalming fluid, as a sterilizer, as part of foam insulation, as an adhesive in plywood and particleboard, and in textile treatment. It is listed as a carcinogen and is known to cause nasal, lung and brain cancer and some forms of leukemia. Formaldehyde is often found in carpeting, textile materials used in furniture, and in other household items that off-breathe formaldehyde gas into the air of our homes.

Indoor pollution enters our homes in the form of many household products, like paints, varnishes, waxes, aerosols, paint strippers, adhesive removers, rugs and furniture, dry cleaning fluids on newly dry-cleaned clothes, insecticides, termiticides, rodenticides, fungicides, and disinfectants. The Environmental Protection Agency (EPA) found that levels of about a dozen common organic pollutants were 2–5 times higher inside homes than outside regardless of whether the home was in a rural or urban setting.<sup>29</sup> Indoor pollution floats in or is tracked in, where it then accumulates, or it originates in the building itself because of products and building materials that contribute negatively to indoor air quality by off-breathing continuously in place.

*Methylene chloride*<sup>30</sup> is used in paint strippers, adhesive removers, and aerosol spray paints. It is a known carcinogen and converts to carbon monoxide when metabolized in the human body. *Benzene*<sup>31</sup> is found in tobacco smoke, stored fuels and paint supplies, and in auto emissions in closed garages. It is a known carcinogen and a primary cause of leukemia. *Perchloroethylene*<sup>32</sup> emissions off-breathe from newly dry-cleaned materials and from dry-cleaning facilities, some of which do not have adequate facilities to collect this organic gas. It is a known carcinogen.

## CHAPTER 4

### *Yin and Qi* — Breast Cancer

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There is no one but us.  
There is no one to send,  
not a clean hand nor a pure heart  
on the face of the Earth, nor in the Earth,  
but only us,  
a generation comforting ourselves  
with the notion that we have come to an awkward time,  
that our innocent fathers are all dead  
— as if innocence had ever been —  
and our children busy and troubled,  
and ourselves unfit, not yet ready,  
having each of us chosen wrongly,  
made a false start, failed,  
yielded to impulse and the tangled comfort of pleasures,  
and grown exhausted, unable to seek the thread, weak,  
and involved.  
But there is no one but us.  
There never has been.

— *Annie Dillard, Holy the Firm*

### Introduction

There is a prophetic saying that when the grandmothers speak the Earth will heal.<sup>1</sup> It is not clear from which tradition this saying came but it may have come from a matriarchal society or one in which women were coequals and were treasured. One of the greatest gaps of inclusion made by the founders of the United States was the omission from the knowledge they gained from the Iroquois Confederacy that it was the grandmothers of the clan who appointed the chiefs.<sup>2</sup>



Unfortunately, it was not until 1920 that women were able to gain the vote in this country. In the present day and only 90 years after achieving the vote, women are caught in the thing that we call the "war on cancer." And nowhere is this war more visible in the United States than in the skirmishes with breast cancer. Mothers, daughters, and grandmothers are all caught in these battles. And although women have rallied around one another in this war, we still await the grandmothers speaking the truth about breast cancer. Since Rachel Carson died of breast cancer shortly after *Silent Spring* came out in 1962, we are still waiting for the connection between culture, the environment, and breast cancer to be voiced.

If men were more inclined to form circles of support like women do when stressed, we would learn that the rates of prostate cancer and breast cancer are about the same: one in six men are diagnosed with prostate cancer and one in eight women with breast cancer.<sup>3</sup> But many men remain quiet, accepting their fates and going down — more men die from prostate cancer than women do from breast cancer — alone and silent.<sup>4</sup> Some reasons for this will be covered in the next chapter. Women, on the other hand, form groups and brew a pot of tea. Women circle the wagons and hold a summit meeting. We should all, men and women and children and animals and the entire circle of life, be doing this, because we are all at risk.

This particular chapter happens to be about breast cancer and the specific healing that is required. Although mainly pertinent to women, it is more importantly about the broader realities of the receptive<sup>5</sup> and nurturance, the Yin side of nature that is part of us all, no matter our gender. In the last chapter, the crisis of masculinity came up, and it will come up again, even as part of the discussion of femininity. But, in this chapter, what is needed is to speak about the crisis of femininity, the crisis regarding the receptive in life, of water and the fecund dark side of the mountain that holds the seeds for all future life, the side of listening for truth, of receiving the message, of hope through giving, of caution, of carrying the responsibility for hope and healing through love, and of the positive power of darkness. Truly, masculinity and femininity are of the same mountain but femininity is on the north side. And one cannot exist without the other.

