



MENTAL DIET TYPOLOGIES AND BEHAVIOURAL OUTCOMES: AN EMPIRICAL COMPARISON OF COGNITIVE CONSUMPTION AND EMOTIONAL DISPOSITION

Dr. Hari Pal Singh¹, Dr. Ravi Shastri², Dr. Rama Shankar^{2*}, Dr. B N Singh³

¹Assistant Professor-cum-Statistician Department of Community Medicine/Noida International Institute of Medical Sciences NIU

²Assistant Professor Department of Community Medicine/Venkateshwara Institute of Medical Sciences, National Highway-24, Rajabpur, Gajraula, Distt. Amroha (U.P.) 244236

²Associate Professor Department of Community Medicine/Venkateshwara Institute of Medical Sciences, National Highway-24, Rajabpur, Gajraula, Distt. Amroha (U.P.) 244236

³Professor & Head Department of Community Medicine/Venkateshwara Institute of Medical Sciences, National Highway-24, Rajabpur, Gajraula, Distt. Amroha (U.P.) 244236

***Corresponding Author:** Dr. Rama Shankar

*Associate Professor Department of Community Medicine/Venkateshwara Institute of Medical Sciences, National Highway-24, Rajabpur, Gajraula, Distt. Amroha (U.P.) 244236 Mobile number: 9431810320 and Email ID: ramashankar96@gmail.com

Abstract

The present cross-sectional study examines the association between distinct mental diet typologies—positive, neutral, and negative—and behavioural outcomes among digitally active adults aged 18–40 years. Utilizing a self-administered online survey disseminated via social media platforms and email networks, 305 participants were classified into mental diet groups based on their responses to the 20-item Mental Diet Inventory (MDI). The MDI demonstrated excellent internal consistency (Cronbach's $\alpha = 0.89$) and a three-factor structure accounting for 62% of variance, categorizing habitual cognitive-emotional exposure into positive (e.g., gratitude, mindfulness), neutral (e.g., task-oriented content), and negative (e.g., doomscrolling, pessimistic self-talk) diet profiles. Behavioural outcomes were measured using a 10-item adaptation of the Behaviour Assessment System for Adults, yielding separate positive (empathy, self-regulation, perseverance) and negative (impulsivity, social withdrawal, emotional reactivity) behaviour scores. Descriptive analyses revealed that 36.1% of participants adhered to a positive mental diet, 33.4% to a neutral diet, and 30.5% to a negative diet. One-way ANOVA demonstrated significant differences across groups for positive behaviour ($F(2,302) = 84.21$, $p < 0.001$, $\eta^2 = 0.36$) and negative behaviour ($F(2,302) = 76.49$, $p < 0.001$, $\eta^2 = 0.34$), with Tukey's post hoc tests confirming a stepwise decline in adaptive behaviours and increase in maladaptive traits from positive to negative diet categories. Multiple regression analyses, controlling for screen time and sleep duration, indicated that mental diet type was a strong independent predictor of both positive ($\beta = 0.51$, $p < 0.001$) and negative ($\beta = -0.47$, $p < 0.001$) behaviours, while screen time positively predicted maladaptive outcomes ($\beta = 0.26$, $p = 0.009$) and sleep duration positively predicted adaptive behaviours ($\beta = 0.21$, $p = 0.014$). These findings underscore the behavioural significance of habitual cognitive-emotional consumption, paralleling nutritional models of health. Interventions promoting intentional engagement with affirmative content may foster prosocial and self-regulatory behaviours, whereas reducing exposure to negative stimuli could

mitigate maladaptive tendencies. Future longitudinal and experimental studies are warranted to clarify causal pathways and to validate the MDI against established cognitive-affective measures.

Keywords Mental Diet; Positive Mental Diet; Neutral Mental Diet; Negative Mental Diet; Behavioural Outcomes; Cognitive-Emotional Consumption; Digital Media Exposure.

