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Review Article

What is Nutritional Psychiatry? Position statement from the International Society for Nutritional Psychiatry Research

Wolfgang Marx [a,*], Annabel Sandra Mueller-Stierlin [b], Caroline Wallace [c], Megan Lee [d], Samantha L. Dawson [a], Michael Berk [a], Kuan-Pin Su [e], Sabrina Leal Garcia [f], Julia J. Rucklidge [g], Jeanette M. Johnstone [h], Kathleen F. Holton [i], Tasnime N. Akbaraly [j], Aniko Korosi [k], Felice Jacka [a,l,m]

[a] Deakin University, IMPACT - the Institute for Mental and Physical Health and Clinical Translation, Food & Mood Centre, School of Medicine, Barwon Health, Geelong, Australia
[b] Ulm University, Institute for Epidemiology and Medical Biometry, Ulm, Germany
[c] School of Nutrition Sciences, University of Ottawa, Ottawa, Ontario, Canada
[d] Bond University, Faculty of Society and Design, Gold Coast, Australia
[e] China Medical University, Taichung, Taiwan
[f] Medical University of Graz, Department for Medical Psychology, Psychosomatics and Psychotherapy, Graz, Austria
[g] School of Psychology, Speech and Hearing, University of Canterbury, Christchurch, New Zealand
[h] Oregon Health & Science University, Department of Psychiatry, Center for Mental Health Innovation, Portland, OR, USA
[i] American University, Departments of Health Studies and Neuroscience, Center for Neuroscience and Behavior, Washington DC, USA
[j] Desbrest Institute of Epidemiology and Public Health, University of Montpellier, Inserm, Montpellier, France
[k] University of Amsterdam, Swammerdam Institute for Life Sciences, Center for Neuroscience, Brain Plasticity Group, Amsterdam, the Netherlands
[l] Centre for Adolescent Health, Murdoch Children's Research Institute, VIC, Australia
[m] College of Public Health, Medical & Veterinary Sciences, James Cook University, QLD, Australia

1. Introduction

While treatment access and uptake has expanded significantly in many settings, the population mental health burden has remained largely unchanged due to diagnostic heterogeneity, unclear etiology, limitations of existing pharmaceutical approaches, and evolving environmental determinants [1,2]. This underscores the need for modifiable preventive and therapeutic targets, particularly those affecting shared biological pathways across mental disorders. In this context, the accumulating evidence showing that lifestyle behaviors not only influence the risk and progression of mental disorders [2,3] but also demonstrate therapeutic efficacy as adjunctive treatments [3], highlights the significant potential of dietary policies and interventions as scalable, feasible, and acceptable approaches that can address both prevention and treatment needs [3].

Over the past two decades, interest in the link between diet and mental health has moved from the periphery of mental health care to a more central, evidence-informed position, informing clinical guidelines in several countries [3–5]. The concept of 'Nutritional Psychiatry' has evolved from an informal term to a recognized field of research [6], being shaped by advances using preclinical, epidemiological, and clinical models and approaches. The field of Nutritional Psychiatry encompasses investigation of the role of diet quality, dietary patterns, and individual dietary compounds as risk factors and therapeutic strategies, along with a study of biological pathways influenced by diet and in turn influencing mental disorders [7].

* Corresponding author.
E-mail address: wolf.marx@deakin.edu.au (W. Marx).

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However, the term Nutritional Psychiatry is often used inconsistently and sometimes interchangeably with related concepts, such as Nutritional Psychology or Metabolic Psychiatry. As the field is broad and multidisciplinary, such ambiguity is understandable. However, we feel it important that researchers, clinicians, stakeholders, and the public have a consistent understanding of what Nutritional Psychiatry encompasses. Thus, our aim in this paper is to provide standardized terminology that enhances communication, research quality, and evidence-based practice, and supports the continued maturation of Nutritional Psychiatry as a distinct discipline.

The International Society for Nutritional Psychiatry Research (ISNPR) previously published a consensus position statement on nutritional medicine in modern psychiatry in 2015 [8], which emphasized diet and nutrition as key modifiable targets for prevention and treatment, called for methodologically rigorous trials, highlighted the importance of clarifying biological pathways, and encouraged biomarker assessment alongside clinical outcomes. Building on this foundation, members of the executive committee of the ISNPR propose a formal definition of Nutritional Psychiatry and outline the core elements that underpin this field of research, with the aim of supporting conceptual consistency and advancing the rigorous growth of the field.

