

## Foundation of Creation Series

### *Class Four*

## Dust of the Earth (Probiotics and Living Organisms)

### I. A WORLD OF LIVING ORGANISMS

A. Our world is teeming with living organisms. Living bacteria, viruses, fungi and parasites are found in the air, soil, plants, animals and human beings. It's part of God's natural created order. Living organisms are a vital part of the life cycle and play a pivotal role in how the natural world is continually building up and breaking down. There are more living organisms on one square inch of your skin than people on the earth. It is estimated that on average, one teaspoon of soil from the earth has over 20,000 different species and in excess of four billion living organisms.

***"To everything there is a season, a time for every purpose under heaven...A time to break down and a time to build up." Ecclesiastes 3:1-3***

B. The human body is composed of trillions of living organisms and out-number cells in the body by at least 10 to 1. It is the most important component of our digestion and immune system. The way the human body digests and breaks down food, and the way our immune system works, is a direct reflection of how living organisms work in the soil with plants in nature.

C. These living bacteria are by the trillions in our mouths, esophagus, guts, skin and private areas. These living bacteria on our skin protect us from invaders that would weaken and damage us. The skin creates an acid mantle with a Ph of 5.0-6.0. This is why anti-bacterial soaps, most commercial soaps with lye and other alkaline substances are very dangerous for the skin. We should be using lemon, apple cider vinegar and other acidic mediums for good skin health. Note: Be sure to dilute lemon and apple cider vinegar with water before applying.

D. Soil is not soil without living organisms. There is no life without these living organisms. You cannot have compost which results in new, healthy soil without these organisms. The human gut is like a compost bin, teeming with bacteria to digest and break down our foods. Bacteria can easily break down real, living foods created by God. The body is going to have a much more difficult time breaking down and processing man-made foods full of chemicals. This is the same reason we don't put plastic, metal and styrofoam in our compost bins.

## II. THE ROLE OF LIVING ORGANISMS IN SOIL

A. Living organisms need nutrients to survive. They are fed by minerals, oxygen, water and other decomposed plant materials. Decomposed plant matter contains nutrients called FULVIC and HUMIC minerals (as would be found in your compost). They are the most crucial building blocks for living organisms. The elemental analysis of these minerals includes carbon, oxygen, hydrogen and nitrogen. Based on an article on soil, written by Dr. Robert E. Pettit (Texas A&M University), some of the functions that fulvic and humic minerals have on plant soil organisms include:

- \* Promote fertility
- \* Hydration and water holding capacity (absorbs up to seven times their weight in water)
- \* Chelation (binding) of heavy metals
- \* Includes over 60+ naturally occurring minerals
- \* Because of small size, can easily be digested and enter into root system (villi) to be distributed and used by the body
- \* Carry trace minerals into the tissues
- \* Increase oxygen and energy levels
- \* Release natural antibiotics to protect against foreign invaders
- \* Electrical charge attracts and neutralizes pesticides and other toxic substances
- \* Direct effect on cell membranes, increasing permeability and ease at which mineral elements move back and forth between cell membranes.
- \* ***Soils deficient in humic substances may contain adequate iron, however the iron is frequently bound in forms that render it unavailable to plant roots.***

B. A healthy fertile soil must contain sufficient mineral compounds to sustain the billions of microscopic life forms required for a fertile soil and a healthy plant. A living soil is a fertile, healthy soil.

C. The same things that damage the soil, and damage living organisms in the soil, also affect the human gut. The over-use of pesticides and herbicides kill living soil organisms. In addition, what we are doing to plants using chemicals is the same damage we are doing to human beings with antibiotics. We are destroying our living soil, and the organisms contained therein that are crucial for life.

### III. THE IMMUNE SYSTEM

A. How does a plant build natural immunity in nature? For plants to be strong they must have adequate nutrition from the soil. A plant cannot build natural immunity without nutrition (consider the weakness of GMO crops, mono-crops and NPK fertilizers). The minerals, oxygen, living organisms and other components of the soil are the life source of the plant. In fact, a healthy seed cannot even sprout and begin the process of life without the perfect environment. Like plants in the soil, our intestinal tract serves this function for the human body. Like a hole in a donut, our intestinal tract is within our bodies, yet separate, serving as the protective soil needed for proper immune system protection, digestion and nutrient uptake. If we don't provide a healthy environment for our soil and root system (the villi or finger-like projections in our intestines that absorb nutrients), we cannot expect to thrive, just as we would not expect our plants to thrive if we don't care for them properly.

