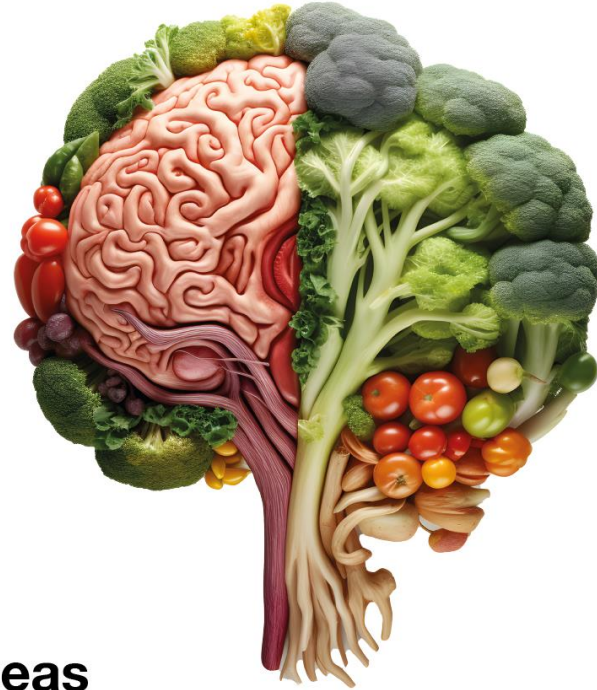


THRIVE WITH ADHD



**Practical Tools for
Personal Growth
with ADHD**

By *Dr Miguel* Toribio-Mateas
Clinical Neuroscientist





Hello! I'm Miguel!

Clinical Neuroscientist

Applied Microbiologist

Longstanding background in Nutrition

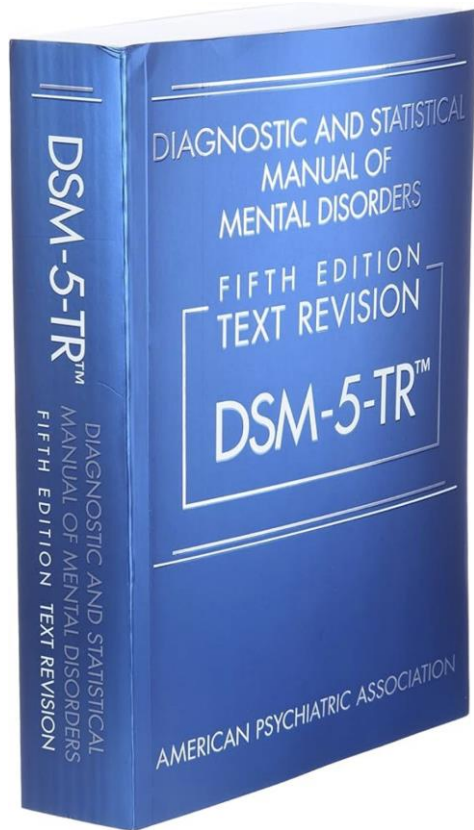
Honorary Research Fellow, Cardiff University

Late-diagnosed ADHD/Autistic

ADHD Researcher and Author



What is ADHD?

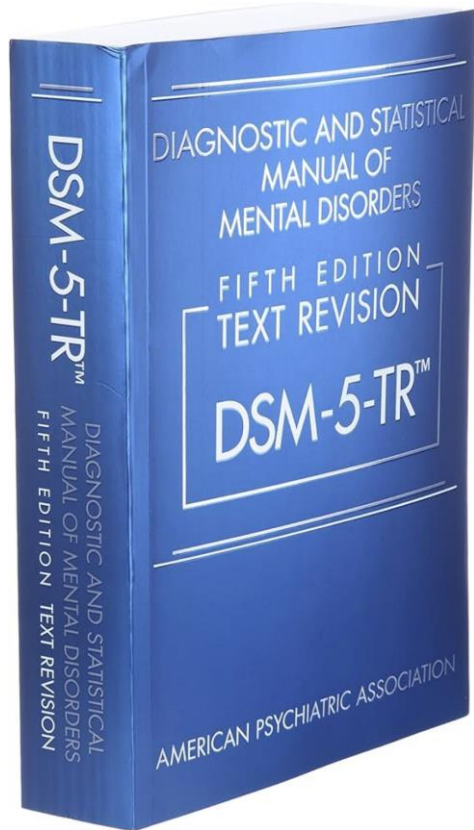


The clinical definition of Attention-Deficit/Hyperactivity Disorder (ADHD) is primarily based on the criteria set forth in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), published by the American Psychiatric Association and widely accepted standard for psychiatric diagnoses.

Although each case is unique and requires comprehensive evaluation, the DSM-5 criteria are used as a guideline by healthcare professionals to diagnose ADHD in countries around the world.



ADHD and the DSM-5



According to the DSM-5, Attention-Deficit/Hyperactivity Disorder (ADHD) is a neurodevelopmental disorder characterised by a consistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development.

The DSM-5 clinical definition categorises ADHD into three presentations: **predominantly inattentive**, **predominantly hyperactive**, and **combined**.



Increase in awareness of ADHD



Attention-deficit hyperactivity disorder diagnoses and prescriptions in UK primary care, 2000–2018: population-based cohort study

Published online by Cambridge University Press: 17 July 2023

Douglas G. J. McKechnie , Elizabeth O'Nions, Sandra Dunsmuir and Irene Petersen 

- Both ADHD diagnoses and prescriptions for ADHD medication have increased significantly over the past two decades.
- There was approximately a twenty-fold increase in ADHD diagnoses and nearly fifty-fold in ADHD prescriptions in men between the ages of 18-29 (from 0.01% to 0.56%).



Significant rise in adult diagnoses

[UCL Home](#) » [UCL News](#) » [Significant rise in ADHD diagnoses in the UK](#)

“Whilst ADHD is most likely to be diagnosed in childhood, an increasing number of people are diagnosed for the first time in adulthood. We do not know exactly why this is happening, but it may be that ADHD has become better recognised and diagnosed”

“Over the last few years, there have been many reports of long waiting lists for ADHD assessments on the NHS, especially in adults. It’s likely that more and more people will be diagnosed with, and treated for, ADHD, so specialist services need to be made available to handle this.”



Here's the first problem

The DSM-5 defines ADHD as a neuropsychiatric disorder with deficits in attention, hyperactivity, and impulsivity.

This model emphasises reducing symptoms that are seen as problematic or disruptive. Medications are prescribed to manage these symptoms. They work by increasing focus and reducing impulsivity and hyperactivity.





And here's a bigger problem

“Normal” describes what is typical or average, while “normative” refers to what is prescribed as a standard or ideal.

Normativity shapes our understanding of what should be, often overshadowing the rich diversity of what is.



The Neurodiversity Paradigm

- recognises ADHD as part of neurodiversity.
- celebrates the unique attributes and capabilities of ADHD brains.

Thrive With ADHD is rooted in neurodiversity and uses Neuroaffirming language throughout.



Clinical vs Neuroaffirming Language

Clinical

Deficit

Disorder or Disease

Patient with autism

Comorbid (e.g. with ADHD)

Neuropsychiatric disorder

Healthy controls

Suffering from...

Special interest

Neuroaffirming

Difference

Condition

Autistic person

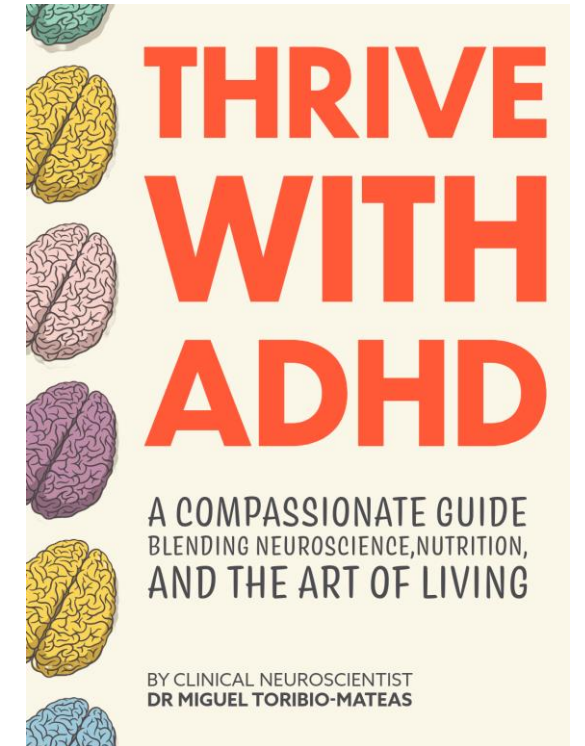
Coexisting/Co-occurring

Neurotype

Controls

Living with...

Passion



Scientific language can feel invalidating of neurodivergent people's identities.

Using appropriate language is important when working with neurodivergent clients.

