For a plethora of health conditions, I continue to see over and over again recommendations for Mindfulness-Based Stress Reduction (MBSR). New research shows that it changes the structure and functioning of the brain (for the better). The University of Massachusetts Medical Center has been studying MBSR since 1979 at its Stress Reduction Clinic. MBSR training results in thickening of the Hippocampus, the area of the brain important for learning and memory, and a thinning of the Amygdala, the area that regulates fear-based reactions to perceived threats. I would suppose that the Amygdala is already oversized due to most people having an excess of fear-based reactions, and that reducing its size normalizes it.

People trained in MBSR show activation of the networks in the cerebral cortex having to do with experiencing the present moment. People not trained in it show greater activation in the networks involved in generating narratives about their experiences. Thus the MBSR expands the repertoire of how we experience a situation, not limiting our experience to the stories we tell ourselves about it.

Research also shows that it helps the brain process difficult emotions in a more positive way by balancing activation in the prefrontal cortex between the left and right hemispheres, and that positive immune system changes correlate with the brain changes. So a few of the many benefits are seen in anxiety, panic, depression, chronic pain, cancer, and multiple sclerosis. It doesn't cure the last 3, but people cope with these conditions with better quality of life. I would add that if their quality of life is better, very likely their disease process itself is also going to be made better.

I would also anticipate that MBSR would be beneficial in every area of health that involves mind/body interface, behavior, relationships, and general quality of living. That includes just about every person on the planet and involves having a significant positive impact on every health condition known to us. We know that most illness' causation, expression, and resulting experience are related to toxic stress. I say toxic stress, not all stress, because some stress is beneficial. See my article on The Upside of Stress. So all this stress reduction is concerning toxic stress. Anxiety and depression alone are prevalent in a large portion of the population, to say nothing of the effect of anxiety and depression on many other disease conditions.

To describe the process in a nutshell, I would say mindfulness is all about paying attention to the here and now, being aware of what is happening around us and observing our thoughts and feelings in a non-judgmental way, not obsessing with telling ourselves stories about the past and speculating about the future, keeping everything relevant to the present.

This sounds simple, but it definitely does not come easily or quickly. It takes a commitment to a lot of regular practice to see progress.
Jon Kabat-Zinn received his doctorate in molecular biology at M.I.T. and is Professor of Medicine Emeritus at the University of Massachusetts Medical School. He is founder of the MBSR Clinic and the Center for Mindfulness in Medicine, Health Care, and Society. He has authored numerous best-selling books translated into 30 languages. His work has spurred a growing movement of mindfulness into mainstream institutions such as hospitals, schools, corporations, prisons, and professional sports. Medical centers worldwide offer clinical training in MBSR.

Although mindfulness meditation has its origins in Buddhism, Dr. Kabat-Zinn neither promotes Buddhism nor does any significant discussion of it. He focuses this training on the practical methods (the "nuts and bolts") based on scientific study, in a secular fashion. Meditating in this style doesn't make one a Buddhist any more than celebrating Christmas makes one a Christian or eating kosher food converts one to Judaism, or practicing Hatha Yoga would make one a Hindu. I point this out because many Christians have worries about meditating because the practice is so strongly emphasized in Eastern religions and philosophies, and some other books on mindfulness do discuss aspects of Buddhism.

Mindfulness is only one of many forms of meditation from many traditions, including the Christian repetition of prayers, the rosary, praying without ceasing, Yoga meditation, loving kindness meditation, mindfulness meditation, and the trademarked Transcendental Meditation.