B. Digestion is a critical component to a healthy immune system. Your gut is like a compost bin. Living organisms should be breaking down and digesting your foods. Quality nutrients should be passed through the gut wall to nourish the body, and the waste should be pushed through the colon and eliminated. Without first being broken down by living bacteria, nutrients such as minerals cannot be properly assimilated into the body. ***In other words, digestion cannot occur without healthy living bacteria, also known as gut flora.*** Unhealthy digestion and damaged gut flora is a huge reason why we have chronic health problems today. People cannot digest, break down and process many foods such as dairy, gluten, nuts, corn and soy without strong digestion. They now say over 80% of our immune system is in the digestive tract. Our intestinal tract is truly the defender of our castle.

C. Imagine a castle with high walls. Guarding the castle walls are soldiers with guns, cannons and other powerful weapons. This is your main and first line of defense for your castle. These soldiers are trained to fight and can engage the enemy in hand-to-hand combat. Inside the castle are civilians growing food and making dinner for themselves and the soldiers. They have pots, pans and pitchforks. Their job is to grow and make food, not fight battles. If the soldiers are killed and enemies start flooding into the fort, civilians are now forced to become soldiers. They do not have the right training, or weapons, to defend well, and it therefore requires a mob of civilians to destroy just one invader. They will fight the best they can, but have limited resources or strength to fight enemies.

D. This analogy is a representation of our immune system. There are two main components of the immune system, Th1 Immunity (trained soldiers) and Th2 Immunity (untrained civilians). Th refers to the thymus, where T-cells are produced, vital to the immune system.

E. Role of Th1 Immunity – First Line of Defense - Trained Soldiers

\* Responsible for the protection against environment (dust, pollen, animal hair, food, drink, chemicals, pathogens)

\* Bifidobacteria (healthy bacteria in the colon) activates immune system cells called lymphocytes. Lymphocytes protect the gut wall (enterocytes) from invaders. Lymphocytes in the gut wall produce immunoglobulins. Immunoglobulin A (IgA) is produced in the **mucous membranes** and secreted in body fluids. These include breathing passages, nose, throat, bladder, urethra, vagina, saliva, tears, sweat, colostrums, breast milk and the mucous membranes of the digestive system.

**\*When Th1 is working appropriately, you can be in contact with anything from the environment, without having any reactions.\***

F. IgA is the most critical part of your immune system in your gut, and without good bacteria, you cannot activate the needed lymphocytes (which produce IgA). The job of IgA is to destroy incoming bacteria, viruses, fungus and parasites.

Bifidobacteria -----> Activates lymphocytes-----> Secretion of IgA-----> Destruction of invaders

G. When gut flora (healthy bacteria) is damaged, the important players of the immune system become ineffective, making the person immune-compromised. Why? Because ***the immune system is only as strong as your gut flora.***

H. Role of Th2 Immunity – Second Line of Defense - Untrained Civilians

\* Responsible for protection within the body fluids.

\* Th2 immunity is found in the **fluids** of the body (blood and lymphatics). When the First Army Th1 becomes compromised (damaged gut wall), the Th2 army becomes activated. Th2 is not equipped, nor trained, to defend the body properly. Th2 requires a full scale mob attack vs one-on-one combat, creating an overactive immune system. Immunoglobulin E (IgE) and Immunoglobulin G (IgG) is then secreted and is responsible for what we call allergic reactions.

I. Activation of IgE and IgG means that the first line of defense (the gut) has already been breached and IgA has been overwhelmed. Allergies are born in the gut. Most allergies are from a compromised gut lining because of a deficiency in healthy gut flora.

J. The body is FORCED to activate Th2 when Th1 breaks down, and becomes hyperactive. Therefore, when Th2 (IgE and IgG) type antibodies are found in high amounts in the bloodstream, it is a sign your immune system has weakened. If you are having allergies, food sensitivities, hay fever, eczema, asthma, sensitivities to mold, strong odors, etc. your castle wall (gut) has been breached. Allergens are getting into your bloodstream and causing an immune system response.

