



Physician Wellness

The Facts

- medical learners face high rates of burnout and psychological comorbidity
- burnout exists in 20% of medical residents, can lead to less consultation with supervisors, less empathy, increased unhealthy coping strategies
- burnout exists in 45% of medical physicians
- burnout rates are higher in medical students, residents, and physicians compared to the general population and rates increase as years of study increase
- doctors suffer: depression 1.4-73% of medical students, 11% of medical students experience suicidal thoughts, 37% of USA doctors screen positively for depression, 6% have suicidal thoughts; protective factors include being older, being married
- only 15% of struggling doctors seek help with 37% fearing a lack of confidentiality, and other fears including: this means I am less intelligent, seeking help is risky, I'll be less competitive for my residency or job placements, peers will respect my opinions less, people will think I am unable to handle responsibilities
- stigma does exist, where doctors, especially male doctors, do not want to work with a depressed medical student or resident
- untreated depression or anxiety leads to medical errors, dropping out of medicine, decreased altruism, increased unprofessional behaviour

Risks

- female
- academic pressure
- workload
- financial concerns
- sleep deprivation
- exposure to suffering
- mistreatment

Improvement

- mind body programs decrease stress and increase stress tolerance
- mental health programs decrease depression and suicidal thinking
- increased clinical contact and decreased book study helped decrease drop out
- significant benefit from organization directed interventions
- example of biweekly groups with mindfulness, reflection, shared experiences, and small group learning

Wellness for the Individual

- create a structure of self care that you can find success
- ask for help and seek a coach or specialist to work with you on change
- read the article below for some wellness tips: for doctors, you can get credit for this at <https://thischangedmypractice.com/wellness-professional-excellence/>

Wellness and self-care for professional excellence

What frequently asked questions I have noticed

Do you ever feel you could use a recharge? As professionals, part of our standards (1,2,3) are to lead by example, yet living in optimal physical and mental and emotional shape may be tricky to balance in to a life full of high pressure professional demands. *"It is also recognized that, to provide optimal patient care, physicians must take responsibility for their own health and well-being and that of their colleagues."* – Cruess et al, 2004

More and more, professionals are frequently asking for optimal wellness. The personal drive and demands of a profession can have costs that either reduce proficiency and enjoyment, or are the early warning signs of impending health risk. On the more dramatic side, in doctors we know that suicide rates are elevated significantly. Depression and anxiety rates increase throughout medical training. We now know that burnout rates are increasing to fifty percent or more of doctors, residents and medical students. More doctors are leaving medicine than ever before. The Canadian Medical Association is supporting new initiatives to discover best practice for wellness for doctors, with an interest in developing wellness tools and programs based in scientific evidence.

Not only doctors suffer however, it is also health care providers, business executives, and other professionals. So how do we support our professionals? How does the drive to succeed get balanced with wellness and effective self-care?

Data that answers these questions

Wellness science is an evolving trend. You have likely heard of mindfulness. Mindfulness is a wellness practice that has measurable benefits including weight loss, improved mental focus, decreased stress, enhanced parasympathetic nervous system tone, lowered blood pressure, normalized heart rate, increase grey matter in the brain, may reduce inflammation, and be anti- aging (5,6,7,8,9,10,11). Mindfulness is now used in health care effectively for chronic pain, addiction, mood disruption, and anxiety (12,13,14). Understanding and adjusting your food choices and how these can have measurable effects on your health is also a wellness science trend (15). Exercising for wellness increases mitochondria to improve your energy, boosts your cognitive power, and increases the ability for your brain to grow through activation of BDNF, Brain Derived Neurotropic Factor (16,17). Evaluating your habits in relationships and adjusting accordingly creates deeper and more meaningful connections with others that create lasting happiness throughout your life, as proven through studies on happiness at Harvard (18).

What I recommend (practice tip)

Defining yourself as a person first, and your role as a professional second, has benefits in preventing burnout and creating more personal energy (19). Evaluating the systems within workplaces is resulting in new workplace wellness strategies, which is creating better employee retention and productivity. Specifically for the medical system, studies are showing that organizational change is key to preventing healthcare provider burnout and thus providing improved wellness (20). Wilderness recharge is also increasingly recognized to promote wellness: forest walking, hiking, surfing, and other activities that connect body and mind to natural elements, are found to have significant benefits for modulating the body's stress response system in positive ways, including balancing brain chemicals (21,22).

Summary of Wellness Tips & Tools:

1. *Sleep before 11 pm, avoid screen time after 8 pm, and get 8 hours of sleep to boost brainpower and resilience.*
2. *Exercise at least 30 min 5days/wk where you sweat, to balance your nervous system, find calm, improve focus.*
3. *Eat whole foods with a strong base of vegetables to culture a healthy balance in your gut biome. Avoid sugar.*
4. *Introduce breaks into your daily life to daydream and relax the mind. Avoid stress where possible and take time off to balance stress hormones.*
5. *Cultivate a healthy mind, consider psychotherapy and mindfulness to shift thought patterns.*
6. *Enjoy high quality relationships by learning about attachment styles, emotions, taking responsibility for your communication, and developing diverse connections.*
7. *Stay up to date on self and systems wellness for your profession.*
8. *Spend time in nature.*

