## <u>Fear: the Medium of Death; Love: the Elixir of Life</u>

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Winston Churchill said, "There is nothing to fear except fear itself." Have you ever wondered about that famous statement? Imagine walking a four-inch wide balance beam placed securely on the ground, your feet only a few inches from the dirt. Now imagine walking that same beam raised 100 feet in the air. Would your ability to successfully traverse the beam be negatively affected as you look down from such a height? What changed? Fear!

When we are afraid, the brain's fear circuit (amygdala) activates, which floods the body with surges of stress chemicals (adrenalin and glucocorticoids). We experience the classic "fight or flight" response in which blood is shunted from our internal organs to our muscles and glucose is dumped into the blood stream. This is to bring us to quick attention in the face of an external threat, like the house being on fire. However, chronic fear, fear of failure, fear of rejection, fear of what others think, fear of financial ruin, and chronic worry of any kind keeps the fear circuits firing, which activates the body's immune system, increasing inflammatory factors that injure our bodies. Under chronic fear, worry, and stress these inflammatory factors damage insulin receptors, increasing the risk of diabetes mellitus, obesity, high cholesterol, heart attacks, and strokes.

Chronic fear also impairs growth of all types. A recent study documented that Iraqi children growing up in war zones were measurably shorter than Iraqi children growing up in rural safe zones. Fear impairs physical growth!

Maybe you have known someone with test anxiety or someone who froze when getting up in front of an audience. What happened? Their fear circuits fired, paralyzing their prefrontal cortex (thinking circuits). Intellectual and cognitive growth is impaired when we are afraid.

When something really frightens you, like smelling smoke as someone yells fire in a theater, where does your focus turn? Do you become more concerned with the strangers in the room or more concerned with saving self? The more fearful we become, the more self-focused we become. Fear impairs relational growth!

When we believe God concepts that incite fear, the ability to grow spiritually is impaired. It is in the prefrontal cortex (located right behind the forehead) where we reason, plan, organize, focus, concentrate, and self-restrain. It is also in the prefrontal cortex where we have our conscience, redirect inappropriate behavior, and worship. A special part of the frontal cortex, called the anterior cingulate cortex (ACC) is our neurological "heart." It is here where we experience altruistic love and empathy. The ACC is also the seat of the will, the place we choose right from wrong. The proverb, "As a man thinks in his heart so is he" (Proverbs 23:7) is referring to the ACC.

Amazingly, brain research has demonstrated that people 60-65 years of age who meditated on a God of love, just 12 minutes a day for 30 days, experienced measurable growth in the ACC of their brains. This was directly correlated with reductions in heart rate, blood pressure and a 30% improvement in memory testing [ii]. Meditating on a God of love reduces fear and is healing to our being. Science confirms what the Bible tells us, "perfect love casts out all fear" (1John 4:18).

But, just as strikingly, brain research confirmed that meditating on angry, wrathful and punishing god concepts did not result in positive growth in the ACC, nor provide the beneficial reductions in blood pressure, heart rate, and improvement in memory. In other words, angry or wrathful god concepts do not heal the brain, improve love, or enhance prefrontal cortex function. Instead, believing such concepts activates the fear circuits of the brain and contributes to impairments in healthy growth, thinking, reasoning, and relationships.

Love acted out is also healing. Research documents that youth who volunteered (love others with acts of altruism) experienced greater academic achievement, civic responsibility, and life skills that include leadership and interpersonal self-confidence than those who didn't [iii]. And adults who volunteered (after accounting for variables such as education, baseline health, smoking, etc.) lived longer, had less illness, less disability, less depression, less dementia, and lived independently longer than those who did not [iv].

Fear is our enemy, it infects us, drives us toward destructive thinking, living and reacting. Whereas, love is the only power capable of freeing our hearts from fear and bringing genuine healing to our minds, bodies and relationships. So love well. Love always.

[ii] Newberg, A. How God Changes Our Brain. Ballantine Books, New York. 2009: p.49.

[iii] Post, S. Altruism and Health Perspectives from Empirical Research, Oxford University Press, New York, 2007: p. 20, 21).

[iv] Ibid. p. 22, 26