***\*When Th2 is activated, you will have allergic reactions to dust, pollen, animals, foods, drink, chemicals, etc.\* This is a histamine reaction often times.***

K. Allergy testing is problematic at this point. People spend thousands of dollars checking for allergies with blood tests. The test results are often dictated by what you are eating and what you are breathing at that time when you get the test. The allergy test can be different every single time, and if you do enough testing, you will find that you are allergic to practically everything. The reason is, your castle wall (gut) has been breached and everything is spilling into your bloodstream causing an immune system response. At this point, equally important to removing allergens from your daily life, it is critical to heal the damaged gut lining.

L. When our immune system breaks down, opportunistic and unhealthy organisms can over-take and invade our bodies. Organisms that are normally contained at healthy levels in the body, such as candida, can begin to take over the system. In addition, the body is more prone to invading organisms in food-borne bacteria, parasites and other pathogens. These organisms can reproduce, get into the bloodstream and begin taking over organs and the entire body if the internal environment is not corrected.

M. Living organisms in our body serve the same function they do in nature. If we have unhealthy, sick, diseased tissues in the body, organisms will work to break down and "recycle" that dead tissue just as it happens on the earth. In addition, toxic materials in our body such as acids, pesticides and heavy metals attract bacteria as well. We see this in many forms of arthritis, such as gout. There is always a reason unhealthy organisms have taken over parts of the body.

#### **IV. THE ROLE AND NEEDS OF GUT FLORA**

A. The role of gut flora:

- \* It provides a physical barrier to prevent colonization by pathogenic or infectious microbes
- \* Gut flora communicates with the immune system to target and destroy invading organisms. Have you ever wondered how your body knows the "good" guys from the "bad" guys? Gut flora helps with this.
- \* Gut flora contains genetic code and communicates with the body in producing various components of the immune system, such as T-cells in the thymus gland. Studies show formula fed infants have weaker immune systems and shrunken and less productive thymus glands.
- \* The average adult has around 5lbs of living bacteria, composing 90% of the human body. This means only about 10% of the human body is cells.
- \* Intestinal flora are critical to breaking down and digesting food properly, much like a compost bin
- \* They are important to help with natural, formed bowel movements and elimination of wastes
- \* They help synthesize and produce vitamins in the intestinal tract such as certain B-vitamins and Vitamin K

B. If good flora is absent, what is present? Opportunistic pathogens begin to take over. Opportunistic organisms are those normally present in a healthy body, but begin to replicate and take over in an unhealthy environment.

- Reduced or Absent Populations of Good Flora – Gut taken over by pathogens
- Candida, Clostridia, Viruses, H. Pylori, etc.

C. Now we have a compromised gut, and therefore, a compromised immune system. Resulting digestive problems may include:

- Colic
- Bloating/gas
- Diarrhea
- Constipation
- Feeding difficulties
- Food allergies/intolerances
- Craving only sugars, starches and carbohydrates
- Fecal compaction
- Inflammatory bowels

D. What are the resulting health conditions?

- Asthma
- ADD/ADHD
- Autism
- Learning disabilities
- Dyslexia and dyspraxia
- Allergies
- Eczema
- Malnutrition
- Bed wetting
- Thrush
- Chronic cystitis, sinus infections, UTI's, yeast and other infections
- Psychological disorders (schizophrenia, bi-polar, etc.) There is a strong gut-brain connection and these disorders must have a nutrition component for optimal success. In the early 1800's, French psychiatrist **Dr. Phillipe Pinel said "the primary seat of insanity generally is in the region of the stomach and intestines."**

## V. THE BIRTH OF YOUR IMMUNE SYSTEM

A. A healthy immune system starts before birth. How is this possible? The immune system of the baby is dictated by the strength of the mother's immune system prior to birth. Babies are born with an immature immune system and the gut flora must be established within the first 20 days of life. The two ways the immune system is originally established is either through the mother and/or the environment. Hopefully they receive both. An example of the ideal scenario would include:

- Healthy mother
- Vaginal Birth
- First colostrum and breastfed from day one
- No invasive drugs or chemicals introduced to the child
- Child plays in dirt, soil and/or farms from a young age
- Child weaned after breastfeeding with quality nutritious foods

B. The health of the parents is critical to the health of our children. The reason we are seeing so many health problems starting at birth such as ADD, ADHD, autism, allergies and various other developmental problems is due to our lifestyle choices over the last 100 years. We have chosen processed foods, void of nutrients, a man-made system of synthetic drugs for health care, and we allow pollution and chemicals in our homes, personal care products and crops. This is a tough message for parents to believe that we are responsible for our children's health problems.