## The Problem

Women, and therefore men, have been at a crossroads for some time now: one that poses the confusing question of how to live a life that expresses the need for an individual and creative life of self-fulfillment juxtaposed with the needs imposed upon all of us, but especially upon those of us of the female gender, for family and child-rearing, for nurturing the society of humanity. The questions are about giving, receiving, and sometimes taking. And they are about individuality and community, service and self-fulfillment. They include the apparent conflict between the driving force of individuality and the inherent right to do anything with one's life and property, and the inherent need to work for the general good, protecting resources that are communal and the need to forego some things for the larger good and the future. These questions seem clearly and simply put. However, the conundrum is far more complex, and the world outside and inside of the family imposes constraints especially upon women that make both parts of the question an impossible maze of contradiction that provides in our current world no clear choice or answer for women and, therefore, for the receptive side of life and nature.

As we all try to move beyond the traditional roles that women, and therefore men, have been caught in for the last few thousand years, the primary motivator and carrier of the burden of discovery has been women. Perhaps it is always the downtrodden, the slaves, the underclass, the powerless, and the poor who move a revolution. Many religious paths speak of how the meek shall inherit the Earth, and the great shall be made small and the small shall be made great. It is a very old theme — perhaps even an Abrahamic patriarchal theme that keeps us all going even in the midst of little change. This particular revolution is an immense task because it touches every aspect of life as we know it: societal roles, gender roles, work, poverty, how we own and use the land, science versus religion, and so on. And women seem to be trying to accomplish it alone. The question always is: Can women have it all? That is, if you are wealthy enough to have the choice to ask. The very question comes out of the issue of women struggling to make this change often by themselves. We do not ask if men can have it all,

exacerbate the problem of *Qi* stasis by depleting the *middle Jiao*. In a *deficiency* condition the long and slow course combined with psychotherapy is the path of recovery. A combination of needles and moxibustion is applied to *back shu* points in one treatment for *deficiency* depressions.

### ***Emotional Constraint***

*Emotional constraint* is another diagnostic category that is often given the diagnosis of depression or *liver Qi* stasis. *Constraint* has a very broad meaning in Chinese medicine and includes any form of stagnation. Historically, it has been thought to affect all of the organs. In the Yuan Dynasty there were six types of *constraint*:

- *Qi constraint,*
- *Damp constraint,*
- *Heat constraint,*
- *Lung constraint,*
- *Blood constraint,*
- *Food constraint.*

*Emotional constraint* can cause any one of these *constraint* syndromes, depending on which organ or level of disease attracts injury.

*Emotional constraint*, as a pattern within the context of depression, is often accompanied by changes in perception regarding pain. And so patients with *constraint* often end up seeing practitioners who use the modality of acupuncture. Differentiating pain syndromes is important not only relative to type and place and quality of pain but according to an understanding of the cause. A condition or disease can cause pain but emotional or psychological issues can also play a major role in the cause and perception of pain.

People with chronic pain will often develop *constraint*, and in conventional medicine this would be considered a form of depression treated with antidepressants. The question becomes whether a patient has pain because of a psychological predisposition or whether being in pain for long periods of time has caused psychological problems.

## The Falling Age of Puberty in Girls

Early puberty — especially early menarche — is a known risk factor for breast cancer.<sup>200</sup> Although there are no studies that go back even 50 years, there does exist a body of historical evidence from Europe and the US that shows that the age of onset of puberty has declined over the last 150 years, from age 17 in 1830 in Europe to age 13 in 1960. Among European girls, the average age of menarche (the first menstrual period) ranged from 12.3 years in Greece to 13.3 years in Finland in 2003. In the US in 1900, the average age of menarche was 14.2 years. By 1970, the mean age of menarche was 12.8 years.<sup>201</sup> In 1922, a prospective longitudinal study was launched that followed 3650 public school first graders in three Massachusetts cities for 19 years.<sup>202</sup> In 1937, the average age of menarche was 13.5, which, at the time, was the youngest average age recorded anywhere.<sup>203</sup>

