



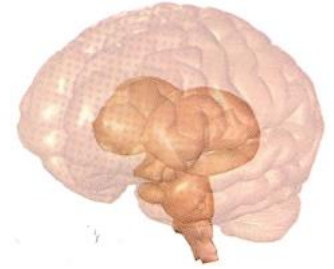
How Prayer Changes the Brain—and Heals!

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Brain References
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10-19

Human brains are more alike than they are different – yet each develops uniquely!

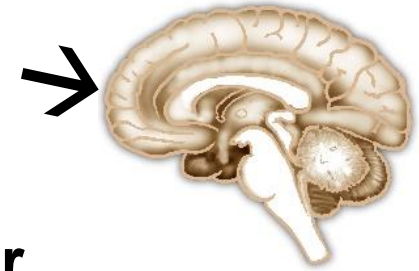


- **No two brains are ever identical in structure, function, or perception—not even in identical twins!**
- **Give up all expectations of another brain understanding yours—you don't even understand it completely—avoid meaningless argument and foolish controversy!**
- **Each brain's perception and practice related to prayer is unique**

Prayer is the process of communicating with a Higher Power as you perceive it —Dictionary

Prayer is a form of meditation; the frontal cortex lights up during prayer

—Candace B. Pert, PhD INH Researcher



Prayer is a universal *being-and-not-doing* phenomenon, an attitude of the heart . . . Although science tells us that prayer works, it cannot tell us how it works

—Larry Dossey, MD *Prayer is Good Medicine*

Prayer has been “adopted” as a worship activity in many churches and organizations but it is not in-and-of-itself “religious” (rather it is a spiritual practice)

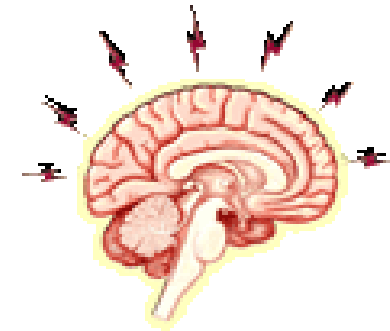
55% - pray every day

21% - pray weekend or monthly

23% - seldom or never pray

6% - of atheists or agnostics pray daily

11% - of atheist or agnostics pray weekly



2014 Pew Research Center survey, US General Public

There are many many ways to pray / meditate

- ✓ **Head bowed**
- ✓ **Eyes closed**
- ✓ **Hands folded**
- ✓ **Kneeling**
- **Eyes open**
- **Head up**
- **Lying down**
- **Driving a vehicle**



- **Standing**
- **Sitting**
- **Prostrate on floor**
- **Hands raised or waving**
- **Hands by your sides**
- **Holding hands of others**
- **Laying hands on others**



Pray without ceasing

—Apostle Paul 1 Thess 5:17

The Greek work for “without ceasing” is *adialeiptos*, which implies *constantly recurring*—anytime, anywhere, any style, in any attitude, and about anything

God (your Higher Power) is available 24/7 anywhere in the universe, regardless of time zones

Prayer does not demand that we interrupt our work but that we continue working as if it were a prayer

—Mother Teresa



Prayer can be viewed as one of the ultimate activities of the frontal lobes of the neocortex

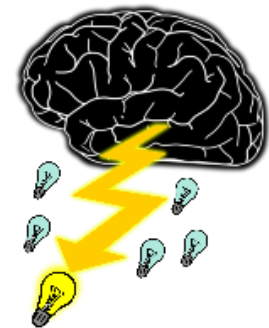
—Neil Nedley, MD *Proof Positive*



- **Prayer decreases pulse and breathing rates and lowers blood pressure**
- **Slows the aging process (reduces brain-wave activity which decreases brain metabolism and oxygen requirements without lowering cognitive abilities)**

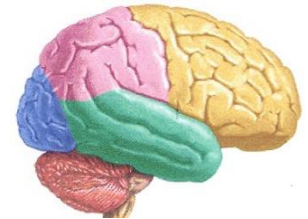
—Larry Dossey, MD

- **Prayer improves the coordination of communication and electrical patterns between the two hemispheres**
- **It improves the efficiency of body functions in runners who pray or meditate while they are running (maybe in the brain and body of other athletes who pray, as well)**
- **Heightens learning ability and creative problem-solving**
- **Positively affects heart attacks, wound healing, anxiety, and headaches**



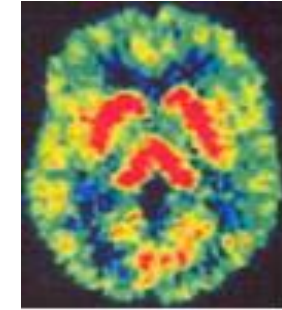
Different types of prayers affect areas of the brain differently—but they all appear to impact neurological function, physical, and emotional health in positive ways

- **Can increase blood flow to frontal, parietal, temporal, and limbic areas**
- **Can decrease metabolic activity (uses less energy)**
- **May trigger deafferentation, type of pain relief**