C. Besides the health of the parents, the actual birth process is important to giving the baby the best possible start at life. Unfortunately, pregnancy and the birth process have become a medical procedure and very few women, doctors or hospitals understand the human body and appreciate the natural birth process the way God designed and intended for it to work. ***Having a natural, drug-free vaginal birth is vital to having a healthy baby!***

D. A vaginal birth is God's design. The baby should be flooded with fluids from the mother at birth. These fluids should be in the mouth, on the body and get into the intestinal tract of the newborn child. This is how healthy bacteria, antibodies and other immune system components are initially transferred to the child. This is God's way of inoculation and immune system building. When a woman has a c-section, this critical process is missed and instead of receiving healthy bacteria from the mother, a baby's first exposure to the outside world is the doctors, nurses and the unhealthy environment of most hospitals. This is why America has one of the worst infant and mother mortality rates in the industrialized world.

E. The first step after birth should always be immediate skin to skin contact and the baby breast crawl. Most babies should need no assistance in making his/her way to the mother's breast to begin breastfeeding.

F. Breast milk is the most important part of a baby's early development. No comparisons should be made between formula or animal milk vs human breast milk. Nothing compares to God's original design and intention. Not only is breast milk critical for health, but also provides a place of trust, comfort and relationship.

***"But You are He who took Me out of the womb; You made Me trust while on My mother's breasts. I was cast upon You from birth. From My mother's womb You have been My God." Psalm 22:9-10***

G. Breast milk coagulates in the babies gut, building up healthy bacteria and a strong immune system. If you were breastfed, you were fermented from birth! This is your best chance at a strong immune system. The first month of life is vital to the immune system. A baby has a porous gut lining, allowing the colostrum to work its way into every part of the body. Again, this is God's way of natural immunity.

***H. "Remember, I pray, that You have made me like clay. And will You turn me into dust again? Did you not pour me out like milk, and curdle me like cheese, clothe me with skin and flesh, and knit me together with bones and sinews? Job 10:9-11***

- \* Curdled - Hebrew 7087 - "qapha" means to shrink, thicken, congeal, curdle, settle
- \* Cheese - Hebrew 13856 - "gbinah" means curdled milk, cheese
- \* Chymosin, rennin or rennet is an enzyme produced in all living organisms
- \* It is a proteolytic (protein eating) enzyme needed to digest milk properly
- \* The main function of rennin enzymes is to curdle milk
- \* If milk is eliminated without digestion, the baby does not receive the health benefits
- \* The milk is curdled to slow down the digestive process to fully provide the nutrients and healthy bacteria needed for optimal development
- \* The optimum temperature to coagulate milk is 37 degrees Celsius or exactly 98.6 degrees Fahrenheit. This is the exact temperature needed to turn animal milk into yogurt as well.

I. If we are fermented and coagulated upon birth, this means we are alive with trillions of living organisms. It is important we understand the difference between inoculation and sterilization for the next generation of unborn children. Sterilization is what we are doing when we choose vaccines, antibiotics, acid reflux medications, baby formula, processed foods, anti-bacterial soaps, hospital births, birth control pills and other man-made interventions. These are not natural to God's design of the human body. What makes matters worse is that we are introducing these interventions at the child's most fragile and vulnerable time of their lives. Instead of protecting them, we are bombarding their developing immune system. Our ancestors lived on the earth, made their homes and dishes from the earth, and ate food straight from the earth. Maybe we should return to the ground from which God fashioned us, and return to God for our knowledge of caring for the body He designed.

## **VI. WORKING WITH (NOT AGAINST) GOD'S NATURAL CREATED ORDER**

A. We are always growing and learning. If you look at some of the history of infectious disease, you can trace it back to Biblical times. This has always been a concern for humanity. Why do we seem to have "good" bugs and "bad" bugs in our world? Why do some people seem to get sick and die, and others don't get sick at all?

