# Nutritional psychiatry: Towards improving mental health by what you eat

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## Abstract (600 Word Limit):

Does it matter what we eat for our mental health? Accumulating data suggests that this may indeed be the case and that diet and nutrition are not only critical for human physiology and body composition, but also have significant effects on mood and mental wellbeing. While the determining factors of mental health are complex, increasing evidence indicates a strong association between a poor diet and the exacerbation of mood disorders, including anxiety and depression, as well as other neuropsychiatric conditions. There are common beliefs about the health effects of certain foods that are not supported by solid evidence and the scientific evidence demonstrating the unequivocal link between nutrition and mental health is only beginning to emerge. Current epidemiological data on nutrition and mental health do not provide information about causality or underlying mechanisms. Future studies should focus on elucidating mechanism. Randomized controlled trials should be of high quality, adequately powered and geared towards the advancement of knowledge from population-based observations towards personalized nutrition. Here, we provide an overview of the emerging field of nutritional psychiatry, exploring the scientific evidence exemplifying the importance of a well-balanced diet for mental health. We conclude that an experimental medicine approach and a mechanistic understanding is required to provide solid evidence on which future policies on diet and nutrition for mental health can be based.

## Importance of Research (200 Word Limit):

Keratins were the first group of into fills to have their X-ray diffraction pattern discovered. However, from a structural perspective, their molecular functions have been difficult to elucidate; this is in part due to the ability of keratins to form both stable heterodimers and homodynes in vitro—which led to the assumption that this can occur in the living cell (although this has been difficult to confirm)].A phylogenetic tree of the human IntFil group reveals that all 18 IntFil genes of types III, IV, V and VI appear to be evolutionarily older than the keratin gene subsets (i.e., IntFil types I & II). It should be noted that the two synemin protein isoforms in the tree originate from one gene, and the three lamin isoforms are derived from one gene. Note that the IntFil genes of subgroups III, IV, V and VI are scattered among twelve chromosomes (Chr 1, 2, 3, 5, 8, 10, 12, 15, 17, 19, 20, 22); this is further evidence that these four IntFil subgroups are evolutionarily very ancient.

## Biography (150-200 Word Limit):

Brian Thompson is a second-year doctoral student in Environmental Health Sciences at Yale University where he has gained experience from his teaching fellowship roles in both the Introductory Biostatistics and Introductory Toxicology courses. His research interests include understanding how cells of the central nervous system respond to both endogenous and exogenous stressors. His interest in climate change grew from a belief that climate change is the most consequential problem facing the world in the 21st century. Prior to his doctoral studies, Brian obtained a BS in Biochemistry from the University of Massachusetts Amherst. Ocular development is composed of a carefully orchestrated set of events that are easily perturbed, which results in a syndrome of diseases termed MAC (microphthalmia, exophthalmia and coloboma). For decades, previous research has largely been focused on elucidating the role of transcription factors in directing eye development. However, it is increasingly realized that oxidative stress also plays an important role in the eye development process. Despite these realizations, much remains to be known about the mechanisms by which oxidative stress influences eye development.

## Information of Institute/ University/ Laboratory :(200 Word Limit)

Our founders worked together in public and private sector roles research, transformation and collaboration in a safe space.
For more than 25 years, TLI's leadership team have developed strong working relationships with U.S. universities and aided in their varied pursuits of international, commercial and federal programs. Our strategic clinical and educational partners range from Mayo Clinic and Harvard University to top DC metro universities.TLI supports the Mayo Clinic, Johns Hopkins University, and the Uniformed Services University of the Health Sciences (USUHS), and the Bridging Advanced Developments for Exceptional Rehabilitation (BADER) Consortium which supports the University of Delaware, Harvard, and the Mayo Clinic.
Other clients have included UPMC, University of Washington, Yale University, Columbia University, Duke University, Oklahoma University, University of Nebraska, Henry M. Jackson Foundation, Robert Wood Johnson Foundation, and RAND Corporation.

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