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## **MINDFULNESS**

To begin with let's talk a little about why this is such a popular topic right now

Stress and how we handle it is a common concern

The most popular "Health News" articles for 2016 so far have included:

"Stress: It's surprising Implications for Health"

"Live Music shown to reduce stress hormones"

"Chronic Stress leads to Brain Inflammation and memory loss"

An internet article "How to improve your mental health for 2016" listed several targets.

The article notes however that "Individuals with poor mental health are at "Increased risk of death from cardiovascular disease and cancer", this according to one of many studies reporting similar findings in the BMJ in 2012.other research reported by Medical News Todaylinked mental illness to a higher risk of heart disease and stroke.

So clearly something to take seriously

Good Mental Health according to The World Health Organizations is a "State of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community."

The UK's <u>Mental Health Foundation</u> described good mental health as "the ability to learn, form good relationships with others, and express, manage and feel an array of positive and negative emotions."

The article highlighted some important and well unknown targets:

 Adopting a Healthy diet –most of us know that a balanced, healthy diet is beneficial for physical health. It can help with weight maintenance, and protect against a range of illnesses including: Heart disease

Diabetes

And Cancer

<sup>&</sup>quot;Uncertainty is more stressful than pain, say neurologists"

<sup>&</sup>quot;anxiety may lead to bad decision-making"

It is also important for brain function, brain chemicals require the correct proteins to be eaten, digested and assimilated-so good digestion is key- and your brain is 80% fat and requires essential fatty acids to function properly.(I spoke on supplementation of essential fatty acids several years ago(3000mg/d for **healthy** adults-of a good brand like Nordic Naturals)

The **Mediterranean Diet** has long been considered one of the healthiest and a 2012 study reported by *Medical News Today* that the Mediterranean Diet is not only good for physical health but <u>also beneficial for mental well-being</u>. A 2013 study reported that of almost 11,000 middle-aged women who followed a Mediterranean diet not only lived longer, but also had <u>better cognitive function and mental health</u> when compared to a control population.

<u>Mediterranean Diet:</u> Incorporates high consumption of beans, nuts, cereals, seeds, plant-based foods and fruits. The diet is low in saturated fat, includes moderate consumption of fish, poultry and dairy, and low consumption of meats and sugary foods.

A *BMJ* 2014 article suggested that eating <u>five portions of fruits and vegetables is good for mental well-being</u> other studies have supported that number being a reasonable goal. Other foods have been associated with "poor mental health": foods and drinks containing sugar, artificial additives and caffeine

Though the plusses and minuses of coffee continue to be debated-I am a bit on the positive side right now.

The Physicians Committee for Responsible Medicine(PCRM) has a raft of data and literature to support the benefit, and help with implementation of a <u>Vegan Diet</u> for health benefits especially in addressing and reversing type II Diabetes.

High Alcohol consumption has also been linked to increased risk of depression and anxiety.

There has long been support for 1 glass of red wine a day –red grapes contain longevity associated reservatrol (really there is positive associated with <u>1</u> glass of almost any alcoholic beverage/d –most often associated with a more relaxed temperament)

2. Regular Exercise—Regular exercise has been well documented to have a positive effect on all aspects of health and mental well being-Exercise is a good choice to improve almost any medical concern.

**US department of Health and Human services** recommend that adults should do at least 150min(2.5hrs) of moderate intensity aerobic (where you elevate your heart rate) exercise each week(walking), or 75 min (1hr15min) of vigorous-intensity aerobic exercise(jogging).

In 2014 *Medical New Today* reported that University of Michigan researchers found that **group nature walks could promote good mental well-being.** Dr Sara WarberAssocProfessor

of Family Medicine at the Univ of Michigan remarked that this format is a powerful underutilized <u>stress-buster</u>, combining walking the universally recommended easiest, safest and least expensive form of effective exercise with *nature* and *group contact* –both also demonstrated to reduce stress.

Long ago research demonstrated that 30min of exercise is equally as effective as any antidepressant.

The concept of grounding has also been demonstrated to have a positive effect on moodessentially walking outside in bare feet. So much of our existence has been distanced from nature with rubber soles on our shoes, carpets and floors and our increasing tendency to remain inside-even pictures of nature scenes have been demonstrated to improve mental well-being.