The National Health and Nutrition Examination Survey (NHANES) showed that by 1970 the mean age of menarche in US girls stood at 12.8 years.<sup>204</sup> Using the original NHANES and more recent renditions of the studies, women were grouped according to age cohorts. Those born prior to 1920 were in the oldest group, while those born in 1980–84 were in the youngest cohort. The mean age of menarche declined by 10 months from the pre-1920 cohort to the 1980–84 cohort for whites, by 12 months for Mexican Americans, and by almost 15 months for blacks. In the older cohort, black women, in their 80s now, had a higher average menarchal age than whites — the reverse of contemporary patterns.<sup>205</sup>

Nutritional changes and infection control, both of which drive the onset or delay of menarche in mammals, are not able to explain all worldwide trends during the first half of the 20th century. For example, in Japan the age of menarche declined during a period of rapid industrialization after 1900 that ushered in increased poverty, higher rates of infant mortality, and tuberculosis outbreaks. Several studies have shown declines in menarchal age as a result of rapid industrialization. At present, the fastest rates of decline are occurring among countries that are newly industrialized, such as South



## THE GEOLOGY OF THE MODERN CANCER EPIDEMIC: THROUGH THE LENS OF CHINESE MEDICINE

"The Taoist school of Chinese medicine has long advocated the concept of a body ecology, where being in harmony with the environment cultivates harmony in the body. If readers of Tai Lahans' book heed her message to become advocates for political, social, and personal change, they will address the urgent issues of today and help both themselves and their patients achieve the most effective way to address cancer, that is through prevention. While being consistent with the messages of the Chinese medical tradition, they will also join the ranks of famous doctor-activists, such as Sun Yat Sen. Stewardship of the land and being a part of our Earth are both connected to universal sacred relationships and to human health."

**Michael McCulloch, LAC, MPH, PhD**  
Pine Street Foundation  
San Anselmo, CA

"In this book Tai Lahans combines the wisdom of perennial systems of medicine with modern knowledge and presents the greater message the cancer epidemic stands for. She takes a bird's view perspective to illustrate how the "cancers" inflicted on our planet by the modern disconnected world directly relate to the disease of cancer. By employing a micro-macrocosm approach, she explains why the "fight-the-cancer" approach is no real solution and how humans and human health are part of the intricate and fascinating web of life. In addition, Tai Lahans offers her profound experience of Chinese medicine treatment approaches for cancer patients and pre-cancerous conditions. However, more than anything, this book deepens the understanding of the world as a whole, the Great Chain of Being and the Sacred."

**Simon Becker, LAC**  
Academy of Chinese Healing Arts  
Switzerland

"Dr. Tai Lahans, a living treasure, presents a refreshingly unique perspective in this book. By interweaving Chinese medicine philosophy, modern scientific theories and data, and economic/political/social principles she has created a comprehensive book on cancer prevention. Dr. Lahans emphasizes that precaution is the only way to meet the medical imperative "do no harm". Kudos to Dr. Lahans for her vision."

**Misha Cohen, LAC, OMD**  
Research Specialist in Integrative Medicine, UCSF Institute for Health and Aging  
Associate Member, UCSF Comprehensive Cancer Center  
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### About The Book

Cancers are on the rise across the world. Overall cancers are diseases that may be preventable. This book looks at the many levels of determined, probable, and possible causation for several common cancers. These causes include realities found in culture, anthropology, sociology, politics, the environment, agriculture and food, beliefs, and the modern lifestyle. These realities are filtered through the perennial science of Chinese medicine — an ecological system of knowing and understanding the human body as it relates to the world around us.

The book covers lung, colorectal, breast, prostate, and virally-caused cancers. It interweaves conventional medical knowledge of these cancers with modern realities of everyday life we all live, and with Chinese medicine interpretations and strategies for treating probable pre-cancerous conditions. This makes it a book that is useful for the practitioner of Chinese medicine. It is also useful for the patient suffering a cancer diagnosis in terms of survivorship and for other medical practitioners who wish to understand how integrated care for cancerous diseases and conditions may relate to Chinese medicine and prevention.

The final chapters of the book are dedicated to finding answers for a cure for cancer through making connections between how we live, what we believe, the environment we are creating based on those beliefs, and the social and political mechanisms we now have in place that keep us from change and, therefore, from the cure for cancer.