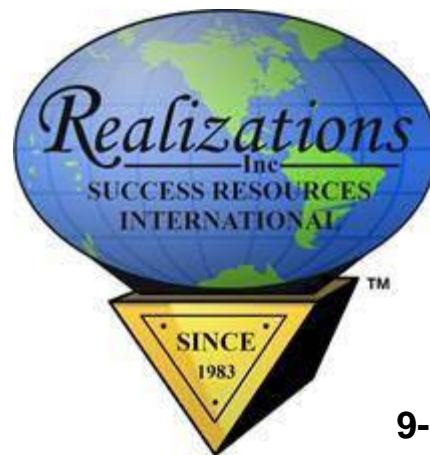




Do Science & Scripture Align?

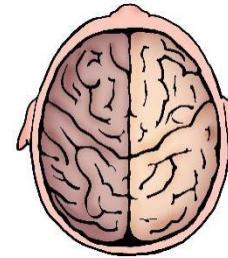
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9-25-16

Age of the Brain

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Everything starts in the brain!

Your brain can only do what it thinks it can do—if you think you can or you think you can't, you're right—it's your job to tell your brain what it can do

The advent of brain scans and other modalities—in this ‘the age of the brain’ —is helping to uncover information that hasn’t been known about or understood before, and providing clues about how to retain and even enhance brain function



Science & Scripture

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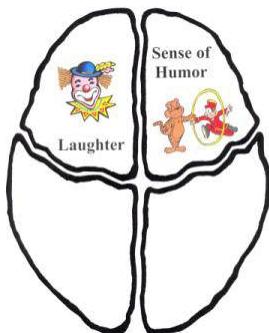
Around the world, people who study scripture have asked: “Does science align with scripture?”

- **Scripture often provides admonition related to being healthier and more successful**
- **Science (especially the science of brain function) helps to provide reasons for that admonition**

1 - Brain and Happiness

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A happy heart is good medicine and a cheerful mind works healing —Proverbs 17:22 Amplified Bible



Happiness, humor, and laughter are good for the brain and immune system

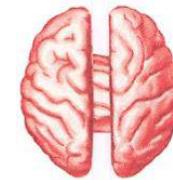
Mirthful laughter:

- Reduces stress hormones that can suppress the immune system
- Increases immune globulins that fight against viruses from colds and flues to cancers



Benefits of Laughter

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- Enhances communication between the two hemispheres (thinking!)
- Helps with learning, storage of data, and retrieval of information (memory!)
- Aids digestion, provides pain relief, helps avoid constipation (health!)

You need a minimum of thirty (30) mirthful laughs a day to be healthy—learn to laugh at yourself and you'll have an unending supply (you're the only person who will be with you your entire life)

Optimism and Health

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I will say it again—rejoice! —Philippians 4:4

Benefits that optimism may provide include:

- ✓ Lower rates of depression
- ✓ Lower levels of distress
- ✓ Greater resistance to colds
- ✓ Better psychological and physical well-being
- ✓ Reduced risk of cardiovascular disease/death
- ✓ Better coping skills during hardship / stress
- ✓ Potentially increased life span



Embrace Optimism

*Put on a
happy face!*

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New research on people over age 65 is the latest scientific endorsement of benefits from an optimistic outlook —US National Institute of Aging

- ✓ Optimism was associated with a reduced likelihood of cognitive impairment over time
- ✓ Better eating and exercising habits
- ✓ Less likely to suffer strokes and heart attacks
- ✓ Better problem solving and judgement
- ✓ Fewer memory problems
- ✓ Beneficial health-related outcomes among cancer survivors

#2 - Brain and Prayer-Meditation

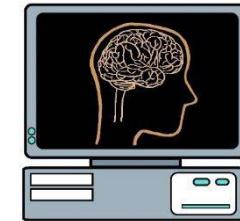
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Pray without ceasing

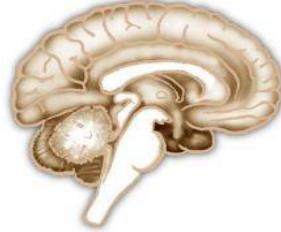
—I Thess 5:16-18 NIV

Prayer is a form of meditation: studies have shown that personal meditative prayer—pondering, meditating, thinking about spiritual things, and listening—provides the greatest personal benefits

- Can decrease metabolic activity
- Can increase blood flow to frontal, parietal, temporal, and limbic areas
- May trigger deafferentation (pain relief)