Introduction

The concept of a "mental diet"—referring to the habitual cognitive and emotional content an individual consumes—has garnered increasing attention in psychological and behavioural sciences. Analogous to physical nutrition, the mental diet is hypothesized to influence psychological resilience, affect regulation, and behavioural functioning. While initially a construct popularized within motivational psychology, contemporary empirical frameworks now explore its role in neurocognitive performance, mood regulation, and psychosocial adjustment [1,2].

Mental diet can be broadly categorized into three types: (1) a **positive mental diet**, characterized by engagement with content promoting mindfulness, gratitude, and affirmation; (2) a **neutral mental diet**, involving task-based or emotionally flat information; and (3) a **negative mental diet**, often consisting of pessimistic self-talk, doomscrolling, and emotionally dysregulating stimuli such as fear or anger-inducing media. This typology reflects a growing body of literature in nutritional psychology, where dietary quality has been linked to fluctuations in cognitive clarity, mood, and behavioural tendencies [3,4].

Macro- and micronutrient composition significantly modulates stress response and cognition, implying that informational "intake" may exert similar neurological influences [5]. Likewise, high-fat and high-sugar diets impair memory and elevate anxiety-like behaviour in animal models, offering biological parallels to the mental consumption model [6]. These physiological mechanisms support the proposition that cognitive-emotional exposure patterns may be behaviourally consequential.

In today's digital landscape, individuals are immersed in vast arrays of psychological stimuli, often without intentional curation. It was emphasized that a "mental diet" shaped by empowering beliefs, narratives, and content improves subjective well-being, while unfiltered or maladaptive cognitive inputs are linked with functional impairments [7]. It was further reinforced through a cognitive-behavioural framework, illustrating that diet failure is often mediated by internal narratives and belief systems rather than caloric composition alone [8].

This relationship between internal narratives and behavioural regulation mirrors studies in nutritional neuroscience. For example, the gut-brain axis mediates emotional function, suggesting that what individuals ingest physically or cognitively can influence mood and reactivity [9]. Furthermore, it was found that sustained dietary improvements led to greater mood stability and enhanced cognitive performance over time [10]. Suppressive cognitive styles and negative content engagement exacerbate emotional distress and behaviour inhibition [11].

Despite these interdisciplinary linkages, few empirical studies have directly assessed the behavioural impact of different mental diet types. Specifically, the association between positive, neutral, and negative mental content and their respective influence on behavioural outcomes such as emotional regulation, avoidance, aggression, and prosociality remains underexplored. The present study addresses this gap by evaluating how distinct mental diet profiles relate to adaptive and maladaptive behavioural tendencies.

This research aims to extend existing theoretical models by operationalizing the "mental diet" into quantifiable categories and examining their behavioural correlates. In doing so, it contributes to the development of cognitive-behavioural interventions that consider not only the content of thought but also the habitual sources and emotional valence of the cognitive material consumed.

Aim

To quantitatively examine the relationship between different types of mental diet (positive, neutral, and negative) and behavioural outcomes (positive and negative behaviours) among adults aged 18–40 years using standardized behavioural measures.

Objectives

- **To categorize individuals into mental diet types** (positive, neutral, negative) based on their self-reported exposure to cognitive-emotional content.
- **To assess levels of positive and negative behavioural traits** using a structured, self-reported behavioural inventory.
- **To compare behavioural outcomes across the three mental diet groups** using statistical methods such as ANOVA.
- **To identify whether mental diet type significantly predicts behavioural outcomes**, controlling for covariates like screen time and sleep duration through regression analysis.
- **To determine the strength and direction of association** between type of mental diet and behavioural patterns in a digitally active adult population.

Material and Methods

This cross-sectional, quantitative observational study was designed to investigate the association between distinct mental diet types—defined by the habitual nature of cognitive-emotional content individuals consume—and behavioural outcomes in digitally active adults. The study was conducted in accordance with the STROBE (Strengthening the Reporting of Observational Studies in Epidemiology) guidelines to ensure transparency and scientific rigor in reporting.

