



METABOLIC BALANCE®

Personalized Nutrition



**SUPPORTING THE BODY BACK INTO BALANCE
THROUGH FOOD AND LIFESTYLE**

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Executive Summary

Metabolic Balance® - A Scientifically Based and Proven Program to Achieve Better Health Through Natural Whole Foods



VISION *To support individuals to enjoy long-term sustainable health, vitality and wellbeing.*



MISSION *To provide healthier choices and the nutritional needs of each individual to address underlying causes of inflammation and metabolic dysfunction, creating hormonal balance and a vibrant quality of life.*



CONCEPT *We consider an individual's unique dietary needs when creating a nutrition plan and ensure that all nutrient requirements are met. We use, promote and share the most up-to-date knowledge on healthy eating and its influence on the metabolic processes in the body.*

Metabolic Balance® is a comprehensive nutrition program based on personalized and customized nutrition plan and professional coaching support. This nutrition plan includes the necessary amount of essential building blocks (proteins, carbohydrates, fats, minerals, vitamins and trace elements) through appropriate and natural wholefoods.

Each nutrition plan lists the ideal proteins, vegetables, fruits, fats and starches based on glycemic load and metabolic rate. These foods are readily available in grocery stores and plans are easy to follow, and can be implemented into any lifestyle.

This detailed and easy to follow plan includes...

- ✓ which foods to eat to provide the right nutrients
- ✓ in what quantities these foods should be eaten
- ✓ what combination of foods are the best
- ✓ when and how to consume these foods
- ✓ how to successfully maintain good eating habits for long term health

Metabolic Balance® is evidence-based with all recommendations founded in established and newly emerging nutritional science. Results from independent research studies have shown improved quality of life, weight loss, sustainable weight management, improved metabolic syndrome and cardiovascular risk factors.

An Overview of Nutritional Medicine

The Efficacy of Personalized Nutrition

The concept of using food as medicine is rooted in ancient traditions and is now increasingly recognized in modern medical research. Here, we aim to provide a brief overview of the evidence supporting the efficacy of nutritional medicine, illustrating how dietary choices can significantly impact health outcomes. This perspective is integral for healthcare professionals, including medical doctors, who are at the forefront of patient health management.

Historically, cultures worldwide have recognized the medicinal properties of food. Hippocrates, the father of Western medicine, famously stated, “Let food be thy medicine.” In recent decades, scientific research has begun to catch up with these ancient wisdoms, uncovering the mechanisms by which nutrients affect bodily functions and health.

Extensive research links diet to the prevalence and management of chronic diseases. For instance, diets rich in fruits, vegetables, whole grains, and lean proteins – and low in processed foods and sugars – are associated with a reduced risk of cardiovascular diseases, type 2 diabetes, and certain cancers. The Mediterranean diet, characterized by high consumption of olive oil, nuts, and fish, has been particularly noted for its protective effects against heart disease.

An emerging field, nutritional psychiatry, explores the relationship between diet and mental health. The gut-brain axis, a bidirectional communication system between the gastrointestinal tract and the brain, is a key focus. Studies suggest that a healthy gut microbiome, fostered by a diet rich in prebiotics and probiotics, can positively influence mood and cognitive functions, offering potential interventions for depression and anxiety.

Personalized nutrition considers individual variability in metabolism and lifestyle when recommending dietary interventions. This approach, supported by nutrigenomics – the study of the interaction between nutrition and genes – underscores the potential of tailored diets in preventing and managing diseases. Numerous clinical trials and epidemiological studies provide robust evidence for the role of diet in health. For example, the PREDIMED study demonstrated the cardiovascular benefits of the Mediterranean diet, while the Diabetes Prevention Program highlighted the efficacy of dietary changes in reducing diabetes risk. Despite compelling evidence, challenges remain in integrating nutritional medicine into mainstream healthcare. These include a lack of comprehensive nutritional training for medical professionals, variability in individual responses to dietary changes, and the influence of socioeconomic factors on diet.

