A CIGARETTE INSPIRATION

PART I - 1942

HENRY G. BIELER, M.D.

What happens when concentrated tobacco smoke is blown into your eyes? After three puffs, the inclination to get the eyes away from the smoke becomes imperative. But if the smoke continues the eyes grow red, inflamed, and very painful. The conjunctiva becomes swollen and there is a watery exudation. The final result is a pair of painful, red, wet, and swollen eyes.

Now, compare the eye to the air-cell of the lung. The eye is a delicate organ, but the air-cell of the lung is exceedingly more delicate and more sensitive, and it also has a much richer blood and lymph supply. The membrane lining the air-cell controls the chemistry of respiration. It is thin enough for gases to permeate, while the blood supply is so rich that these gases can be diffused quickly to the cells of the whole body. Oxygen gas is absorbed and carbon dioxide gas is eliminated. The absorption of oxygen allows for tissue oxidation and oxidation is life. This process of oxidation in the body tissues is controlled by the internal secretion of the adrenal glands. The lungs necessarily receive a rich supply of adrenal secretion through the blood stream. Likewise, it is important to note that the lungs have a thick network of lymph vessels which help to carry away irritating wastes from the delicate air-cells.

The difference between the response to irritation in the eye and the air-cell is dependent upon the sensation of pain. The conjunctiva of the eye is extremely sensitive to irritants and registers irritation as pain, which pain impels the owner of the eye to move his eye away from the source of the irritation. But the air-cell of the lung contains no sensory nerve. Consequently, great damage can be done to the air-cells without the owner of them feeling pain. On the other hand, the air-cells of the lung have a rich sympathetic nerve supply which is under the control of the solar-plexus or "Abdominal Brain". The protective function of this "abdominal brain" is to send more adrenalin to the injured air-cells and thus allow for deeper and quicker oxidation and the consequent removal of the irritating poisons. Now it is well known that when the content of the internal secretion of the adrenals in the blood stream is raised there is a feeling of well-being and a surcease from nervous tension, and to get this reaction is the average smoker's reason for smoking. Since the air-cells, lacking sensory nerves, can register no pain to their smoker-owner, they just lie still and "take it" while the chemical response made to this smoke misleads the smoker as to the real effect. The eyes, on the other hand, being "sensitive" and "irritable" cause a motor response which protects their own chemistry and preserves their healthy state.

What is it that these air-cells "take"? Literally, they are smoked. The action of smoke on the delicate air-cells of the lung is quite similar to the action of smoke on a fresh ham hung in the smoke house to be "cured". The irritants which the smoke contains shrivel and dry and preserve and harden the exterior of the ham. The surface of the ham is so thoroughly embalmed and mummified that it becomes impervious to the action of bacteria, even at fairly warm temperatures.

When smoke is inhaled into the lungs, the same irritating process takes place. The lung becomes red, wet, and inflamed, and there is cough and exudation of serum. When the stethoscope is applied, "smoker's rales" are heard over the entire respiratory tree. The body's defense mechanisms are called into activity and the battle starts between the embalming effect of the smoke and the ability of the adrenal glands to neutralize the irritation and destruction. The absence of actual pain makes the culprit oblivious to the damage and the gentle bath of extra adrenal secretion enshrouds him in

a fool's paradise. He is unaware that his lung lymphatics are getting black with tar-like irritants; that the actual breathing capacity of his air-cells has been diminished more than one-half of the normal.

There is a multitude of clinical evidence to prove that tobacco smoke injures the heart and blood vessels and contributes to the contraction of Burger's disease, which is the final rotting of the blood vessels. Whether the smoker lives ten or fifty years after contracting the habit depends upon the potential strength of his adrenal glands. The weak ones succumb early; the stronger ones live on as ironic testimonials to the harmlessness of smoking. The remote effect on the third and fourth generation has not as yet been recorded, but laboratory experiments on animals show that states of gradual adrenal depletion result in complete sterility of the third and fourth generation.

There is a definite need for a safer and saner stimulant to substitute for the tobacco habit. If stimulants there must be, let one be found that does not leave the user more susceptible to disease; that does not begin the embalming so long before the undertaker is called, and at the same time plays fair with the generations to come.

A CIGARETTE INSPIRATION

PART II - 1957

HENRY G. BIELER, M.D.

Part one of this paper was written in 1942. About five years ago, lung cancer began to increase 150% over what it had been previously and the medical profession became alert. A wave of propaganda swept the country and the fear of cancer was put in the smoker's heart. For a few months, the stocks of some of the large cigarette companies dropped a little. The companies were not in the least concerned, as they knew that a habit as tenacious as the ciagrette habit could never be broken no matter how great the fear. Breaking the dope habit is a much simpler procedure. But something had to be done and the "filter" was invented and the "king size" popularized, which practically doubled the sale of the noxious weed even though a cheaper grade of tobacco was used.

November 24, 1951, I received an answer to the first part of this paper from Alton Ochsner, M.D., the great surgeon from Tulane University. He said:

"Thank you for your letter of November 21 and for your manuscript "A Cigarette Inspiration". I think this is splendidly done and it is a very good resume of what probably happens when one smokes a cigarette. I think it will be ultimately appreciated how detrimental smoking is, but as long as the profession smoke as much as they do, they will never be able to emphasize to their patients how harmful it is."

TIME MAGAZINE for March 18, 1957, contained an article in its section on Medicine entitled "Death of a Surgeon". The surgeon was Evarts A. Graham, one of the greatest and ablest ones in this country, the first to remove an entire lung affected with cigarette cancer. He was a smoker, but he stopped in 1951. He realized that smokers may get a lung cancer years after they quit the habit and he often said: "I should not be surprised if I died of lung cancer". Last week, just short of his 74th birthday, he died from cancer which attacked both lungs at the same time, which made operation impossible.

There was a time when the great cigarette companies' slogan was "A cigarette in the mouth of every man, woman, and child in China". Later, the American woman was told that it was smart to smoke, then the teenagers and one wonders when the wave will strike the children.

Nevertheless, it is not possible to prove that cigarette smoke is the primary cause of cancer of the lung, nor that a bruising injury to the breat results in breast cancer. Both a bruise and a cigarette poison can cause an irritation of the tissues that may end as cancer, providing the chemical background of the body is toxic. This toxemia appears to arise from years of improper diet, or when it occurs in children, from inherited poisons. When the toxemia reaches a high concentration, cancer is imminent and the least bruise or irritation may be the spark that starts the conflagration.

Regarding that last statement, "...plays fair with the generations to come" (which the cigarette stimulant does not!), Dr. Bieler felt that smoking definitely had a huge link to birth defects and other birth problems.

I had a dear friend who introduced me to Bieler, and even though she'd been brought into the world by him, and so forth, her parents could not keep her on the proper diet very well because they couldn't stay on it themselves. And when she became pregnant she would not stop smoking; consequently, her son was born prematurely and with a withered up arm. It's very sad.

Also, a new fact that has come out since the writing of Bieler's articles is that the cigarette industry is now adding sugar, MSG (monosodium glutamate) and many other additives to cigarettes to stimulate the palate. The additives don't have to be listed on the label! Yet some 1,500 common additives (flavor enhancers, chemicals added for aroma, preservatives, etc.) are currently in use. The American Health Foundation has determined that some flavor components in tobacco smoke have mutagenic properties. The American Cancer Society joins the Foundation in noting this. For example, sugar burned with tobacco produces acetaldehyde, which is a potent toxin that damages the lungs and leaves them vulnerable to cancerous changes.