—Andrew Newberg MD



Science

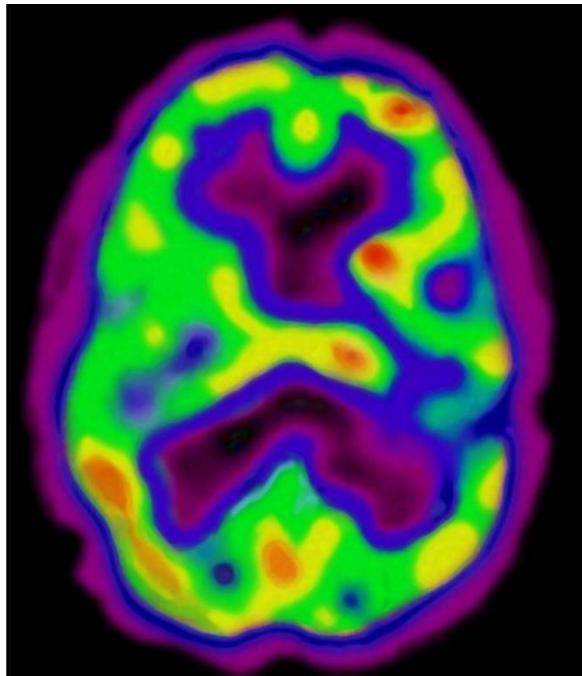
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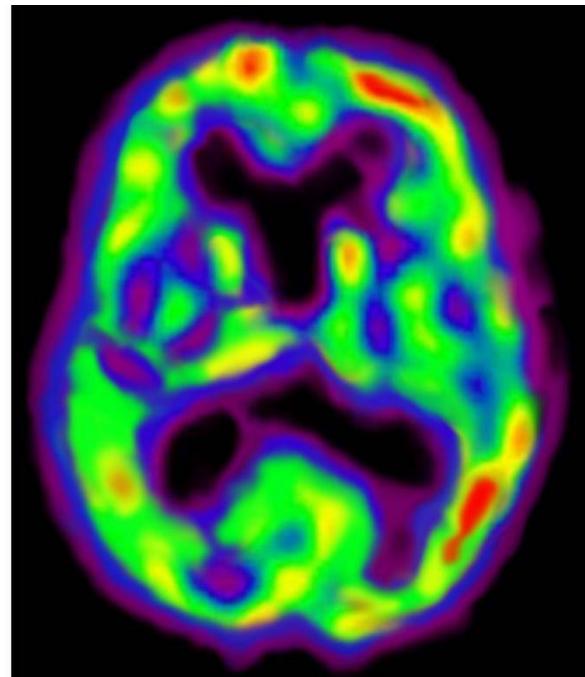
Prayer has been found to impact the brain and health positively, including headaches, worry and anxiety, heart attacks, high blood pressure, wound healing—and can give you some control over the way in which your brain ages

Study participants who prayed and / or reflected in a quiet, comfortable place for at least twelve minutes each day, experienced significant improvements in their memory

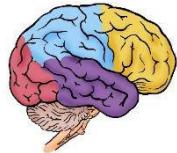
Pet Scan (not praying)



PET Scan (praying)



Note increased activity in both frontal lobes and right temporal lobe; prayer, if done regularly for at least 12 minutes daily, may slow age-related decline of the frontal lobes



#3 – Brain and Heart

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As you think in your heart, so are you —Prov 23:7

The heart is more than just a muscular pump; it contains neurons that look just like brain neurons, use the same neurotrophic food, and ‘think’

The heart has its own independent nervous system with at least 40,000 neurons (as many as are found in various subcortical sections of the brain); there is a two-way nervous system relay between the brain and the heart

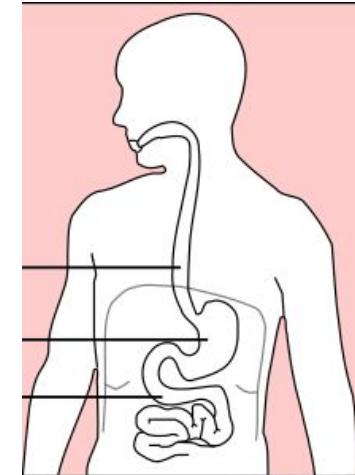
—Doc Childre and Howard Martin
The HeartMath Solution

Neurons in Your Gut

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The Enteric Nervous System or ENS also contains neurons – far more than in any other peripheral organ

Some are now suggesting there may be as many neurons in your ENS as there are in your brain!