2. Defining Nutritional Psychiatry

For clarity, we provide the proposed definition and its core elements in Box 1. This definition was developed through iterative discussion and agreement among the ISNPR Executive Committee and coauthors.

3. Conceptual foundations of Nutritional Psychiatry

Here we discuss the individual components for this definition and provide additional context and rationale.

Commitment to evidence-based practice: Nutritional Psychiatry is grounded in the best available scientific evidence, integrating findings from preclinical research and applied disciplines such as psychiatry, psychology, neuroscience, nutrition science, epidemiology, and public health to inform both research and clinical application. As public interest in nutrition and mental health grows, pseudoscientific or commercialized claims become commonplace [9]. The field of Nutritional Psychiatry aims to counteract health misinformation and disinformation [10], with a commitment to the integration of high-quality scientific research with clinical expertise, while prioritizing the values and preferences of individuals. This holistic approach ensures that nutritional interventions in mental health are not only scientifically validated but also practically relevant and tailored to the lived experience and needs of the individual.

Scope of the field: Nutritional Psychiatry is not limited to specific study designs or forms of inquiry. Instead, the field encompasses a broad and interdisciplinary body of research and clinical practice focused on the role of nutrition in mental health. This includes population-based observational studies that examine etiological associations between diet quality, dietary patterns, food groups, or individual nutrients/nutraceuticals, with both physical, cognitive and mental health outcomes; clinical trials that test the efficacy, effectiveness, and implementation of dietary or nutraceutical interventions; and mechanistic

Box 1
Definition and core elements of Nutritional Psychiatry

Nutritional Psychiatry *is an evidence-based transdisciplinary investigation and transdiagnostic application of how diet and nutrients influence mental and brain health across the life course. Grounded in a biopsychosocial model with an emphasis on biological mechanisms, it encompasses prevention, treatment, and adjunctive care; integrates with standard therapies; supports both self-directed, peer-supported, and professionally guided approaches; spans individual and population-level interventions; and addresses both individual and structural dietary determinants.*

Core elements

- Evidence-based: grounded in the best available scientific evidence across epidemiology, clinical trials, preclinical and mechanistic research.
- Biopsychosocial, with a biological emphasis: Nutritional Psychiatry emphasizes biological pathways linking nutrition and mental health, while conceptualizing these processes within a broader biopsychosocial framework that encompasses psychological and social determinants, psychosocial mechanisms, and recovery-oriented social outcomes.
- Prevention, treatment, and adjunctive care: includes preventive strategies and therapeutic applications, and positions nutritional approaches as complementary to established psychological and pharmacological treatments.
- Integrative: aligns with, and can be embedded within, standard models of care.
- Supports self-directed, peer-supported, and professionally guided approaches: includes evidence-based behavior change strategies, supported self-management, peer-facilitated models, and clinician-delivered interventions.
- Individual and population-level applications: spans clinical interventions and broader public health strategies.
- Addresses individual and structural dietary determinants: considers both personal-level factors and wider food environments, access, affordability, and policy influences.
- Transdisciplinary and transdiagnostic: recognizes that diet is a shared risk factor for commonly comorbid mental and physical noncommunicable disorders.

Table 1
Distinguishing Nutritional Psychiatry from adjacent fields.