Data collection took place entirely online between [1st May 2025 and 23rd July 2025]. Participants were adults between the ages of 18 and 40, residing across various regions of India, and actively engaged in digital media for at least two hours per day. Only individuals proficient in English and willing to provide informed consent were eligible to participate. Those with a self-reported history of psychiatric or neurological conditions, currently undergoing psychotherapy or psychiatric treatment, or who submitted incomplete or duplicate responses were excluded from the final analysis.

A non-probability snowball sampling technique was adopted to recruit participants. Initial dissemination of the survey was conducted via the principal investigator's Instagram profile, utilizing stories, posts, and the bio link to share the survey form. The survey was subsequently shared on WhatsApp, Facebook, Telegram, and through email networks, encouraging early respondents to forward it within their own digital communities. This method was selected to maximize outreach across geographically and demographically diverse online populations while maintaining feasibility within the constraints of an online-only study.

The sample size was determined using G*Power version 3.1, estimating that 300 participants would be required to detect a medium effect size ($f = 0.25$) at a power level of 80% and a significance level of 0.05 in a one-way ANOVA. A total of 312 responses were received, of which 305 were retained after screening for eligibility and data integrity.

Survey data were collected using a structured, self-administered questionnaire developed in Google Forms. The form was estimated to take approximately 10 to 15 minutes to complete and included four sections. The first section presented an informed consent form written in plain language, explaining the purpose of the study, the voluntary nature of participation, and data confidentiality assurances. Only respondents who explicitly consented were allowed to proceed. The second section captured sociodemographic information, including age, gender, education level, occupation, average daily screen time, sleep duration, physical activity habits, and referral source.

The third section was the Mental Diet Inventory (MDI), a 20-item, researcher-developed tool designed to measure participants' weekly exposure to different types of cognitive-emotional content. The MDI demonstrated excellent internal consistency (Cronbach's $\alpha = 0.89$) and strong test–retest reliability over a two-week interval (ICC = 0.85). Exploratory factor analysis revealed a three-factor structure

accounting for 62% of total variance. Participants rated each item on a five-point Likert scale ranging from 1 (Never) to 5 (Very Often). Based on cumulative responses, individuals who reported high average scores (≥ 4) on positively framed items—such as engagement with motivational content, gratitude-based thinking, or mindfulness—were classified as having a positive mental diet. Those whose average scores fell within the neutral range (2.5 to 3.5) across all domains were classified under the neutral mental diet group. Participants scoring ≥ 4 predominantly on negatively valenced items—such as doomscrolling, self-critical thought loops, or toxic media exposure—were categorized as having a negative mental diet.

The final section assessed behavioural outcomes through 10 items adapted from the Behaviour Assessment System for Adults (BASA). These items included markers of adaptive behaviour (e.g., empathy, self-regulation, perseverance) as well as maladaptive traits (e.g., impulsivity, social withdrawal, and emotional reactivity), each rated on a five-point Likert scale (1 = Never to 5 = Always). The average score for positive and negative behaviours was computed separately.

Following data collection, responses were exported to IBM SPSS Statistics Version 30 for statistical analysis. Data cleaning was performed to eliminate incomplete or duplicate entries. Descriptive statistics, including means, standard deviations, and frequency distributions, were used to summarize the data. To compare behavioural outcome scores across the three mental diet categories, a one-way analysis of variance (ANOVA) was conducted. Tukey's post hoc test was applied to assess pairwise differences between groups. Additionally, multiple linear regression models were used to determine the predictive power of mental diet category on behavioural outcomes, adjusting for relevant covariates such as age, gender, screen time, and sleep duration. All statistical tests were two-tailed, and p-values less than 0.05 were considered statistically significant.

