# Dr. Joseph Mercola with Jeffry Herman

# DECEPTION

Discover the Truth about the Benefits of SUNLIGHT EXPOSURE

FREE EXCERPT
CHAPTER 1 ONLY

# CHAPTER 1: THE NEW DARK AGE

# HOW AND WHY YOU HAVE BEEN DECEIVED

F or decades now, you have all been warned that the sun is dangerous. At best, you have been told that it will wrinkle your skin and age you prematurely. At worst—and it is a very grim worst case scenario indeed—you have been told that it will greatly accelerate your risk of cancer. Many of you probably remember dire warnings that the hole in the ozone layer would eventually make going outside nearly impossible. Even now, you have been told that on a sunny day, you need to slather yourself with sunblock, or a grim fate awaits you.

Sunbathing is now portrayed as a social evil. It is considered evidence of poor health judgment, an activity that is comparable, in many circles, to smoking cigarettes or drinking excessive amounts of alcohol. A "healthy tan" is considered an oxymoron. In fact, one ad for sunscreen showed ten onlookers gazing into a casket, with the headline "Here's how you can look with a healthy tan."

The media is filled with such warnings, and so-called "public service announcements" on the issue show no more restraint than the sunscreen commercials. A typical anti-sun ad spotominously alleged that "exposure to the sun's ultraviolet rays accounts for more than half of all cancers in America... cover up and use sunscreen on yourself and your kids every day." Another somewhat bizarre ad in the same series went so far as to compare the sun to "a clown, smiling with jagged teeth and ill intent at your wee ones,

flamethrower in hand ... every day, this unseen killer punches through the earth's atmosphere, through the clouds, and into your child's flesh'And anti-sun ads are far-reaching; a rather self-congratulatory survey conducted after these spots aired revealed that, after only one month, 76 percent of those in the media market where they were being broadcast had seen them.

And that number applied to only one set of ads among many; the message has reached far more than 76 percent of the population. In addition to the ads, news headlines blare "Discoveries on the Making of a Suntan Reveal How Cancer Lurks in the Wings," 5 "Sun is Linked to Mutations in Skin," 6 or "Scientists Struggle to Undo Tanning's Deadly Damage." These articles were published in the New York Times

The U.S. government is in agreement with these disturbing headlines; many who sound the alarm regarding the dangers of sun exposure point to the fact that the National Toxicology Program of the Health and Human Services Department has labeled sunlight a "known carcinogen." Of course, that list also includes nickel coins, wood dust, and wine as "known carcinogens" (and also featured on the list, ironically enough, is methyleugenol, a substance used in sunscreens).

You have been told by doctors, by health officials, by advertisements and commercials, by beauty experts, by corporations, and by well-meaning friends: The sun is your enemy. The sun will kill you. You need to stay out of the sun.

The only problem is that it's all been a distortion of the truth.

That's not to say that sunlight can't be harmful. Of course it can be, as the sun is a powerful source of energy, and needs to be respected. Anyone who has ever gotten a sunburn knows that sunlight, at a high intensity over a long enough period, most certainly can damage your skin. As you will read later in the book, sunburns are only a trigger for skin cancer and not the cause, but imprudent sun exposure is certainly something to be avoided. Precise recommendations for optimal sun exposure will be reviewed later in the book.

It is important to appreciate that anything, no matter how healthy, can be harmful to you if you receive or consume excessive amounts, and sunlight is no exception. There is, however, little scientific evidence to justify the massive public health campaigns that recommend complete avoidance of the sun.

While sunburns do contribute to skin cancer risks, there is no proof that exposure to the sun that does not result in a sunburn will cause melanoma. What's more, there is no proof that sunscreens prevent melanoma. In fact, studies have shown that melanoma is more common at higher latitudes where there isless sunlight. Other studies have demonstrated that people who spendmore time outdoors actually decrease their risk of developing deadly melanoma.

### Sunlight, the Healer

Sunlight's potential to harm you has been blown out of proportion. And what's worse, the paranoia about sun exposure has also overwhelmed and buried the wealth of historical and medical evidence supporting the enormous therapeutic benefits that regular sun exposure can provide. In fact, as you will find out in the next few chapters, careful sunbathing has the potential to radically reduce many of the chronic degenerative diseases that rank among the greatest health problems faced by modern man.