Field	Primary focus	Typical scope and interventions	Key distinction relative to Nutritional Psychiatry
Nutritional Psychiatry	How diet and nutrients influence mental and brain health	Whole-diet patterns, food groups, nutrient status, nutraceuticals; prevention and adjunctive treatment across disorders	Anchored in mental health outcomes and clinical translation, with emphasis on biological mechanisms and evidence-based application
Lifestyle Psychiatry	Multiple lifestyle behaviors relevant to mental health	Diet, physical activity, sleep, substance use, social connection, stress management	Nutritional Psychiatry is a subdomain focused specifically on nutrition
Metabolic Psychiatry	Metabolic dysfunction and energy metabolism in relation to psychiatric symptoms	Insulin resistance, metabolic syndrome, mitochondrial bioenergetics; metabolic interventions (e.g. ketogenic diets)	Emphasis on metabolic pathways; Nutritional Psychiatry encompasses broader nutritional exposures and pathways beyond metabolism
Nutritional Neuroscience	Effects of nutrition on brain and nervous system outcomes	Neurodevelopment, cognition, neurodegeneration; may not be clinically framed around psychiatric disorders	Often broader neuroscience outcomes and not necessarily framed around mental illness or care pathways; Nutritional Psychiatry centers mental health outcomes and translation into prevention and psychiatric care, while also encompassing brain health
Nutritional Psychology/ Psychonutrition	Psychological, cognitive, and behavioral aspects of eating	Beliefs, emotions, habits, appetite, eating behavior change; bidirectional links between mood and eating	Focuses more on behavior and psychology of eating; Nutritional Psychiatry places stronger emphasis on biological mechanisms and clinically relevant mental health outcomes
Eating disorder research	How eating disorders influence eating behaviors, weight, and nutritional status	Anorexia nervosa, bulimia nervosa, binge-eating disorder; behavioral and medical management	Overlap exists, but the emphasis often differs: eating disorder research typically examines how disorder pathology shapes eating and nutritional status, whereas Nutritional Psychiatry examines how diet and nutrients influence mental health outcomes

and preclinical studies that examine underlying biological pathways and provide hypothesis-generating insights for future interventions.

Nutritional Psychiatry spans interventions in the prevention and treatment of mental disorders at both the individual clinical care (e.g. dietary counselling) and broader population level (e.g. nutrition education campaigns). It encompasses the life course from the prenatal period through to senescence as well as across all dietary types, reflecting its broad applicability and potential for population-level impact. Nutritional Psychiatry also aligns with principles of precision medicine, with emerging research exploring the use of biomarkers (e.g., inflammatory markers, omega-3 indices), genetic variants, and microbiome profiles to tailor interventions to individual biological needs [11]. While still in early stages, it is widely hoped that such approaches may soon inform more targeted, effective, and preventive nutritional strategies.

Application to mental, cognitive and neurodevelopmental disorders: The field is inclusive of neurodevelopmental conditions, common mental disorders, serious mental illnesses, and neurodegenerative conditions. This breadth reflects the growing recognition of shared biological mechanisms across these disorders and their commonly comorbid medical disorders. It also enables the translation and adaptation of resources and interventions developed for one condition to be tested for use in other conditions, enhancing the efficiency and impact of therapeutic strategies.

Application across the mental health care continuum: Nutritional Psychiatry is applicable to the full mental health care trajectory, ranging from the primary prevention of mental disorders to the treatment and ongoing management of existing conditions. It can be implemented across all care settings, including inpatient units, outpatient services, rehabilitation programs, and community-based care. Importantly, Nutritional Psychiatry interventions are considered to be adjunct to other evidence-based psychiatric treatments, rather than as a replacement for pharmacological and psychological interventions [3]. Here, 'adjunct' refers to the integration within a stepped-care model that considers the full range of therapeutic options. Nutritional strategies may serve as first-line, combined, or intensification approaches depending on individual needs, preferences, and clinical context.

Support for self-directed, peer-supported, and professionally guided approaches: Nutritional Psychiatry supports both evidence-based, self-initiated dietary or nutrient changes, peer-led initiatives, and professionally guided interventions. This approach aligns with modern stepped-care models, which emphasize tailoring interventions to individual needs, preferences, and clinical history. By actively involving individuals in decisions about their nutritional intake, this model fosters empowerment, autonomy, and engagement.

Biopsychosocial foundation with a biological focus: Nutritional Psychiatry operates within a broader biopsychosocial model of mental health, recognizing the interdependence of biological, psychological, and social influences on both diet and mental health outcomes [12]. The field prioritizes research that links nutritional exposures to mental health through biological mechanisms, from systemic physiology to brain structure and function. These mechanisms can be conceptualized across levels: systemic and tissue-level processes (e.g. inflammation, metabolic and mitochondrial bioenergetics, and microbiome-related pathways) and brain-level consequences that include cellular and circuit processes relevant to mental health outcomes (e.g. neuroinflammatory signaling, oxidative stress regulation, neuroplasticity, myelination, and neurogenesis) [7,13]. These biological processes interact with psychological factors (e.g. beliefs, motivation, mood) and social determinants (e.g. early-life adversity, culture, socioeconomic factors, stigma, and food security) [2,14], as well as health literacy, shaping dietary patterns and mediating intervention effects for mental and comorbid physical disorders.