Module 1

Reframing ADHD From Disorder to Neurotype

Themes

Introduction to ADHD: Beyond the Clinical Definition

ADHD as Neurodiversity: Embracing Differences

Merging Science, Art, and Lived Experience

One day at a time: How To Deal With Overwhelm

Slip-ups / Ups & Downs: Going Easy On Yourself

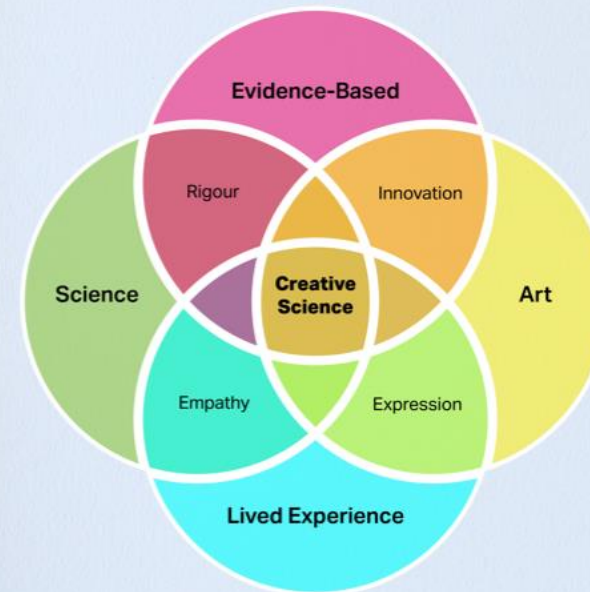


Thrive With ADHD

- integrates scientific understanding with personal experiences.
- uses creative approaches to highlight the lived experiences of those with ADHD.

Insights from The Creative Scientist:

Merging Science, Art,
and Lived Experience



Navigating Emotions

1. **Emotional Cartography:** Begin by mapping out your emotions. As an explorer, you would note landmarks and jot down the emotions you're encountering. Whether it's sadness, anxiety, or joy, recognising and naming these emotions is your first step toward understanding them.
2. **Tracing The Source:** Like following a river to its source, identify what events or thoughts are feeding into your emotions. Understanding what triggers your feelings gives you the insight needed to address them constructively.
3. **Constructing Supports:** Build bridges to better coping by listing actions that foster self-care. Perhaps it's a conversation with a friend, a quiet walk, or a moment of meditation. These acts are your tools for constructing a resilient mindset.
4. **Reframing The View:** Sometimes, we need to climb to a higher vantage point to see our situation in a new light. Practice reframing negative thoughts into positive affirmations. By shifting your perspective, you can often change the emotional landscape itself.

A Compass for the Mind

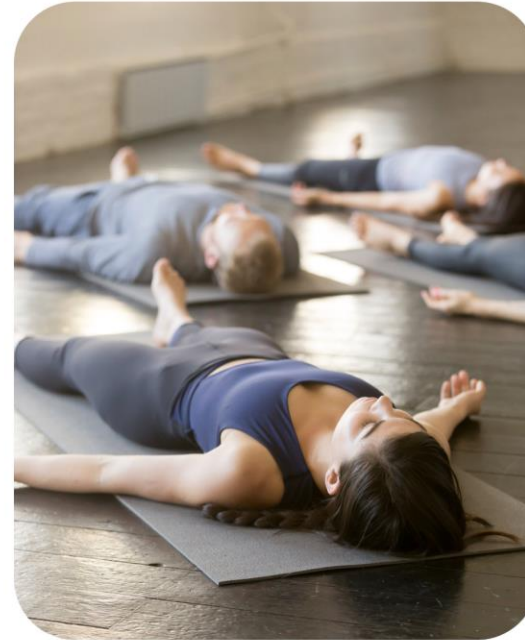
Embarking on a journey through our inner landscape can sometimes lead us through emotional terrains that are challenging to navigate. To assist you in this journey, "Navigating Emotions" provides a compass to help you understand and regulate your emotional world. Incorporate this compass into your daily routine, and with each use, you'll find yourself becoming a more adept navigator of your emotional world. Remember, this is not just a toolkit, it's a guide to self-discovery and empowerment in 4 simple steps:



IN THIS LESSON

Progressive Muscle Relaxation

Progressive Muscle Relaxation (PMR) offers a practical approach for those with ADHD to enhance focus and reduce hyperactivity. By systematically tensing and relaxing muscle groups, PMR aids in regulating the nervous system, fostering a state of calm that improves concentration. This technique empowers you to actively manage restlessness and attention challenges, promoting a sense of mental clarity and physical relaxation.



▶ Progressive Muscle Relaxation
Dr Miguel Toribio-Mateas Download

What is Progressive Muscle Relaxation? ✓

Please post your questions or comments about this lesson on the [Module 1 discussion board](#)

Complete & Continue



Neurobiological Bases of Module 1

Anatomical brain regions: The Prefrontal Cortex

Role: Decision-making, focus, impulse control.

ADHD impact: Impaired function leads to difficulties with attention and self-regulation.

Tool: Mindfulness. Enhances prefrontal cortex activity, improving attention and impulse control.



Neurobiological Bases of Module 1

Anatomical brain regions: The Limbic System

Role: Emotion regulation, stress response.

ADHD impact: Dysregulation leads to emotional volatility.

Tool: Guided imagery. Calms the limbic system, reducing stress and emotional reactivity.



Neurobiological Bases of Module 1

Key neurotransmitters: Dopamine and Noradrenaline

Role: Imbalances affect motivation, reward processing, and focus.

ADHD impact: Dysregulation leads to emotional volatility.

Tool: Progressive Muscle Relaxation. Reduces cortisol, balances neurotransmitter levels, promoting relaxation and focus.



Module 2

A Close Look At The ADHD Brain

Themes

The Unique Neurobiology of ADHD

Role of Neurotransmitters

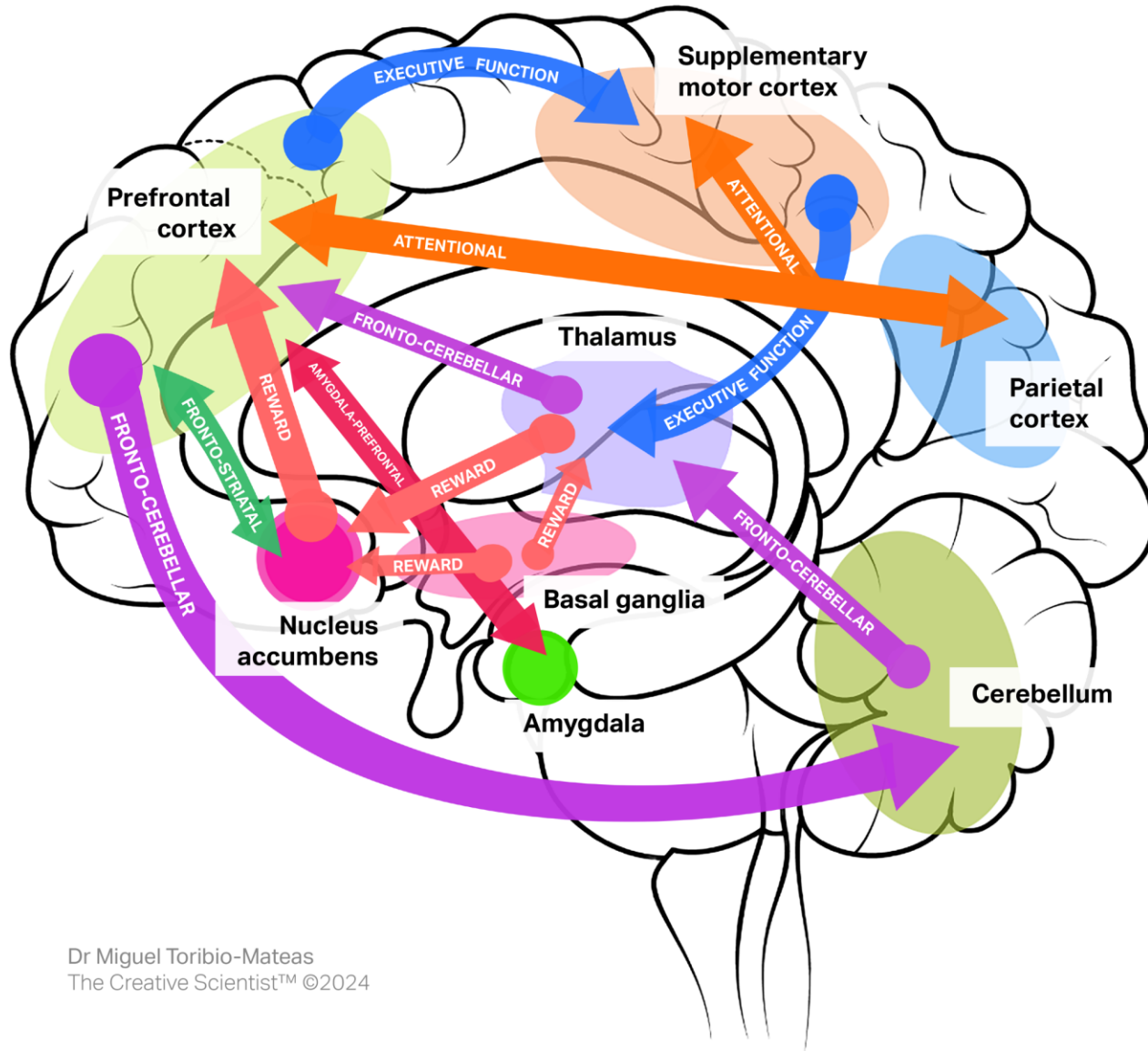
Neuroplasticity: Your Brain's Potential to Change and Adapt

Coexisting Conditions: Depression and Anxiety

Rigour and Empathy as Values for Thriving with ADHD



Mapping The Mind: The Brain Circuitry of ADHD Explained



Neurotransmitter Functions in ADHD Pathways

- Prioritisation: Dopamine
- Focus: Dopamine
- Planning: Dopamine, noradrenaline and acetylcholine
- Attention: Noradrenaline and dopamine
- Integration: Dopamine, noradrenaline and glutamate
- Emotion: Dopamine, serotonin, glutamate and GABA

This diagram explores the intricate brain networks where ADHD plays out, from the pathways of focus and planning to the crossroads of reward and attention. It unveils the brain's inner workings in ADHD, highlighting the key regions and connections that shape how we think, feel, and react.

