

# ALIVE!

## INTERCONNECTED

**SUFFERING FROM PAIN, DEBILITY**, loss of quality of life, destruction and/or malfunction of bodily processes and tissue characterizes disease. Medical science has devoted itself to the study of disease and in so doing has specialized in categorizing the human body so that we can see the correct specialist for the defined problem. It seems neat and tidy that way, at least in our current medical system. Unfortunately there is not a facet of our physiology that has escaped illness.

We tend to think that if we have pain in the knee we have a joint problem. If we have pain or malfunction of the intestines we must have a gastrointestinal problem. If my heart beats irregularly, I must have a heart problem. If we have elevated blood sugar levels we must be eating too many carbs, etc. In reality, it can be a lot more complex than that. The more I study, the more amazed I am that when God designed the human body, He was less concerned about compartmentalizing than ensuring interconnectedness.

Take, for example, immune cells that we understand fight for our health by destroying molecular enemies, isolating infection, and protecting us from sickness and disease. That's their job. But wait. Consider that these very immune cells communicate with, and are influenced by, hormones from the endocrine system, like estrogen, testosterone,

progesterone, etc. Why would immune cells communicate with our hormones and get seemingly distracted like that?

What do you think about the fact that DNA tucked away in the nucleus of the cell has receptors for stress molecules? By having such access, these stress molecules can alter the transcription of DNA and what is reproduced.

Psychiatric disorders have been linked with the activity of the microbiome.

Does it amaze you that the central nervous system is in cahoots with the gut in the digestive system? There is an entire extension of the nervous system devoted to the gut. In addition to this, residing chiefly in the large intestine is the community of microbes known as the microbiome. These microbes have been found to produce a substance called dopamine (a pleasure promoter, reward neurotransmitter), serotonin (nicknamed the happy hormone) and GABA (the chill out hormone) in the gut. Why would we produce these substances down there? So significant is the association between the gut and brain health that scientists are exploring treating depression with probiotics. Psychiatric disorders have been linked with the activity of the microbiome. Apparently these illnesses are not all in the head.

Do you think it's crazy that the vitamin we produce from sun shining on our skin (vitamin D) can improve our quality of sleep? It has also been found to alter the behavior of the intestinal microbiome. This microbial community can then in turn affect B vitamin production in the gut, and can promote a pro-inflammatory state in the body that has been associated with blockages in the arteries and the development of autoimmunity.

This truth of interconnectedness exists in the physical body as well as within the body of Christ.

Ever heard of ghrelin? It is a hormone that is released by the stomach that signals "Eat! I'm hungry." Apparently, it is also produced in the brain. Researchers have found that rises in ghrelin occur not only in response to true hunger and energy insufficiency but also following psychosocial stress. Work from a handful of laboratories now suggests that the peptide hormone ghrelin is one such mediator of both behaviors linked to food intake and body weight and behaviors associated with psychosocial stress, mood, and anxiety.

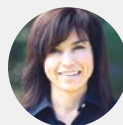
Most people understand that excess fat increases the risk of heart disease, type 2 diabetes, and cancer, but apparently it also has been found to increase mood disorders. In a large cross sectional epidemiological U.S. study, a body mass index <30 was found to be associated with a 25% higher rate of mood disorders.

Understanding how interconnected every facet of our physiology is, it makes sense then, doesn't it, that when seeking to restore health we need to decentralize the focus and perhaps address the whole man. When dealing with a skin condition could it be beneficial to assess psychosocial aspects of the life? When treating the mind could we benefit by looking at gut health? Perhaps our scope of understanding ourselves and how we were designed needs to be broadened so we can live in harmony with how we were designed.

This truth of interconnectedness exists in the physical body as well as within the body of Christ. "So we, being many, are one body in Christ, and every one members one of another

(Romans 12:5). The "one" is so important. The individual influences, supports, or hinders the life of others. Your personal wholeness is a necessary link in communicating life and health to the larger whole. In turn, the larger whole is a necessary part of your personal individual wholeness. It is an undeniable, God-created reciprocal relationship. When the body nurtures the individual, it is building up itself. And when the individual is working for the health of the body, it is strengthening himself. Paul affirms this when he stated, "Therefore, putting away lying, 'Let each **one** of you speak truth with his neighbor,' for we are **members of one another**" (Ephesians 4:25, NKJV).

Grasping this reality and how health and disease are holistically connected may help us to better understand the following statement. "The great Physician is calling you to come to Him, that He may heal you. He healeth all our diseases. The worst of these diseases are envy, jealousy, evil-surmising, evil-speaking, a desire to follow plans that counterwork the work of God." The worst diseases? Our lack of unity and brotherly love are destroying us corporately and hence individually. "But if Christ abides in your heart, you can say, He redeemeth our life from destruction: He crowneth us with lovingkindness and tender mercies . . ." In the place of watching to find something to accuse and condemn in others, thank the Lord that there is forgiveness with Him. Notice that if Christ abides in the individual's heart then "our" united intertwined, interconnected life will be redeemed from destruction. 🌱



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