4. Why "Nutritional Psychiatry" is the preferred term

The term Nutritional Psychiatry is intentionally chosen to reflect the clinical focus of the field - namely, the etiology, prevention, diagnosis, and treatment of mental disorders, which fall within the domain of psychiatry. Unlike terms such as 'nutritional neuroscience', which focuses more broadly on the effects of diet on the functioning of the brain and nervous system, or 'psychiatric nutrition', which refers to a subdiscipline of dietetics rather than psychiatry, Nutritional Psychiatry aligns with established naming conventions in the field (e.g., precision psychiatry, addiction psychiatry). It clearly places nutrition within a model of psychiatric care and underscores the multidisciplinary focus of the field and its clinical research translation, whereby psychiatrists, psychologists and other mental health professionals, as well as nutrition and dietetic professionals integrate evidence-based nutritional strategies to optimize mental health.

5. Relationship of Nutritional Psychiatry to related fields

Nutritional Psychiatry maintains a distinct scope from related fields. Unlike lifestyle psychiatry [15], which includes a broader range of health behaviors, Nutritional Psychiatry is specifically focused on the role of nutrition in mental health and can therefore be seen as a subdomain of lifestyle psychiatry. It also differs from metabolic psychiatry [16], which is more specifically focused on bidirectional links between metabolism and mental health, particularly metabolic mechanisms, dysfunction, biomarkers, and interventions designed to target these pathways (e.g. ketogenic diets). Nutritional psychology and psychonutrition, while sometimes used in reference to research within the scope of Nutritional Psychiatry, suggests an emphasis on the psychological, cognitive and behavioral aspects of eating [17]. This term suggests an examination of how beliefs, emotions, habits, and thought patterns influence food choices and eating behaviors and vice versa, rather than a focus on biological mechanisms and clinical outcomes of diet and nutrient intake. Finally, while eating disorder research can fall under the umbrella of Nutritional Psychiatry, particularly in relation to a study of underlying mechanisms and nutritional interventions designed to target these, it remains distinct in important respects; eating disorder research often focuses on how disorder-related psychopathology shapes eating behaviors and nutritional status, whereas Nutritional Psychiatry more commonly focuses on how diet and nutrients influence mental health outcomes. A summary of how Nutritional Psychiatry differs from adjacent fields is provided in Table 1.

6. Conclusion

In this position statement, we provide a detailed definition that aims to clarify the scope and key features of the field of Nutritional Psychiatry. This definition reflects the growing body of evidence supporting nutrition as a key modifiable factor in mental health and offers a structured framework that distinguishes the field from related disciplines. As interest in the role of nutrition in mental health continues to expand, it is critical to adopt a unified, evidence-based understanding of what Nutritional Psychiatry entails. We encourage researchers, clinicians, and policymakers to use the term in line with this definition, and to contribute to its continued development through further research and clinical translation.

CRediT authorship contribution statement

Wolfgang Marx: Writing – review & editing, Writing – original draft, Supervision, Methodology, Conceptualization. **Annabel Sandra Mueller-Stierlin:** Writing – review & editing, Writing – original draft. **Caroline Wallace:** Writing – review & editing, Writing – original draft. **Megan Lee:** Writing – review & editing. **Samantha L. Dawson:** Writing – review & editing. **Michael Berk:** Writing – review & editing. **Kuan-Pin Su:** Writing – review & editing. **Sabrina Leal Garcia:** Writing – review & editing. **Julia J. Rucklidge:** Writing – review & editing. **Jeanette M. Johnstone:** Writing – review & editing. **Kathleen F. Holton:** Writing – review & editing. **Tasnime N. Akbaraly:** Writing – review & editing. **Aniko Korosi:** Writing – review & editing. **Felice Jacka:** Writing – review & editing, Writing – original draft.

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Data availability

No data was used for the research described in the article.