Frontal Lobe

Problem solving
Judgment
Inhibition of behaviour
Planning
Anticipation
Speaking (expressive language)
Emotional expression
Awareness of abilities
Self-monitoring
Motor planning
Personality
Sexual behaviour
Behaviour control
Limitations
Organisation
Attention
Concentration
Mental flexibility
Initiation

Parietal Lobe

Sense of touch, taste and smell
Differentiation: size, shape, colour
Spatial perception
Visual perception
Academic skills
Math calculations
Reading
Writing

Occipital Lobe

Visual reception area
Visual interpretation
Reading (perception and recognition)

Cerebellum

Coordination of voluntary movement
Balance and equilibrium
Some memory for reflex motor acts

Brain Stem

Sense of balance (vestibular function)
Reflexes to seeing and hearing
Autonomic nervous system
Blood vessel control
Breathing
Heart control
Digestion
Heart rate
Swallowing
Consciousness
Blood pressure
Temperature
Alertness
Ability to sleep
Sweating

Temporal Lobe

Understanding language
Organisation and sequencing
Information retrieval
Musical awareness
Memory
Hearing
Learning
Feelings



BRAIN FUNCTIONS Lobe by Lobe

Module 2 explores the neurobiology of the ADHD brain in detail.

As well to an excellent source of knowledge, Module 2 is rich in analogies for practitioners to help explain situations when working with ADHD clients.



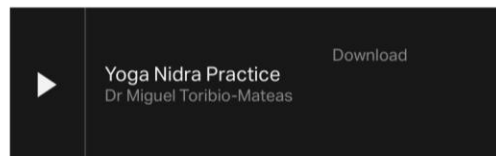
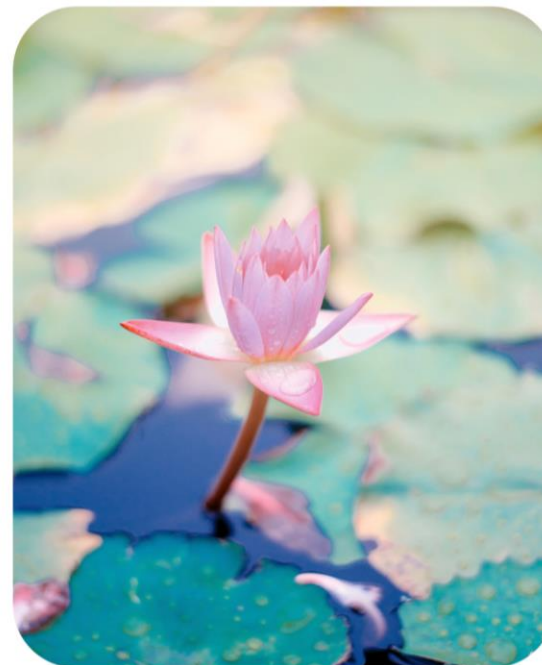
Yoga Nidra



IN THIS LESSON

Yoga Nidra

Discover the transformative power of Yoga Nidra. This ancient practice offers the ADHD mind much-needed respite, enhancing focus, reducing stress, and improving sleep quality. Yoga Nidra is also a well-researched gateway to emotional regulation and heightened neuroplasticity. Do it daily if you can integrate seamlessly into your routine (remember rigour). But if you struggle (empathy), a 20-minute session 3 times a week will provide a peaceful escape from life's hustle. It's more than relaxation; it's a journey of self-discovery and empowerment, making it an invaluable tool for you to harness the uniqueness of your brain and to thrive with ADHD.



Learn More About Yoga Nidra



Please post your questions or comments about this lesson on the [Module 2 discussion board](#)

Complete & Continue



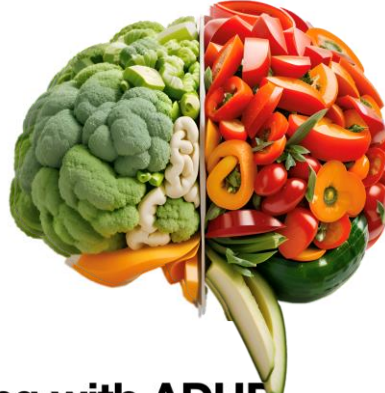
Modules 3 + 4: Food

THRIVE WITH ADHD

By *Dr Miguel Toribio-Mateas*
Clinical Neuroscientist

Module 3

Nutritional Foundations
for Thriving with ADHD



Nutritional Foundations for Thriving with ADHD

Themes

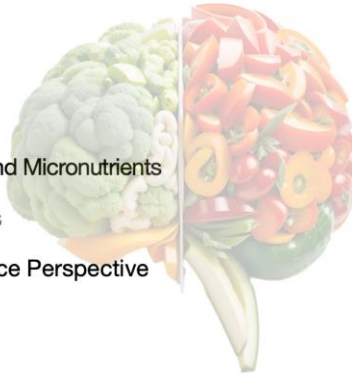
The Importance of Nutrition for ADHD Brains to Thrive

The Paramount Role of the Gut-Brain Connection

Foods that Support ADHD: Omega-3s, Protein, Complex Carbs, and Micronutrients

Foods to Limit or Avoid: Sugars, Food Additives, and Allergens

The Science of Food Choices: From a Behavioural Neuroscience Perspective



THRIVE WITH ADHD

By *Dr Miguel Toribio-Mateas*
Clinical Neuroscientist

Module 4

Enhancing Nutrition Through
Targeted Food Supplements



Enhancing Nutrition Through Targeted Food Supplements

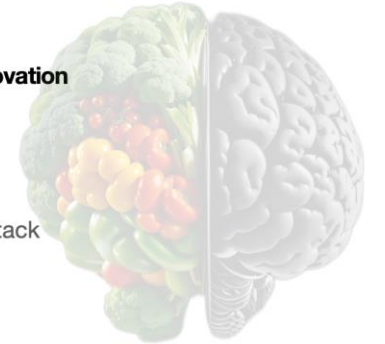
Themes

Dr Miguel's Take on Supplements: Balancing Rigour and Innovation

Food Supplements to Help You Thrive With ADHD

Food Supplements to Support the Gut-Brain Axis

Practical Strategies. Creating Your Ideal Food Supplement Stack



Food Lists + Meal Plans

Dairy Alternatives

1. Almond Milk – Low in calories, high in vitamin E
Fibre content: 0.6 grams per 100 grams (unsweetened).
Type of fibre: Insoluble fibre.

Polysaccharides: Cellulose.
Polyphenols: Contains flavonoids.
Known gut microbiome benefits: Minimal impact on gut bacteria, possibly promoting microbial diversity thanks to the flavonoids in the drink.
Micronutrients: Good source of vitamin E and calcium (fortified version)

2. Coconut Milk – Rich in Medium-Chain Triglycerides (MCTs)
Fibre content: 2.2 grams per 100 grams.
Type of fibre: Insoluble fibre.
Polysaccharides: Cellulose, hemicellulose.
Polyphenols: Contains gallic acid.
Known gut microbiome benefits: MCTs help keep inflar promoting microbial diversity thanks to the flavonoids in the drink.
Micronutrients: High in manganese, copper, and seler

3. Soy Milk – High in protein
Fibre content: 0.5 grams per 100 grams (unswe
Type of fibre: Insoluble fibre.
Polysaccharides: Cellulose.
Polyphenols: Contains isoflavones.
Known gut microbiome benefits: Ben
bacterium that specialises in transform
antioxidant that has similar properti
Micronutrients: Rich in protein, vitamin B12

Omnivore Meal Plan

Monday

Breakfast: Scrambled eggs with spinach and w
• **Key Nutrients:** Lutein and Omega-3s from ea
whole-grain sourdough bread.

