Vagus Nerve Stimulation Techniques: A Christian Path to Peace and Joy

Introduction:

Life's stresses and anxieties can sap our joy and make it difficult to experience the deep peace that Christ promises. Many believers struggle to reconcile their faith with persistent feelings of worry or depression. What if part of the solution lies in how God designed our bodies? The **vagus nerve** – a critical nerve connecting the brain to the heart, lungs, and gut – plays a key role in calming our bodies. By learning **vagus nerve stimulation techniques**, we can help our nervous system shift from stress to rest. This not only improves our mental and physical health but also creates space in our hearts to feel the **"peace of God, which transcends all understanding"** (Philippians 4:6-7). In this article, we'll explore how stimulating the vagus nerve – through simple exercises, lifestyle changes, and when needed, medical devices – can support a joyful, Christ-centered life. We'll reinforce each approach with Scripture and science, showing that caring for our bodies is an important part of our spiritual journey.

Understanding the Vagus Nerve: God's Calming Pathway

The *vagus nerve* (Latin for "wandering nerve") is the longest cranial nerve in the body, extending from the brainstem down through the neck and into most major organs. It's a core part of the **parasympathetic nervous system**, which is responsible for the "rest and digest" state that counteracts the adrenaline-fueled **fight-or-flight response** 1 2. When activated, the vagus nerve sends signals that slow our heart rate, deepen breathing, stimulate digestion, and induce a sense of calm. In essence, it's a built-in mechanism for **physiological peace**.

From a Christian perspective, this is a beautiful design – "I praise You because I am fearfully and wonderfully made" (Psalm 139:14). God equipped our bodies with a way to recover from stress. The vagus nerve helps turn off the alarm bells of stress and anxiety, telling our body "you're safe now" ³ ⁴. Modern medicine recognizes that people with stronger vagus nerve activity (often measured as high vagal tone or greater heart rate variability) tend to have better emotional regulation, resilience to stress, and overall health ⁵ ⁶. High vagal tone means your body can rapidly calm down after a scare or worry, whereas low vagal tone is linked to anxiety and difficulty relaxing ⁷ ⁸. Science is effectively confirming what Scripture has long taught – constant stress is harmful (Luke 21:34, or Proverbs 14:30) but finding rest leads to life. The vagus nerve is one of the "intricate parts of the body" (1 Corinthians 12:18-26) that helps bring us back to a state of rest.

Body, Mind, and Spirit: A Holistic Connection

As Christians, we affirm that we are **holistic beings** – body, soul, and spirit (1 Thessalonians 5:23). Our physical state can affect our spiritual life, and vice versa. The Bible acknowledges this interconnectedness. For example, "A cheerful heart is good medicine, but a crushed spirit dries up the bones" (Proverbs 17:22). When our hearts are joyful, even our bodies benefit; when we are emotionally broken, we feel it physically. In times of intense anxiety or depression, even strong believers may struggle to pray or feel

God's presence. This isn't a lack of faith – it can be the body's stress response overwhelming the mind. Elijah, a great prophet, became so anxious and depressed that he wanted to die – yet God addressed his physical needs first (providing sleep and food) before speaking to him gently (1 Kings 19:4-8). This story shows that tending to our bodily needs is a valid and important part of God's healing process.

Trusting God and using practical tools go hand-in-hand. Taking care of our nervous system doesn't mean we trust God any less; rather, it's being a good steward of the body He gave us (1 Corinthians 6:19-20). In fact, embracing techniques that calm our body can enhance our spiritual practices. When we quiet our racing heart and mind, it becomes easier to "Be still, and know that [He] is God" (Psalm 46:10). On the flip side, prayer and worship can directly benefit our bodies. Research shows that prayer, meditation, and worship can stimulate vagal activity, promoting relaxation and reducing anxiety ⁹ ¹⁰. This means spiritual practices aren't just good for the soul – they tangibly impact our physical stress responses. When Scripture encourages us not to worry but to pray, with thanksgiving (Philippians 4:6), it's not only giving spiritual counsel – it's also guiding us toward a proven method of calming our nervous system. "Cast all your anxiety on Him because He cares for you" (1 Peter 5:7) is both a spiritual release and, through the act of prayer, a trigger for the vagus nerve to signal safety.

In summary, God designed us as unified beings. A deep relationship with Jesus involves our hearts and minds, but also our brains and nerves. We should never feel shame for addressing mental health or using physical techniques to manage anxiety. Just as one might take insulin for diabetes or rest a broken leg, we can use **God-given tools for our nervous system**. Even the apostle Paul told Timothy to "use a little wine" medicinally for his stomach ailments (1 Timothy 5:23), an early example of **endorsing a practical remedy** alongside prayer. With that perspective, let's explore practical vagus nerve stimulation techniques and how they can help restore both peace to the body and joy to the spirit.