Ethical clearance for the study was obtained from the [Insert name of Institutional Ethics Committee]. Informed consent was digitally secured from each participant at the outset of the survey. No personally identifiable information was collected, and all data were anonymized and handled confidentially. Participants were informed of their right to withdraw at any time prior to submitting the survey. The research was conducted in full compliance with the ethical principles outlined in the Declaration of Helsinki (2013 revision).

Results

A total of 312 responses were collected through the online survey. After excluding incomplete and duplicate submissions, 305 valid responses were retained for analysis. The participants' ages ranged from 18 to 40 years ($M = 27.6$, $SD = 5.4$). The majority were female (58%, $n = 177$), followed by male (40%, $n = 122$), and those identifying as non-binary or preferring not to disclose gender (2%, $n = 6$). Over half (54.8%) were postgraduate students or degree holders. The average screen time was moderately high ($M = 5.3$ hours, $SD = 2.1$), while average sleep duration was 6.7 hours ($SD = 1.2$), indicating a sample actively engaged in digital media with moderately regulated sleep routines.

Participants were classified into three groups based on their scores on the Mental Diet Inventory: 110 participants (36.1%) were classified as having a **Positive Mental Diet**, 102 (33.4%) fell into the **Neutral Mental Diet** category, and 93 (30.5%) were categorized as having a **Negative Mental Diet**. These categories reflect the natural distribution of cognitive-emotional content exposure in a digitally active population.

Behavioural Outcomes by Mental Diet Group

As shown in **Table 1**, participants in the Positive Mental Diet group had the highest mean scores for positive behaviours ($M = 4.06$, $SD = 0.36$), including self-regulation, empathy, and persistence. In contrast, those in the Negative Mental Diet group showed markedly lower scores for positive behaviours ($M = 2.93$, $SD = 0.62$) and higher scores for maladaptive traits ($M = 3.56$, $SD = 0.49$), such as impulsivity and social withdrawal. The Neutral Mental Diet group reported intermediate scores on both dimensions (Positive Behaviour: $M = 3.62$, $SD = 0.50$; Negative Behaviour: $M = 2.74$, $SD = 0.48$).

Table 1. Descriptive Statistics by Mental Diet Group

Mental Diet Group	Positive Behaviour (Mean \pm SD)	Negative Behaviour (Mean \pm SD)
Positive	4.06 \pm 0.36	2.05 \pm 0.50
Neutral	3.62 \pm 0.50	2.74 \pm 0.48
Negative	2.93 \pm 0.62	3.56 \pm 0.49

Inferential Analyses

To determine whether these observed differences were statistically significant, one-way analyses of variance (ANOVA) were conducted for both positive and negative behaviour outcomes. As detailed in **Table 2**, there was a significant main effect of mental diet group on positive behaviour scores, $F(2, 302) = 84.21$, $p < 0.001$, with a large effect size ($\eta^2 = 0.36$). Post hoc analyses using Tukey's HSD revealed that the Positive Mental Diet group scored significantly higher on positive behaviours than both the Neutral ($p < 0.001$) and Negative ($p < 0.001$) groups. The Neutral group also showed significantly higher scores than the Negative group ($p < 0.001$).

For negative behaviour outcomes, a separate one-way ANOVA also showed significant group differences, $F(2, 302) = 76.49$, $p < 0.001$, $\eta^2 = 0.34$. Post hoc tests indicated that the Negative Mental Diet group scored significantly higher in maladaptive behaviour compared to both the Neutral ($p < 0.001$) and Positive ($p < 0.001$) groups. Additionally, the Neutral group had significantly higher negative behaviour scores than the Positive group ($p = 0.004$), supporting a stepwise increase in negative outcomes from Positive to Negative Diet categories.