References

[1] O.D. Howes, L. Baxter, The drug treatment deadlock in psychiatry and the route forward, World Psychiatry 22 (1) (2023) 2–3.
[2] W. Marx, B.W. Penninx, M. Solmi, T.A. Furukawa, J. Firth, A.F. Carvalho, et al., Major depressive disorder, Nat. Rev. Dis. Primers 9 (1) (2023) 44.
[3] W. Marx, S.H. Manger, M. Blencowe, G. Murray, F.Y.Y. Ho, S. Lawn, et al., Clinical guidelines for the use of lifestyle-based mental health care in major depressive disorder: World Federation of societies for biological psychiatry (WFSBP) and australasian society of lifestyle medicine (ASLM) taskforce, World J. Biol. Psychiatr. 24 (5) (2023) 333–386.
[4] G.S. Malhi, D. Bassett, P. Boyce, R. Bryant, P.B. Fitzgerald, K. Fritz, et al., Royal Australian and New Zealand college of psychiatrists clinical practice guidelines for mood disorders, Aust N Z J Psychiatry 49 (12) (2015 Dec 1) 1087–1206.
[5] J. Sarris, A. Ravindran, L.N. Yatham, W. Marx, J.J. Rucklidge, R.S. McIntyre, et al., Clinician guidelines for the treatment of psychiatric disorders with nutraceuticals and phytoceuticals: the world Federation of societies of biological psychiatry (WFSBP) and Canadian network for mood and anxiety treatments (CANMAT) taskforce, World J. Biol. Psychiatr. 23 (6) (2022) 424–455.
[6] J. Sarris, A.C. Logan, T.N. Akbaraly, G.P. Amminger, V. Balanzá-Martínez, M. P. Freeman, et al., Nutritional medicine as mainstream in psychiatry, Lancet Psychiatry 2 (3) (2015) 271–274.
[7] W. Marx, M. Lane, M. Hockey, H. Aslam, M. Berk, K. Walder, et al., Diet and depression: exploring the biological mechanisms of action, Mol. Psychiatr. 26 (1) (2021) 134–150.
[8] J. Sarris, A.C. Logan, T.N. Akbaraly, Amminger G. Paul, V. Balanzá-Martínez, M. P. Freeman, et al., International society for nutritional psychiatry research consensus position statement: nutritional medicine in modern psychiatry, World Psychiatry 14 (3) (2015 Oct) 370–371.
[9] S. Segado-Fernández, B. Jiménez-Gómez, P. Jesús Jiménez-Hidalg, M. del Carmen Lozano-Estevan, I. Herrera-Peco, Disinformation about diet and nutrition on social networks: a review of the literature, Nutr. Hosp. 42 (2) (2025).
[10] The Lancet, Health in the age of disinformation, Lancet 405 (10474) (2025 Jan 18) 173.
[11] J.P.C. Chang, K.P. Su, Nutrition and immunology in mental health: precision medicine and integrative approaches to address unmet clinical needs in psychiatric treatments, Brain Behav. Immun. 85 (2020 Mar) 1–3.
[12] G.L. Engel, The need for a new medical model: a challenge for biomedicine, Science 196 (4286) (1977 Apr 8) 129–136.
[13] G. Mandal, S. Alboni, N. Cattane, M. Marizzoni, S. Saleri, N. Arslanovski, et al., The dietary ligands, omega-3 fatty acid endocannabinoids and short-chain fatty acids prevent cytokine-induced reduction of human hippocampal neurogenesis and alter the expression of genes involved in neuroinflammation and neuroplasticity, Mol. Psychiatr. 30 (11) (2025 Nov) 5338–5355.
[14] J. Geertsema, H.G. Juncker, L. Wilmes, G.L. Burchell, S.R. de Rooij, J.B. van Goudoever, et al., Nutritional interventions to counteract the detrimental consequences of early-life stress, Mol. Psychiatr. 27 (2025 Apr) 1–32.
[15] J Deenik, JM Vermeulen, SB Teasdale, FB Schuch, W Marx, B Perry, et al., Lifestyle psychiatry: a conceptual framework for application in mental healthcare and support, BMJ Mental Health 28 (2025) e301980. https://doi.org/10.1136/bmjment-2025-301980.
[16] A. Mudra Rakshasa-Loots, J. Campbell, I.H. Campbell, D.J. Smith, Metabolic psychiatry: key priorities for an emerging field, Nat Mental Health 3 (8) (2025 Aug) 855–858.
[17] N Stroebele-Benschop, V Hedrih, S Behairy, N Pervaiz, E Morphew-Lu, Conceptual Framework for Nutritional Psychology as a New Field of Research, Behavioral Sciences 15 (8) (2025) 1007.