Everyday Techniques to Stimulate Your Vagus Nerve

Fortunately, you don't need an implant or a prescription to tap into the calming power of the vagus nerve. There are many **natural**, **non-invasive techniques** that anyone can practice to stimulate vagal activity. These practices essentially send messages through the vagus nerve telling your brain and body to relax. They are simple, **safe for most people**, and often free. (*If you have any medical issues*, *of course*, *use common sense and consult a healthcare provider as needed*.) Here are some effective vagus nerve stimulation techniques you can incorporate into daily life:

• Slow, Deep Breathing (Breath Prayer): "Then the Lord God formed man...and breathed into his nostrils the breath of life" (Genesis 2:7). Breathing is life, and slow breathing is one of the fastest ways to activate your vagus nerve. By intentionally slowing your respiration to about 5-7 breaths per minute (instead of a typical 12+), you trigger a parasympathetic response 11 12. Try inhaling deeply for a count of 4 or 5, then exhale slowly for a count of 8–10. Extending the exhale is key – it's during exhalation that the vagus nerve signals the heart to slow down 12. You can make this a breath prayer: for example, inhale thinking "Be still", exhale "and know that I am God" (Psalm 46:10). Research has shown that slow, deep breathing increases heart rate variability (a measure of vagal tone) and leads to greater calm, reduced anxiety, and even improved mood 13 14. Over time, regular practice strengthens your vagal response, so your body becomes more resilient and can "snap out" of stress faster 15 16. When you feel panic or anger rising, pause to breathe – it's like pressing a built-in reset button that God installed in your body.

- Singing, Humming, and Speaking Praise: Have you ever noticed how singing a worship song can shift your atmosphere? Physically, this is partly because the vagus nerve connects to your vocal cords and the muscles at the back of your throat 17. Humming or singing (especially in a slow, calming tone) creates vibrations that activate the vagus nerve 17. Making music to the Lord not only honors Him but also soothes us. The Bible often encourages singing in times of fear or trouble -Paul and Silas sang hymns in prison at midnight, and their chains literally fell off (Acts 16:25-26). When we sing or even hum quietly, we stimulate nerves that help lower our heart rate and blood pressure. One study found that chanting or singing at a controlled 6 breaths per minute (which happens in traditions like singing hymns or reciting the Rosary) produced "striking, powerful, and synchronous increases in cardiovascular rhythms," indicating a strong vagal effect and relaxation response 9 18. In simpler terms, "when you sing to the Lord or pray out loud, you are literally activating God's built-in system of peace and restoration" 19 20. This might give new meaning to verses like "Sing and make music from your heart to the Lord" (Ephesians 5:19) - our Creator knew that singing would engage both spirit and body. So next time anxiety hits, try softly singing a favorite hymn or worship song. Don't worry about how you sound - you're activating a God-given mechanism for peace. As Psalm 95:1 says, "Come, let us sing for joy to the Lord... let us shout aloud to the Rock of our salvation." That joyful noise can calm your nerves and lift your spirit.
- Gentle Exercise and Stretching: Physical activity in moderation is a known stress reducer and can improve vagal tone over time ²¹ ²². Activities that synchronize movement and breath are especially helpful. Many Christians enjoy practices like walking in nature (often called *forest therapy* or a prayer walk) to reduce anxiety. The **rhythm of walking** and breathing fresh air can stimulate the vagus nerve and remind us of God's presence in creation. Gentle stretching or Christian yoga alternatives (focusing on scripture while stretching) can also trigger relaxation. "Physical training is of some value" (1 Timothy 4:8), and in this context it can prepare our body to enter a state of rest. Even laughing is great "internal exercise" genuine laughter massages the organs and diaphragmatic muscles, stimulating the vagus nerve. No wonder "a cheerful heart is good medicine" (Proverbs 17:22)! Make time for wholesome fun and fellowship that makes you laugh, as it literally heals. Also consider progressive muscle relaxation (tensing and releasing muscle groups with slow breaths) to tap into vagal activation.
- Cold Water and the "Diving Reflex": This technique might sound surprising, but splashing your face with cold water or taking a brief cold shower can quickly activate the vagus nerve. The body has an automatic response (the mammalian diving reflex) that occurs when cold water contacts the face heart rate slows, blood is directed to vital organs, and the vagus nerve is stimulated 23 24. If you're overwhelmed by panic or anger, try ice-cold water on your face for 15-30 seconds. Some people keep an "ice pack" or even a bowl of cold water handy to dunk their face into when anxiety spikes. This can break the cycle of acute stress. It's a physical way to "chill out" that pairs well with praying through a sudden crisis. (Think of it as a modern twist on the old advice of stepping outside for air except the shock of cold really flips the vagal switch.) Of course, use caution: if you have heart issues, extreme cold could be risky lukewarm coolness may suffice. But many find this quick reset incredibly effective for things like panic attacks or rage. It's fascinating that God built our bodies to respond to even environmental cues like temperature to find equilibrium. In spiritual terms, it's reminiscent of Proverbs 14:30: "A heart at peace gives life to the body." Sometimes, a splash of cold is what helps usher in that physiological peace.