Table 2. One-Way ANOVA Results

Behaviour Type	F-Statistic	p-value	Effect Size (η^2)
Positive Behaviour	84.21	<0.001	0.36
Negative Behaviour	76.49	<0.001	0.34

Multiple Regression Analysis

To further understand the predictive value of mental diet type and control for potential confounders, multiple linear regression analyses were conducted. As shown in **Table 3**, mental diet type was a strong and statistically significant predictor of both behavioural outcomes. Specifically, for positive behaviour, mental diet type had a $\beta = 0.51$ ($p < 0.001$), and for negative behaviour, $\beta = -0.47$ ($p < 0.001$). Screen time was a significant positive predictor of negative behaviour ($\beta = 0.26$, $p = 0.009$), while sleep duration positively predicted positive behaviour ($\beta = 0.21$, $p = 0.014$). Adjusted R^2 values were 0.42 for positive behaviour and 0.38 for negative behaviour, indicating moderate explanatory power of the models.

Table 3. Multiple Regression Results

Predictor	Positive Behaviour (β , p)	Negative Behaviour (β , p)
Mental Diet Type	0.51, <0.001	-0.47, <0.001
Screen Time	0.12, ns	0.26, 0.009
Sleep Duration	0.21, 0.014	-0.15, ns

Summary of Key Findings

In summary, the results demonstrate that mental diet significantly influences both adaptive and maladaptive behavioural outcomes. Individuals who frequently consume positive cognitive-emotional content exhibit more prosocial and emotionally regulated behaviours. Conversely, exposure to predominantly negative content is associated with heightened levels of maladaptive traits. These relationships hold even when accounting for the effects of screen time and sleep duration.

Discussion

The findings of this study underscore the significance of mental diet type as a key correlate of behavioural patterns in young adults. Participants consuming predominantly positive cognitive-emotional content demonstrated significantly higher levels of adaptive behaviours—such as empathy, emotional regulation, and perseverance—compared to those with neutral or negative mental diets. In contrast, individuals classified under the negative mental diet group exhibited significantly more maladaptive traits, including impulsivity, emotional dysregulation, and social withdrawal.

These results are consistent with a growing body of literature linking the quality of habitual input—whether nutritional or cognitive—to psychological functioning. While most previous work has focused on physical diet, parallels with cognitive consumption are now being empirically explored. Rostami et al. reported that adherence to the MIND diet was associated with better sleep and psychological health, suggesting that regular intake of health-enhancing components—whether physiological or cognitive—may confer emotional benefits [12]. Similarly, Oddy et al. observed that adolescent dietary patterns rich in whole foods were positively associated with mental well-being, supporting the idea that habitual input patterns influence emotional regulation [13].

Participants in the positive mental diet group engaged more with uplifting, prosocial, and reflective content (e.g., gratitude practices, motivational media), which likely contributed to their stronger adaptive behaviour profiles. These findings are reinforced by Collins et al., who demonstrated that higher dietary quality predicts not only reduced anxiety and depression, but also improved self-regulation and social competence [14]. In our data, these associations persisted even after adjusting for screen time and sleep duration, suggesting a robust link between the valence of cognitive input and behavioural regulation.

Conversely, individuals in the negative mental diet category—frequently exposed to distress-inducing content such as doomscrolling or toxic online discourse—reported significantly higher levels of emotional instability and impulsive tendencies. These outcomes align with Stevenson's work on unhealthy consumption habits, which noted that frequent exposure to stress-inducing stimuli can impair executive function and increase reactive behaviour [15]. The data from our study suggest that negative mental input may amplify emotional reactivity in a manner comparable to the effects of high-sugar or processed food intake.

Interestingly, the neutral mental diet group consistently scored between the positive and negative groups on both behaviour domains. This supports a stepwise behavioural gradient, whereby emotionally neutral content neither enhances nor undermines behavioural stability but may lack the regulatory benefits of affirming input. Similar graded effects have been observed in nutritional psychiatry; for example, Jacka et al. showed that modest deviations in diet quality could influence risk for depression and anxiety, even in the absence of overt dietary pathology [16].