• **Calories and Macros:** Approximately 300 calories;
Fibre: 3g.

Lunch: Quinoa salad with chickpeas, cucumber, and chern
• **Key Nutrients:** Protein from chickpeas, fibre and vitam
• **Calories and Macros:** Approximately 350 calories; Fats: 1,
Fibre: 8g.

Dinner: Grilled chicken breast with steamed broccoli and brown rice
• **Key Nutrients:** Protein from chicken, vitamins and fibre from bro
• **Calories and Macros:** Approximately 400 calories; Fats: 10g, Carbs:
Fibre: 5g.

Snacks:

- Morning: Greek yoghurt with a handful of blueberries.
- Afternoon: A medium-sized apple.
- **Calories and Macros (total):** Approximately 200 calories; Fats: 5g, Carbs:
25g, Fibre: 4g.

Drinks: Herbal tea, water with lemon slices.

Plant-Based Meal Plan

Monday

Breakfast: Chia seed pudding made with almond milk, topped with fresh berries.
• **Key Nutrients:** Omega-3s from chia seeds, antioxidants from berries.

• **Calories and Macros:** Approximately 300 calories; Fats: 15g, Carbs: 30g,
Fibre: 10g.

Lunch: Quinoa and black bean salad with avocado, lime, and cilantro.
• **Key Nutrients:** Protein from black beans, healthy fats from avocado, fibre
from quinoa.

• **Calories and Macros:** Approximately 400 calories; Fats: 15g, Carbs: 50g,
Fibre: 15g.

Dinner: Stir-fried tofu with broccoli, bell peppers, and brown rice.
• **Key Nutrients:** Protein from tofu, vitamins and fibre from vegetables.
• **Calories and Macros:** Approximately 450 calories; Fats: 20g, Carbs: 50g,
Fibre: 10g.

Snacks:

- Morning: A banana.
- Afternoon: Carrot sticks with hummus.
- **Calories and Macros (total):** Approximately 200 calories; Fats: 5g, Carbs:
35g, Fibre: 5g.

Drinks: Herbal tea, water with lemon slices.

1. Barley

Fibre content: Approximately 17.3 grams per 100 grams.
Type of fibre: Rich in both soluble fibre (beta-glucans) and insoluble fibre
(cellulose, hemicellulose).

Polysaccharides: Xylans and arabinoxylans.

Polyphenols: Contains lignans, ferulic acid, and saponarin.

Known gut microbiome benefits: Nourishes beneficial gut bacteria like
Faecalibacterium and Roseburia.

Micronutrients: High in vitamin E and selenium.

2. Oats

Fibre content: Around 10.6 grams per 100 grams.
Type of fibre: Predominantly soluble fibre (beta-glucans).

Polysaccharides: Beta-glucans.

Polyphenols: Avenanthramides, ferulic acid, and phytic acid.

Known gut microbiome benefits: Oats support the growth of Bifidobacteria and
Lactobacilli.

Micronutrients: Rich in manganese and magnesium.

3. Lentils

Fibre content: Approximately 7.9 grams per 100 grams.
Type of fibre: Contains both soluble (pectins) and insoluble fibres (cellulose,
hemicellulose).

Polysaccharides: Pectins.

Polyphenols: Rich in flavonoids, tannins, and saponins.

Known gut microbiome benefits: Lentils promote the growth of Lactobacilli and
Bifidobacteria and contribute to microbial diversity.

Micronutrients: High in folate and iron.

50 Fibre-Rich Foods

Thrive With ADHD

January 2024





Mindful Eating: A 4-Step Technique for Reframing Cognition in Response to Emotional Eating

This is an adaptation of the “**Navigating Emotions**” technique that you already know from Module 1. It has 4 simple steps that allow you to reframe your response to an input, be it from your own mind or from the outside world.

It’s a neuroscience-based technique that engages the following brain areas:

The prefrontal cortex: This area is responsible for executive functions like planning, decision-making, and moderating social behaviour. Cognitive reframing involves this area extensively as it helps in analysing and restructuring thoughts.

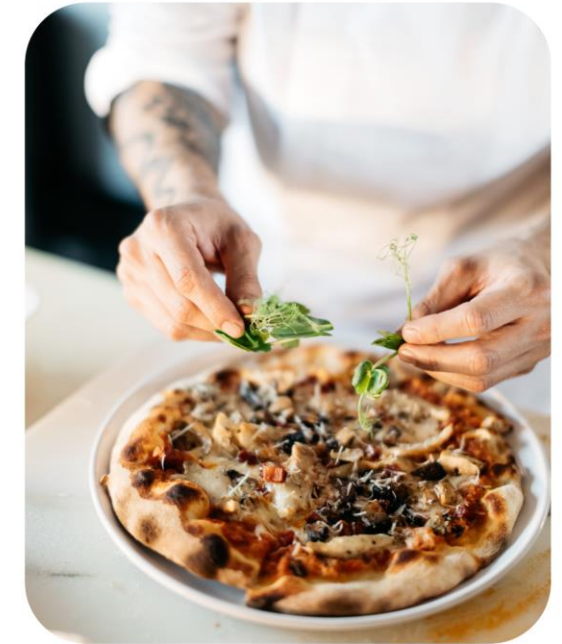
The amygdala: Often linked with emotional responses, the amygdala plays a role in how we perceive and react to situations. Cognitive reframing can help in reducing the amygdala’s response to perceived negative stimuli, thus aiding in emotional regulation.

The hippocampus: This region is crucial for memory formation. By practising cognitive reframing, we can influence how memories, particularly those associated with stress or anxiety, are processed and recalled.

Harnessing Intuitive Eating for Self-Regulation

This lesson unveils the transformative power of intuitive eating, guiding you through the process of aligning food choices with emotional and physical needs. It emphasises the joy of trusting your gut feeling when it comes to food choices, the importance of gut-brain harmony, and the calm that comes from mindful eating practices. You’ll discover how to navigate your unique neurobiology with nourishment that enhances focus, balances emotions, and fosters a serene mind. You’ll also be introduced to a variation of “Mindful Eating,” a 4-step cognitive reframing technique that’s a variation of the tool you learned in Module 1 and that’s applied to help you manage emotional eating. It’s called “Mindful Eating,” and I hope you find it useful. **Please download the instructions now, along with the course notes.**

Download Lesson Notes



Mindful Eating: A Cognitive Reframing Technique for Emotional Eating

Please post your questions or comments about this lesson on the [Module 3 discussion board](#)

Complete & Continue



The Gut-Brain Axis



Advances in Nutrition
Volume 12, Issue 4, July 2021, Pages 1239-1285



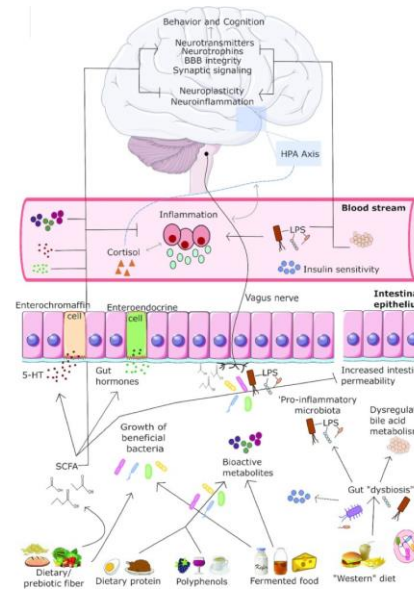
Diet and the Microbiota–Gut–Brain Axis: Sowing the Seeds of Good Mental Health

Kirsten Berding¹, Klara Vckova¹, Wolfgang Marx², Harriet Schellekens^{1,3},
Catherine Stanton^{1,4}, Gerard Clarke^{1,5}, Felice Jacka^{2,6,7}, Timothy G Dinan^{1,5},
John F Cryan^{1,3}

“The fact that many different dietary patterns have been linked to improved mental wellbeing reinforces the fact that individual components of the diet may be less important to mental health than overall dietary patterns high in plant foods and low in ultraprocessed foods.”

Adv Nutr. 2021 Jul 30;12(4):1239-1285.

Thrive With ADHD - Module 4 - Lesson 4



Bacillus coagulans MTCC 5856

LactoSpore, the commercial name for *Bacillus coagulans* MTCC 5856, has been studied in the context of depression. Clinical trials have investigated its impact on the gut-brain axis, particularly its potential to alleviate symptoms of depression. The probiotic properties of LactoSpore help balance gut microbiota, which is increasingly recognised as a factor in mood regulation and mental health.

Clinical findings: Studies suggest that supplementing with LactoSpore can lead to improvements in mood and reductions in depressive symptoms. This is likely due to its effects on gut health, including the modulation of inflammation and the production of mood-regulating neurotransmitters in the gut.



Thrive With ADHD - Module 4 - Lesson 4

Beneficial Microbes in Kefir

Kefir is a rich source of probiotics, including various strains of *Lactobacillus* and beneficial yeasts. These microorganisms play a crucial role in gut health, which is directly connected to overall well-being and cognitive function. *Lactobacillus* strains in kefir contribute to a balanced gut microbiome, aiding digestion and enhancing the immune system. Beneficial yeasts, like *Saccharomyces*, help maintain gut barrier integrity and have anti-inflammatory properties.