- The Valsalva Maneuver and Gargling: A more specialized trick, the Valsalva maneuver involves exhaling against a closed airway (for example, pinching your nose and closing your mouth, then blowing as if trying to pop your ears). This action increases pressure in the chest and stimulates the vagus nerve, often resulting in a slowed heart rate [25] [26]. It's actually taught to patients in cardiac rehab to help with certain rapid heart rhythms. You can use it when you feel your heart pounding with anxiety but do it gently and only for a few seconds to avoid dizziness. Similarly, gargling with water or coughing can activate the vagal reflexes in the throat. Some therapists humorously suggest gargling your beverage each morning it might sound silly, but that throat vibration and muscle engagement give the vagus a mini workout. Even yawning or opening your throat wide (like in singing practice) can stimulate vagal tone. These odd little habits can be daily reminders that caring for your nerves is part of caring for your soul. As 3 John 1:2 says, "I pray that you may enjoy good health and that all may go well with you, even as your soul is getting along well." Small actions like these honor that prayer by tending to our God-given body.
- Social Connection and Laughter: The vagus nerve is deeply tied into our ability to connect socially this is a key insight of modern Polyvagal Theory. When we feel safe with others, our vagal activity increases, putting us in a "social engagement" state that is calm yet connected [27] [28]. On the other hand, isolation or conflict can threaten our sense of safety and lower vagal tone. The Bible affirms the power of community: "Two are better than one... if either falls, one can help the other up" (Ecclesiastes 4:9-10). To naturally stimulate your vagus nerve, seek out **positive social interaction** – a heartfelt conversation, a hug from a loved one (which triggers a vagal-mediated release of oxytocin), or even playing with a pet. Laughter with friends is especially potent - it not only "does good like medicine" (Prov. 17:22) but also rhythmically engages your diaphragm and vocal cords in a way that activates vagal tone. Engaging in fellowship at church or in a small group can provide this therapeutic connection. The apostle Paul often found comfort and joy in the presence of fellow believers (Philippians 1:7-8). In moments of loneliness-induced anxiety, consider calling a trusted friend or praying with someone. Even texting or hearing a familiar voice can initiate a calming vagal response ²⁹ ³⁰ . God often uses *people* as His vessels of comfort – our nervous system wiring reflects that we truly are made for community. As Romans 12:15 encourages, "Rejoice with those who rejoice; mourn with those who mourn." Such empathetic connection is healing on multiple levels.

These everyday techniques can be thought of as ways to "seek peace and pursue it" (Psalm 34:14) in the practical sense. They can be woven into your daily routines: perhaps start morning devotions with deep breathing, hum a hymn during your commute, take a short walk thanking God for creation, splash your face when hitting an afternoon slump, gargle during oral care, and end the day with a phone call or prayer with a friend. By regularly engaging in these practices, you are essentially training your nervous system. Over time, you may notice you feel calmer, sleep better, and recover from stress more quickly. It's like exercising a muscle – consistency builds strength. Scientists call this building vagal tone, and it's associated with lower inflammation, better sleep, and improved emotional resilience ⁴ ³¹. In doing so, you're better able to "guard your heart" (Proverbs 4:23) both figuratively and literally, as the vagus nerve helps guard your cardiovascular health. And importantly, a calm body creates a more receptive heart for the Holy Spirit's joy and guidance. When the physical adrenaline and tension are dialed down, it becomes easier to "hear the gentle whisper" of God (1 Kings 19:12) and to experience the subtle fruits of the Spirit like joy, peace, and patience (Galatians 5:22-23).