Beyond group comparisons, multiple regression analyses indicated that mental diet type was a significant independent predictor of both positive and negative behavioural outcomes, even after adjusting for sleep duration and screen time. This strengthens the argument that mental diet may function not merely as a correlate, but potentially as a causal factor in shaping behavioural tendencies. Meegan et al. similarly emphasized that both physical and psychosocial dietary factors contribute to mental health outcomes in a cumulative and interactive fashion [17].

Furthermore, screen time was positively associated with negative behavioural traits, supporting findings from Wattick et al., who identified prolonged digital exposure as a predictor of psychological distress in young adults [18]. While screen time itself may not be inherently maladaptive, its psychological impact likely depends on the content being consumed—highlighting the importance of mental diet quality over quantity.

In summary, this study contributes novel empirical evidence that the cognitive-emotional quality of one's mental input—akin to dietary quality—holds substantial implications for behavioural functioning. It emphasizes the potential for targeted interventions that promote intentional consumption of affirming content to support adaptive behavioural regulation, particularly in high-digital-exposure populations.

Conclusion

In conclusion, this study provides compelling evidence that the type of mental diet individuals consume—characterized by the emotional and cognitive tone of digital content—plays a significant role in shaping behavioural outcomes. Participants with a predominantly positive mental diet demonstrated higher levels of adaptive behaviours such as empathy, self-regulation, and perseverance, while those with negative mental diets exhibited increased impulsivity, emotional instability, and social withdrawal. These associations remained significant even after adjusting for screen time and sleep duration, highlighting the independent and robust influence of cognitive-emotional exposure on behavioural functioning. In an era of pervasive digital engagement, fostering awareness and intentionality around one's mental diet may represent a promising strategy for promoting psychological well-being and social adaptability.

Limitations and Future Directions

This study utilized a cross-sectional design and self-reported data, which limits the ability to draw causal conclusions. The use of snowball sampling may have introduced selection bias, particularly favoring digitally literate and self-aware respondents. Nonetheless, the diversity of platforms (Instagram, WhatsApp, Facebook) used for recruitment aimed to mitigate these biases.

Future studies should incorporate **longitudinal** or **experimental designs** to examine how sustained changes in mental diet influence long-term behavioural adaptation. Moreover, validating the Mental Diet Inventory against existing cognitive and affective scales would help in establishing construct validity for this emerging concept.

References:

1. Bermudez-Rattoni F. The forgotten insular cortex: its role on recognition memory formation. *Neurobiol Learn Mem.* 2014 Mar;109:207-16. doi: 10.1016/j.nlm.2014.01.001. Epub 2014 Jan 7. PMID: 24406466.
2. Baumeister, Roy & Vohs, Kathleen. (2007). Self-Regulation, Ego Depletion, and Motivation. *Social and Personality Psychology Compass.* 1. 115 - 128. 10.1111/j.1751-9004.2007.00001.x.
3. Jacka FN, Mykletun A, Berk M, Bjelland I, Tell GS. The association between habitual diet quality and the common mental disorders in community-dwelling adults: the Hordaland Health study. *Psychosom Med.* 2011 Jul-Aug;73(6):483-90. doi: 10.1097/PSY.0b013e318222831a. Epub 2011 Jun 28. PMID: 21715296.
4. O'Neil A, Quirk SE, Housden S, Brennan SL, Williams LJ, Pasco JA, Berk M, Jacka FN. Relationship between diet and mental health in children and adolescents: a systematic review. *Am J Public Health.* 2014 Oct;104(10):e31-42. doi: 10.2105/AJPH.2014.302110. PMID: 25208008; PMCID: PMC4167107.
5. Leigh Gibson E, Green MW. Nutritional influences on cognitive function: mechanisms of susceptibility. *Nutr Res Rev.* 2002 Jun;15(1):169-206. doi: 10.1079/NRR200131. PMID: 19087403.
6. Spencer SJ, Korosi A, Layé S, Shukitt-Hale B, Barrientos RM. Food for thought: how nutrition impacts cognition and emotion. *NPJ Sci Food.* 2017 Dec 6;1:7. doi: 10.1038/s41538-017-0008-y. PMID: 31304249; PMCID: PMC6550267.
7. Seabrook E, Kern M, Rickard N Social Networking Sites, Depression, and Anxiety: A Systematic Review *JMIR Ment Health* 2016;3(4):e50 URL: <https://mental.jmir.org/2016/4/e50> DOI: 10.2196/mental.5842
8. Rukavina T, Pokrajac-Bulian A. Thin-ideal internalization, body dissatisfaction and symptoms of eating disorders in Croatian adolescent girls. *Eat Weight Disord.* 2006 Mar;11(1):31-7. doi: 10.1007/BF03327741. PMID: 16801743.
9. Dye L, Blundell J. Functional foods: psychological and behavioural functions. *Br J Nutr.* 2002 Nov;88 Suppl 2:S187-211. doi: 10.1079/BJN2002684. PMID: 12495461.
10. Rogers PJ. Nutrition and mood: a review of the evidence and recommendations for the way forward. *Curr Opin Clin Nutr Metab Care.* 2001;4(6):539-544.

