



# NP 150 Part I: Mechanisms in the Diet-Mental Health Relationship (DMHR) (APA/CDR/NBCC)

\$299 USD  
39.25 CE APA/CDR and 37.25 NBCC

NP 150 Part I introduces comprehensive mechanisms underlying Diet-Mental Health Relationships (DMHR), spanning **biological, neurobiological, neuroimmunological, psychoneuroimmunological, psychological, behavioral, social, environmental, and developmental** domains.

**Biological mechanisms** include macronutrients, micronutrients, dietary patterns, nutritional deficiencies, phytonutrients, neuroactive compounds, and hormones (e.g., insulin, leptin, ghrelin, cortisol). The course also covers neuroendocrine pathways, early-life nutrition, the gut-brain axis, neurotransmitter synthesis, cognitive regulation, stress resilience, and energy balance.

**Neurobiological mechanisms** focus on brain regions relevant to DMHR, such as the amygdala, hippocampus, prefrontal cortex, hypothalamus, and striatum. Key processes include neurotransmission, neurogenesis, neural repair, neuroplasticity, neurotrophins, neuropeptides, and neuroinflammation—highlighting how nutrients and dietary patterns support brain health and resilience.

**Neuroimmunological mechanisms** examine the role of the immune system in mental health and how diet modulates this interaction. Topics include immune dysregulation in mental disorders, the immunomodulatory effects of nutrients, and the impact of inflammation and oxidative stress. Specific components like microglia, the blood-brain barrier, and mitochondria are explored in relation to dietary influences on brain health. NP 150 Part I introduces the comprehensive mechanisms underlying Diet-Mental Health Relationships (DMHR), spanning biological, neurobiological, neuroimmunological, psychoneuroimmunological, psychological, behavioral, social, environmental, and developmental domains.

CNP is approved by the American Psychological Association (APA) to sponsor Continuing Education for Psychologists, RDs/DTRs under Activity Type 742 Eligible Enduring through the Commission on Dietetic Registration (CDR), and National Certified Counselors through the National Board of Certified Counselors (NBCC). CNP maintains responsibility for this program and its content.

## LEARNING OBJECTIVES

- List three **disciplines** included within the interdisciplinary scope of nutritional psychology

Name two ways **phytonutrients** impact brain function

Cite two ways omega-3 fatty acid deficiency can influence the efficiency of brain processes

Describe three **dietary patterns** studied for their effects on mental well-being

Name three key **brain regions** involved in DMHR

Name the brain region involved in **reward** and habit formation
- Define ‘**neurotrophins**’ and name two dietary components modulating their brain levels

Name three ways chronic **inflammation** can impact brain structure and function

Recite the mechanism by which **antioxidants** in the diet reduce neuroinflammation in the brain

Name three **dietary factors** that suppress inflammation

Explain three ways **immune system** dysregulation can impact mental disorders

## COURSE INSTRUCTORS

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## COURSE DETAILS AND POLICY

- Target Adience:** Mental health, nutrition, and other professionals and individuals wanting to understand the evidence-based connection between diet and mental health.
- This course is a prerequisite to NP 150 Part II and is part of the **Certificate 2: Biological Mechanisms in Nutritional Psychology (NP-M)**. Other courses in this certificate include NP 120 Part I, Part II and NP 150 Part II. See the CNP Programs page for more information.
- CE hours do not include meals or breaks. Course certificates are awarded upon successful completion of the course and it's evaluation. If students do not receive their certificate they can email [editor@nutritional-psychology.org](mailto:editor@nutritional-psychology.org). CNP maintains course records for 7 years.
- This course is **accessible for four months (120 days)** from the date of enrollment. The course itself cannot be downloaded, however, **Module Download Kits** with key information can be downloaded while enrolled in the course. Questions, concerns, or grievances may be directed to the course authors via the course messaging platform. Failing a timely resolution, learners may contact [editor@nutritional-psychology.org](mailto:editor@nutritional-psychology.org), or follow instructions in the course **Conflict Resolution Procedure**.

The one-time course fee payment is due at the time of enrollment and is considered non-refundable. Exception for a partial refund (up to 75%) will be considered should the learner have proof of severe circumstances leaving them unable to complete the course. Learners who have completed the course's first module will not be refunded. Learners needing accommodations may write to [editor@nutritional-psychology.org](mailto:editor@nutritional-psychology.org).