Importance for health: The symbiotic relationship between bacteria and yeasts in kefir creates a potent probiotic mixture. This synergy enhances the bioavailability of nutrients and supports a healthy gut environment, which is vital for mental health, including mood regulation and cognitive processes. Regular consumption of kefir may, therefore, offer benefits for brain health and could be particularly advantageous for ADHDers.

Thrive With ADHD - Module 4 - Lesson 4



Beneficial Microbes in Sauerkraut

Lactobacillus brevis: This bacterium is often found in fermented foods and is known for its ability to produce lactic acid and contribute to the overall health benefits of sauerkraut.

Pediococcus pentosaceus: Another lactic acid bacterium, *Pediococcus pentosaceus*, is sometimes present in sauerkraut, contributing to the fermentation process and the development of flavor.

Lactobacillus paraplantarum: Similar to *Lactobacillus plantarum*, this strain also plays a role in the fermentation and preservation of sauerkraut.



Thrive With ADHD - Module 4 - Lesson 4



Module 5

Beyond Nutrition Holistic Lifestyle Interventions

Themes

Introduction to the Synergy of Mind, Body, and Soul

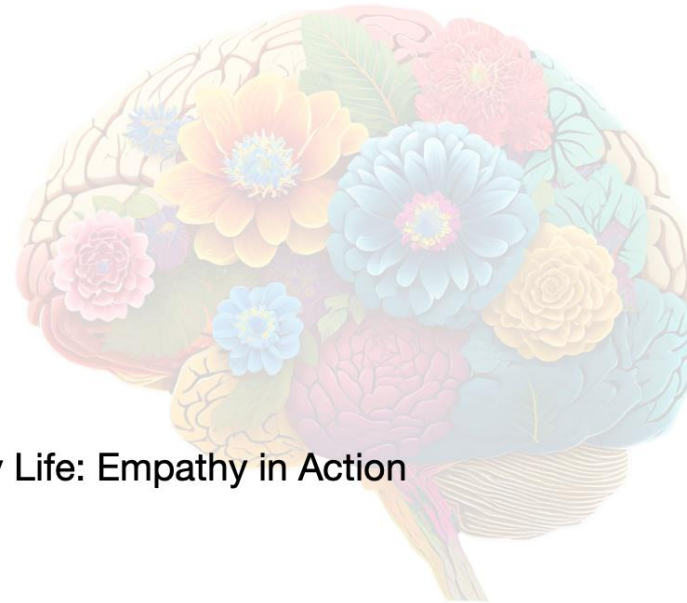
Guided Meditations Tailored for the ADHD Brain

The Science of Exercise for Thriving With ADHD

Intermittent Fasting + ADHD

Integrating "The Creative Scientist" Philosophy in Daily Life: Empathy in Action

Spiritual Undertones: Finding Peace + Purpose





22/03/2024 • Module 5, Intermittent fasting, Lifestyle

The Gentle Art of Intermittent Fasting for Women

Intermittent fasting for women combines scientific insight and mindful eating, tailored to natural bodily rhythms for health benefits and self-empowerment. Focusing on timing rather than food choice, it respects the body's needs and supports metabolic health, energy, and wellbeing.

[Read More](#)

Listening to the Body's Wisdom

The journey of intermittent fasting is deeply personal. It requires tuning into the body's signals — hunger cues, energy levels, and emotional states. For women, it's crucial to adapt fasting practices around menstrual cycles and life stages, easing into fasting gently and allowing for flexibility. Here are some specific tips on how to approach IF, focusing on when to fast and when to take a more gentle approach:

Starting with IF: When to Fast

1. **Start slowly:** Begin with shorter fasting periods, like the 12-hour overnight fast, and gradually increase to longer windows like 16 hours of fasting and 8 hours of eating (16/8 method) as your body adapts.
2. **Align with your cycle:** In the first half of your menstrual cycle (the follicular phase), your body is generally more resilient to stress, including fasting. This might be a good time to experiment with slightly longer fasting periods, as insulin sensitivity and energy levels are typically higher.
3. **Listen to your body:** Choose fasting days on your less physically demanding days to minimize stress on the body. If you're feeling energetic and not overly hungry, it's a good sign that it's a suitable day for fasting.

Adjusting Your Approach: When to Ease Off

1. **During your luteal phase:** The second half of your menstrual cycle (the luteal phase) can be more challenging for fasting. Your body requires more calories as it prepares for menstruation, and you might experience more cravings and less energy. It's wise to shorten fasting periods or skip fasting days if you're feeling fatigued or overly hungry.
2. **If experiencing hormonal imbalances:** Women with conditions like PCOS, thyroid disorders, or adrenal fatigue may need to approach fasting with caution. Consult with a healthcare provider to tailor fasting in a way that supports your health without exacerbating these conditions.
3. **During pregnancy and breastfeeding:** These are times when your body's nutritional needs are significantly increased. Fasting is not recommended during pregnancy and breastfeeding due to the potential impact on nutrient intake and milk production.



The Discussion Board

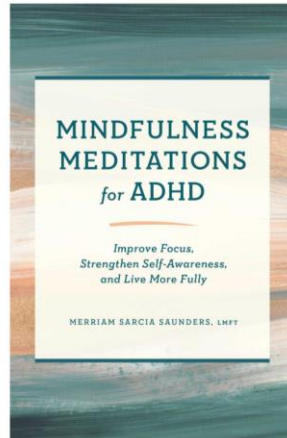
[← Back to Discussion Board](#)

Some Cool Books

[Module 5](#) • [Books](#) • [Recommendations](#) 5 Feb • Written By [Dr Miguel Toribio-Mateas](#)

In the spirit of Module 5's focus on holistic lifestyle interventions for thriving with ADHD, I am thrilled to recommend "Mindfulness Meditations for ADHD" by Merriam Sarcia Saunders and "Emotional Agility" by Susan David.

Saunders' meditations offer tools to fine-tune our attention and awareness—skills that are pivotal for managing ADHD. Meanwhile, David's insights into emotional flexibility complement our exploration of the synergy between mind, body, and soul, equipping us with the emotional intelligence necessary to navigate life's challenges with a grounded and focused presence. These reads are more than books; they are companions on our journey to self-mastery and well-being



Mindfulness Meditations for ADHD by Merriam Sarcia Saunders, LMFT

This book feels like embarking on a journey to the present moment. It's curated with the ADHD brain in mind and offers practical meditations designed to enhance focus and self-awareness. As someone living with ADHD, I've found these exercises to be a cornerstone in cultivating a sense of calm and clarity amidst my fast-paced thoughts. It's a must-read for those of us seeking to navigate the waters of ADHD with grace and intentionality.

4 comments

Newest First ▾



Hi all

4 months ago ⋮

This course is providing me with many new insights into the ADHD brain. As a Psychotherapist and Coach it is helping me to support my neurodivergent clients. Thank you very much Miguel!

Binaural Beats

[Module 6](#) • [Mind Tools](#) • [Music](#) 12 Feb • Written By [Dr Miguel Toribio-Mateas](#)

Diving into the realm of binaural beats unveils an auditory experience where each ear catches a different sound frequency, creating a unique auditory illusion as the brain perceives a third, distinct tone. This fascinating interplay taps into the brain's innate ability to synchronise with these frequencies, a phenomenon that holds particular promise for those of us navigating the challenges of ADHD. Through the lens of binaural beats, we explore not only an intriguing auditory experience but also a potential path to enhancing cognitive function and emotional wellbeing for the ADHD brain.

At the heart of binaural beats is the principle of frequency following response (FFR), which essentially nudges the brain into alignment with a perceived third tone that emerges from the differential frequencies fed into each ear. This auditory nudge has the power to modulate brainwave patterns, steering the mind towards states of deep relaxation, heightened focus, or restorative sleep, depending on the frequency of the beats. For the ADHD brain, often marked by a cacophony of distraction and a struggle to maintain focus, the steady rhythm of binaural beats might be the harmonising force needed to calm the neural storm.

The Best of Binaural Beats
PREVIEW | Lullify Music Group
+ Save on Spotify

- 1 Sound Exposure - 1 Hour of Binaural Audio for Unwinding | Binaural Beats by Lullify | ∞ 026
Focus. Relax. Sleep. Repeat. 1:01:58
- 2 Binaural Waves - 1 Hour of Brain Waves for Harmony | Binaural Beats by Lullify | ∞ 017
Focus. Relax. Sleep. Repeat. 1:01:41
- 3 Neural Communication - 1 Hour of Synths for Mindfulness | Binaural Beats by Lullify | ∞ 009
Focus. Relax. Sleep. Repeat. 1:00:27



Downward-Facing Dog (Adho Mukha Svanasana)

Instructions

1. Start on your hands and knees, lift your hips up and back to form a triangle with the floor.
2. Press your hands into the mat and stretch your heels down towards the floor.
3. Hold the pose, focusing on the lengthening of the spine.