Not all of the precise mechanisms that produce the benefits of sun exposure are known, but a mountain of recent scientific research points to vitamin D as having one of the most profound roles in providing these beneficial effects. Vitamin D is produced naturally by your body when sunlight strikes your skin. It is essential for your health and for the proper functioning of your organs and cells. A deficiency in vitamin D renders your body vulnerable to a host of chronic disease conditions.

Unfortunately, the fear and paranoia regarding sun exposure, combined with the fact that so many people now work indoors, has contributed to a silent epidemic of vitamin D deficiency. This epidemic is a major factor in the precipitous rise of the many chronic illnesses which are currently plaguing our modern industrial society. And, as you will read later on, simply swallowing a vitamin D capsule is not at all equivalent to obtaining vitamin D the way your body was designed to produce it, by having sunlight shine on your uncovered skin.

Recent evidence strongly suggests that if everyone in the U.S. received enough sunshine, the number of cancers diagnosed each year would drop by

200,000, and the annual number of cancer deaths would drop by as much as 63,000.<sup>12</sup> And a vast new study that spanned the globe revealed even more astonishing results. Researchers looked at data from 177 countries, examining blood serum levels of vitamin D3, satellite measurements of sunshine and cloud cover, and breast and colon cancer rates. They found that, worldwide, adequate sun exposure could prevent as many as 250,000 cases of colorectal cancer and 350,000 cases of breast cancer annuallyThink about that for a moment—600,000 fewer people would develop those potentially deadly diseases each year. And that number refers to only two types of cancer; if all varieties of cancer were taken into account, the number would be far higher.

### Still in the Dark Ages

It wasn't always like this. For most of human history, the sun was respected for its curative powers, rather than being regarded as a cause of disease. In fact, from the beginning of recorded time, humans have worshipped the sun for its therapeutic properties. Many ancient cultures have clear records of this.

Health practitioners reported the benefits of sun exposure on heart health six thousand years ago, in the time of ancient Egyptian pharaohs Ramses and Akhenaton.<sup>14</sup> The Greek physician Antyllus wrote that sun therapy "prevents increase of body weight, strengthens muscles, makes fat disappear and reduces hydropic swellings.<sup>75</sup> Heliotherapy (helio meaning "sun") was also praised by Hippocrates, the creator of the Hippocratic Oath, as well as the doctors of Rome and Arabia.<sup>16</sup> The Roman scholar Pliny the Elder called sunbathing "the bestof all self-administered medicine," and sunning was prescribed in Rome for epilepsy, paralysis, asthma, jaundice, bladder and colon diseases, and obesity.<sup>18</sup> The great Arabic physician Avicenna recommended sun baths for asthma, sciatica, and other ailments.

Our ancestors often had a complex relationship with the sun, however, and attitudes towards it sometimes changed quite radically over the course of human history. Sun therapy fell out of common practice in the West between the fall of pagan Rome and the beginning of the eighteenth centurishe reasons were primarily religious; early Christians were afraid of the association between heliotherapy and sun worship, so they avoided attributing healing

powers to sunlight. In both Rome and Greece, heliotherapy was linked with the powers of sun gods, and the Christians of Europe, after fighting a long and bitter campaign to eliminate persistent solar cults, were relentless in their goal of destroying every trace of them.

The Middle Ages were a dark period for medical practice in general. Many medical principles considered basic common sense today, such as good hygiene practices, were unknown. At the same time traditional remedies were often rejected because of their association with witchcraft or pagan religions. The scientific method had not yet been introduced, and doctors never tested their theories to see whether or not the cually worked; a patient lived, or died, and medical practice remained the same either way. This was the era of the Black Death, of rampant plagues, and of epidemics of cholera and tuberculosis. Millions perished needlessly because basic medical concepts were unknown or misunderstood.

The modern era could learn a powerful lesson from this period of history. While there has been clear and obvious improvement, traditional remedies such as sun therapy are still being rejected because physicians are afraid of their association with primitive superstition. It's true that the scientific method has allowed us to conquer or reduce the spread of many infectious diseases, but at the same time mountains of evidence, pointing squarely at many of the actual causes of chronic illnesses, have far too frequently been dismissed out of hand.