Lifestyle Habits and Spiritual Disciplines for Vagal Tone

In addition to specific techniques, our overall **lifestyle** can strengthen (or weaken) our vagus nerve function. Think of lifestyle as the soil in which daily practices grow. Here are some habits and disciplines that support a well-regulated nervous system in the long run, along with their biblical parallels:

- **Regular Exercise:** Engaging in regular moderate exercise (such as walking, cycling, swimming, or dancing) improves baseline vagal tone and heart rate variability over time ³². It doesn't have to be intense; even 20–30 minutes a day of moving your body can make a difference. Exercise reduces chronic stress hormones and can alleviate mild depression and anxiety. The Bible uses running and physical training as metaphors for spiritual growth (1 Corinthians 9:24-27, 1 Timothy 4:8). Just as we **discipline our bodies** for a prize, caring for physical health equips us to better run the spiritual race. Many Christians find that a routine of exercise becomes a sweet time of prayer or worship (for example, listening to worship music while jogging) feeding body and spirit together.
- Adequate Sleep and Rest: Sufficient sleep each night and rhythms of rest (like practicing a Sabbath or unplugging weekly) greatly influence our nervous system balance. Chronic lack of sleep keeps the body in a stressed state and undermines vagal tone. God built us to need rest "In vain you rise early and stay up late, toiling for food to eat for He grants sleep to those He loves" (Psalm 127:2). Honor your body's need for 7-8 hours of sleep. If anxiety is hindering sleep, that's all the more reason to practice the techniques above (breathing, prayer, etc.) at bedtime. Creating a peaceful pre-sleep routine (perhaps reading Scripture or journaling gratitude by low light) can signal your vagus nerve that it's safe to relax. Also, consider short daytime breaks: Jesus Himself often withdrew from crowds to rest and pray (Luke 5:16). Emulating that, even a 15-minute midday quiet time can reset your nervous system.
- Mindful Eating and Gut Health: The vagus nerve plays a big role in digestion it connects the brain to the gut, sometimes called our "second brain" 33. Have you noticed how anxiety can cause butterflies or nausea? That's vagal communication at work. To support this, be mindful of nutrition. Eating wholesome foods (fruits, vegetables, lean proteins, whole grains) at regular times and not overeating can stabilize blood sugar and mood. On the flip side, excessive caffeine or sugary processed foods might rev up your nervous system. Enjoy food with thankfulness (1 Timothy 4:4-5) and consider incorporating fermented foods or probiotics which some research suggests can positively influence the gut-brain axis and vagal tone. More fundamentally, avoid gluttony or highly stressful eating environments. Make mealtimes an opportunity to slow down, say grace, and savor activating digestion (a vagal function) in a calm setting.
- Prayer and Meditative Scripture Reading: We've touched on prayer as an acute tool, but making it a daily habit is key. Studies have found that people who engage in regular contemplative prayer or meditation have lower stress levels and improved autonomic balance over time ⁹ ³⁴. Prayer is our lifeline to God "Cast your cares on the Lord and He will sustain you" (Psalm 55:22). Incorporate forms of prayer that emphasize stillness and trust. For example, breath prayers (as described earlier), centering prayer (quietly sitting with a biblical phrase or simply in God's presence), or praying the Psalms slowly can all activate a relaxation response. Even the Rosary or repeating a simple prayer like "Lord Jesus, have mercy" can be a Christ-centered form of meditation that brings both spiritual and physical calm. One review on prayer and breath control noted that rhythmic prayer practices engage the parasympathetic system, reducing stress hormones and potentially boosting serotonin

(a mood-regulating brain chemical) ³⁵ ³⁶ . In practical terms, consistently entering that prayerful state trains your body to associate prayer time with safety and peace. Over weeks and months, you may find you're generally less anxious because you regularly "recharge" in God's presence – "He leads me beside quiet waters, He refreshes my soul" (Psalm 23:2-3).

• Cultivating Gratitude and Joy: Scripture tells us to "Rejoice in the Lord always" and to give thanks in all circumstances (Philippians 4:4, 1 Thessalonians 5:18). These commands aren't just spiritual ideals – they have real effects on our brain and body. Gratitude and positive reflections can lower cortisol (stress hormone) and increase optimism, which is linked with better heart rate variability (hence, better vagal tone). Consider a practice like a gratitude journal or ending each day by thanking God for 3 things. Consciously focusing on God's goodness and the joys (even small ones) in your life counters the brain's stress bias. This aligns with the famous Philippians 4:8 directive to think on things that are true, noble, right, pure, lovely, and praiseworthy. Neurologically, this kind of meditation can shift your nervous system out of fear mode. And when anxiety does creep in, rejoicing in God – even as a deliberate choice – can be powerful. Remember how "the joy of the Lord is your strength" (Nehemiah 8:10). Joy and laughter release tension and energize us to face challenges with resilience.