B. In Leviticus, God gave very clear instructions on how to handle infectious disease. We knew germs existed, and could spread disease, because the Bible told us. Although we didn't fully seem to realize and fully believe this until we could see them with microscopes.

C. Even though it was clearly outlined in the Bible, hand-washing for disease prevention was not fully recognized until the 1800's. Dr. Semmelweis is called "The Savior of Mothers" because of his insistence that doctors wash their hands between patient visits. Because of this belief in something "invisible" causing disease, he was ridiculed by the medical community. Many beliefs that go against the standard medical beliefs of the current day are met with vicious retaliation.

D. Antibiotics were discovered accidentally in the 1920's with the discovery of Penicillin. Many truly believed that a cure to all infectious disease had been discovered. Soon antibiotics were used for everything, and almost 100 years later, not much has changed. What we have learned over the past century is that antibiotics, although life-saving in certain instances, are over-used, over-prescribed and damaging to the immune system long-term. It is believed that upwards of 80% of all prescribed antibiotics are not necessary. The reason antibiotics are dangerous is because they are non-specific and indiscriminate killers, destroying the healthy living bacteria in our bodies that is crucial for the proper functioning of our immune system.

E. Over 80% of all antibiotics are used in farming for sick and unhealthy animals. Dairy, cattle, pig and chicken farms are full of sickness and disease because of conventional farming methods. Because these animals are so sick and unhealthy, the antibiotics are necessary just to keep them alive. When we eat meat and other factory farmed products, we are consuming antibiotics, growth hormones and chemicals used in industry, weakening our own bodies.

F. The number one thing that will destroy your healthy bacteria and immune system is antibiotic usage. Many people are learning the hard way after years of antibiotic usage handed out by doctors with no awareness of the damage they are causing. Destruction of our healthy gut bacteria and therefore our immune system can be caused by:

- Antibiotics
- Birth control pills
- Antacids
- Pain drugs, including aspirin and tylenol
- All other man-made synthetic pharmaceutical drugs
- Herbicides, pesticides and insecticides
- White sugar, white flour and all processed foods
- Pollution in our environment
- Chemicals in our foods and personal care products
- Fluoride and chlorine in tap water

G. People are suffering from sinus infections, yeast infections, urinary tract infections, mouth infections, colds, flus, bronchitis, pneumonia, candida overgrowth, ear infections and more. Antibiotics are handed out with reckless abandon. If it doesn't work, we often try a different one or a stronger, longer dosage. We have little concept of the guessing game of Russian roulette that is being played with our bodies and our health.

H. ***The biggest dangers with antibiotics is germ resistance.*** Remember that things created by God have intelligence. Living organisms have intelligence (including the "bad" organisms), and the ability to change, morph, resist and strengthen themselves against man-made synthetics. This is because man-made drugs such as antibiotics are lifeless synthetics. They are indiscriminate killers that destroy all good and bad bacteria in the body. This weakens the immune system by killing healthy intestinal flora, and the unhealthy organisms that survive the chemical onslaught become resistant and stronger, only to return another day. In addition, our lifestyle choices further weaken our immune system and gut flora. This is why our world suffers from chronic infections.

I. We are starting to realize that instead of fighting against all germs, that we must work with God's natural created order. We need to understand how God designed the earth, plants, animals, humans, living organisms, and our immune systems to function and operate. A mutual symbiotic, balanced relationship should be the goal. Much of how our medical system is designed works against nature, against germs and against how the human body functions and operates. Although this may provide an occasional quick fix, it does not create balance, health and quality of life long-term.

J. God's solutions are many if we are looking for them. It starts with the above description of the birth process, including a vaginal birth, breastfeeding and quality nutrition. God also gave us oregano, garlic, olive leaf, sunshine, oxygen and thousands of other things to build our immune systems and keep us healthy. God's solutions have intelligence, and therefore pathogenic organisms are eliminated without damaging healthy gut flora. God's solutions bring balance. ***Because you cannot patent and make millions of dollars on things designed by God, they are absent from our medical system.***

K. If we have learned the truth, that our immune systems are designed by God to function with trillions of living organisms that we must protect and strengthen, the honest question should be asked. Are we changing our system of medicine to embrace this crucial information concerning the truth about antibiotics? Or is it business as usual at the expense of our health?

