Germs. (Bacteria? Viruses?)

The whole body is designed for action; and unless the physical powers are kept in health by active exercise, the mental powers cannot long be used to their highest capacity. The physical inaction which seems almost inevitable in the schoolroom—together with other unhealthful conditions—makes it a trying place for children, especially for those of feeble constitution. Often the ventilation is insufficient. Ill-formed seats encourage unnatural positions, thus cramping the action of the lungs and the heart. Here little children have to spend from three to five hours a day, breathing air that is laden with impurity and perhaps infected with the **germs of disease**. No wonder that in the schoolroom the foundation of lifelong illness is so often laid. The brain, the most delicate of all the physical organs, and that from which the nervous energy of the whole system is derived, suffers the greatest injury. By being forced into premature or excessive activity, and this under unhealthful conditions, it is enfeebled, and often the evil results are permanent. Ed 207.2

Be sure to read Sister White's account of Florence Nightingale in Health Reformer, July 1, 1871, par. 8 which helps to bring a broader understanding of the role of germs.

Every form of uncleanliness tends to disease. **Death-producing germs** abound in dark, neglected corners, in decaying refuse, in dampness and mold and must. No waste vegetables or heaps of fallen leaves should be allowed to remain near the house to decay and poison the air. Nothing unclean or decaying should be tolerated within the home. In towns or cities regarded perfectly healthful, many an epidemic of fever has been traced to decaying matter about the dwelling of some careless householder. MH 276.4

<u>Perfect cleanliness</u>, plenty of sunlight, <u>careful attention to sanitation in every detail</u> of the home life, are essential to freedom from disease and to the cheerfulness and vigor of the inmates of the home. MH 276.5

Bread should be light and sweet. Not the least taint of sourness should be tolerated. The loaves should be small and so thoroughly baked that, so far as possible, **the yeast germs** shall be destroyed. When hot or new, raised bread of any kind is difficult of digestion. It should never appear on the table. This rule does not, however, apply to unleavened bread. Fresh rolls made of wheaten meal without yeast or leaven, and baked in a well-heated oven, are both wholesome and palatable. MH 301.2

"What are viruses? Viruses are very tiny germs" (National Library of Medicine, United States Government, available at https://medlineplus.gov/viralinfections.html).

Can viruses, those tiny germs, cause cancer? "Viruses that Can Lead to Cancer" (American Cancer Society, available at https://www.cancer.org/cancer/risk-prevention/infections/infections-that-can-lead-to-cancer/viruses.html).

Flesh was never the best food; but its use is now doubly objectionable, since disease in animals is rapidly increasing. Those who use flesh foods little know what they are eating. Often if they could see the animals when living, and know the quality of the meat they eat, they would turn from it with loathing. People are continually eating flesh that is filled with tuberculosis and cancerous **germs**. Tuberculosis, cancer, and other fatal diseases are thus communicated. PHJ September 1, 1905, par. 2

The tissues of <u>the swine swarm with parasites</u>. Swine are scavengers, and this is the only use they were intended to serve. Never under any circumstances was their flesh to be eaten by human beings. It is impossible for the flesh of any living creature to be wholesome when filth is its natural element, and when it feeds upon every detestable thing. PHJ September 1, 1905, par. 3

You ask in regard to <u>meat eating</u>. I will say that it is quite true that nearly all animal flesh is diseased. Many people are eating meat filled with consumptive and <u>cancerous germs</u>. At the present day animals are suffering from all kinds of deadly diseases. 16LtMs, Lt 83, 1901, par. 1

God said, "What God hath joined together let no man put asunder;" and yet Christ explains the law of divorce as given because of the hardness of their hearts. [Matthew 19:6-8.] Because of the degeneracy of the people, a divorce law which was not in God's original plan was permitted. I believe that the principle should be understood in regard to such isolated statements as your protest against the use of butter, and the statement that the child should have no other teacher than the mother until it was eight or ten years old. 19LtMs, Ms 7, 1904, par. 57

Now, when that view was given you about butter, there was presented to you the condition of things—people using **butter full of germs**. They were drying and cooking in it, and its use was deleterious. But later on, when our people studied into the principle of things, they found that while butter is not best, it may not be so bad as some other evils; and so in some cases they are using it. 19LtMs, Ms 7, 1904, par. 58

The Lord puts His vital power into the seed, causing it to spring forth into life. Under His care the **germ of life** breaks through the hard crust encasing it, and springs up to bear fruit. First appears

the blade, then the ear, then the full corn in the ear. As the children are told of the work that God does for the seed, they learn the secret of growth in grace. CT 124.5

