

Section 1: Introductory Chapters

1. An introduction to the Thyroid Gland
2. Thyroid Hormones: An Introduction
3. Enzymes Involved in Thyroid Hormones Metabolism and Status
4. Diseases of the Thyroid Gland and Thyroid Hormone Production: Autoimmunity and Beyond

Section 2: Psychology and Behavior as a Consequence of Changes in Neurological Tissues

5. Free Thyroxine and Psychosis
6. Hypothyroidism and Impact on Anxiety and Depression
7. Mental State and Thyroid Hormones: Bipolar Disorder
8. Thyroid Patients and Adverse Psychological Impact of COVID-19 Related Lockdown
9. Thyroidectomy and Quality of Life Domains

Section 3: Focused Areas of Neurological Pathology and Physiology

10. 3,3',5-Triiodothyroacetic Acid and Effects on Cerebrum
11. Brain Demyelination, Remyelination and Thyroid Hormones
12. Environmental Toxicants, Thyroid Hormones and Gene Expression in the Brain
13. The Thyroid Hormone Transporter, Transthyretin (TTR) and Effects of Stress on the Brain
14. Thyroid Hormones and the Hippocampus in Alzheimer's Disease
15. Thyroid Hormones and the Hypothalamus
16. Thyroid Signaling and Glial Cells

Section 4: Treatment Regimens Modulating Thyroid Status and Effects on Neurological Tissues

17. Levothyroxine and Effects on the Brain: MRI and Beyond
18. Levothyroxine Treatments in Pregnancy and Impact on Cognition in Offspring
19. Nomedicines with Promyelinating Agent Triiodothyronine

Section 5: Non-Thyroid Treatment Regimens

20. Alemtuzumab and Impact on Autoimmune Thyroid Dysfunction
21. Changes in Thyroid Status in Response to Drugs Used in Epilepsy: A New Narrative
22. Lithium Use in Mental Health and Impact on Thyroid Status

Section 6: Diseases of the Thyroid or Thyroid Status And Impact On Brain And Behavior

23. Hashimoto Thyroiditis and Blood Flow to the Brain
24. Hashimoto's Thyroiditis: Linking Anxiety and Depression
25. Postpartum Thyroiditis and Links with Depression

Section 7: Diet and Nutrition and Impact on Thyroid Status and Neuroscientific Domains or Behavior

27. Arginine and Endocrine Status: A Focus on Thyroid Hormones
28. Brain Damage in Hyperthyroidism: Effect of Nutraceuticals
29. Iodine in Pregnancy and Brain of Offspring
30. Resveratrol and Related Polyphenols: Impact on TRH in Neurological Tissues
31. Thyroid Function and Postnatal Depression