Brain areas this pose works on

Downward-facing dog works on the prefrontal cortex and the hippocampus.

Benefits for ADHD

Downward-facing dog calms the mind, enhances focus, and strengthens the body's stress response mechanisms.



Tree Pose (Vrikshasana)

Instructions

1. Stand straight, shift your weight onto your right foot, and place the sole of your left foot on your inner right thigh.
2. Balance here as you bring your hands into prayer position in front of your chest.
3. For more of a challenge, extend your arms over your head.

Brain areas this pose works on

Vrikshasana works on the prefrontal cortex and the cerebellum.

Benefits for ADHD

Vrikshasana enhances focus, balance, and proprioception - the sense that lets us perceive the location, movement, and action of parts of the body - and strengthens neural connections related to attention control.



Cat-Cow Stretch (Marjaryasana-Bitilasana)

Instructions

1. Start on your hands and knees, inhale as you arch your back down and lift your head and tailbone up (Cow).
2. Exhale as you round your back up and tuck your chin to your chest (Cat).
3. Alternate between Cat and Cow, moving with each breath.

Brain areas this pose works on

Cat-cow works on the prefrontal cortex and the somatosensory cortex.

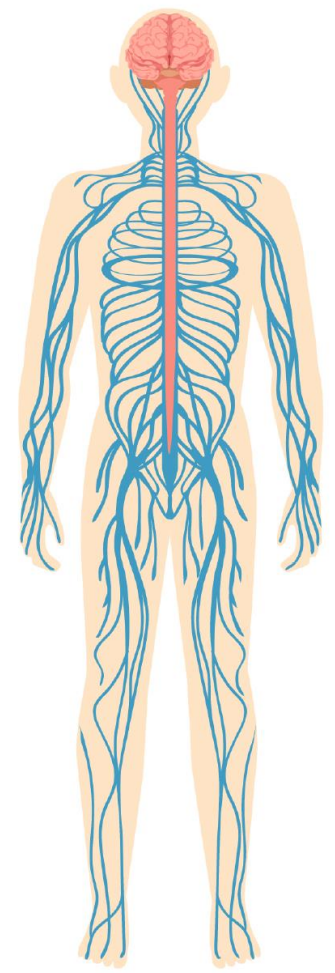
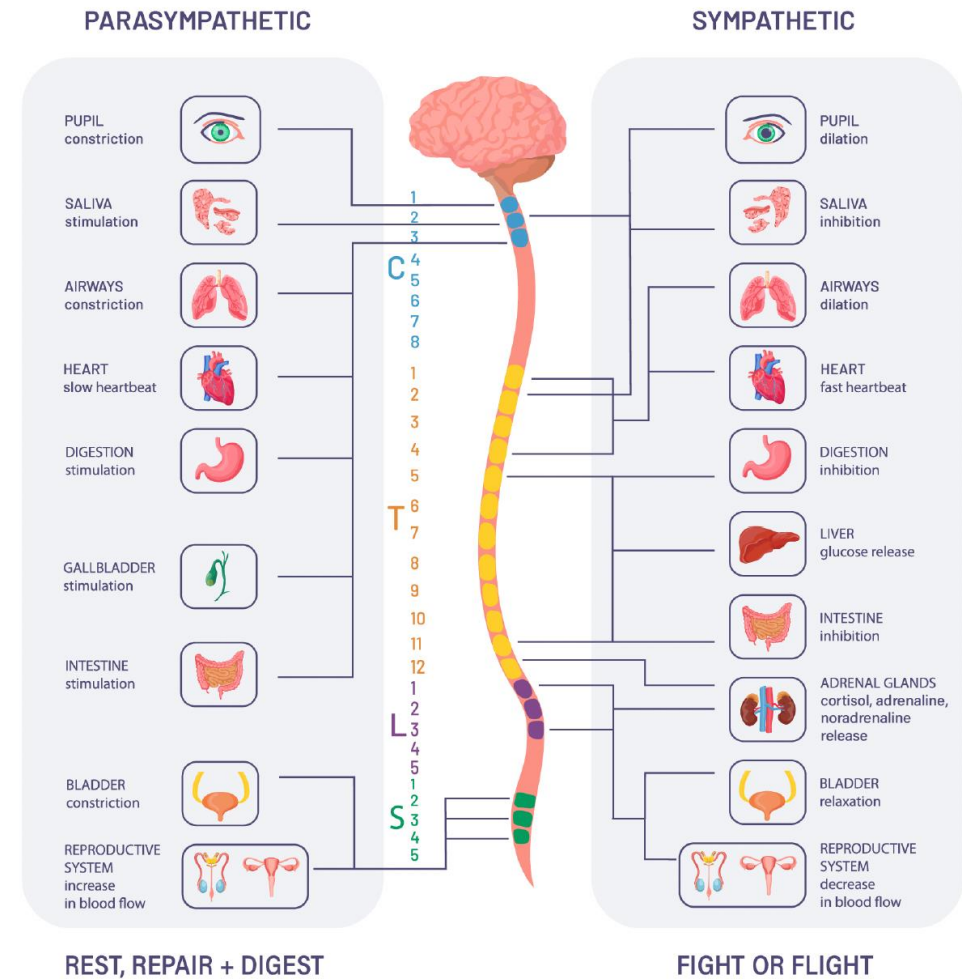
Benefits for ADHD

Cat-cow encourages mindfulness, regulates emotional response, and soothes the nervous system. Additionally, cat-cow massages your gut muscles, helping soothe the gut-brain axis and facilitating regular bowel movements.



Module 5 aims to improve the nervous system resilience.

AUTONOMIC NERVOUS SYSTEM



Dr Miguel Toribio-Mateas
The Creative Scientist™ ©2024



And to help with emotional awareness.

1 Hy Happy															2 Af Affectionate						
3 Pl Pleased	4 Se Separate															5 Lw Low	6 Bl Bleak	7 Wo Worried	8 Ag Aggravated	9 Pt Patient	10 Fo Fondness
11 Jy Joyful	12 Rm Remote															13 Sa Sad	14 Mi Miserable	15 Dp Desperate	16 Ir Irate	17 To Tolerant	18 Y Yearning
19 DI Delighted	20 Ly Lonely	21 C Curious	22 Sd Stimulated	23 Ex Excited	24 Su Surprised	25 Da Daring	26 En Energetic	27 Pa Playful	28 Op Optimistic	29 Ho Hopeful	30 Cv Creative	31 So Sombre	32 Sw Sorrowful	33 Dj Dejected	34 V Vexed	35 Ge Gentle	36 De Desire				
37 B Blissful	38 Al Alienated	39 Ru Rueful	40 Re Resentment	41 Bi Belittled	42 Fs Forsaken	43 Cr Crushed	44 W Wounded	45 Ma Maligned	46 H Humiliated	47 Dg Degraded	48 A Abused	49 Sb Subdued	50 Dm Demoralised	51 Ey Empty	52 O Outrage	53 Gn Generous	54 Ad Adoration				
55 EI Elated	56 I Isolated	57-71 Ti Timid	72 U Uneasy	73 Ts Tense	74 Ah Apprehensive	75 N Nervous	76 Ax Anxious	77 Dd Distressed	78 Fr Frightened	79 T Terrified	80 Py Paralysed	81 Uh Unhappy	82 Me Morose	83 Ds Desolate	84 Fu Fury	85 Te Tender	86 P Passionate				
87 E Ecstatic	88 Ab Abandoned	89-103 Av Adventurous	104 Tc Tenacious	105 Be Brave	106 Cg Courageous	107 Bo Bold	108 Ip Intrepid	109 F Fearless	110 Fy Feisty	111 M Masterful	112 le Invincible	113 Aw Awful	114 Dr Dreadful	115 S Suicidal	116 R Rage	117 Id Indulgent	118 L Love				
58 Lu Lust	59 Gy Gluttony	60 Gd Greed	61 Sl Sloth	62 Wr Wrath	63 Ev Envy	64 Pe Pride	65 Ce Chaste	66 Tp Temperance	67 Cy Charity	68 K Kindness	69 Hu Humility	70 J Jealousy	71 Sh Shame								
90 Am Ambivalence	91 Ap Apathy	92 Sg Sanguine	93 Ph Phlegmatic	94 No Nostalgic	95 Mc Melancholic	96 Ne Neutral	97 Ch Cheer	98 Gl Glee	99 Mr Merry	100 Ra Rapture	101 Eh Exhilarated	102 D Delirious	103 Eu Euphoric								



The Power of Meditation

In this lesson, I'm introducing 6 guided meditations specifically tailored to harness the strengths and navigate the intricacies of ADHD. Discover how mindfulness and meditation can become key tools in enhancing cognitive functions, reducing distractibility, and empowering the creative and dynamic problem-solving skills inherent in ADHD.

You can play each of the meditations here, or you can download them to your computer, mobile phone or tablet.

