



Is there A Relationship between Diet and Mental Health Status?

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Abstract

Introduction: Diet has always been associated with life expectancy or longevity, which accounts for the importance of encouraging food choices and eating habits in people. The issue as to whether diet is associated with mental health is a potent one as it offers an insight into ‘how we could be eating our way into mental disorders’.

Objective: The current study is to evaluate the relationship between diet and mental health.

Methods: Phenomenology is the methodology that was employed in this study.

Findings: A medical doctor, Eva Selhub (2022) opined, “Think about it. Your brain is always "on." It takes care of your thoughts and movements, your breathing and heartbeat, your senses-it works hard 24/7, even while you're asleep. This means your brain requires a constant supply of fuel. That "fuel" comes from the foods you eat-and what's in that fuel makes all the difference.

Conclusion: Studies have established the relationship between diet and mental health and one of the features of some mental health disorders is eating disorders. There is scientific evidence that supports the association between mood and eating disorders, and this explains why eating is critical to health and by extension life expectancy.

Keywords: Diet, Mental Health, Psychological Well-being, Well-being.

Introduction

Diet has always been associated with life expectancy or longevity, which accounts for the importance of encouraging food choices and eating habits in people (Fadnes, et al., 2022; Harvard T.H. Chan School of Public Health, 2023; World Economic Forum, 2022). According to the Harvard T.H. Chan School of Public Health (2023), “five low-risk lifestyle factors: healthy diet, regular exercise (at least 30 minutes daily of moderate to vigorous activity), healthy weight (as defined by a body mass index of 18.5-24.9), no smoking, and moderate alcohol intake (up to 1 drink daily for women, and up to 2 daily for men). Compared with those who did not incorporate any of these lifestyle factors, those with all five factors lived up to 14 years longer.”

PLOS. (2022) forwarded that diet would add at least 10 years to one life (see also, American Institute for Cancer Research, 2022; NIHR Leicester Biomedical Research Centre, 2020). The Humane League (2022), using a published study, opined that a plant-based diet reduces heart disease, and cancer risk, and supports brain health. The Humane League’s perspective introduces brain health into the discourse of dieting, which is supported by other studies. The literature has empirically validated the relationship between diet and longevity, The Humane League introduced brain health, and this explains the purpose of this paper, which is to evaluate whether there is an association between diet and mental health.

Definition of Mental Health

How do scholars or international agencies such as the World Health Organization (WHO) define mental health? WHO (2022a) opined, “Mental health is a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn well and work well, and contribute to their community. It is an integral component of health and well-being that underpins our individual and collective abilities to make decisions, build relationships and shape the world we live in.” WHO continued, “Mental health is more than the absence of mental disorders. It exists on a complex continuum, which is experienced differently from one person to the next, with varying degrees of difficulty and distress and potentially very different social and clinical outcomes”, offers a broad perspective on mental health, as is the case for the general definition of health (WHO, 1948). The National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health (2023) stated, “Mental health includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make healthy choices” which concurs with WHO’s definition. Having provided a somewhat consensual definition of mental health, the next phase of this discussion is the mental health status across the globe including the Caribbean.

Mental Health Status across the Globe

In 2019, the World Health Organization reported that 12.5% of people across the globe live with a mental disorder (WHO, 2022b). The WHO was referring to anxiety disorder, depression, post-traumatic stress disorder (PTSD), bipolar disorder, schizophrenia, disruptive behaviour and dissocial disorders, eating disorders, disruptive behaviour and dissocial disorders, and neurodevelopmental disorders. The WHO continued, “In 2020, the number of people living with anxiety and depressive disorders rose significantly because of the COVID-19 pandemic.” The National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health (2023) reported that 20% of US adults live with mental illness (which is 1 in 5), that over 1 in 5 youths (ages 13-18) are currently living with some type of mental illness, and that 25% of US adults were living with a serious mental illness.