## **VIII. BUILDING A STRONG IMMUNE SYSTEM**

A. We have a generation of parents and children with weak immune systems. Man-made pharmaceuticals, pain relievers (aspirin, tylenol, advil, etc.), antibiotics, antacids, birth control pills, herbicides, pesticides, pollution, white sugar, white flour, rancid trans-fats, and chemicals in our food supply have taken their toll. What steps can we take to begin to reverse this process for our current health, and more importantly, for healthy future generations?

**1. Start good nutrition BEFORE getting pregnant. Consider Body Ecology Diet or GAPS Diet**

**2. Have a natural, vaginal childbirth if at all possible.** Consider a home birth. Contrary to popular belief they are much safer than hospital births. Don't let doctors induce early labor for their convenience. Many drugs, such as Pitocin, that are designed to stimulate the birth process are so shocking to the body and so painful it often leads to more drugs for pain relief. Pain relieving drugs (such as epidurals) have the reverse effect of Pitocin and actually stall labor. This creates a yo-yo effect on the mother, speeding up and slowing down the birth process as the mother becomes completely worn out. Eventually this often leads to an otherwise unnecessary c-section.

**3. Baby should go straight from birth to the mother's breast with no intervention.**

**4. Breastfeed for at least 1-3 years.** The first milk (colostrum) and the first 3 months of breast milk are critical to a child's long-term immune system. This literally sets the stage for their future health.

**5. Within reason, allow children to be outside and play in the dirt and mud.** It exposes them to healthy soil organisms critical for the immune system. Feed children healthy foods, don't allow them to be addicted to starches and junk food like cheerios, gold fish and crackers.

## **6. Eat fermented foods DAILY and feed them to your children, these foods include:**

- \* Fermented veggies like sauerkraut and kim-chi (you can ferment about anything)
- \* Kombucha
- \* Dairy yogurt and kefir (home-made with raw milk ideally)
- \* Coconut yogurt and kefir
- \* Bragg's Apple Cider Vinegar

## **7. Take probiotics daily:**

- \* Transient vs Colonizing Bacteria – You need both.
- \* Transient bacteria are all of your fermented foods and most probiotics supplements on the market containing strains such as lactobacillus, acidophilus, bifidus, etc. These should be consumed on a regular basis to keep healthy flora levels high.
- \* Colonizing bacteria are found in soil organisms. You and your children should be playing in the dirt and living on the farm!

## **8. Don't destroy living organisms in and on our bodies**

- \* Avoid eat white sugar, white flour or processed foods
- \* Avoid use of antibiotics, vaccines, birth control pills, anti-bacterial soaps or other man-made chemicals that sterilize your body
- \* Buy organic and farm fresh produce, avoiding pesticides and herbicides
- \* Buy organic meat, avoiding antibiotics and hormones
- \* Choose toxic free personal care products and home cleaning supplies

## **9. Provide a healthy environment for our healthy living gut bacteria**

- \* The skin is acidic, use lemon and apple cider vinegar on the skin
- \* Take care of your mouth! Not doing so creates a one-way ticket for bacteria to get into your body and spread disease. Oil pulling, baking soda, hydrogen peroxide, sea salt and clay are all powerful tools to keep your mouth clean and healthy.
- \* Take bentonite clay every day to keep pathogenic organisms and toxins out of the body
- \* Take plant minerals every day to feed living bacteria in the gut (drink your compost!)
- \* Greens provide healthy fibers and prebiotics that feed gut flora
- \* Fibers keep the bowels moving and bacteria healthy such as flax, psyllium and oat bran
- \* Bone broth soups can be healing and soothing to the gut lining, also providing minerals
- \* Oxygen supplements can provide much needed oxygen to the gut and healthy flora

**10. Get outside in the sun daily and exercise!**

**11. Fight infections naturally with God's endless resources**

- Colloidal silver
- Essential oils such as Thieves
- Ozone
- Sunshine
- Oil of oregano
- Bentonite Clay
- Iodine
- Echinacea, Pau D'Arco, Cat's Claw and hundreds of other herbs
- Garlic
- Plant minerals
- Sea Salt
- Apple Cider Vinegar
- Hydrogen Peroxide