Remember, practice is the key to unlocking the benefits. Find one or two that you resonate with and stick to them regularly, or experiment with them all. Do it with an open mind and let your heart guide you. You might be surprised by the places you may end up visiting as a result.

Also, don't forget to download the additional notes with the neurobiological background to each of the techniques so you can learn about which areas of the brain you're working on as you're being guided on each journey of exploration.

Download Lesson Notes

▶ Emotional Barometer
Dr Miguel Toribio-Mateas [Download](#)

▶ Web of Awareness
Dr Miguel Toribio-Mateas [Download](#)


▶ Calm in the Eye of the Storm
Dr Miguel Toribio-Mateas [Download](#)

▶ Embrace Your Challenges
Dr Miguel Toribio-Mateas [Download](#)

▶ A Different Perspective
Dr Miguel Toribio-Mateas [Download](#)

▶ Earth's Embrace
Dr Miguel Toribio-Mateas [Download](#)

Guided Meditations: The Neurological Background

Please post your questions or comments about this lesson on the [Module 5 discussion board](#) 

Complete & Continue

Embrace Your Challenges: A Compassion Journey

"Embrace Your Challenges: A Compassion Journey" is a profoundly nurturing guided meditation designed to cultivate self-compassion, particularly for people navigating the complexities of ADHD. This exercise encourages you to acknowledge and gently confront your executive functioning challenges, fostering an environment of kindness and understanding towards yourself. By reflecting on specific personal difficulties and visualising compassionate responses, you'll be guided to transform your inner dialogue into one of support and self-care. This process of self-compassion is crucial for mitigating feelings of inadequacy or frustration that ADHDers can experience, promoting a healthier self-esteem and a more forgiving perspective towards personal struggles.

Neurobiological rationale

Neurologically, this meditation engages the brain's emotional regulation centres, such as the prefrontal cortex and the mirror neurone system, which is involved in empathy and compassion. By practising self-compassion, there is an activation in areas related to positive emotions and social connection, which can counteract the negative emotional states often experienced by those with ADHD. This exercise strengthens the prefrontal cortex's ability to regulate emotions, enhancing resilience and reducing the impact of stress and anxiety. Simultaneously, it nurtures the mirror neurone system's capacity for empathy but is directed inward, fostering a sense of self-compassion that is as beneficial as the compassion you might feel towards others. "Embrace Your Challenges: A Compassion Journey" not only aids in soothing the emotional turmoil associated with ADHD but also builds a foundation for a more supportive and understanding relationship with yourself, leading to improved mental health and wellbeing.

Guided Meditations

Neurobiological Background

Thrive With ADHD



Module 6

The Psychology of ADHD Through a Neuroscience Lens

Themes

Differences, Deficits + Ordinary Brilliance

Positive Psychology, Self-Love + ADHD

Sleep + Rest ADHD

The Power of Play in ADHD

Growth Mindset + ADHD

Navigating the Complexities of ADHD: Understanding and Overcoming Challenges



Beyond the Superpower Myth

Debunking superpower expectations. The narrative that neurodivergent individuals must possess extraordinary “superpowers” to be valued is a myth that we must dismantle. It’s essential to acknowledge that everyone, including those with ADHD, has a range of abilities that are inherently valuable and do not require sensationalisation to be appreciated.

Valuing neurodivergent abilities: Let us shift the discourse from seeking “superpowers” to recognising the intrinsic worth of every person’s abilities. **Celebrating the “ordinary brilliance” of neurodivergent minds means recognising the natural talents and contributions that enrich our collective human experience without the need for exceptionalism.**



Thrive With ADHD - Module 6 - Lesson 1



Neurodiversity as Natural Variation

Understanding neurodiversity as natural: Embracing neurodiversity involves appreciating the natural variability in human brain development. It's a perspective that sees neurological differences as a part of the spectrum of human diversity.

Empowering neurodivergent contributions: Focusing on the “power of neurodiversity” means recognising the unique skills and abilities that come with being neurodivergent. It’s about valuing these traits and fostering an inclusive society where all forms of cognitive functioning are celebrated.



Thrive With ADHD - Module 6 - Lesson 1



Theoretical Foundations of Self-Love

In positive psychology, self-love is conceptualised as an appreciation for one's worth and virtue. Neuroscientifically, this appreciation is associated with healthier levels of serotonin, the key neurotransmitter implicated in mood regulation, which can be dysregulated in ADHD. Self-love practices can help recalibrate serotonin levels, enhancing feelings of wellbeing.

Moreover, self-acceptance involves embracing one's whole self, which can lead to activation in the brain's default mode network (DMN), involved in self-referential thought and daydreaming. This neural activity is important for ADHDers as it allows for introspection and integrating personal values with self-concept, fostering a holistic sense of identity.



Self-Related Practices at a Glance

Self-acceptance: Embracing all aspects of yourself without judgment.

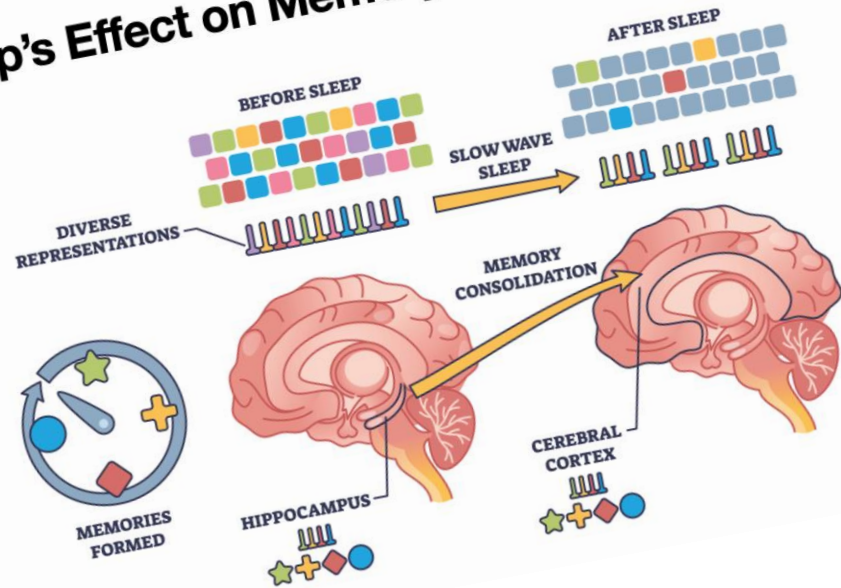
Self-love: Prioritising your happiness and wellbeing.

Self-care: Activities you engage in to improve your health and happiness.

Self-compassion: Offering kindness to yourself in moments of failure or difficulty.



Sleep's Effect on Memory Consolidation



Thrive With ADHD - Module 5 - Lesson 3

Practical Sleep Strategies

Get a blackout blind

Melatonin production, the hormone responsible for regulating sleep-wake cycles, is influenced by light. Darkness signals the pineal gland to produce melatonin, preparing the body for sleep.

Go to bed 1 hour earlier

Circadian rhythms, our internal biological clocks, dictate our sleep patterns. Going to bed earlier can help realign these rhythms with natural light cycles.



Bathing: My Favourite Way to Rest

BMC Complement Altern Med. 2017; 17: 172. PMID: PMC5371197
Published online 2017 Mar 28. doi: 10.1186/s12906-017-1676-5

Effects of hyperthermic baths on depression, sleep and heart rate variability in patients with depressive disorder: a randomized clinical pilot trial

Johannes Naumann,^{1,2} Julian Grebe,² Sonja Kalfel,² Tomas Weinen,² Catharina Sadaghiani,¹ and Roman Huber²

Author information Article notes Copyright and License information PMC Disclaimer

Conclusions

In conclusion, this pilot study demonstrates effects of HTB on depressive symptoms and sleep quality in depressed patients, especially in severely depressed patients, with fast onset of treatment success after 4 treatments in 2 weeks, without severe AE and with relatively good acceptance and tolerability. With HTB treatment, the core body temperature can be raised rapidly and with clinically relevant effect (2.4 °C in 20 min).

J Appl Physiol (1985). 2022 Jul 1;133(1):234-245. doi: 10.1152/jappphysiol.00684.2021. Epub 2022 Jun 23.

Repeated warm water baths decrease sympathetic activity in humans

Jian Cui,¹ Zhaohui Gao,¹ Urs A Leuenberger,¹ Cheryl Blaha,¹ Jonathan Carter Luck,¹ Michael D Herr,¹ Lawrence I Sinoway,¹

Affiliations expand PMID: 35736952 PMID: PMC9291418 DOI: 10.1152/jappphysiol.00684.2021

DISCUSSION

The main findings of this study are that 4 wk of repeated warm baths induces a decrease in resting MSNA and a decrease in resting HR. The sensitivity of baroreflex control of MSNA and the cardiac baroreflex sensitivity are not altered by the repeated warm baths, although the operating points are reset. Moreover, the MSNA and hemodynamic responses (i.e., changes) to a variety of stressors are not altered.