—Andrew Newberg, MD

Dr. Newberg is co-founder of Neurotheology—the study of the relationship between the brain and spiritual or religious phenomena; he has studied more than 150 brain scans to observe brain changes that occur during types of prayer, meditation, and religious practices



**—Andrew Newberg, MD,
*How God Changes Your Brain***

Multiple studies have concluded that being on the receiving end of prayers appears able to improve one's physical health

In a review of literature, Dr. Dale Matthew of Georgetown University identified 212 research studies showing medical benefits of prayer on one's health—prayer has been found to be effective and beneficial in the clinical treatment of patients



“When we pray, we reap tremendous physical, emotional, and spiritual benefits... we may also reap the benefits from the prayers of others on our behalf

—Mind/Body Health Journal

Prayer for beneficial healing and quick recovery in a ten-month study of 192 cardiac patients

—Randy Byrd MD, SF General Hospital, CCU, Double Blind



Prayed-for Group had fewer complications

- No intubations
- 3 required antibiotics
- 6 had pulmonary edema

Control Group had increased complications

- 12 required intubations
- 16 needed antibiotics
- 18 had pulmonary edema

Seven groups around the world prayed for 150 angioplasty patients

**—Mitchell W. Krucoff MD
(Duke U Med Center, NC), Double-Blind**

Prayed for specific patients by name during angioplasty procedures —patient-prayer group match was not based on any denomination affiliation

- ✓ **Patients who were prayed for had far fewer complications**



Prayer for pregnancy in 199 women receiving in-vitro fertility treatments in Korea

**—Rogerio A. Lobo, MD
Columbia University, S of M, NYC**

Half the women were randomly assigned to Christian prayer groups in Canada, USA, and Australia

- ✓ **The pregnancy rate was doubled among the women who were prayed for**



Reflecting on a spiritual or scriptural passage, picturing God or your Higher Power (by any name) in a positive way, or saying a prayer that has special meaning for you can enhance your memory

***We do not know what we ought to pray for,
but the Holy Spirit intercedes for*** —Romans 8:26



**I've seen prayers answered—but often, in my experience,
if you get what you pray for, you've really shortchanged
yourself**
—Anne Lamott

Many studies have shown that when you pray for others they can receive benefits—especially if they believe in prayer and know that you are praying for them

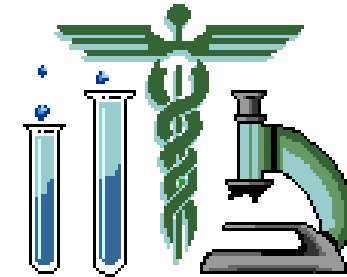


However, the greatest benefits of prayer and meditation may accrue to the brain that is actually doing the praying

In that way, prayer appears to resemble forgiveness: the person who does the forgiving appears to receive the most benefits to mind and body; and the person who does the praying may receive the most benefits

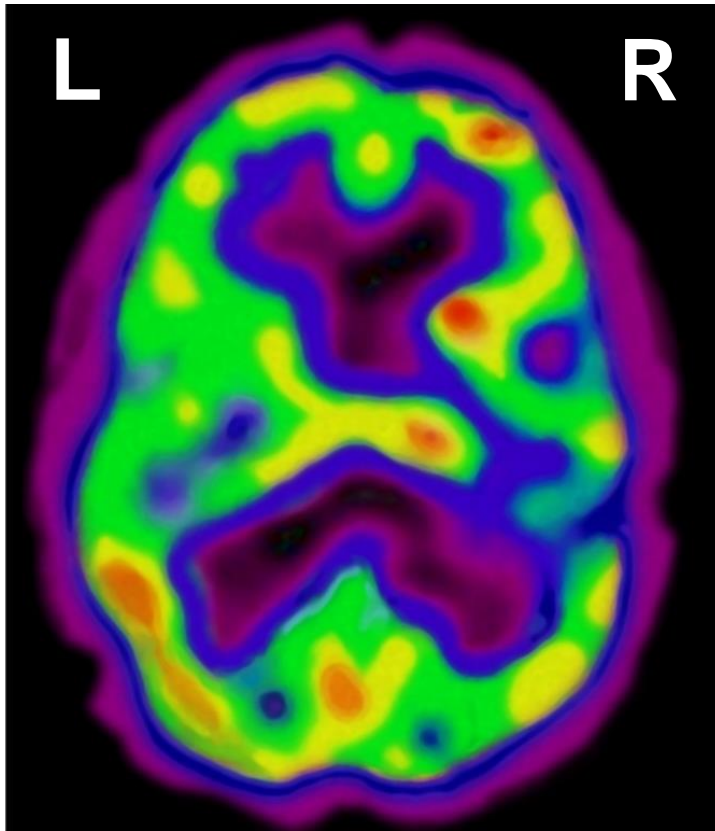
Activities that engage the frontal lobes (e.g., prayer / meditation) protect against age-related deterioration (shrinkage) associated with:

- **Loss of memory, overall loss of mental function, and dementia**



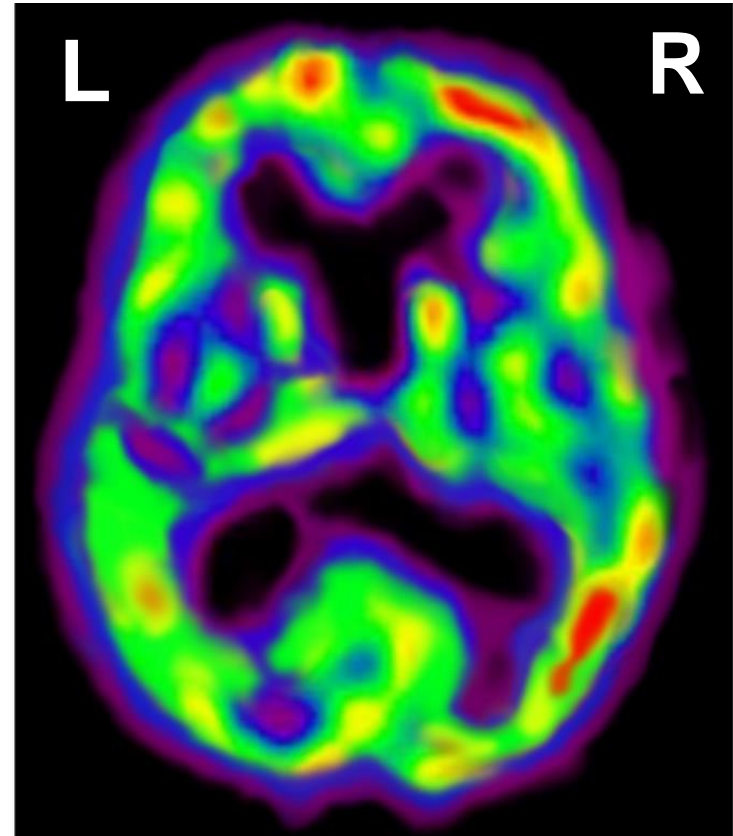
Meditation and prayer are excellent brain-power boosters as they battle stress (e.g., promote synchronized brain rhythms and reduce levels of stress hormones); give you some control over the way in which your brain ages

—Kenneth Giuffre, MD



Not praying

**PET
Scans**



While praying

Study conclusion: Prayer is an anti-aging strategy that may slow the age-related decline of the frontal lobes—if done regularly for at least twelve (12) minutes a day

**Never use a negative thought in prayer;
only positive thoughts get positive results
—Norman Vincent Peale**



The Lord's Prayer – is written in *positive language*

—Matt 6, Luke 11

Be careful how and what you pray for!

Evidence suggests that prayer, like drugs and medications, can have effects that are positive, neutral, or negative



One study found that 1 in 20 Americans admitted they had actually prayed that others will be harmed

—Larry Dossey, MD

Since prayers most impact the person who is doing the praying, there is some concern about the effect negative prayers may have on their brain

Negativity creates negative pictures in the mind's eye and the subconscious mind tends to follow those pictures (does not use language, per se)



Your brain believes that what you see in your mind's eye is what you want, and it does its best to help you achieve it

1. Prayer is instantaneous – nothing can block it, not even a lead-lined room



2. A person's own belief can strengthen the effect of prayers (placebo effect) but it works even when what or who is being prayed for is unaware of the prayers

3. Being on the receiving end of prayers appears able to improve physical health; cells seems able to “get the message somehow” although the location of where the cells' receptors for prayer has so far not been revealed

4. Distance does not appear to be a factor in how well prayer works:

- **it can be Local (immediate presence)**
- **it can be Nonlocal (at any distance)**



5. It is not some 'conventional' form of energy that is 'sent' and 'received'

6. Scientists such as Larry Dossey, MD, have speculated that prayer energy travels as Extremely Low Frequency (elf) electromagnetic waves that somehow reach, touch, and influence our cells



Due to their extremely long wavelength (10,000 to 100,000 Kilometers), elf waves can diffract around large obstacles, pass through sea water, and are not blocked by mountain ranges or by the horizon so they travel around the curve of the earth

Prayers that focus on gratitude, celebration, awe, or a positive vision of the future (as well as rejecting anger and resentment) have been found to be the most beneficial and can:

- Increase compassion**
- Reduce depression and anxiety**
- Relieve stress**
- Lower blood pressure and heart rate**
- And eventually even extend life**



Bottom line: no two brains are identical in structure, function, perception, or approach to prayer and meditation



However, studies are showing empirically that prayer can positively impact your brain, health, and potential longevity—as well as in the lives of those for whom you choose to pray

Find your own prayer path and make it part of your Longevity Lifestyle—because it *Matters*