ENS neurons use more than thirty neurotransmitters, most of which are identical to those in the brain and central nervous system

ENS and Brain Chemicals

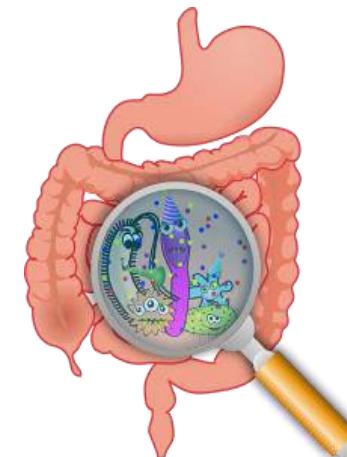
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The Enteric Nervous System also contains:

- 90 percent of all serotonin in your brain - body**
- 50 percent of all dopamine in brain - body**

**Perhaps because of this, the ENS
has been called a *second brain***

**Irritable Bowel Syndrome or IBS
is an ‘Enteric Neuropathy’**

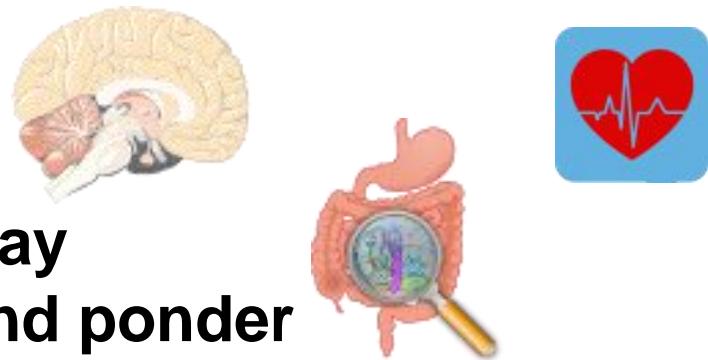


Science

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You '*think*' with your brain neurons—but you also '*think*' with your heart and gut neurons so your choices matter:

- Eat and drink
- Read and watch
- How you behave and play
- Thoughts you harbor and ponder



The vagus nerve connects the brain and the ENS, which helps explain the reason children cry and get stomach aches when parents argue and fight



#4 - Brain and Worry

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Can you add a single hour to your life by worrying? —Matthew 6:7

Worry and anxiety are forms of fear that are energy eaters and can downshift the brain – focusing its energy and attention toward lower brain levels, which keeps the stress response stimulated and can decrease judgement, health, and longevity...

Seek help if you are having difficulty managing worry and anxiety





Stop Worrying

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Never worry about anything —Phil 4:6

Problem-solve but dump worry and anxiety as they never solve anything, reduce an ability to brainstorm, downshift the brain, and trigger the stress response; select strategies to move away from fear:

- 1. Identify something humorous about the situation—and laugh about it**

- 2. Be thankful for something—fear and gratitude cannot coexist in the brain simultaneously**

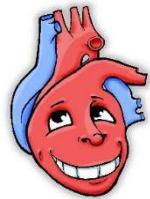
Science

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Worry and anxiety trigger stress hormones that can have serious consequences on both creatures and human beings over time, including:

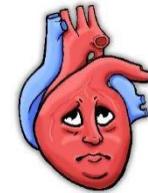
- ✓ Immune system suppression
- ✓ Increased digestive disorders
- ✓ Increased muscle tension
- ✓ Short-term memory loss
- ✓ Premature coronary artery disease, heart attack, depression, and even suicidal thoughts





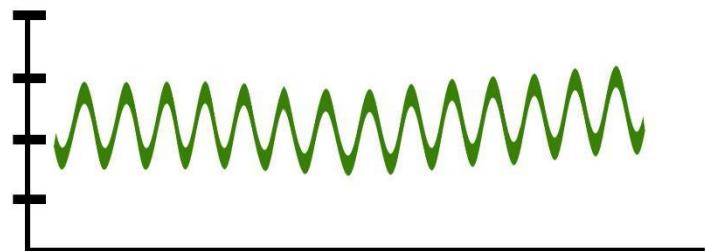
#5 - Brain and Gratitude

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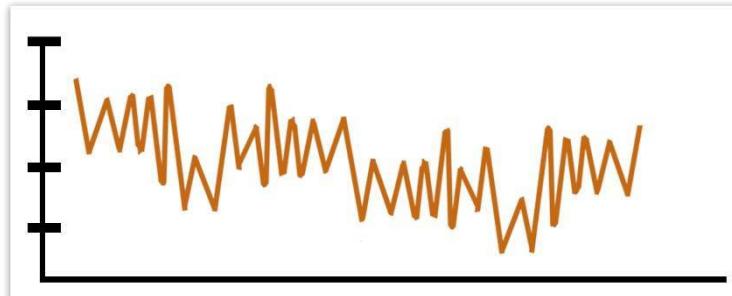