All too many modern physicians, like their counterparts in the Dark Ages, make recommendations about factors such as diet and sun exposure based on conventional wisdom, rather than a scientific examination of real effects on human health. Study after study cited in this book will demonstrate that the currently accepted conventional wisdom is simply inaccurate, and based on misinformation.

In many ways conventional medical science is still in the Dark Ages.

### The Enlightenment

During the eighteenth century there came an era known as the Enlightenment. It is called this because, at that time, modern scientific principles were first

developed and applied to physics, chemistry, and medicine. Along with the Enlightenment there came—for a while—a return to the earlier regard for the sun as a healing power. As scientists examined the effects of sunlight on disease, they became more aware of the fact that it was potentially a powerful force for human health.

Waldvogel of Bohemia began to recommend sunbathing for health in 1755, although he had few, if any, followers so early only 1776 Le Peyre and Le Comte used sunlight to help treat wounds and tumors, and reported excellent results: In 1779, Bertrano published a series of essays entitled, "Concerning the Influence of Light on Living Organisms," and a scientific basis began to form for a study of the beneficial effects of sunlight 1796 the University of Gottingen in Germany offered a prize to whoever wrote the best essay on the effect of light on the human body. The prize was won by one Dr. Ebermaien, who came very close to describing the manner in which sunlight could be used to cure rickets.

The nineteenth century saw a small explosion of research into sunlight. The scientists Cauvin, Dobereiner, Gerard, Hauterive, and Bonnet all carried out numerous experiments in the 1800s in an attempt to determine the effects of sun exposure. Their results were so positive that these men attempted to build a new system of therapeutics based on the use of the sunbattlen 1820 a French doctor named Lachaise observed that sunlight "gives marked relief in scurvy and rickets,"<sup>28</sup> and later in that same decade the Polish doctor Jedrzej Sniadecki successfully treated rickets in city children by taking them to the countryside so that they could get some suth.

In the 1830s, Dr. George Bodington defied the received medical wisdom of his time by using an "open air" treatment for tuberculosis patients, rather than enclosing them inside. He was successful in treating the disease, and even brought about some cures. The year 1849 saw H. Lebert winning the prize of the French Academy of Medicine for a treatise on the treatment of scrofula and tuberculosis that included sun therapy. In 1852, Drs. Ollier and Poncet began experimenting with heliotherapy to treat patients with surgical tuberculosis (tuberculosis of the joints, bones, intestines, or skin, rather than the more common tuberculosis of the lungs, also called pulmonary tuberculosis).<sup>31</sup>

The father of modern sunbathing therapy is thought by many to be Arnold Rikli, who in 1855 opened a famous sanatorium in Weldes Krai, Austria, that provided a "Cure Atmospherique." The institution attracted patients from all over the world, and the experience Rikli gained in his fifty-two years of practice enabled him towrite seven books on all aspects of heliotherapy.<sup>22</sup> Although he is remembered by few today, his work influenced several generations of scientists.

In 1877, two British scientists, Dr. Arthur Downes and Thomas Blunt, accidentally discovered that light could kill bacteria when they left tubes of sugar water on a window sill. Tubes in a shaded area became cloudy, indicating bacterial growth, but tubes exposed to light remained clearealizing the potential implications they decided to thoroughly and scientifically test the effects of sunlight on the development of bacteria. They discovered that sunlight was in fact a powerful bactericide.

Their research, at last proving the beneficial effects of sunlight, set offa cascading series of experiments and treatments demonstrating the necessity of sunlight to health. By the end of the nineteenth century, sunlight had been demonstrated to be effective against such illnesses as anthrax, cholera, and dysentery, among many others. Scientists soon determined that the violet end of the spectrum produced the most intense antibacterial action.

# Into the Twentieth Century—Nobel Prizes For Sunlight Researchers

At the start of the twentieth century, research had advanced to the point that two Nobel Prizes were given to sunlight therapists: Neils Finsen in 1903 and Robert Koch in 1905. Both used ultraviolet light to successfully treat tuberculosis, decades before the advent of antibiotičs:lorence Nightingale knew of the importance of sunlight, and redesigned many of the hospitals of the early twentieth century to let in more suris.