A beneficial result of meditating is improving one's awareness and attention all day long, not just while sitting to do formal meditation. One of the many benefits is self-understanding (Remember Socrates, "Know Thyself?"). Observing our thoughts, feelings, and behaviors without judgment allows opportunity to see from where they arise and to understand them, and allows a choice of changing them if we prefer. Just as a scientist peering into a microscope tries to see things objectively without preconceived notions and biases, so when we simply observe our thoughts without being quick to interpret them, we are more able to make choices from a more rational place. I remember that Dr. Herbert Benson in the 1970's in his book, *The Relaxation Response*, popularized meditation for blood pressure control and for many other health issues. I went to his seminar then, in which one important issue discussed was choosing healthful behaviors. I remember one bit of advice regarding impulsive behaviors such as eating junk food: "Stop, Breathe, Reflect, Choose." When we stop to take notice what we are feeling and thinking, first before we act, we are being mindful and aware of our situation, and then we can choose wisely from a more powerful position instead of feeling victimized by our impulses.

Likewise, in regard to people among our families or acquaintances acting disrespectfully or unkindly, or a political leader who incites violence and has the ethics of a pig, if we are mindful of our thoughts and feelings in a non-judgmental way, we may recognize some of their positive values also. At the very least, we could acknowledge that they can provide a valuable example of how not to behave. Unfortunately, our children may see deplorable behavior of some high profile individuals as something to
model after, unless we mindfully explain that we can observe it as an important example of what not to do.

The book has 85 short chapters, allowing opportunity to digest each part one at a time and to stimulate reflection. It also has an accompanying 74-minute CD that guides the listener through the practice sessions. This is produced by Sounds True Recordings, a publisher committed to inspiring and supporting people in personal transformation.

Two complimentary practices are important. One is the daily formal practice, and the other is allowing the effect to spill over into all of one's waking life in an uncontrived and natural way. He states that you have to make a commitment to daily practice if you expect to see results. When I was teaching Yoga, I urged students to always do a little every day even if it is only a minute or 2.

The author encapsulates mindfulness as "much ado about what might seem like almost nothing, that turns out to be just about everything."

He urges the reader to always keep a beginner's mind, no matter how many years you have been practicing, to always be open to new discovery. He quotes Suzuki Roshi, a Japanese Zen Master – "In the beginner's mind, there are many possibilities, but in the expert's, there are few."

He recommends paying attention to the breath, because the breath, or any object of attention, helps to attend with greater stability. It is about the attending itself, not the object of attention.

He says, "The cultivation of mindfulness may just be the hardest work in the world." Also, "at the same time, the work of cultivating mindfulness is also play." Ultimately it can become effortless. It is awareness. It is cultivating the being mode of the mind. It is a way of stabilizing the mind, like calibrating an instrument. We wouldn't set up a telescope on a waterbed to observe the moon. So with practice, eventually the mind stabilizes itself to some degree. Being "lost in thought" usually seems to constitute our "default setting." As soon as you sit down to meditate, as soon as you put down the welcome mat to non-doing, just being, you begin to notice that the mind has "a life of its own." It can go on endlessly, "thinking, musing, fantasizing, planning, anticipating, worrying, liking, disliking, remembering, forgetting, evaluating, reacting, telling itself stories." And then your mind can fill itself up with new ideas about meditating, how well you're doing or not doing, whether you're doing it right, just like a sports broadcast summary, commenting about the game rather than watching the game itself. Everyone has this thought-stream running 24/7, often without realizing it. We could ask the question, "When you are caught up in the thinking, is that really you?"

I would like to quote from another book, that Dr. Kabat-Zinn calls "a masterpiece," entitled Mindfulness In Plain English, by Bhante Gunaratana. He discusses when you're sitting for meditation and you've been thinking, daydreaming, worrying, etc. Gently, firmly, without getting upset or judging, simply return to the sensation of the breath.
"Then do it again the next time, and again, and again, and again. Somewhere in this process you will come face to face with the sudden and shocking realization that you are completely crazy. Your mind is a shrieking, gibbering madhouse on wheels barreling pell-mell down the hill, utterly out of control and helpless. No problem. You are not crazier than you were yesterday. It has always been this way, and you just never noticed. You are no crazier than everybody else around you. The only real difference is that you have confronted the situation; they have not...It is a milestone actually, a sign of progress. The very fact that you have looked at the problem straight in the eye means that you are on your way up and out of it."