The evidence supporting nutritional medicine is robust and growing, underscoring the need for its integration into general healthcare practice. As frontline health managers, medical doctors can play a pivotal role in this integration, using dietary interventions as a complement to traditional medical treatments. Embracing the adage that food can indeed be medicine, healthcare providers can offer more holistic, effective care for their patients.

At Metabolic Balance®, we aim to be a bridge between health professionals and the nutritional support their patients need, in an easy, manageable and most importantly, highly effective whole food approach for lifelong health and wellbeing.

*see references on page 13

What is Metabolic Balance®?



Helping Individuals Reclaim Their Health

Metabolic Balance® is a personalized wholefood program, developed by a German physician and his team, that brings the body back into balance. It is a coach led nutrition lifestyle program for empowering individuals to reach their health potential.

Unlike other weight management programs involving pills or shakes, Metabolic Balance® *focuses solely* on natural wholefoods and educates people how to eat them. With over 25 years of scientific and innovative understanding, the Metabolic Balance® program has been developed to help people achieve optimal health naturally.

Personalized Approach

The Metabolic Balance® program is designed to naturally balance hormones, enzymes, and biochemistry, which can lead to improved digestion, better sleep, increased energy, and overall well-being.

This innovative program is not a one-size-fits-all "diet", but a personalized approach that is tailored to your unique body chemistry.

How does Metabolic Balance work?

A Step-by-Step Approach to Healthier Eating

1

Initial Consultation

Book and attend a first consultation with a qualified Metabolic Balance coach to ensure the Metabolic Balance® Program is the right fit. At the initial consultation the client's current situation and wellbeing will be assessed, the Metabolic Balance® program introduced and objectives and goals set.

2

Blood Test

Blood is taken at a local approved lab. The blood test allows for a functional health analysis of the client. Once results are received and a plan has been created, a new consultation is arranged to discuss results as needed and the personalized nutritional plan is presented.

3

Individual Nutrition Plan & Coaching Sessions

The personal meal plan presents healthy, varied meals which are easy to adapt to, with the 8 essential guidelines and a smartphone app to assist. Coaching sessions with the supporting practitioner are scheduled to ensure health goals are achieved and to help the client stay on track through the phases of the program.

4

The Four Phases

- **Phase 1** – During the two preparation days the body is gently prepared for nutritional change.
- **Phase 2** – In the first two weeks, clients are asked to strictly adhere to the food list in their nutrition plan. Thereafter, healthy oils will be reintroduced as well as an optional treat meal for one meal a week.
- **Phase 3** – The food list on the plan is extended and, under the guidance of their coach, the client starts to introduce additional healthy foods.
- **Phase 4** – Ongoing healthy eating lifestyle which is naturally followed, based on the client's experience of the first three phases. By slowly incorporating new foods from outside their plan, and they are able to personally assess how they feel and adjust as needed. Their newly-learned eating habits become second nature and easy to sustain.

Required pathology markers

GGT
AST
ALT
Alk. Phos.
Total Protein
Urea
Urate
Potassium
Creatinine
LD
Sodium
Creatine Kinase
RBC
Haemoglobin
Haematocrit
White Cell Count
Monocytes
Lymphocytes
Neutrophils
Eosinophils
MCH
MCV
Platelets
Amylase
Lipase
Bilirubin
Glucose (fasting)
Calcium
Total Cholesterol
HDL Cholesterol
LDL Cholesterol
Triglycerides
Serum Iron
TSH
C-Reactive Protein

Personalized Nutrition Analysis

All plans are individually generated using a client's blood test results, body measurements, current health conditions and prescription medication.

Strictly Coach Only

Only available to be offered by fully qualified Metabolic Balance coaches.

Scientifically Validated

All recommendations are based on published nutritional literature and knowledge. The foundations of Metabolic Balance® arise from the founders' personal and clinical experience from over 20 years in practice.

Coaching Program

The right food is not enough. Clients need coaching support to bring about long term lifestyle change and ensure ongoing success.