"If ye have faith as a grain of mustard seed," said Jesus, "ye shall say unto this mountain, Remove hence to yonder place; and it shall remove." Though the grain of mustard seed is so small, it contains that same mysterious life principle which produces growth in the loftiest tree. When the mustard seed is cast into the ground, the tiny **germ** lays hold of every element that God has provided for its nutriment, and it speedily develops a sturdy growth. If you have faith like this, you will lay hold upon God's word, and upon all the helpful agencies He has appointed. Thus your faith will strengthen, and will bring to your aid the power of heaven. The obstacles that are piled by Satan across your path, though apparently as insurmountable as the eternal hills, shall disappear before the demand of faith. "Nothing shall be impossible unto you." DA 431.3

The plan of life which God appointed for our first parents has lessons for us. Although sin has cast its shadow over the earth, God desires His children to find delight in the works of His hands. The more closely His plan of life is followed, the more wonderfully will He work to restore suffering humanity. The sick need to be brought into close touch with nature. An outdoor life amid natural surroundings would work wonders for many a helpless and almost hopeless invalid. MH 261.4

The noise and excitement and confusion of the cities, their constrained and artificial life, are most wearisome and exhausting to the sick. The air, laden with smoke and dust, with poisonous gases, and with **germs of disease, is a peril to life**. The sick, for the most part shut within four walls, come almost to feel as if they were prisoners in their rooms. They look out on houses and pavements and hurrying crowds, with perhaps not even a glimpse of blue sky or sunshine, of grass

or flower or tree. Shut up in this way, they brood over their suffering and sorrow, and become a prey to their own sad thoughts. MH 262.1

And for those who are weak in moral power, the cities abound in dangers. In them, patients who have unnatural appetites to overcome are continually exposed to temptation. They need to be placed amid new surroundings where the current of their thoughts will be changed; they need to be placed under influences wholly different from those that have wrecked their lives. Let them for a season be removed from those influences that lead away from God, into a purer atmosphere. MH 263.1

Even worse is its (*long hoop skirts*) uncleanliness. Dragging through the filth of the street, it is a collector of poisonous, <u>deadly germs</u>. <u>Many a death</u> from diphtheria, tuberculosis, or other contagious disease, has been <u>caused by the germs</u> brought into the home on a trailing skirt. PHJ May 1, 1905, par. 5

It is true that remains found in the earth testify to the existence of men, animals, and plants much larger than any now known. These are regarded as proving the existence of vegetable and animal life prior to the time of the Mosaic record. But concerning these things Bible history furnishes ample explanation. Before the Flood the development of vegetable and animal life was immeasurably superior to that which has since been known. At the Flood the surface of the earth was broken up, marked changes took place, and in the re-formation of the earth's crust were preserved many evidences of the life previously existing. The vast forests buried in the earth at the time of the Flood, and since changed to coal, form the extensive coal fields, and yield the supplies of oil that minister to our comfort and convenience today. These things, as they are brought to light, are so many witnesses mutely testifying to the truth of the word of God. Ed 129.2

Akin to the theory concerning the evolution of the earth is that which attributes to an ascending line of **germs**, mollusks, and quadrupeds the evolution of man, the crowning glory of the creation. Ed 130.1

When consideration is given to man's opportunities for research; how brief his life; how limited his sphere of action; how restricted his vision; how frequent and how great the errors in his conclusions, especially as concerns the events thought to antedate Bible history; how often the supposed deductions of science are revised or cast aside; with what readiness the assumed period of the earth's development is from time to time increased or diminished by millions of years; and how the theories advanced by different scientists conflict with one another,—considering all this, shall we, for the privilege of tracing our descent from **germs** and mollusks and apes, consent to cast away that statement of Holy Writ, so grand in its simplicity, "God created man in His own image, in the image of God created He him"? <u>Genesis 1:27</u>. Shall we reject that genealogical record,—prouder than any treasured in the courts of kings,—"which was the son of Adam, which was the son of God"? <u>Luke 3:38</u>. Ed 130.2

Rightly understood, both the revelations of science and the experiences of life are in harmony with the testimony of Scripture to the constant working of God in nature. $\rm Ed~130.3$

The genealogy of our race, as given by inspiration, traces back its origin, not to a line of developing **germs**, mollusks, and quadrupeds, but to the great Creator. Though formed from the dust, Adam was "the son of God." PP 44.3

Satan has wrought with deceiving power, bringing in a multiplicity of errors that obscure the truth. Error cannot stand alone, and would soon become extinct if it did not fasten itself like a parasite upon the tree of truth. Error draws its life from the truth of God. The <u>traditions of men, like <u>floating</u></u>

germs, attach themselves to the truth of God, and men regard them as a part of the truth. Through false doctrines, Satan gains a foothold, and captivates the minds of men, causing them to hold theories that have no foundation in truth. Men boldly teach for doctrines the commandments of men; and as traditions pass on from age to age, they acquire a power over the human mind. But age does not make error truth, neither does its burdensome weight cause the plant of truth to become a parasite. The tree of truth bears its own genuine fruit, showing its true origin and nature. The parasite of error also bears its own fruit, and makes manifest that its character is diverse from the plant of heavenly origin. RH October 22, 1895, par. 3