Detailed Recommendations: The Rationale

-  1. **Sleep:** try to get to sleep before 11 pm and reduce your exposure to blue light from smartphones, the television, the computer screen in the two to three hours before sleep. This will help your melatonin production to make you sleepy and then get you to a deep sleep, where astrocytes can recharge your brain cells, and set the stage for better memory, focus, and emotional resilience the next day. Sleep at least 7 hours a night (8 recommended), as a 5 hour night can lead to cognitive impairment equal to drunk driving. Melatonin production is also starting to be linked to anti-aging.
-  2. **Exercise:** exercise boosts energy, endorphins, serotonin, and BDNF (brain-derived neurotrophic factor). Movement resets your body chemistry. More mitochondria are produced, and autophagy, the destruction of unhealthy cells, is increased. Sweat has been proven to clear excess endocrine disruptors like Bisphenol A and phthalates from the body. Exercise also helps put your body in “rest and digest” mode, which is the opposite of the “fight or flight” mode of work or stressful situations.
-  3. **Nutrition:** eighty to ninety percent of your serotonin is produced in your gut, not in your brain. So, what you eat matters, even if the serotonin does not go to the brain - the gut-brain connection does have an effect on your nervous system that matters. Learn how to balance the ecology of your gut, where trillions of bacteria set up a certain biome that can be beneficial or adverse. In North America, we consume over ninety pounds of sugar, a habit that may be linked to Alzheimer's disease. Sugar quickly raises serotonin, then rapidly depletes it, so be careful and consider avoiding sugar altogether. Consider intermittent fasting to increase BDNF and slow disease processes. Eat mainly whole foods, rather than processed foods.
-  4. **Brain wellness:** stress leads to hormonal imbalance which can include too much cortisol and too many glucocorticoids for your brain cells, your neurons. In animal studies, high levels of stress hormones are associated with loss of neuronal branches, leading to less dendritic growth, after 3 weeks of chronic sustained stress. You can reverse this in three weeks by relaxing, including reading, writing, exercise, or simply daydreaming or reflecting. When you are stressed or focused for too long on problem solving, you have beta brainwave patterns and exhaust your problem-solving and decision-making, so you actually need a break, by daydreaming, or

reflecting, something where you go into an alpha brainwave state, which is found in mindfulness, meditation, or daydreaming. Meditation also may be anti-aging according to evolving research.



5. **Mind wellness:** the way you think about things directly relates to your success. Research shows that “emotional cognition” subconsciously directs motivation, decision, and how much self-control you have. You can increase your success by practicing mindfulness with deep breathing to start to “see” your emotions, rather than be immersed in or overwhelmed by them. You can then become more aware of how your emotions affect your logic, and then make better decisions to guide your life. Consider psychotherapy. It’s proven to have benefits. With a psychotherapist, you can begin to rewire your brain for success.



6. **Relationships:** high quality connections with others is proven to be directly related to lifelong happiness. By cultivating positive emotions, you can improve the quality of your own health and the nature of your relationships, according to research. Emotions such as kindness, compassion, and gratitude foster an ability to be with your loved ones, even when they are distressed, such that the distress has less effect on you. Avoid relationships characterized by violence or abuse, as these are stressful to the brain cells and the heart. Create positive bonding moments with those you love by understanding attachment principles and doing things together, unrelated to planning or finances or stressful situations. As you are probably already aware, take responsibility for your moods and your communication, as you are the only person that you have full ability to change. Foster both same sex and opposite sex relationships to have balance in your understanding of men and women; be diverse in your human connections as more equality minded social structures experience greater long term happiness.

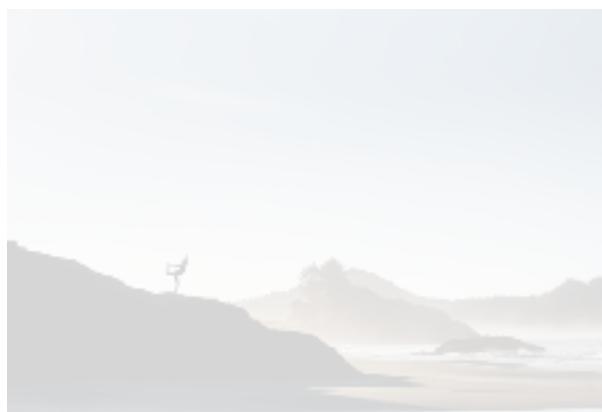


7. **Career:** stay up to date on strategies for physician wellness. Organizations including the NEJM, Stanford, the Mayo Clinic, MGH, the Institute for Lifestyle Medicine. The Mayo Clinic has a well-being index that you can take to check your wellness; currently many tools are challenging to access without multiple steps and cost. Consider reading “Finding Balance in a Medical Life” by Lee Lipsenthal, which includes screening tools.



8. **Nature:** nature is powerful. The ocean calms us through its colour, the rhythm of the waves, possibly through negative ions, and heals skin and hair with salt and minerals. Forests release aromatic particles called “phytonicides” that boost immune function. Hiking normalizes blood pressure, reduces heart rate, and calms the nervous system. So next time you feel run down, commit a day off to a hike, a forest walk, a beach sojourn, or a retreat by the ocean.

Change is not easy. Make sure to start changes slowly, find what works for you and move forward. Introduce new challenges every month.



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Tools:

1. Doctors of BC: Wellness Coaching in the [Physician Health Program](#)
2. Book: Stop Physician Burnout by Dike Drummond MD
3. Book: Finding Balance in a Medical Life by Lee Lipsenthal MD
4. [Vancouver Brain Lab](#) for brainwave training with Hiroku DiMichelis
5. Hot yoga at your favourite studio
6. [NEJM Catalyst Physician Burnout](#)
7. [The Mayo Clinic: Physician Well Being Program](#)
8. [Head Space](#) or [Calm](#) apps for mindfulness meditation