Supports Various Conditions

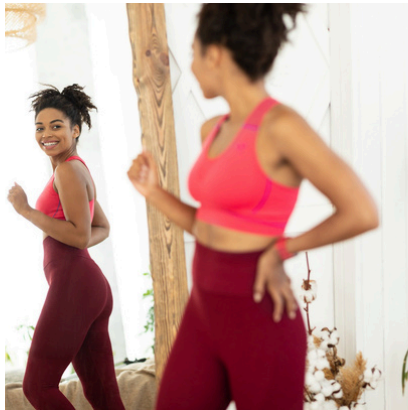
Inflammation is a key factor in numerous chronic health conditions. Personalized dietary changes can rapidly and effectively reduce inflammation, leading to notable improvements in the quality of life.

Personalized Nutrition

Four Reasons Why Food Choices Need To Be Unique to the Individual

1 Body Functions

Our daily food choices have a profound influence on the functioning of body systems and processes and therefore on overall well-being and health.



2 Metabolic Health

Metabolic Balance® focuses on improving the overall wellbeing. By addressing underlying causes and restoring the body's balance, it's possible for symptoms to naturally resolve.

3 The Blood Tests Provide Essential Information

The blood is a long recognized and established method for reliable, accurate information about the current function of organs and body systems and whether inflammation or risks exist for a disease. The pathology markers measured also highlight which nutrients are above or below optimum levels.

The detailed and comprehensive functional pathology analysis, in combination with measurements, forms the critical basis of what the individual client needs to restore balance.



4 Customized Care

Metabolic Balance® further adjusts the meal plan to accommodate needs and personal preferences, such as allergies, conditions and individual likes and dislikes.

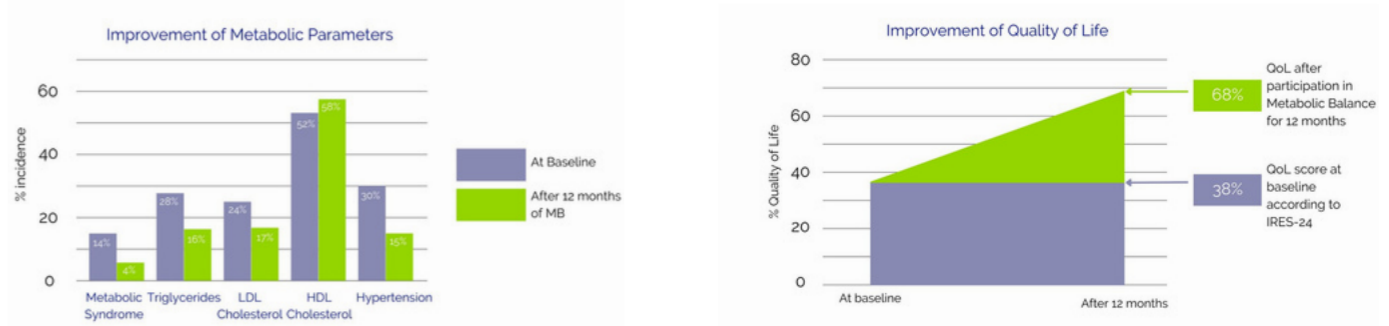
Our proprietary analysis utilizes the individual's body measurements, blood values and health data to create a completely individualized meal plan.

The Research

Results Using Our Method Are Demonstrated By Peer Reviewed Published Research

The “Journal of Nutrition and Metabolism” published a study in 2010 demonstrated that the Metabolic Balance® program as a highly effective program for both weight loss and improved quality of life.

The study, following 472 individuals over a 12 month intervention period, demonstrated Metabolic Balance® as a highly effective approach for overweight individuals, aiding not just initial weight reduction but also in sustaining long-term weight loss. Throughout the duration of the study participants saw considerable improvements in their blood values *(figure 1.5). Furthermore, there was a distinct improvement in their overall personal and health-related quality of life (see graphs to the right & below).