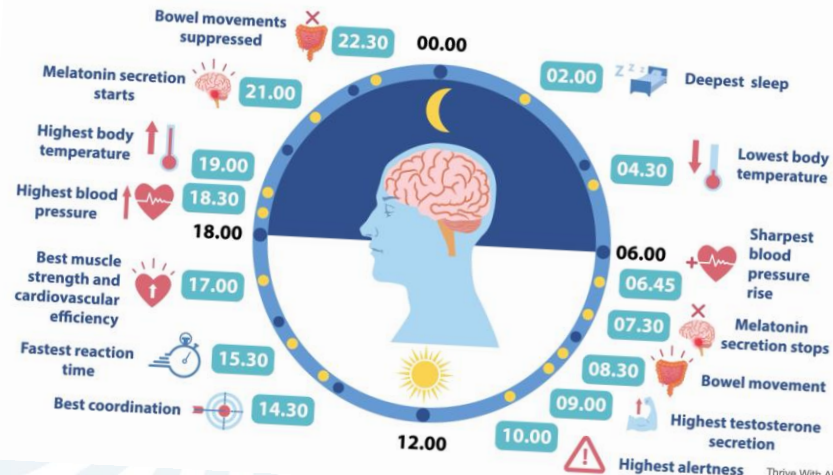
Why a daily bath helps beat depression - and how to have a good one

According to researchers, a regular warm bath can have a greater effect on mood than physical exercise. Here's how to enjoy the plunge, even if you prefer a shower



Thrive With ADHD - Module 6 - Lesson 3

Circadian Rhythms



Thrive With ADHD - Module 6 - Lesson 3



THE 8 PLAY PERSONALITIES

The Joker

A person who loves to joke and make others laugh



The Artist/Creator

Enjoys creating and making things



The Explorer

A person who loves to explore something new or different, either physically, emotionally or mentally

The Collector

Enjoys gathering interesting collections of objects and experiences



The Director

Enjoys planning & executing events, loves organization



The Competitor

Loves a competitive game with rules, and likes to play to win



The Kinesthete

Someone who loves to move and push their body to see what it can do

The Storyteller

Loves to use their imagination to tell stories in writing, or in acting



Who knows a "Storyteller"?

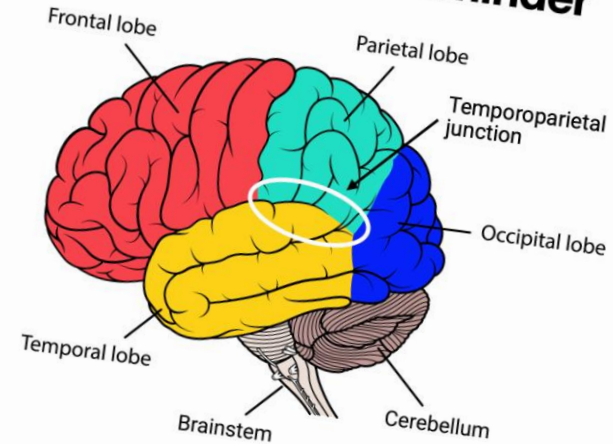
They weave narratives that can help process complex emotions and social dynamics, engaging areas such as the temporoparietal junction, critical for theory of mind and empathy, skills that are sometimes challenging for those with ADHD.

Explorers + Directors

The "Explorer" ignites the exploratory circuits in the brain, particularly in the prefrontal cortex and hippocampus, regions involved in planning and spatial navigation. This stimulation can be a source of intrinsic motivation and a powerful counterbalance to the attentional challenges of ADHD.

The "Director" enjoys planning and executing events and loves organisation, which can be therapeutic for people with ADHD by providing a sense of control and accomplishment, enhancing their executive function skills.

Brain Anatomy Reminder



The **temporoparietal junction (TPJ)** is an area of the brain where the temporal and parietal lobes meet. The TPJ is a bit of a melting pot that incorporates information from the thalamus, the limbic system, and the visual, auditory, and somatosensory systems.

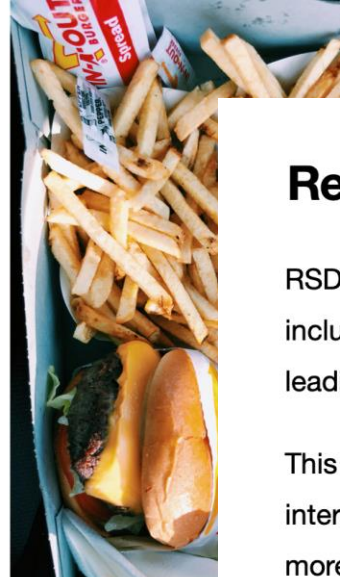
Thrive With ADHD - Module 6 - Lesson 4



Self-Sabotaging

Self-sabotaging behaviours in ADHD can be linked to an impaired reward system, where immediate gratification from unhealthy behaviours temporarily boosts dopamine levels but disrupts the long-term emotional and cognitive balance.

These behaviours can form maladaptive coping mechanisms, many times addictive (e.g. alcohol, drugs, sex, food binging) that then feed into self-sabotage, hindering personal growth and achievement and reinforcing negative self-perceptions and cycles of failure.



Rejection Sensitivity Dysphoria (RSD)

RSD is linked to the emotional regulation centres of the brain, including the amygdala, which can be more reactive in ADHD, leading to intense feelings of distress upon perceived rejection.

This heightened sensitivity can profoundly affect social interactions and self-esteem for those with ADHD, making them more vulnerable to depression and anxiety in the face of criticism or rejection.



Navigating Challenges In ADHD



Imposter Syndrome

Imposter Syndrome, a psychological pattern where individual doubt their accomplishments and fear being exposed as a "fraud," intersects notably with ADHD. This overlap is grounded in ADHD's core challenges; difficulty with consistent performance, forgetfulness, and struggles with executive function can fuel feelings of inadequacy and self-doubt.

Neurobiologically, the ADHD brain's unique wiring affects self-perception and emotional regulation, making it more susceptible to imposter feelings. Addressing Imposter Syndrome in ADHD involves strategies that bolster self-esteem, recognise inherent strengths, and develop a more compassionate self-dialogue, acknowledging achievements while accommodating neurodiverse needs.



Five Layers of Insight

A Practical Tool to Support Decision-Making + Avoid Overwhelm

Decision-making can sometimes feel like navigating a maze in the fog. Whether it's pondering over a career shift, deciding on the week's menu, or contemplating a social gathering, the path isn't always clear.

I have adapted the "Five Whys" technique, birthed by Toyota's founder Sakichi Toyoda, to offer a lantern that guides you through the confusion, saving you cognitive energy and minimising the chances of getting decision paralysis.

When you use the tools I share with you on the course, please embark on your journey of exploration with curiosity and an open heart, and let yourself be ar by the insights that emerge from within.

In health,

Dr Miguel

Dr Miguel Toribio-Mateas, Clinical Neuroscientist

The Five Layers of Insight

- 1. Initial hesitation:** What is my initial feeling about this decision?
When facing a decision, my initial feeling often carries a whisper of apprehension—a momentary pause where instinct and reason briefly collide, signalling a deeper introspection.
- 2. Underlying cause:** What belief or experience is shaping this hesitation?
This hesitation is rooted in a mosaic of past beliefs and experiences woven into current perceptions, quietly influencing my crossroads.
- 3. Emotional response:** What emotions are attached to this belief?
Attached to these woven threads are the emotions they elicit. They're a complex blend of anticipation and anxiety, colouring my judgment and decision-making process.
- 4. Personal reflection:** How does this emotion reflect my past interactions and self-image?
These emotions serve as mirrors reflecting facets of my past interactions and self-image I've sculpted over time, revealing patterns and biases that silently guide my choices.
- 5. Core insight:** What is the fundamental need or fear at the heart of this emotion?
At the very core of these emotions lies a fundamental need or fear, a bedrock truth-seeking acknowledgement, whether it be a quest for validation or a defence against a deep-seated dread of inadequacy.

Neurobiological Rationale + Psychological Foundations

What's going on in the brain when using this technique?

When engaging in the "Five Layers of Insight," you are essentially exercising the prefrontal cortex, the brain region critical for decision-making, planning, and impulse control. This practice helps strengthen executive functions that are often challenged by ADHD, such as task initiation and completion, working memory, and emotional regulation.

Additionally, this reflective process involves the limbic system, which is crucial for emotional processing. By identifying and acknowledging emotions tied to decisions, you can better manage the emotional dysregulation often experienced with ADHD.

The default mode network (DMN), active during introspective thought and self-reflection, also plays a key role here. The "Five Layers of Insight" encourages the DMN's engagement in a focused and productive manner, helping to counteract tendencies toward rumination or inattention.





Summary

A wholly online course.

For Practitioners + clients

Access to Dr Miguel throughout the course.

LOTS of practical tools rooted in neurobiology.

£100 off with code BRAIN100



Download a course guide

drmiguelmateas.com/thrive-with-adhd-course

Or grab me after the workshop and ask me any questions you may have.