In practicing these habits, it's helpful to remember that **grace is key**. We won't do them perfectly, and that's okay. God's mercies are new each morning (Lamentations 3:22-23). If you miss a workout or have a terrible night's sleep, don't spiral into guilt; simply take the next step that you can. Living a balanced life that honors God with your body is a marathon, not a sprint. Small, consistent changes yield results. And because our goal is a joyful life *in Christ*, always invite Him into these processes. Pray as you exercise, thank Him as you eat well, listen for His voice in the silence, and ask the Holy Spirit for help in establishing healthy routines. The Lord cares about every detail – "your Father knows what you need" (Matthew 6:8) – including your need for a well-regulated nervous system!

Medical Vagus Nerve Stimulation: Extreme Cases and Modern Miracles

We've explored many **self-help techniques** and lifestyle changes, which are effective for daily stress and moderate anxiety. But what about more **extreme cases** – severe clinical conditions like drug-resistant epilepsy or major depression that hasn't responded to anything? In such cases, modern medicine has developed **Vagus Nerve Stimulation (VNS) therapy devices**. As a Christian, you might wonder whether using such high-tech interventions is appropriate or if it indicates a lack of faith. It's important to address this: using medical treatment is **not** contrary to trusting God. In fact, it can be seen as utilizing the knowledge and tools He's provided through human ingenuity. Jesus said, "It is not the healthy who need a doctor, but the sick" (Mark 2:17). Luke, the author of one Gospel and Acts, was a physician by trade (Colossians 4:14). There is no shame in seeking medical help; it can be a channel of God's healing. With that perspective, let's briefly look at what VNS therapy is and when it's used.

Implantable VNS Devices: In the 1990s, doctors discovered that electrically stimulating the vagus nerve with a device could improve certain conditions. The first FDA-approved VNS device came in 1997 for treating refractory epilepsy 37 . Essentially, it's a pacemaker-like device surgically implanted under the skin of the chest, with a wire that coils around the left vagus nerve in the neck 38 39 . It delivers mild electrical pulses to the nerve at intervals. These signals then travel up to the brain and can help regulate abnormal brain

activity. **For epilepsy:** many patients with severe seizures have found relief – the device can reduce seizure frequency and intensity when medications alone aren't enough ⁴⁰ ⁴¹. Typically, it's considered for epilepsy patients as young as 4 years old who have tried multiple medications without success ⁴². It's an *add-on therapy*, meaning patients usually continue taking meds but get an extra boost from VNS. **For depression:** in 2005, the FDA also approved VNS for **treatment-resistant depression** – i.e. adults with chronic severe depression who have tried at least four other treatments (various antidepressants, therapy, even ECT) with little improvement ⁴³ ⁴⁴. These are truly extreme cases, often people who have suffered for decades. In such patients, an implanted VNS can gradually improve mood over months and years. It's not a quick fix, but studies show significant benefits. For example, a recent large clinical trial across 84 sites found that after one year of VNS, about 50% of these very ill depression patients experienced **measurable improvement in symptoms and quality of life** – often the difference between being bedridden versus functioning in daily tasks ⁴⁵ ⁴⁶. Some even achieved remission. One participant described it as a lifesaving turn from "paralyzed by life" to being able to get out of bed and reconnect with loved ones ⁴⁷. These outcomes are nothing short of **hope re-kindled** for people who felt hopeless.

It's worth noting that implant surgery carries risks (infection, vocal cord damage, etc.), and the device can have side effects like temporary hoarseness, cough, or tingling when it goes off. That's why **VNS devices are used only in the most extreme cases**, after other treatments fail. Doctors and patients weigh the potential benefit against these risks. When it works, it can be a blessing. One patient with severe depression said, "It feels like a fog is slowly lifting." We can view that as God's grace through technology – akin to how insulin pumps are grace for diabetics. If you or a loved one is in such dire straits, **seeking a VNS evaluation does not mean you lack faith**. It may mean God is opening a door for healing through medical means. We must remember: all healing ultimately comes from God, whether it's through prayer, a surgeon's hand, or an electrical device.