In 2023, two case studies using Metabolic Balance® were published by Alternative Therapies demonstrating the impact Metabolic Balance® played in supporting highly effective improvements for Type 2 Diabetes Mellitus.

The article underscores the urgency of addressing Type 2 Diabetes Mellitus (T2DM) with effective dietary strategies. It advocates for personalized nutrition therapy with coaching support, as evidenced by improved health outcomes in the case studies. Intensive lifestyle interventions, like those in the Look AHEAD trial, significantly reduce cardiovascular risk factors and improve overall quality of life. Thereby demonstrating the potential for personalized dietary approaches to become a standard in diabetes care, potentially enhancing health and reducing healthcare costs.

The Metabolic Balance® program, delivered via personalized coaching was shown to significantly improve metabolic functions and A1c levels *(figure 1.3). The author concludes the Metabolic Balance® program, using a balanced diet of whole foods, could help to reverse insulin resistance and promote long-term healthy eating habits.

Figure 1.5 Client 1: Lipid Profile before and after 4 months of starting the intervention

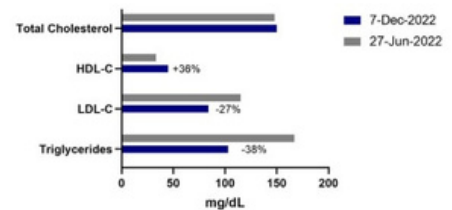
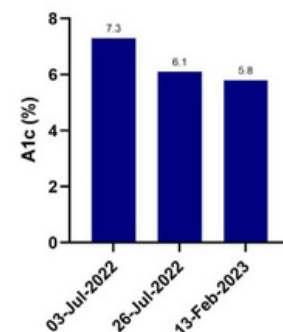


Figure 1.3 Client 1: A1c levels in %



*see references on page 13

The Plan

The Metabolic Balance® Nutrition Concept

A Sophisticated Plan Simple to Implement

Metabolic Balance® is a comprehensive nutrition concept, based on intensive and individual care as well as the creation of an individual meal plan.

The plan is 100% food based with no supplements or meal replacement shakes, thereby offering a true healthy eating and lifestyle learning potential for the client to achieve ongoing success.

Every plan, personalized to each client, will incorporate the following:



Food	Quantities	Time Frame	Sustainability
<ul style="list-style-type: none"> Which foods to eat to provide the right nutrients In which combination foods are best for the individual 	<ul style="list-style-type: none"> In what quantities these foods should be eaten 	<ul style="list-style-type: none"> When and how to consume these foods 	<ul style="list-style-type: none"> How to maintain the new eating habits for long term sustainable success



What symptoms may Metabolic Balance® support?

- ✓ Unwanted weight gain and obesity
- ✓ Hormone dysregulation
- ✓ Menopause and peri-menopause symptoms
- ✓ Hypersensitivity and allergies
- ✓ Food sensitivities
- ✓ Fatigue and low energy
- ✓ Poor gut health
- ✓ Skin conditions
- ✓ Management of chronic conditions such as diabetes mellitus and hypertension
- ✓ Dysregulated sleep patterns