One very notable figure from this era is Dr. Auguste Rollier, a surgeon who had become disenchanted with the largely ineffective surgical techniques that were being used at the time to treat tuberculosis. Dr. Rollier had good reason to despise these methods—his best friend committed suicide after a

colleague of Rollier's removed his shoulder joint, knee joint, hip joint, finger, and foot in an attempt to stop his tuberculosis from spreading.

When Rollier's fiancée also came down with the then-common illness, he started searching for another way to treat the disease. He eventually found it when his Swiss patients shared with him the folk remedy of sunbathing. He enjoined his fiancée to spend as much time as she could in the bright Alpine sunshine, and she was soon fully recovered. From the day of her recovery, Rollier was a devoted disciple of heliotherapy.

Rollier began using sunlight therapy in Switzerland in 1903, with such success that, over the course of the next forty years, his methods were adopted by hospitals worldwide, including in the United StatësOf the 2,167 patients who were under his care for tuberculosis following World War II, 1,746 completely recovered their health, an astonishing number for the time, with the only failures those who were already in the most advanced stage of the disease.Rollier's technique became a template for all who came after him. Because his work was so important, excerpts from his remarkably advanced book on the subject are included in appendix B.

While Rollier was practicing in Switzerland, Dr. Oskar Bernhard became known during World War I for his skill at preventing wounds from developing tetanus and gangrene, and saving limbs other physicians would have been forced to amputate; he was a sunlight therapistA decade later, in 1929, a practitioner named Dr. Ude began to use sun therapy to treat streptococcal skin infections, dramatically reducing the mortality rate of the illness, which had previously killed one out of every ten people contracting it.

Interestingly, at about the same time, Seattle scientist Emmett Knott came up with an innovative new technique that used ultraviolet (UV) light to treat disease. Dr. Knott wondered if blood infections might be cured by directly irradiating the blood with UV light. He built an apparatus that removed about 5 percent of the blood volume, exposed it to UV radiation, and then pumped the irradiated blood back into the body. The procedure was observed to have dramatic results on a variety ofi nfections and diseases, including blood poisoning, peritonitis, and viral pneumonid. It also rapidly cured both rickets and tetany. The Knott Technique, however, fell into disuse in the U.S., in part because no one at the time could explain the mechanism by which it worked.

One modern theory, however, is that the procedure delivers pharmacological amounts of vitamin D into the circulation (vitamin D deficiency is a common cause of rickets and tetany). Many substances develop vitamin D activity when irradiated, including olive oil, cereal products, orange juice, and egg yolk (milk used to be irradiated to fortify it with vitamin D, but now the vitamin D is just added).

Hundreds of studies have been published describing the antibiotic-like actions of blood irradiation. While it is of course best to receive your vitamin D through sunlight on your exposed skin rather than through a complicated surgical procedure, the effects of blood irradiation are a powerful testament to the healing powers of vitamin D.

As the twentieth century continued moving forward, the healing powers of sunlight became well known and well respected. It was used to treat diseases of the skin, nervous system, musculoskeletal system, circulatory system, respiratory system, ear, nose, and throat, among many othersThe scientific evidence was clear and the clinical results were inarguable. Patients who were exposed to sun frequently got better; those who were kept confined in the dark generally languished.

# Antibiotics Changed the Progressive Adoption of Sunlight Therapies

The discovery of penicillin by Alexander Fleming in the late 1920s gradually led, over the next few decades, to the age of antibiotics. When Gerhard Domagk won the Nobel Prize in 1939 for developing the first drug that was effective against bacterial infectionit, started the era of the pharmacological dominance of medical therapy—drug treatments rather than natural cufes. By the 1950s many started to regard heliotherapy as quaint and passé. Why spend months sunning yourself to cureour illness when a ourse of pils would cure it in a week?

While this is an attractive and even sometimes sensible attitude, it has led medicine down a dangerous path throughout the second half of the twentieth century and into the twenty-first. Antibiotics, followed by a host of other "miracle" drugs, have resulted in an attitude among physicians and patients

alike that for every disease there is a simple and convenient cure—a pill that can be popped or, at worst, a surgical procedure that can be performed to magically remedy the health challenge in question.