Non-Invasive VNS Devices: In recent years, there are also devices that stimulate the vagus nerve without surgery, typically by sending current through the skin of the neck or the ear (where a branch of the vagus is accessible). The FDA approved a handheld stimulator for cluster headaches and migraines – you place it on the neck and it can abort or prevent headache attacks by vagal action ³⁹. These are exciting advancements, and researchers are testing non-invasive VNS for conditions like **anxiety, PTSD, tinnitus, and inflammation disorders** ⁴⁸ ⁴⁹. Many of these are still experimental or not yet widely available. But the idea is that someday, people might treat certain ailments by simply applying a vagus nerve "tickle" externally, similar to a TENS unit for nerves. As of now (2025), such devices are mainly under clinical trials or limited use.

From a faith standpoint, how amazing is it that God created our bodies with an "off switch" for stress and an "anti-seizure" pathway that we're only now learning to tap into? It's a reminder of Proverbs 25:2 – "It is the glory of God to conceal a matter; to search out a matter is the glory of kings." Discovering these medical therapies is like searching out treasures of God's design. Christians in healthcare often speak of "thinking God's thoughts after Him" – uncovering the built-in mechanisms God placed in nature and our bodies. Vagus nerve stimulation is one such mechanism.

Balancing Faith and Medicine: If you're undergoing VNS therapy or considering it, you can integrate it with your spiritual life. For instance, each time the device pulses (some patients can feel a mild flutter in their throat), it could prompt you to whisper a prayer or recall a scripture. Instead of viewing it as a purely clinical thing, sanctify it as part of God's healing toolkit for you. Continue to pray for healing, continue in counseling or fellowship, while also using the device as instructed – they are not mutually exclusive. It's

similar to how someone might pray for improved mental health but also take an antidepressant; the two approaches can complement each other. In fact, initial studies indicate that VNS for depression works best **in conjunction with ongoing therapy and support** ⁴⁴, not as a standalone. We could parallel that with how spiritual support (prayer groups, pastoral counseling) should accompany any medical treatment for mental health. Wrap the medical in a blanket of prayer.

It's also valid to pray for the medical process itself – pray for your doctors, for minimal side effects, for insurance coverage (which has been a barrier for VNS in depression ⁵⁰), and for the device to function optimally. James 1:17 says "Every good and perfect gift is from above, coming down from the Father of lights." We can view medical breakthroughs as part of those good gifts. So if a VNS device or any other treatment helps restore your ability to live and love, that is God's gift for which to give thanks.

Lastly, remember that **devices are a tool, not a cure-all**. They assist in managing conditions; they don't necessarily address spiritual needs or underlying life issues. Someone with a VNS implant for depression will likely still need community, possibly medication, and definitely the hope of Christ to fully recover a sense of purpose and joy. As Jesus healed people physically, He often also addressed their spiritual state ("Your sins are forgiven" or "Go in peace"). So likewise, if you pursue physical healing, stay attentive to what God might be doing in your heart through the journey. Sometimes He uses these struggles to draw us nearer or to equip us to comfort others with similar afflictions (2 Corinthians 1:4). In summary: **for extreme cases**, VNS devices may be recommended by healthcare providers – use them without guilt, see them as God's provision in your Exodus 15:26 "I am the Lord who heals you" journey. For most people not facing those severe conditions, the simpler techniques we covered are sufficient and very effective. Now, let's see how all these pieces can come together in a real-life scenario.

Case Study: Renewed Joy through Faith and Physiology

To illustrate how vagus nerve stimulation techniques and spiritual practices can work together, consider the story of "Sarah" (a composite of real cases). Sarah is a 38-year-old Christian mother of two who loves the Lord. She used to be active in her church and felt joyful in serving. But over the last few years, she began experiencing debilitating **anxiety and depression**. It started after a series of stressful events – her mother's death, then a job loss, then COVID-19 isolation. Sarah found herself constantly on edge, with heart palpitations, insomnia, and a sense of dread that wouldn't lift. She prayed and read her Bible, but in her words, "It felt like my brain was stuck in panic mode, and I couldn't *feel* God's peace no matter how much I prayed." This only made her feel guilty as a Christian – shouldn't her faith be enough to overcome this? She even wondered if she was failing God.

Finally, Sarah confided in a wise older woman at church, who gently advised her that **seeking help was not a lack of faith**. Sarah saw a Christian counselor who taught her about the vagus nerve and the practical techniques we discussed. The counselor also pointed out scriptures about peace and rest. They developed a plan combining **daily practices, medical care, and spiritual support**:

• **Baseline Metrics:** At the start, Sarah's anxiety score on the GAD-7 (a standard anxiety questionnaire) was 18, indicating severe anxiety. Her depression score on the PHQ-9 was 15 (moderate to moderately severe). She also wore a smartwatch that estimated her heart rate variability (HRV) and found it was consistently low, a sign of stress. She averaged 5 hours of broken sleep per night and had stopped participating in her worship team due to low energy.