<p>What do you measure in the blood test?</p>	<p>Full Blood Count; E/LFT; C-reactive protein; Amylase/Lipase; Creatine Kinase; Lipid panel; Iron studies; Thyroid Function Tests; Fasting glucose and electrolytes. (FBE,UECr,LFTs, CRP,Uricacid,CK,LDH,Amy,Lip,Festudies,TSH,Lipidprofile(fasting),glucose (fasting), Calcium)</p>
<p>What foods are included in the nutritional plan?</p>	<p>Metabolic Balance® is a whole food program with all recommendation easily sourced from local grocery store or farmers market. Following the analysis of their personal data, each client receives a detailed list of their ideal protein sources, fats, starches, fresh vegetables, and fruit. If a food is listed on their plan they can eat it, if it is not listed, they should avoid it whilst following the program. There are no meal replacement shakes, energy bars, artificial products or supplements associated with Metabolic Balance®. It's simply a highly personalized food list and menu plan.</p>
<p>Is Metabolic Balance® solely for weight loss?</p>	<p>Metabolic Balance® is a holistic well-being program that naturally restores overall balance to the body. It has been shown to be highly beneficial for inflammatory conditions including metabolic syndrome, cardiovascular health, hormone balance, immune disorders, skin health and mental health problems. Healthy weight loss naturally results from improved overall balance and health.</p>
<p>Why is the blood test necessary?</p>	<p>Blood analysis is a well-established and precise technique for assessing key aspects of organ and systemic function, as well as identifying markers of inflammation and increased risk for metabolic disorders. This approach yields vital data regarding nutrient levels, pinpointing deficiencies or excesses.</p> <p>The interpretation of these analytical findings incorporates a comprehensive review of the individual's health profile, encompassing current weight and body metrics, existing medical conditions, ongoing pharmacological treatments, and specific dietary habits.</p>
<p>Who is able to offer Metabolic Balance in their practice?</p>	<p>Metabolic Balance® is a practitioner-only led program. All Metabolic Balance® practitioners are nutrition, medical or holistic practitioners who undertake further certification training with Metabolic Balance®.</p>
<p>Can anybody participate as a client?</p>	<p>As a whole food program, Metabolic Balance® is safe and appropriate for all, but some clients may not be eligible if they have any significant health problems that could be adversely effected by dietary change or weight loss. Exclusions include pregnant and breast feeding women as well as those with significant renal or hepatic health conditions. Metabolic Balance® advises all clients to check with their primary health care provider before starting the Metabolic Balance® program.</p>

FAQs cont'd

What is the cost of Metabolic Balance® for the client?	<p>Metabolic Balance® is solely available via professional coaches and all costs are independent and determined by the individual coaches. A Metabolic Balance® plan is supported by coaches for a minimum of 4 - 5 consultations however given the unique situation of all clients, Metabolic Balance® coaches do assess the degree of support a client requires based on the individual needs of the client.</p> <p>All enquiries regarding costs and a support offered should be directed to the chosen Metabolic Balance® coach.</p>
Who is Metabolic Balance best suited for?	<p>Metabolic Balance is a safe and appropriate approach for all adults. It is ideal for those clients who are interested in a natural approach, are willing to prepare their own meals and make lifestyle changes to improve their overall quality of life.</p>
Is Metabolic Balance® suitable for long term health?	<p>Absolutely! This is one of the main driving principles behind firstly, the Metabolic Balance® personalized meal plan and secondly, the compulsory support of a coach to interpret and implement the program. Research has shown that for sustainable and long term weight improvements, clients need personalized support over an extended period of time. This is precisely what Metabolic Balance® aims to promote for clients to achieve and maintain a healthy lifestyle and future.</p> <p>Ordovas JM et al. personalized nutrition and health. BMJ. 2018 Jun 13;361:bmj.k2173. doi: 10.1136/bmj.k2173. PMID: 29898881; PMCID: PMC6081996. Coulter A et al. Doi: 10.7861/futurehosp.3-2-114. PMID: 31098200; PMCID: PMC6465833.</p>

“ *Let food be thy medicine* ”

Hippocrates, considered to be the father of modern medicine




metabolic balance

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References



Overview (pg. 3)

