

### ALL YOU NEED TO KNOW ABOUT

# METABOLIC BALLANGE

LIVE A HEALTHIER LIFE STYLE

WRITTEN AND COMPILED BY CHERRY WILLS PHD

WITH PERSONALIZED NUTRITION

### Food



### ....AS MEDICINE?

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 use of nutritional and lifestyle changes, illustrating how they can significantly impact health outcomes.

Historically, cultures worldwide have relied on 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.

Nutritional psychiatry, an emerging field, studies the connection between diet and mental health. The gut-brain axis, which communicates between the gut and the brain, plays a crucial role. Research suggests a healthy gut microbiome which is all the trillions of bacteria that live in our gut, supported by a diet rich in prebiotics and probiotics, can positively affect mood and cognitive functions, offering new approaches to managing depression and anxiety.

Personalized nutrition can also consider a person's individuality 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 conditions and some diseases.

There are thousands of research articles investigating the influence of individual nutrients, diets and lifestyle interventions on changing the health of the body. Essentially it all boils down to this - simple daily food choices can significantly influence the health of the whole body.





## What is METABOLIC BALANCE?

Metabolic Balance® is a groundbreaking and scientific program in personalized nutrition that uses a detailed blood analysis to create individual nutrition plans for each and every client. This leading European all-natural nutrition program was established in 2002. Metabolic Balance focuses on achieving better health through real food and lifestyle choices.

The founders, Dr. Wolf Funfack and their medical team, driven by their experiences and indepth knowledge, developed Metabolic Balance to support the complete metabolic health of his patients. The program quickly gained popularity in Germany - and many other countries - for its highly effective results. Nutritional research has increasingly substantiated and further supported the Metabolic Balance principles advocated since the beginning - including intermittent fasting, a whole food approach, support of the microbiome, optimal hydration, the unique benefits of apples, and the importance of sleep.

The Metabolic Balance plans are created through a two-step process. Firstly, a proprietary functional pathology analysis creates a detailed understanding of each person's health. This analysis of blood parameters offers crucial information of all body systems as well as any nutrient insufficiencies and deficiencies. From this, the Metabolic Balance in-depth algorithms are then able to identify the ideal foods to support each person to optimal health and wellbeing.

This truly proactive and scientific approach is what sets Metabolic Balance apart. While standard healthcare relies on blood tests to diagnose nutritional deficiencies, Metabolic Balance looks to understand the macro and micronutrients needed to restore health holistically and most importantly to identify the ideal food sources for each person to achieve this successfully.

By embracing the concept that food can be medicine, each person can achieve a nutritious, and balanced approach to selfcare, helping to restore and rebalance their health now and for the future.





## About METABOLIC BALANCE

### **Our Mission**

We empower our clients to achieve a holistic, healthy lifestyle through personalized nutrition. As life-long partners, we use evidence-based approaches and cutting-edge technology to expand their potential.

### **Our 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.

### **Our Belief**

Healthy nutrition is the basis of good health. Health is the basis of life satisfaction. Life satisfaction is the basis for truly sustainable personal growth and fulfilment.



### THE EIGHT PRINCIPLES



You can think of these as the framework within which you can support your health long into the future. Some people call them "rules," others refer to them as the Metabolic Balance "philosophy." We believe it's best to call them whatever sits well with you. If you're not someone who likes the idea of "rules," you might use a difference phrase such as the "framework to balance your health." After all, this is all personalized to you!

- Rule 1: Eat three meals a day and never skip a meal. When you want something to change in your health, then it's important to stay highly focused on your Metabolic Balance food plan that is created for you.
- Rule 2: Take a break of at least 5 hours between your meals to allow your digestion to rebalance and hormone levels to stabilize.
- Rule 3: Keep your mealtimes focused so that you ideally eat all the food you are going to eat within 60 minutes. This helps avoid a drift to grazing and will ensure that you can easily take the five-hour break.
- Rule 4: Always start each meal with a first mouthful of protein. This is a clever little rule that ensures optimal insulin and glucagon levels over the next 5 hours. The order of food has been shown in research to influence glucose balance and insulin levels.
  - Rule 5: While you are super focused on achieving health shifts, we advise you to stick to one protein per meal and have a different protein for each meal. As we said, this guideline is in place only while you are working to create change, but it can significantly help your digestion become balanced and ensure the full benefits of your protein are being realized.
  - Rule 6: Don't eat late at night and ideally at least 2 hours before bed. We also advise people to ensure that they are giving themselves the opportunity to sleep well.
    - Rule 7: Stay hydrated throughout the day. As a general guideline, Metabolic Balance recommends drinking about half an ounce of water for each pound of body weight, up to a maximum of 4 litres, but this should be adapted as needed.
    - Water must be in balance—both too little and too much can be problematic. For example, if you weigh 75 kilograms, you'd aim for about 2.6 litres of water throughout your day.
    - Rule 8: An apple a day keeps the doctor away. Apples are powerhouses of nutrients with hundreds of research papers showing their benefits for digestive health, healthy bacterial balance, blood sugar balance, and cholesterol balance, plus many more.