I recently came across a landscaping company marketing themselves as developing water-based landscaping to pull you out of your house and into the inviting natural environment they create .

3. **Sleep** It is considered common knowledge that sleep problems can affect our mental well-being. I can tell you as a ChildPsychiatrist, sleep is an early and essential target for the majority of my patients.

A 2010 study from the George Institute on global Health in Australia found that people with less than 5hours of sleep each night <u>"may be at greater risk of mental illness."</u>
It has also been demonstrated that though many people can "do ok" on 7hrs of sleep at night, 9hrs of sleep at night results in overall improved function.

Sleep is really the corner stone of our overall function, sets our biological clock and is often the 1<sup>st</sup> thing to go array for people with serious mental illness, thus the importance of maintaining a healthy regular sleep schedule for pretty much everyone.

Over all sleep is regenerative and restorative. It is when we grow and when all cellular repair and detoxification occurs.

Last year I had discussed the importance of avoidance of exposure to electromagnetic frequencies during sleep to preserve the bodies capacity for these actions.

Generally it is best to attempt to: 1.maintain the same wake up time every day

2.maintain a bedtime routine-I generally tell my patients that I
want them to develop and do the same every night a 30min process to give the body a clear
message it is time to relax and fall asleep.

Back rubs, Epsom salts baths can be helpful, music, reading It is generally best to avoid all screen time-TV, video, computers, phone, ipads as the blue component of the light can surpress your bodies melatonin. (yellow screens/glasses can eliminate that)

**Melatonin** is made by the pineal gland in the brain and regulates the bodies circadian rhythm .

Some people do not make enough melatonin and this can be supplemented safely. When "treating sleep issues" I generally begin with optimizing the sleep environment, sleep hygiene and 1<sup>st</sup> supplementing with Magnesium, a very commonly deficient mineral whose deficiency reliably results in sleep onset difficulty (250-500mg magnesium gluconate or magnesium citrate-natural calm is available in most healthfood stores)

Only after this do I recommend trying melatonin(1-20mg)

Sleep environment is crucial-most people sleep best in a cool, dark, and quiet room High intake of Alcohol, caffeine and sugary foods have been noted to disrupt sleep patterns.

Infants crying in the night are most often having pain associated with digestive difficulty. Eating a heavy meal(lots of protein) will disrupt sleep as digestion needs to occur 1<sup>st.</sup>

A snack high in simple carbohydrates is likely to help promote sleep-(bread, donut.)

A 2012 study published in the BMJ reported that "<u>Psychological distress is associated with</u> increased risk of mortality from several major causes in a dose –response pattern. Risk of<u>mortality(death) was raised even at lower levels of distress.</u>

In 2014 *Medical News Today* reported on a study from University of California-Berkley that found <u>stress can make the brain more susceptible to mental illness.</u>

A number of studies have demonstrated a <u>higher risk of coronary heart disease with</u> <u>mental illness.</u> –Some of this has been explained as related to poor lifestyle choices often made by people struggling with mental illness, it has also been suggested that some of the side effects of medication can contribute to risk as well.

I actually think that some of the less well understood components to the increase in mental illness, developmental problems in children and overall chronic disease are the same.

We have long understood that stress is bad for you-there is more and more documentation of the risks associated with stress —our busy life style and multitasking can lead to just that STRESS!!

Stress has been associated with many health issues:

-<u>reduced blood flow to the heart</u>, 2012 study published in the Lancet found that <u>work</u> <u>stress may raise heart attack risk by 23%</u>, researchers at the University of Sydney in Australia found that periods of intense anger or anxiety <u>may raise heart attack risk by more</u> than 9 times,

-JAMA Psychiatry published a study in January 2015 where women with symptoms of PTSD(a condition triggered by very distressing events) were **more likely to develop diabetes** 

Periods of stress increase the production of cortisol which in turn increased glucose in the blood –this is felt to moderate that finding.

Well what can be done –actually a lot and a lot of things that we have direct control over And we actually have a lot of evidence that these things really make a difference. One needs to work on, actually put effort into having a positive attitude. If you focus on and think about the negative side of things, then things will be pretty negative –there is a whole field of cognitive psychology built on this. ( Mind Coach Dr Amen)

Smiling actually helps us deal with stress-researchers at the University of Kansas showed that smiling reduced the heart rate during recovery from stress.