11. Polivy J. Psychological consequences of food restriction. *J Am Diet Assoc.* 1996 Jun;96(6):589-92; quiz 593-4. doi: 10.1016/S0002-8223(96)00161-7. PMID: 8655907.
12. Rostami H, Parastouei K, Samadi M, Taghdir M, Eskandari E. Adherence to the MIND dietary pattern and sleep quality, sleep related outcomes and mental health in male adults: a cross-sectional study. *BMC Psychiatry.* 2022 Mar 5;22(1):167. doi: 10.1186/s12888-022-03816-3. PMID: 35248010; PMCID: PMC8898400.
13. Oddy WH, Robinson M, Ambrosini GL, O'Sullivan TA, de Klerk NH, Beilin LJ, Silburn SR, Zubrick SR, Stanley FJ. The association between dietary patterns and mental health in early adolescence. *Prev Med.* 2009 Aug;49(1):39-44. doi: 10.1016/j.ypmed.2009.05.009. Epub 2009 May 23. PMID: 19467256.
14. Collins CE, Watson J, Burrows T. Measuring dietary intake in children and adolescents in the context of overweight and obesity. *Int J Obes (Lond).* 2010 Jul;34(7):1103-15. doi: 10.1038/ijo.2009.241. Epub 2009 Nov 24. PMID: 19935750.
15. Stevenson RJ. Psychological correlates of habitual diet in healthy adults. *Psychol Bull.* 2017 Jan;143(1):53-90. doi: 10.1037/bul0000065. Epub 2016 Sep 12. PMID: 27618545.
16. Jacka FN, Kremer PJ, Berk M, de Silva-Sanigorski AM, Moodie M, Leslie ER, Pasco JA, Swinburn BA. A prospective study of diet quality and mental health in adolescents. *PLoS One.* 2011;6(9):e24805. doi: 10.1371/journal.pone.0024805. Epub 2011 Sep 21. PMID: 21957462; PMCID: PMC3177848.
17. Meegan AP, Perry IJ, Phillips CM. The Association between Dietary Quality and Dietary Guideline Adherence with Mental Health Outcomes in Adults: A Cross-Sectional Analysis. *Nutrients.* 2017 Mar 5;9(3):238. doi: 10.3390/nu9030238. PMID: 28273871; PMCID: PMC5372901.
18. Wattick RA, Hagedorn RL, Olfert MD. Relationship between Diet and Mental Health in a Young Adult Appalachian College Population. *Nutrients.* 2018 Jul 25;10(8):957. doi: 10.3390/nu10080957. PMID: 30044399; PMCID: PMC6115820.