

# Heal the body, the mind follows

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It's not often that psychology articles begin with an article from a famous actor, but this one seemed perfectly appropriate for this instance. So, without further ado, here is Jim Carrey's take on depression:

*"I believe depression is legitimate. But I also believe that if you don't exercise, eat nutritious food, get sunlight, get enough sleep, consume positive material, surround yourself with support, then you aren't giving yourself a fighting chance." – Jim Carrey, Actor and Comedian*

From ACT to CBT and ABC to XYZ, there is no shortage of psychological approaches to help people better understand what is going on within their respective minds. It also makes sense that in an effort to solve our mental health woes, we would gravitate towards techniques that focus efforts predominantly on the fundamental base of mental health: the mind. But what if focusing solely on cognitive interventions means that we are forgetting – or worse, ignoring – that the mind and our mental health are inexorably linked to our health of our body? In a world where beautifully formulated and articulated cognitive theories garner media attention, it would seem too simple, and far too obvious, to acknowledge and examine an individual's physical lifestyles in order to understand how they may be influencing and contributing to mental wellbeing.

## The big three: Physical lifestyles that impact mental health

When it comes to the connection between the body and the mind, there is a preponderance of evidence supporting the argument to start with the body, specifically with an assessment of an individual's daily lifestyle. Food, exercise, and sleep likely constitute the three most significant healthy lifestyle choices most often cited within literature. One of principal ways we interact with our external environment

is through the food we eat, and the influence that our food has on our bodies cannot be overstated. Hippocrates famously stated – and has been quoted thousands of times since – to 'let food be thy medicine and medicine be thy food'. Science has explored this notion from myriad different angles to truly understand how, and the extent to which, our mental and emotional wellbeing are linked to the food we eat. From gestation into adulthood, dietary habits have been linked not only to the disruption of energy balance, but also to attention, mood, behaviour, and even mental health disorders (Murphy & Mercer, 2013).

Few are aware of the key connection between nutritional deficiencies and mental disorders, such as the role that food choice may have in the onset – as well as severity and duration – of depression (Rao et al., 2008). Research has shown that many of the clinically identified dietary patterns linked with depression (i.e., poor appetite, skipping meals, and a dominant craving for sugary and sweet foods) are likely present prior to the onset of depressive symptoms (Rao et al., 2008). The relationship seems to exist in both directions, with diet- and nutrient-based interventions demonstrating the potential to ameliorate symptoms associated with mental disorders, such as anxiety-related symptoms (Murphy & Mercer, 2013; Kiecolt-Glaser et al., 2011), reduction of depression symptoms (Francis et al, 2019; Lai et al., 2014), and generally supports overall mood and mental wellbeing (Firth et al., 2019). Lastly, increasing amounts of scientific attention has been placed on gut and digestive health because, firstly, the majority of the cells that make up the human body are bacterial cells (Sender, Fuchs, & Milo, 2016) and, secondly, the biological significance of the microbiota in relation to its interactions with the brain regions associated with mood and behaviour (Tillisch et al., 2017). Dysbiosis – a microbial imbalance of maladaptation such as an impaired microbiota – has been linked to anxiety and depression (Clapp et al., 2017).

Indeed, probiotic-rich fermented foods have demonstrated a protective effect and serve as a low-risk intervention for improving mental health because fermented foods support a healthy microbiome (Hilimire, Devylder, & Forestell, 2015).

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Two other lifestyle choices with scientifically validated significant impacts on mental wellbeing are regular exercise and adequate sleep. Exercise could be considered one of the magic bullets for mental health disorders because of its positive impacts on anxiety (Stonerock et al., 2015), depression (Craft & Perna, 2004), schizophrenia (Gorczynski & Faulkner, 2010), and bipolar disorder (Thomson et al., 2015). And the kind of exercise matters little as all exercise types have been associated with a lower mental health burden (Chekroud et al., 2018). In addition to healthy dietary choices and consistent exercise, sleep – and the lack thereof – has been significantly associated with mental health and wellbeing as poor sleeping patterns have been associated with higher levels of depression and anxiety (Al-Khani et al., 2019). Indeed, sleep difficulties might be a contributory causal factor in the occurrence of mental health problems, which supports the notion that treatment of disrupted sleep may require a higher clinical priority with mental disorders (Freeman et al., 2017).

The fact that eating healthy food, exercising, and getting quality sleep seem like common sense is likely one of the contributing factors for overlooking these lifestyles within clinical settings. It's only when we take the analysis one step deeper that we begin to see why our physical lifestyles have such a significant

impact on our mental health. Two important questions arise out of such an exploration. Firstly, what are the common biological ramifications of unhealthy lifestyle choices (i.e., poor diet, sedentary lifestyle, poor sleep quality) and how are these

commonalities related to mental health disorders? Secondly, what are the common physiological implications shared among healthy lifestyle choices (i.e., healthy eating habits, consistent exercise, adequate sleep) and how do they support mental health and wellbeing? The likely answer to both these questions is likely related to the concept of inflammation.