Give thanks in all circumstances —I Thess 5:8

Gratitude, kindness, and appreciation promote smooth and relatively even heart patterns, while frustration has a negative impact on heart patterns



Gratitude heart pattern



Frustration heart pattern

*Gratitude is a vaccine, an antitoxin,
and an antiseptic* —John Henry Jowett



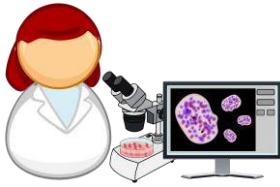
Your Choice

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Be thankful for what you have; you'll end up having more. If you concentrate on what you don't have, you will never, ever have enough —Oprah Winfrey

- ✓ Find the silver lining—the gift—you always get something when you must give up something
- ✓ Identify what you can learn, and avoid (insofar as possible) similar situations in the future
- ✓ There is always something for which to be grateful ...



Science

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Gratitude unlocks the fullness of life. It turns what we have into enough, and more. It turns denial into acceptance, chaos to order, confusion to clarity.

—Melody Beattie

Studies have shown that gratitude provides an antidote to fear; it improves problem solving and your health

An attitude of gratitude promotes congruence of thoughts, emotions, and feelings to increase gratefulness

#6 – Brain and Study

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Study to show yourself approved —2 Timothy 2:15

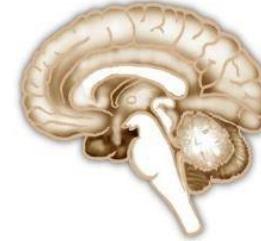
You must be *approved* for a passport, a marriage license, a divorce, an adoption, a TSA Precheck, and to lease a vehicle

You have been leased a *living vehicle* to use on this planet—there's no evidence you'll be taking it any place else with you

Are you studying how best to care for your *living vehicle*, especially the science brain of function?

Are You Studying?

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Learning is not attained by chance—it must be sought for with ardor and attended to with diligence —Abigail Adams (1744 - 1818)

You only know what you know; you can only do what you know; you can only know if you study and learn

Some do not study, others study but do not learn or fail to practically apply what they do learn—some study and are approved



You Just ‘Lease’

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You are not your own . . . —1 Corinthians 6

From a Christian perspective, your *living vehicle* is a *temple* . . . The question is: are you caring for it in an approved manner?

My brain’s opinion is that appropriate care includes refusing to abuse your own brain and body (or those of others) through your lifestyle choices and protecting yourself from abuse

#7 - Brain and Knowledge

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My people are destroyed for lack of knowledge

—Hosea 4:6



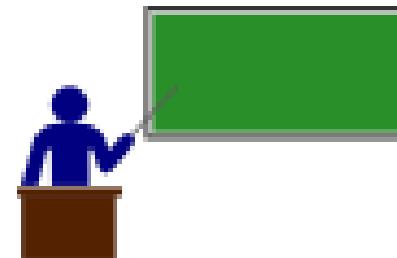
This is the *information* age, yet
people perish right, left, and center

The news is filled with examples of well-known individuals who have perished because of their own choices

They may have had the information but lacked the practical application of knowledge—information and knowledge are not the same thing

Information

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Information - a noun from the Latin verb *informare* (to inform an idea of, to teach)

Defined as that which informs (including facts, figures, and data) and from which knowledge can be derived



Vehicle metaphor: you have facts and data about the vehicle, how it works, and instructions on how to care for it



Knowledge

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Knowledge – a noun likely from Old English meaning to know and denoting action or practice

Defined as understanding something through learning, by experience of practical application, by evaluating the outcome (negative or positive?) and course correcting as needed

Vehicle metaphor: you have honed the skills to care for and operate the vehicle wisely, safely, and appropriately—and you do it consistently



Science

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It is not that I do not know what to do—it is that I do not do what I know —Confucius (551-479 BC)

What I want to do I do not do but what I hate I do
—Apostle Paul, Romans 7:15

Studies clearly link health with lifestyle choices

Healthier choices require awareness, intention, learning, daily practical application of knowledge using willpower, consistent effort, ongoing evaluation, and course correction

In Conclusion

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The unexamined life is not worth living —Socrates

Examine yourselves! —II Corinthians 13:5

When you KNOW better you can DO better . . .

Scripture recommends behaviors for a healthier lifestyle for both brain and body

Science is showing the reason for some of those recommendations—to help you '*prosper and be in good health, as your soul also prospers*'

—3 John 1:2