RESEARCH PORTFOLIO | NOVEMBER 2026

LIFESTYLE, HEALTH & WELL-BEING

Four Evidence-Based Scholarly Reviews

Portfolio Overview

A multidisciplinary synthesis of peer-reviewed research and authoritative public-health guidance on longevity, exercise physiology, psychological well-being, and nutritional science.

RESEARCH REVIEW 01 | PREVENTIVE HEALTH & HEALTHY AGING

The Foundations of Healthy Living: How Daily Habits Influence Long-Term Health and Quality of Life

Research leads: Lucas Moreau and Michael Thompson

Abstract: Healthy aging is shaped by interacting behavioral, social, clinical, and environmental determinants. Evidence indicates that regular movement, nutritious dietary patterns, sufficient sleep, tobacco avoidance, and management of cardiometabolic risk optimize long-term healthspan.

1. Introduction and Conceptual Model

Lifespan describes total years lived; healthspan refers to years lived with preserved physical, cognitive, and functional capacity. A lifestyle-centered framework considers daily behaviors as repeated exposures influencing blood pressure, insulin sensitivity, inflammation, and cumulative disease risk alongside environmental and social determinants.

2. Key Behavioral Pillars

- **Physical Activity:** Accumulate 150–300 minutes of moderate-intensity aerobic activity weekly plus multi-day muscle strengthening.
- **Nutrition:** Emphasize patterns rich in vegetables, fruits, legumes, whole grains, nuts, and unsaturated fats.
- **Sleep & Recovery:** Prioritize 7–9 hours of sleep to support attention, mood, metabolic regulation, and cardiovascular health.
- **Habit Formation:** Sustainable change relies on accessible cues, progressive repetition, and reducing environmental friction.

1. World Health Organization. (2020). *WHO guidelines on physical activity and sedentary behaviour*. Geneva: WHO.
2. Li, Y., et al. (2018). Impact of healthy lifestyle factors on life expectancies in the US population. *Circulation*, 138, 345–355.
3. Estruch, R., et al. (2018). Primary prevention of cardiovascular disease with a Mediterranean diet. *NEJM*, 378, e34.

RESEARCH REVIEW 02 | EXERCISE PHYSIOLOGY & PERFORMANCE

Beyond Exercise: How Structured Physical Activity Transforms Health, Energy, and Everyday Performance

Research leads: Matteo Ricci and Michael Thompson

Abstract: Structured physical activity produces measurable adaptations in cardiorespiratory capacity, muscular strength, balance, and functional performance. This review evaluates exercise programming, progressive overload, recovery, and lifelong adaptation.

1. Exercise as an Adaptive Stimulus

Physical training creates repeated physiological demands that prompt physiological adaptation. Cardiorespiratory fitness strongly predicts long-term health outcomes, while progressive resistance exercise maintains muscle mass, bone density, and functional independence across adulthood.

2. Programming Considerations

- **Aerobic Conditioning:** Combines brisk walking, cycling, or interval training to expand cardiovascular capacity.
- **Resistance Training:** Targets major movement patterns to preserve strength and joint integrity.
- **Recovery & Progression:** Organizes workload frequency and intensity, using sleep and nutrition to allow tissue repair.

1. American College of Sports Medicine. (2009). Progression models in resistance training for healthy adults. *MSSE*, 41, 687–708.
2. Kodama, S., et al. (2009). Cardiorespiratory fitness as a quantitative predictor of all-cause mortality. *JAMA*, 301, 2024–2035.

RESEARCH REVIEW 03 | MENTAL HEALTH & BEHAVIORAL PSYCHOLOGY

The Psychology of Everyday Life: How Lifestyle Choices Shape Mental Health, Stress, and Emotional Resilience

Research leads: Sarah Mitchell and Lucas Moreau

Abstract: Psychological well-being emerges from interactions among physiological health, social connection, work demands, and stress regulation. Lifestyle strategies complement formal psychological care to bolster resilience.

1. Biopsychosocial Determinants

Emotional resilience depends on a combination of regular movement, restorative sleep, manageable workloads, and strong social bonds. Chronic stress and burnout are mitigated when individual coping strategies are paired with supportive social and organizational environments.

2. Core Interventions

- **Sleep & Emotion:** Restorative sleep regulates mood, attention, and cognitive coping.
- **Social Connectedness:** High-quality interpersonal relationships are strongly linked to long-term health and emotional stability.
- **Mindful Practices:** Structured focus and boundary setting reduce occupational stress and cognitive fatigue.

1. Singh, B., et al. (2023). Effectiveness of physical activity interventions for improving depression and anxiety. *BJSM*, 57, 1203–1209.
2. Holt-Lunstad, J., et al. (2010). Social relationships and mortality risk: A meta-analytic review. *PLoS Medicine*, 7, e1000316.

RESEARCH REVIEW 04 | NUTRITIONAL SCIENCE & METABOLIC HEALTH

Fueling a Healthier Life: The Relationship Between Nutrition, Metabolic Health, and Performance

Research leads: Wei Zhang, Matteo Ricci, and Sarah Mitchell

Abstract: Sustainable dietary patterns influence energy balance, lipid profiles, glycemic control, and physical recovery. Focus is placed on food quality, fiber adequacy, macronutrient distribution, and hydration.

1. Metabolic Protection & Patterns

Overall dietary pattern quality matters more than single isolated nutrients. Patterns like Mediterranean and DASH diets demonstrate consistent cardiometabolic benefits, improved lipid profiles, and better glycemic control across broad clinical trials.

2. Practical Nutritional Guidelines

- **Macronutrient Balance:** Adequate protein for tissue maintenance; complex carbohydrates and healthy fats for sustained energy.
- **Fiber & Whole Foods:** High fiber intake from legumes, fruits, and whole grains supports gut and metabolic health.
- **Sustainable Habits:** Focus on long-term dietary quality and accessibility rather than restrictive short-term diets.

1. Appel, L. J., et al. (1997). A clinical trial of the effects of dietary patterns on blood pressure. *NEJM*, 336, 1117–1124.
2. Reynolds, A., et al. (2019). Carbohydrate quality and human health: A series of systematic reviews. *The Lancet*, 393, 434–445.

Cross-Portfolio Synthesis

Across all four areas, health behaviors interact: physical activity enhances sleep and mental health, nutrition fuels physical adaptation, and psychological well-being sustains long-term lifestyle habits. Integrated, moderate-burden practices produce the most durable health benefits.