A probability study of 1218 Jamaicans and 2068 Guyanese people found that “Guyanese compared with Jamaicans for alcohol abuse (3.6% vs 2.2%), drug abuse (1.4% vs 1.3%), substance abuse (4.7% vs 2.7%) and mania (0.4% vs 0.1%). The rate of depression, however, was higher among Jamaicans than Guyanese (7.4% vs 4.1%)” (: Lacey, et al., 2016; p. 1). Based on Lacey and colleagues’ study, there are disparities in the mental health conditions experienced

between Jamaicans and Guyanese. A study by Gaviria and Rondon (2010) went further than the one conducted by Lacey, et al. (2016), which found it is that 9.8% of people in Latin America and the Caribbean suffer from depression, 11.3% from alcohol abuse, and 2.1% for drug abuse and dependence.

According to Kohn et al. (2018):

Data from community-based surveys of mental disorders in Argentina, Brazil, Canada, Chile, Colombia, Guatemala, Mexico, Peru, and the United States were utilized ...found that Mental and substance use disorders accounted for 10.5% of the global burden of disease in the Americas. The 12-month prevalence rate of severe mental disorders ranged from 2% - 10% across studies. The weighted mean treatment gap in the Americas for moderate to severe disorders was 65.7%; North America, 53.2%; Latin America, 74.7%; Mesoamerica, 78.7%; and South America, 73.1%. The treatment gap for severe mental disorders in children and adolescents was over 50%. One-third of the indigenous population in the United States and 80% in Latin America had not received treatment. (p. 42)

The study by Kohn and colleagues emphasized that mental issue is typical across the globe including in developed nations. The English-speaking Caribbean has found that young people were living with mental health issues (Liverpool, et al., 2018), which speaks to the importance of examining mental health. Continuing, the literature also forwarded that eating disorders are a by-product of mental health issues (WHO, 2022b) and that dieting is associated with general health (Fadnes, et al., 2022; Harvard T.H. Chan School of Public Health, 2023; World Economic Forum, 2022). A framework has been set that eating disorder is a by-product of mental health, but is dieting associated with mental health issues in people.

Diet and Mental Health

The issue as to whether diet is associated with mental health is a potent one as it offers an insight into 'how we could be eating our way into mental disorders'. The Mental Health Foundation (2022) postulated, "Include more whole grains, fruits and vegetables in your diet. They contain the vitamins and minerals your brain and body need to stay well. Include some protein with every meal. It contains an amino acid that your brain uses to help regulate your mood." The perspective of the Mental Health Foundation is quite revealing about a critical matter in our society. It attempts to explain some of the mental health issues that go unmasked in our societies. Nevertheless, it is a scientific explanation or is it mere rational thinking?

The issue of the relationship between diet and mental health will be comprehensively examined in this study from various perspectives. A medical doctor, Eva Selhub (2022) opined, "Think about it. Your brain is always "on." It takes care of your thoughts and movements, your breathing and heartbeat, your senses-it works hard 24/7, even while you're asleep. This means your brain requires a constant supply of fuel. That "fuel" comes from the foods you eat-and what's in that fuel makes all the difference. Put simply, what you eat directly affects the structure and function of your brain and, ultimately, your mood." The perspective is logically presented to us; but, is it a scientific one? Nowhere in the publication has Dr. Selhub used scientific references and although

her perspective was posted on the Harvard Medical School website, is this scientific enough for us to accept and move on?

Unlike the stance taken by Dr. Selhub, the American Society for Nutrition (2023) provided research-based evidence to support the association between nutrition and mental health. The American Society for Nutrition (2023) quoted from a study conducted by Tuck et al. (2019) that found, “Where studies explored the independent effects of fruit and vegetable consumption on psychological health ($n = 3$), 2 reported a preferential effect of vegetables (compared with fruit) on psychological well-being, whereas 1 reported a superior effect of fruit intake on odds reduction of symptoms of depression. More broadly, there was evidence that consuming the recommended amount of [food and vegetable] F&V (and exceeding this) was associated with increased psychological well-being” (Tuck, et al., 2019, p. 196). In 2022, a study conducted by another group of researchers concurred with Tuck et al. (2019) that diet is associated with mental health or psychological well-being (Bayes, et al., 2022).