- Hippocrates. (Approx. 400 B.C.). Aphorisms. This ancient text, where Hippocrates is often quoted saying "Let food be thy medicine," provides historical context for the concept of food as medicine.
- metabolic balance® – Nutrition basics: Introduction to the success program by Dr. Wolf Funfack 2011 ASIN : B006TKOTRU Estruch, R., Ros, E., Salas-Salvadó, J., et al. (2013). Primary Prevention of Cardiovascular Disease with a Mediterranean Diet. The New England Journal of Medicine, 368(14), 1279-1290. DOI: 10.1056/NEJMoa1200303. This study, known as the PREDIMED trial, provides robust evidence of the benefits of the Mediterranean diet on cardiovascular health.
- Willett, W. C., & Skerrett, P. J. (2017). Eat, Drink, and Be Healthy: The Harvard Medical School Guide to Healthy Eating. New York: Free Press. This book offers comprehensive information on how diet is linked to the prevention and management of chronic diseases.
- Selhub, E. M., Logan, A. C., & Basted, A. C. (2014). Fermented foods, microbiota, and mental health: ancient practice meets nutritional psychiatry. Journal of Physiological Anthropology, 33(1), 2. DOI: 10.1186/1880-6805-33-2. This paper discusses the relationship between diet, gut health, and mental health.
- Firth J, et al. A meta-review of "lifestyle psychiatry": the role of exercise, smoking, diet and sleep in the prevention and treatment of mental disorders. World Psychiatry. 2020 Oct;19(3):360-380. doi: 10.1002/wps.20773. PMID: 32931092; PMCID: PMC7491615.
- Grimaldi, K. A., van Ommen, B., Ordovas, J. M., et al. (2017). Proposed guidelines to evaluate scientific validity and evidence for genotype-based dietary advice. Genes & Nutrition, 12, 35. DOI: 10.1186/s12263-017-0584-0. This article provides insights into the emerging field of nutrigenomics and personalized nutrition.
- Diabetes Prevention Program Research Group. (2002). Reduction in the Incidence of Type 2 Diabetes with Lifestyle Intervention or Metformin. The New England Journal of Medicine, 346(6), 393-403. DOI: 10.1056/NEJMoa012512. This landmark study demonstrates the impact of lifestyle and dietary changes on reducing the risk of diabetes.
- Adams, K. M., Lindell, K. C., Kohlmeier, M., & Zeisel, S. H. (2006). Status of nutrition education in medical schools. American Journal of Clinical Nutrition, 83(4), 941S-944S. This article discusses the challenges of integrating nutrition education into the medical curriculum.

The Research (pg. 8)

1. Meffert C, Gerdes N. Program adherence and effectiveness of a commercial nutrition program: the metabolic balance study. J Nutr Metab. 2010;2010:197656. doi: 10.1155/2010/197656. Epub 2010 Dec 21. PMID: 21209712; PMCID: PMC3010672.
2. Clerc T (2015) Effectiveness of Adhering to a Behavioral Weight Loss Program to Address Metabolic Syndrome. Int J Complement Alt Med 1(6): 00040. DOI: 10.15406/ijcam.2015.01.00040
3. Unverdorben S. The Meaningful Effects of a Personalized Nutrition and Coaching Program for Type 2 Diabetes Mellitus: Two Case Reports. Altern Ther Health Med. 2023 May;29(4):92-96. PMID: 37164034.
4. Wing RR; Look AHEAD Research Group. Does Lifestyle Intervention Improve Health of Adults with Overweight/Obesity and Type 2 Diabetes? Findings from the Look AHEAD Randomized Trial. Obesity (Silver Spring). 2021;29(8):1246-1258. doi:10.1002/oby.23158

Disclaimer

Metabolic Balance® is not a medically supervised program. The Metabolic Balance® plan and system is designed to help individuals lose weight and achieve a new lifestyle. It is a meal planning program only and in no way represents a medical treatment or medical advice. The program does not constitute a medical product or service and does not diagnose or treat any medical condition or disease. It does not accommodate for physical or medical conditions, food allergies or the taking of any medications. All medical conditions and your current health status should be discussed with your physician prior to beginning this, or any other, weight loss program.



Total Metabolic Reset

The Total Metabolic Reset Program with Rainbow Nutrition includes:

- Personalised Nutrition Plan from Metabolic Balance
- 4 Phases for Structure & Success
- 1:1 Coaching, Support & Accountability
- Welcome Care Package, Recipe Books, Guides and Tools
- Concierge Care: Limited Clients & Maximum Support

INFORMATION VIDEO



BOOK A DISCOVERY CALL



Nicola Woodcock

BHSc (Nutrition), Metabolic Balance Coach

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