- Interventions Implemented: Sarah began a routine of morning breathing exercises and scripture meditation. She would sit quietly, inhale and exhale slowly as described earlier, while repeating a favorite verse (1 Peter 5:7, "cast my anxiety on You, Lord, for You care for me"). This took 10 minutes each morning. She also committed to an evening wind-down: no screens 30 minutes before bed, instead doing gentle stretches while listening to calming worship music. She'd end the night in prayer, releasing worries to God. During the day, when anxiety spikes came (often around midday), she'd step away to splash cold water on her face and say a quick prayer like "Lord, I know You are with me." She also rejoined the church choir, figuring the regular singing practice could be therapeutic indeed, singing became one of her vagus nerve workouts each week. Additionally, with her doctor's guidance, she started a low-dose antidepressant to give her a neurochemical boost out of the darkest place. The doctor explained this could lift the floor of her mood so that the other strategies could take better effect. Sarah was initially hesitant, but the counselor reminded her that using medicine is akin to using a cast for a broken bone sometimes needed for a season. They prayed together as she started the medication, asking it be used for God's glory and her healing.
- Progress and Outcome: After one month, Sarah noticed she wasn't as jittery in the mornings. Her husband said she seemed a bit calmer and smiled more often. By three months in, her sleep had improved to a solid 7 hours. She reported that on most nights she fell asleep peacefully after her prayer routine - something she hadn't done in years. She also began enjoying things again, like gardening and playing guitar, which she'd abandoned due to apathy from depression. Her GAD-7 anxiety score dropped to 8 (mild range) and PHQ-9 depression score to 5 (minimal range) - a dramatic improvement. Objectively, her smartwatch showed an increased HRV, reflecting better vagal tone. But more meaningful to Sarah was her spiritual rejuvenation: "I feel I can sense God's presence again," she said. "It's like the static is clearing from the line." By six months, Sarah had weaned off the medication under her doctor's supervision (as her condition stabilized) and maintained her gains through her lifestyle and faith practices. One Sunday, she shared a testimony at church: "I always thought I just had to pray more to beat my anxiety. Prayer is powerful, but I learned that God also wants us to use wisdom in caring for our bodies. When I breathe, sing, laugh, rest – I'm not doing something 'unspiritual'. I'm actually cooperating with God's design. He made our bodies in a wondrous way that these things help. I thank God for healing me through both prayer and very practical means. My joy has returned, and all glory goes to Him!"
- **Key Takeaways:** Sarah's story highlights that **baseline vs. outcome metrics** can change significantly when we address both the physical and spiritual aspects. She went from severe anxiety to mild, from moderate depression to essentially none quantitatively and qualitatively a transformation. It wasn't any single thing that "fixed" it, but the combination of **faith (prayer, scripture, community) + works (breathing, habits, appropriate medicine)** (see James 2:26 faith and works together). Not every story will have such rapid improvement, and relapses might occur (in fact, Sarah had a rough patch at 9 months after a family stress, but she knew what to do and bounced back). Yet, the principle stands: engaging the vagus nerve can be a catalyst to reclaiming mental wellness.
- Role of Medical VNS: As an aside, consider another case of "John," a man in his 50s with treatmentresistant depression who did not respond to counseling or 7 different medications. John eventually was referred for VNS implant surgery. He saw gradual improvements over a year: his depressive symptoms reduced by about 40%, and he reported feeling "more like myself" and able to experience hope again. In that year, he also drew nearer to God, because he said the implant process forced him

to confront how much he needed God's strength each day. He kept a journal of prayers corresponding with the device's periodic stimulations. For John, the **device was a tool God used** to lift the darkest clouds, enough that his spiritual eyes could once again see the light. Today, he serves as a peer mentor for others with depression, pointing them to both medical help and the ultimate Healer, Jesus. His life verse became Psalm 40:2: "He lifted me out of the slimy pit, out of the mud and mire; He set my feet on a rock and gave me a firm place to stand." John says that rock was God, but the hand extended to pull him up included his VNS treatment, a gift he's grateful for.

These examples underscore a powerful truth: **God wants us to live in joy and peace, and He provides many means of grace to help us get there**. Sometimes it's instantaneous deliverance, but often it's a journey of using both *prayer* and *palms (hands)* – meaning we pray, and we also put our hand to the plow in doing what we can. For anxiety and depression, vagal stimulation techniques are some of those hand-to-plow actions that yield real fruit. The end result, as in Sarah's case, is not just feeling calmer, but being able to re-engage with life and with God's calling. A regulated nervous system freed her to be present with her family, to serve in ministry, and to actually feel the **"love, joy, peace"** that she knew intellectually were hers in Christ (Galatians 5:22).