Like Tuck et al. (2019), Graber (2022) used the Detroit Dental Health Project to scientifically establish the importance of diet to mental health. He argued, “Significantly associated with chronic stress,” as caregivers with chronic stress were more than twice as likely to consume an unhealthy diet. Moreover, “almost 41% of this association was explained by an indirect pathway through depressive symptoms.” Many other scholars have either used secondary studies or primary studies to conduct with Tuck et al. (2019) and Graber (2022) that there is an association between diet and mental health (Grajek, et al., 2022; Kaplan, 2002; Loughman, et al., 2021). Firth, et al. (2020) found a relationship between diet and mood, which supports the long list of literature on the matter.

The literature has set the stage for an understanding of the link between diet and mood (or diet and mental health), and by extension diet and general health. The reality is, that mental health is one of the dimensions of general health (or health), and so we must bring into this discourse people who live in the Blue Zone. There is evidence that people who live in the Blue Zone live a healthy life and have an average life expectancy of over 100 years. What accounts for this longevity or lifespan? Another important question that must be examined is why they live so long.

Life expectancy or healthy life expectancy is widely accepted as a determinant of people’s health status (Aburto et al., 2020; Beltrán-Sánchez et al., 2015; Crimmins, 2021; Ho & Hendi, 2018). Studies have found that for people who live in Blue Zones, life expectancy is over 100 years, which is not the case generally for those living outside of these communities (Buettner & Skemp, 2016). The World Economic Forum (2023) identified ‘Blue Zones’ as “areas in the world where people live longer and healthier lives than anywhere else on the planet.” Some of these areas are “Ikaria, an island in Greece; Okinawa, an island in Japan; the Barbagia region of Sardinia (Italy); Loma Linda, a small city in California, and the Nicoya peninsula in Costa Rica.” Others are found in Nicoya, Costa Rica, and Okinawa, Japan (Buettner, 2008, 2015; Buettner & Skemp, 2016; Christakis & Fowler, 2007; Herskind et al., 1996).

The Blue Zone at Loma Linda, California, is home to Seventh-day Adventists (Eisenberg, 2019). Eisenberg (2019) states, "They are Seventh Day Adventists; more than 250 members of its church on the Loma Linda University campus are 90 or older; another 425 are 80 to 89" (para. 2). Therefore, the literature concludes that those who consume a plant-based diet, are vegetarian Adventists, and reside in the Blue Zone in Loma Linda are healthier than other Americans (Blackmer, 2019; Kekatos, 2019). Additionally, there are no records of mental health issues among those in the Blue Zone who consume a plant-based diet (Buettner, 2008, 2015; Buettner & Skemp, 2016; Institute of Medicine, 2015). According to the Institute of Medicine (2015), "The Danish Twin Study established that only about 20 per cent of how long the average person lives is dictated by genes, while about 80 per cent is influenced by lifestyle and environment, said keynote speaker, Dan Buettner, founder of the concept of Blue Zones." The lived reality in the Blue Zone offers an explanation of increased mental health and other diseases among people in our world. To support the earlier argument, a study on university students found that the quality of their diet influences mental health (Solomou, et al., 2023). This means that a healthy diet reduces mental health issues in people by just feeding your brain with the right foods to support better health (Tufts University, 2023; Skerrett & Willett, 2010). Living a long and healthy life is more a matter of choice than genetics, and so mental health practitioners and policymakers need to examine the quantitative contribution of eating on mental health disorders.

Conclusion

Studies have established the relationship between diet and mental health and one of the features of some mental health disorders is eating disorders. There is scientific evidence that supports the association between mood and eating disorders, and this explains why eating is critical to health and by extension life expectancy.

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