Natural remedies have been abandoned in favor of synthetic chemicals, long-term approaches have been dropped and replaced by quick fixes, and preventive medicine has been relegated to being a minor consideration while most attention is focused on disease management. The result is a system that emphasizes treating symptoms, hile allowing the actual causes of diseases to fester and grow worse.

When, for example, high cholesterol is treated with a cholesterol-lowering drug, your cholesterol level indeed drops. But this approach ignores the fact that high cholesterol is a symptom, not a disease in and ofi tself; and all too often it is a symptom of dangerous disease conditions caused by poor lifestyle choices, choices that remain unchanged while the patient trustingly swallows pills. The real disease continues to worsen as a result, often turning into a full-blown chronic, degenerative, and frequently terminal illness. (Incidentally, as you will read in more detail in later chapters, sunlight can work dramatically to normalize blood cholesterol levels, and your body actually requires it to break cholesterol down. §

Unprocessed wholesome foods, proper exercise, and, yes, sun exposure have all fallen by the wayside as synthetic drugs have grown in prominence. Starting with the advent of modern chemical-based medicine, sunlight gradually faded from the public mind as a cure.

But it would take a further set of changes for it to become regarded as outright dangerous.

### Selling Sunblock and Stealing Sunlight's Source of Sustenance

One inevitable result of the "man-made cure for every problem" attitude of modern medicine—and a major reason that it has become so widespread—is that as long as such an attitude persists, there will be those willing and eager to exploit and perpetuate it. The reason is simple; those who are peddling the pills, powders, and lotions are making a great deal of money by doing so. Many multinational corporations now have a stake in keeping the system

going, and providing an endless array of new solutions that cost money, even though free and sensible methods of solving the problems almost always exist.

The changes that led to the current paranoia regarding sun exposure began in the 1960s and 1970s, when the middle-class leisure culture in industrialized societies expanded. Indor workers began spending more and more time outdoors, either participating in leisure sports or sunbathing on vacation.<sup>58</sup>

This did not, however, begin a return to healthy outdoor sunning. Switching suddenly from indoor officework to outdoor activities without any preparation or knowledge of the effects is not a prudent way to go about getting a dose of sunlight. As more people began exposing their skin to endless hours of summer sun, suddenly and without proper preparation, sunburns became an increasing problem.

This is when the "have a problem, sell a cure" attitude of modern medicine took an even more dangerous turn with regard to sun exposure. Sunburns were a "new" illness on the public radar, and there were, of course, those who were more than happy to provide an expensive and potentially toxic "solution" for it. As usual, there was a free and easy solution; in this case the problem could have been solved by the practical application of sensible sunbathing techniques. But instead the pharmaceutical industry and dermatologists developed sunburn creams that quidy became enormously popula".

These sunscreens gave people a false sense of security and actually encouraged excessive sun exposure. But they were enormously profitable for the companies that produced them, and thus there was a strong incentive for them to continue and expand their disinformation campaigns in order to increase their market share even further. Eventually many of these products started making additional health claims. Not only did they prevent sunburns, their advertisements claimed, but they actually protected you from skin cancer.

This claim did have some basis in reality; as I have previously stated, the sun can be dangerous. There is clear evidence, for example, that sunburns are a risk factor for melanoma, an uncommon but dangerous form of skin cancer.<sup>63</sup> And it also appears to be true that excessive, long-term, or irregular sun exposure can increase the risk of some more common but less dangerous skin cancer variants as well. But the risks of sunlight have been

blown so far out of proportion by manufacturers seeking to sell their products that most people vastly overestimate the dangers and are completely unaware that safe sun exposure actually helppreventuch illnesses as colon cancer and breast cancer, which combined kill almost 100,000 people in the U.S. alone every year.66

Sunblock manufacturers have taken advantage of opportunities to sell their products with scare tactics. You may recall the widespread fear in the 1980s and 1990s that the depletion of the ozone layer would allow more ultraviolet light to penetrate the atmosphere, making sunlight even more dangerous. Unsurprisingly, sunblock ads made much of these fears, and sales of high-SPF sunblocks increased by millions of dollars. These fears have diminished since environmental policies have reduced the size of the ozone "holes," but even when they were at their peak, there was little reason to worry. There were no increases in skin cancers that could be attributed to ozone depletion. In Punta Arenas, the largest South American city near the Antarctic ozone hole, there have been no reported health problems related to ozone depletion, and measures of ultraviolet radiation showed that the increase was far too small to have any effect. Despite the evidence, the fear campaign continues.