Conclusion: Embracing God's Gift of Peace

The journey to a joyful, peaceful life is a **whole-person journey**. God cares about our soul and our body – in fact, our body is a "temple of the Holy Spirit" (1 Corinthians 6:19). When we tend to it, we are honoring the One who designed it. Vagus nerve stimulation techniques, from slow breathing and singing to cutting-edge medical devices, are part of the *toolbox* we have for stewardship of our mental and emotional health. There is **no conflict** between utilizing these techniques and having deep faith. On the contrary, as we've seen, many of these practices overlap with spiritual disciplines (prayer, worship, fellowship) that Scripture has encouraged all along. It turns out that "He leads me beside still waters" might involve us intentionally slowing our breath by those waters, and "He restores my soul" might come through both divine comfort and a calmed vagus-mediated body response.

By embracing these techniques, you are **actively "renewing your mind"** (Romans 12:2) – and part of that renewal may be biological as your brain learns new patterns of peace. You are also **guarding your heart and mind** (Philippians 4:7) by creating an environment where the peace of God can reign instead of constant fight-or-flight turmoil. Remember, Jesus said, "Peace I leave with you; my peace I give you… Do not let your hearts be troubled and do not be afraid" (John 14:27). If our hearts are troubled, sometimes we need to minister to them in both spiritual and physical ways to receive that peace.

A few final tips as you integrate vagus nerve stimulation into your life:

- **Start Small:** Pick one or two techniques that resonate with you and practice them daily. Consistency matters more than doing everything at once. You might begin with 5 minutes of deep breathing prayer in the morning and see how that affects your day.
- **Be Patient and Celebrate Progress:** Changes in anxiety or mood may be gradual. It's often two steps forward, one step back. That's okay. If you track your feelings or some metrics, look at the trend over weeks, not just each day. And celebrate even small victories: "I only had 1 panic attack this week instead of 3 thank God!" or "I slept through the night for the first time in months, hallelujah."

- **Combine with Scripture:** Continue to anchor each practice in God's Word. For instance, when using cold water on your face, you could recall Isaiah 41:10 ("Do not fear, for I am with you; I will strengthen you and help you") as a refreshing promise. When humming or singing, choose lyrics that declare God's faithfulness. The Word of God is "living and active" (Hebrews 4:12), and when spoken or meditated on, it doesn't just encourage you spiritually it even has the power to change your brain's pathways from fear to trust.
- **Don't Isolate:** Involve a trusted friend, spouse, or mentor in your journey. Not only can they pray for you, but social connection itself is healing, as we discussed. Perhaps invite a friend to take a weekly prayer walk with you (exercise + prayer + fellowship all in one!). If you're struggling greatly, seek professional help sooner than later there are Christian counselors and support groups well-versed in these strategies who can walk with you.
- **Pray for Discernment:** Ask God for wisdom (James 1:5) about if and when to utilize medical interventions. If you feel led toward considering a VNS device or any medical treatment, pray for clear guidance and for the right healthcare providers. And trust that God can work through those means. At the same time, pray for His supernatural touch; the ultimate healing comes from Him, whether instant or through process.

In closing, **embrace the peace that God offers, using all the gifts and knowledge He provides**. You might find that as you practice calming your body, your times of prayer become sweeter, your awareness of God's presence sharper. With a quieter mind and a calmer heartbeat, you may hear God's whisper of love more clearly. "May the Lord of peace Himself give you peace at all times and in every way" (2 Thessalonians 3:16). As you implement vagus nerve stimulation techniques alongside your faith, may you discover a new level of resilience and joy. Remember that **Jesus is walking with you** on this journey to wholeness: He cares for your anxious heart, and He also understands the physical pain of stress (He sweat drops of blood in Gethsemane under extreme anguish). He will never leave you or forsake you (Hebrews 13:5). By taking these steps, you are not only moving toward a healthier you; you are positioning yourself to be more available to God's purposes – with a clearer mind and fuller heart to love Him and others. That, ultimately, is the goal: "Love the Lord your God with all your heart and with all your soul and with all your mind and with all your strength" (Mark 12:30). May your renewed mind and body empower you to live out that greatest commandment with joy.

Go forth in peace – **shalom** – as both a prayer and a lived experience, trusting that the Lord's joy will be your strength and that He delights in your holistic well-being.

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