Dr. Kabat-Zinn says it may be helpful to also look at the ocean as the metaphor of the mind. The surface can be ferociously turbulent in the midst of a storm, but just 40 feet below the surface, there is only a gentle undulation. The mind on the surface is labile, changing with the "weather patterns" of moods, thoughts, and feelings, often with little or no awareness on our part. We can feel blinded or victimized by our thoughts and can mistake them for the truth. But they are just waves on the surface. "The entirety of the mind, on the other hand, is by its very nature deep, vast, intrinsically still and quiet." I like to think of that deeper aspect of the mind as the part that is observing the thoughts, and is untouched by them, always peaceful.

We do not have to take our thoughts personally. We do not have to believe them or to claim them as "ours." We can recognize them as "events in the field of awareness" that arise and pass away. If we identify with the thoughts, then we can get caught in them and spin a long narrative. At some point we can recognize that clinging to the thoughts is optional, and that we can let them go. I remember from my childhood, my pastor in the Mennonite Church, Willis Troyer, preaching about choosing good thoughts. He said, "We can't stop birds from flying over our heads, but we can stop them from building nests." (on top of our heads). An apt illustration of what the author describes as the difference between, on one hand, having a thought and, on the other hand, "thinking" the thought, that is, identifying with it and getting involved with it.

The author states, "We have become so highly conditioned by our patterns of thinking that we don't even recognize thoughts as thoughts anymore. We tend to experience them as facts, as the absolute reality of things. We are born with the capacity for awareness, but it is sorely undeveloped. This can be developed with training. When we begin to question and investigate our lives with awareness, we may start to observe that the story of our lives that we tell ourselves is entirely based on thought, a construct, a fabrication that we have become comfortable with. We then discover that our lives are much larger than the narrative we have been telling ourselves about it. I have also noticed that when we write in journals, become introspective, do psychotherapy and other forms of self-discovery, we also notice how rigid our lives had been before doing this kind of work. It opens up new horizons, and we let go of former limiting beliefs about ourselves and about the world.

Sometimes letting go of "self-ing," the "my," as in "my" thoughts, "my" worries, etc., helps act of observing, the letting go of judgment. We have heard the saying that pain is
inevitable, and suffering is optional. This means that how we choose to be in relation to the pain makes a difference.

The author recommends that when you are beginning practice and you are full of enthusiasm, it is best to resist the impetus to talk a lot about it except with someone who is doing it as long or longer than you. Otherwise, you can dissipate the energy and distract you from growing in the experience.

He discusses the 7 attitudes that are a foundation for a mindfulness practice: Non-judging, patience, beginner's mind, trust, non-striving, acceptance, and letting go. He emphasizes that practice needs to be regular. After a while it may become effortless, but not until after a lot of practicing has been done.

The guided practices included in the book and the CD are eating meditation, mindfulness of breathing, mindfulness of the body as a whole, mindfulness of sounds, thoughts, and emotions, and mindfulness of pure awareness, sometimes called "choiceless awareness," or "objectless attention."

I would like to add that the main elements of any kind of formal meditation are usually finding a quiet location, temporarily free from phone, text, multitasking, and other responsibilities. It can be alone or meditating together with others. It can be sitting, standing, or walking. The point of focus or mantra could be the breath, a visual object, a sound, a phrase or word, spoken silently or aloud, a thought, a pose, a dance or Yoga movement, or concentrating on walking very slowly with all concentration on only walking. Whatever the focus, the point is to bring the mind to the focal point, and as soon as the mind wanders from it, gently bring it back without judgment, doing it as many times as necessary. It is good to have some kind of timer to signal the end of the formal period of practice, such as gentle alarm or the end of a string of beads that has been used for moving to the next bead each time the mantra is repeated.

For anyone interested in exploring this further, I would recommend getting this book with the CD. This author has written several other books about this topic, and they could be valuable tools to explore the issue more deeply. If you want to do this in regard to a major health issue, it could be very beneficial to take part in a formal MBSR program.