The field of psychoneuroimmunology has not only demonstrated that stress results in a wide variety of negative health impacts: inflammation

Functional gastrointestinal disorders like irritable bowel S. Accelerated progression of HIV Delayed wound healing

As early as 1975 Robert Adler, currently a Professor at the University of Rochester School of Medicine and Dentistry was able to demonstrate that conditioned responses can be created in the immune system-the immune response can be enhanced or suppressed by a wide variety of conditioned cues .

The benefit from different modes of relaxation is called the "relaxation response". This has shown demonstrated benefit. Yoga has demonstrated stress reducing benefit and reduction in the risk of depression and anxiety in expectant mothers. Daily meditation has been show to increase longevity.

The <u>"relaxation response"</u> has been defined as a mind-body intervention that offsets the physiological effects cause d by stress and has been useful therapeutically. A 2008 study published in PLOS one demonstrated that the relaxation response <u>was able to alter the</u> typical genetic expression of the stress response in long term practitioners.

There are a number of mind-body approaches that reliably elicit the Relaxation Response; Meditation, repetitive prayer, yoga, tai chi, breathing exercises, progressive muscle relaxation, biofeedback, guided imagery, Qi Gong and <u>Mindfulness</u>.

Mindfulness: the term was 1st used in 1530-no references.

The concept of Mindfulness has been popularized in our time by Jon Kabat-Zinn. He obtained his PhD from MIT in 1971. He was also a student of Buddist teachers and along with his own practice of yoga, this led him to integrate their teachings with those of science. He is internationally known for bringing mindfulness into the mainstream of medicine and society and is Professor of Medicine Emeritus at the University of

Massachusetts Medical School where he founded its Mindfulness-Based Stress Reduction Clinic (in 1979).

The common Definition of Mindfulness is: "the quality or state of being conscious or aware of something

I am referring more to a slightly different definition: "a mental state achieved by focusing one's awareness on the present moment, while calmly acknowledging and accepting one's feelings, thoughts and bodily sensations.

Beyond the quieting of the mind, and reducing stress; the goal of Mindfulness is to <u>wake</u> <u>up the inner workings of our mental, emotional, and physical processes, recognize the connectedness between people, and operate in the world with greater compassion towards others and ourselves.</u>

## Mindfulness is about cultivating awareness.-to become more present-

Part of the popularity is it's direct counter to our current cultural over scheduling and multitasking that leads to what is often a frenetic and stressful lifestyle.

This is one tried and true method for people to begin walking in a more functional/livable direction

The benefit comes from a regular practice of mindfulness. But even in the short term there is often notable improvement.

Let me begin with <u>Emotional Awareness</u>. Awareness means noticing all of our emotions, then making active choices about whether we need to take action or whether it's best to leave things alone.

Simply describing and label how we feel can decrease the hold some emotions have over us. Recognizing emotions and what they reflect in our lives has value in and of itself in keeping us on the right path for ourselves.

Moods can be fleeting. Some arrive driven by our own inner chemistry We often attribute a mental down turn to our work, our partner, or some external experience-someone or something must be responsible.

We may seek solace in a reactive habit(withdrawing or lashing out) –this often offers temporary relief without fixing an underlying cause.

When we build awareness, we notice our emotions more clearly and with less resistance. We recognize our mental habits and actively choose to leave things alone for a moment instead.

Awareness of emotions starts with just that-paying attention more often to how we feel.

From there, slowly and over time, we can set new intentions for ourselves. So... for the next few days, aim to:

- 1.Recognize emotions more often as they arise. Label briefly, if you like, whatever emotion you notice.
- 2. Refrain, for a moment, from doing whatever you typically do with that emotion. Pause, take a few breaths, and let things alone before taking a next step.
- 3. Relax if you can, letting go of any sense of constriction or tension the emotion causes you. If you see something useful to be done about how you feel—go for it. If not, practice letting things be, instead of falling back on reactive, less productive habits.
- 4.Resolve to keep working on emotional awareness and reactivity. Old habits change slowly, not all at once.

Anxiety is the most common universal distressing feeling –Anxiety is an emotion that occurs frequently and may strongly effect our behavior.

It is not the same as fear, which is an appropriate response to danger. Anxiety is a more complex feeling, with elements of fear, worry and uneasiness, and is often accompanied by restlessness and muscular tension.