The sophisticated and aggressive "educational" campaigns have created an anti-sunshine hysteria that is detrimental to your health. Dermatologists have worked synergistically with the drug companies to create a culture that frightens the average person away from receiving a healthy dose of sunshine.

It is a disinformation campaign that is very difficult to fight, because on one side powerful vested interests are making a great deal of money offof their products, but the other side has no profits to funnel towards promoting its cause. No one can make money from recommending sunlight. It is freely available, abundant, and unpatentable. As Dr. Michael Holick, professor of medicine, physiology, and biophysics, points out in his bookhe UV Advantage"There is no sun lobby. Sunlight is free."

### The Truth Eventually Rises to the Surface

Dr. Holick is one of the world's foremost authorities on sunlight and vitamin D; in fact he discovered the activated form of vitamin D (1,25-hydroxy

cholecalciferol) in 1980. But when Dr. Holick dared to speak out about the benefits of sunlight, he was asked to resign from his position in the Dermatology Department of Boston University. The American Academy of Dermatology called his recommendations "irresponsible," according to Miami Herald, even though many of his colleagues, after reading his more than one hundred published papers, deemed him "ahead of his tim'e."

The resignation request was largely symbolic—Dr. Holick remained the director of BU Medical Center's Vitamin D lab—but Holick was still, as he put it, "being punished for challenging one of the dogmas of dermatology." He was not the first person to be attacked for speaking the truth, nor will he be the last. But as we move forward into the early years of the twenty-first century, the truth will prevail, and someday soon sunlight will once again be viewed as therapeictally valuable and an absolute requirement for optimal health.

In the pages of this book, you will read many things. I will show you the health benefits of sunlight exposure and the dangers of avoiding it. I will give you tips for staying out in the sun safely, without getting burns or damaging your skin. I will demonstrate why many oral vitamin D supplements are a shoddy, ineffective, and potentially toxic replacement for the naturally produced vitamin D your body manufactures when exposed to sunlight.

You are likely to encounter skepticism from others when you start to put some of these principles into practice. The myth of the dangerous sun is deeply ingrained in the current culture; it has had decades of reinforcement from the media and powerful economic interests. You will be told that you are putting your health, or your children's health, at risk, that you will damage your body irreparably, even that you will die an early death.

I urge you to treat this as what it is—alarmism. You will find in these pages study after study after study bearing out the same basic fact; the sun is not deadly. The sun is healthy. And how could it be any other way?

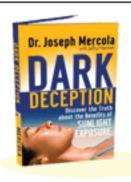
The human body evolved for hundreds of generations under the sun's rays. For most of history our ancestors have been outdoors far more often than they were indoors. How is it possible that our bodies could have ended up configured in such a way that the sun was a deadly force to us? It would be as if we were allergic to air. How could we have survived, as a species, if we

were that vulnerable to something humans have been exposed to constantly for nearly their entire existence?

This is a perversion of rational logic, and simply makes no sense. And it makes no sense because it quite simply isn't true.

### REMEMBER:

- Sunlight was used for millennia as a method of healing.
- The use of sunlight as a curative tool stopped primarily as a result of prejudice and intolerance, not science.
- From the Enlightenment through the first half of the twentieth century, sunlight was used as a medicine more and more, as scientific evidence continued to validate its effects.
- Sunlight fell out of use again mostly as a result of the rise of synthetic drugs, such as antibiotics, not because it was shown to be unhealthy.
- Sunlight is now perceived as dangerous as a result of the fear-mongering and alarmism used by the health product industry to increase sales.



## "New Light Shed on the Healing Qualities of Sunlight"

New Book by Dr. Mercola Reveals All, Despite Decades of Dark Deception...

Read more about it at: products.mercola.com/dark-deception