The facts of faith and religious growth do not manifest themselves in noisy shouting and contortions of the body. The truth received in the heart never degrades the receiver, never works upon man's hearts and character to make him get up a sensational something and call that the testimony of the Holy Ghost. A precedent condition of growth is life. The life is in the seed, hidden under a cover to protect it. **The whole life is hidden in the germ**. Healthful growth is dependent upon a sufficient supply of nourishment. 15LtMs, Lt 202, 1900, par. 5

Our pioneers & others speak:

Arthur Lacey White was of the view that Ellen White's time the medical world did not know about viruses or bacteria, which suggests that Ellen White used the phrase "germs" generically to include whatever today we know as viruses or bacteria. No doubt that Arthur Lacey White believed that viruses exist. He wrote: "Although erysipelas is extremely contagious, and these were days before germs or viruses were known, neither Ellen nor any other member of the family was stricken" {1BIO

430.4}. "For the medical world, and for almost everyone, these were days of great ignorance in health lines. Bacteria and viruses were unknown" {Wv 104.4}.

Gary Land was of the view that in the time of Ellen White, bacteria and viruses were foreign to the then doctors, which suggests why Ellen White would use a generic phrase of "germs" which today would apply to both viruses and bacteria. He wrote: In the early nineteenth century, American patients and physicians shared a common understanding of health and sickness that contrasts sharply with that of most Americans today. Viruses, bacteria, and antibiotics were foreign to their model for the maintenance and restoration of health" {WEGW 143.4}.

Francis D Nichol understood Ellen White's phrase of "cancerous germs" to apply to what later scientists called viruses. Here is two quotations for context: "So far as we have been able to discover, Mrs. White's first references to cancer were in the early 1860's. To be precise, in 1864 she declared that cancer was transmissible, which clearly implied that it was germ-borne (see Spiritual Gifts, volume 4, page 146). In 1905 she spoke specifically of "cancerous germs" (The Ministry of Healing, 313)." {WBEGW 50.3}. "Now, in 1905, much less 1864, did any learned doctor think that cancer was a germ-borne disease? Emphatically No. Quite a while after 1905 some researchers began to advocate what was known as the germ theory in regard to cancer, but they received a rather stony stare from almost all their colleagues. Finally, a whole new world of research opened up in the field of viruses. A virus might be described in nontechnical language as an infinitely small germ; at least no better description can currently be offered, for as yet we really know little about viruses. They are beyond the range of all except the electronic microscope. But this much we do know now, that these "midget germs," to borrow Virologist Stanley's phrase, seem most certainly to be the cause of a variety of afflictions" {WBEGW 50.4}.

This is an interesting quote in MH by the Publishers referencing bacteria to milk:

If milk is used, it should be thoroughly sterilized; with this precaution, there is less danger of contracting disease from its use. Butter is less harmful when eaten on cold bread than when used in cooking; but, as a rule, it is better to dispense with it altogether. Cheese is still more objectionable; it is wholly unfit for food. [The safeguarding of the purity of all foods of dairy origin is a matter of prime importance. While frequent testing of dairy herds, together with thorough pasteurization and refrigeration, serves to this end, such foods, if from uncertain sources, or if carelessly handled, constitute a serious menace to health; for, as stated in U.S. Department of Agriculture Farmers' Bulletin No. 1705 by a Government expert, Rowena Schmidt Carpenter: "The same chemical constituents and physical properties that recommend milk as a human food make it an excellent food for **bacteria**." The reader will understand that the reference to cheese *does not* include cottage cheese or foods of a similar character, which were ever recognized by the author as wholesome.—Publishers.] MH 302.1

In 2 biography James White makes the following comment in reference to canning:

In the first advertisement for this pamphlet in the January, 1871, *Health Reformer*, White stated that it contained "valuable information, gleaned from larger books, and from personal experience on this subject." The pamphlet contained advice on cultivating and selecting the best varieties of plants. Five pages were devoted to canning fruit. As the pamphlet is read today, it must be kept in mind that it was published only a few years after Louis Pasteur, in France, had discovered that **fermentation in wine was caused by bacteria**. White made the following application: 2BIO 299.6

The strawberry, the raspberry, the blackberry, the blueberry, the cherry, and the grape may be safely canned by a similar process. We recommend the glass, self-sealing can. We have used the Mason, the Dexter, and the Hero with success.—*Small Fruits*, p. 23. 2BIO 300.1

Percy Magan wrote in the preface of Counsels on Health:

From many and varied sources, during the last half century, a flood of light has been thrown upon this important theme. From out the mind of the renowned Pasteur came shafts of light of brilliant and penetrating power on matters relating to health and disease. From him the world received its knowledge of **bacteria**, the causative factors of so many diseases. From Louis Pasteur came the cure that conquered anthrax, that devastating sickness afflicting both man and beast. He it was whose unremitting toil culminated in the discovery of a cure for hydrophobia, one of the most dread diseases of all the ages. CH 1.4