### **Inflammation: The conceptual bridge between physical lifestyles and mental health**

Inflammation is a natural defence mechanism in the human body. Acute inflammation is beneficial and part of the body's natural immune response. Chronic inflammation – characterised by slow, long-term exposure to inflammation lasting for prolonged periods of several months to years – however, has been shown by increasing bodies of evidence to be the cause of many diseases (Hunter, 2012). Though inflammation is a physiological phenomenon that occurs at the physical level, it is also incredibly relevant in the world of mental health as pro-inflammatory bodily states are associated with a proclivity towards mental health disorders such as depression and anxiety (Slavich & Irwin, 2014; Strawbridge et al., 2015; Furtado & Katzman, 2015). Additionally, evidence suggests a significant relationship between inflammatory processes and pathways

in the body and the relapse of depression (Liu et al., 2019), and also helps explain why some individuals exhibit poor responses to conventional antidepressant therapies as increased inflammation may interfere with the efficacy of antidepressants (Felger, 2019). Lastly, supporting the notion of chronic inflammation and its role in mental health disorders are the higher rates of depression across a broad range of conditions associated with activation of the immune system (i.e., allergies, autoimmune diseases such as Type-1 diabetes, multiple sclerosis, systemic lupus erythematosus, and rheumatoid arthritis, and infections) (Lee & Giuliani, 2019).

Literature suggests that inflammatory pathways are considered important biological mediators of mental health and wellbeing, specifically that decreases in inflammatory pathway activation during periods without active bodily infection are associated with both better physical and mental health (Elenkov et al., 2005). And here is where healthy lifestyle choices come in as lifestyle choices have been shown to have significant impacts on inflammation (Jarvandi et al., 2012). The food we eat can be pro-inflammatory and cause chronic, low-grade inflammation (Minihane et al., 2015). Conversely, eating healthy foods such as olive oil, garlic, apples, and cocoa powder can have anti-inflammatory effects and, thus, help reduce the overall inflammatory burden of the body (Schwingshacki, Cristoph, & Hoffmann, 2015; Lapuente et al., 2019). Dietary interventions have been utilized to treat mental health disorders such as depression, schizophrenia, and bipolar precisely because of this link between inflammation and mental health disorders (Firth et al., 2019a).

It is thus not surprising that in addition to a healthy anti-inflammatory diet, both consistent

exercise and adequate sleep have also been significantly associated with decreases in – and healthy metabolization of – stress and inflammation (Woods et al., 2012; Mullington et al., 2010). How we choose to live our life will have a direct impact and influence on the inflammatory pathways in our body. And this is why Jim Carrey's quote really brings it home. The actor – who himself publicly battled with depression – did not stop with healthy eating, exercise, and sleep when discussing his take on the optimal lifestyle and environment for the treatment of depression. He listed many other lifestyle choices. Quite reasonably, and probably without realizing it, he knew that there's more to a healthy lifestyle than just eating healthily, exercising, and sleeping well. Each and every one of our lifestyle choices are either pro-inflammatory or anti-inflammatory, either adding or reducing stress, either helpful or detrimental to our mental wellbeing. Every lifestyle choice – day-to-day, moment-to-moment – matters.

### **Destressing: The whole lifestyle matters**

Sometimes eating healthily or exercising are not enough on their own, especially when the other aspects of an individual's life do not promote health and wellbeing. This is because when it comes to healthy lifestyles and their impacts on mental health and wellbeing, it is not about one single factor, but rather the sum of all the parts. The whole lifestyle matters. How someone eats, moves, sleeps, laughs, loves, thinks, connects, talks, and rests all come into play in the cumulative equation of stress and inflammation. For the perspective of mental health, research certainly supports this notion, as the concepts of belonging to a community (Mushtaq et al., 2014), exposure to nature, outdoors, and sunshine (Pearson & Craig, 2014; Penckofer et al., 2010), and meditation (Hoge et al., 2013; Black & Slavich, 2016) have all been associated with a wide range of mental health benefits, particularly related to stress. Indeed, nearly every activity that reduces stress plays an integral role in reducing chronic inflammatory activity (Maydych, 2019), as the two are inexorably linked. The more we stress ourselves (i.e., poor diets, work stress, sedentary lifestyle, poor sleep) the more chronically inflamed our body becomes. With this mind, it may help the reader to conceptualise healthy lifestyles as those that promote rest, recovery, and destressing.

The real magic that results from healthy lifestyles, however, is when someone truly embraces the notion that the whole is greater than the sum of the individual parts. Healthy lifestyle choices support each other, thus compounding the mental health benefits to be derived from each individual lifestyle choice. Two prime examples include the positive compounding effects of both exercise and meditation,

which individually are associated with a wide range of mental health benefits, but also improve sleep quality (Banno et al., 2018; Black et al., 2015). Mental health is thus the direct consequence of the environment that your body lives in 24 hours a day. The whole lifestyle counts. When we put our bodies in an environment that promotes health and stress management, then improvements to vast arrays of mental benefits naturally manifest.

When we begin to consider the interconnectedness of the various aspects of physical lifestyles and mental wellbeing, it becomes increasingly relevant in clinical settings. How much is our physical lifestyle contributing to our debilitating psychological states? What would happen if we started first with the health of the body in order to see how much of the issues/symptoms are resolved naturally as a consequence of improved biological function, and only then dive in with cognitive approaches to see what's left over. These are important questions for practitioners to consider when working with clients because of their respective significant impacts on mental and emotional wellbeing. If the root cause of an individual's mental disorder is a manifestation of physiological and biological variables, then it doesn't matter how good you are at ACT or CBT, it'll be a long road to recovery as the physiological root cause will remain unaddressed.

This piece sheds light on what is often overlooked, undervalued or considered secondary in modern approaches to improving mental health: the human body and the environment created by someone's daily physical lifestyle. Bodily health has tremendous impacts on psychological wellbeing and the manifestation of mental disorders.

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Interventions focused on the health of the body via proactive physical lifestyles may even play a primary role in treating and preventing mental disorders. My hope is that this article has highlighted the importance of assessing and intervening with physical health – maybe even first and foremost – before exploring the thought processes that could be the direct consequence of physiological variables that psychological interventions simply cannot address.



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