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THE METABOLIC BALANCE PROGRAM IS IN 45 COUNTRIES OF THE WORLD, SUCCESSFULLY SERVING OVER 1 MILLION CLIENTS.



The Metabolic Balance program utilizes a sophisticated computer analysis of pathology markers to evaluate the health of the body and its organ systems, and then matches this information with the nutritional value of whole foods. With the guidance of trained professional practitioners, a Metabolic Balance nutrition plan can support individuals in making life-long lifestyle and nutritional changes with whole foods.

This quick list provides links to a few studies that offer a simple overview of supporting evidence for the Metabolic Balance methods and procedures, as well as the eight principles.

#### The Metabolic Balance Study

Meffert, C., & Gerdes, N. (2010). Program adherence and effectiveness of a commercial nutrition program: the metabolic balance study. Journal of nutrition and metabolism, 2010, 197656.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3010672/

#### Eat regular meals with fasting (Rule 1, 2 & 3)

- Lee, Y. Y., Erdogan, A., & Rao, S. S. (2014). How to assess regional and whole gut transit time with wireless motility capsule. Journal of neurogastroenterology and motility, 20(2), 265–270. https://doi.org/10.5056/jnm.2014.20.2.265
- Paoli, A., Tinsley, G., Bianco, A., & Moro, T. (2019). The influence of meal frequency and timing on health in humans: the role of fasting. Nutrients, 11(4), 719. https://doi.org/10.3390/nu11040719
- Silva, J., von Meyenn, F., Howell, J., Thorens, B., Wolfrum, C., & Stoffel, M. (2009). Regulation of adaptive behaviour during fasting by hypothalamic Foxa2. Nature, 462, 646–650. https://doi.org/10.1038/nature08589
- Sun, Y., Rong, S.,... & Bao, W. (2023). Meal skipping and shorter meal intervals are associated with increased risk of all-cause and cardiovascular disease mortality among us adults. Journal of the Academy of Nutrition and Dietetics, 123(3), 417-426. https://doi.org/10.1016/j.jand.2022.08.119

#### Protein first (Rule 4)

- Nesti, L., Mengozzi, A., & Tricò, D. (2019). Impact of nutrient type and sequence on glucose tolerance: physiological insights and therapeutic implications. Frontiers in Endocrinology, 10, 144. https://doi.org/10.3389/fendo.2019.00144
- Shukla, A. P., Andono, J., Touhamy, S. H., Casper, A., Iliescu, R. G., Mauer, E., ... & Aronne, L. J. (2017).
   Carbohydrate-last meal pattern lowers postprandial glucose and insulin excursions in type 2 diabetes.
   BMJ Open Diabetes Research and Care, 5(1), e000440.
   https://drc.bmj.com/content/5/1/e000440

#### The importance of protein (Rule 5)

- Larsen, T. M., Dalskov, S-M., ... & Astrup, A. (2010). Diets with High or Low Protein Content and Glycemic Index for Weight-Loss Maintenance. The New England Journal of Medicine 363(22), 2102-2113. https://www.nejm.org/doi/pdf/10.1056/NEJMoa1007137
- Mateo-Gallego, R., Marco-Benedí, V., ... & Civeira, F. (2017). Energy-restricted, high-protein diets more effectively impact cardiometabolic profile in overweight and obese women than lower-protein diets. Clinical nutrition (Edinburgh, Scotland), 36(2), 371–379. https://doi.org/10.1016/j.clnu.2016.01.018



#### Eating late at night (Rule 6)

- Dashti, H. S., Gómez-Abellán, P., ... & Garaulet, M. (2021). Late eating is associated with cardiometabolic risk traits, obesogenic behaviors, and impaired weight loss. The American journal of clinical nutrition, 113(1), 154–161. https://doi.org/10.1093/ajcn/nqaa264
- Garaulet, M., Gómez-Abellán, P., ... & Scheer, F. A. J. L. (2013). Timing of food intake predicts weight loss effectiveness. International Journal of Obesity 37, 604-611. https://doi.org/10.1038/ijo.2012.229

#### Hydration (Rule 7)

- Liska, D., Mah, E., ... & Spriet, L. L. (2019). Narrative review of hydration and selected health outcomes in the general population. Nutrients, 11(1), 70. https://doi.org/10.3390/nu11010070
- Perrier, E. T., Armstrong, L. E., ... & Péronnet, F. (2021). Hydration for health hypothesis: a narrative review of supporting evidence. European journal of nutrition, 60, 1167-1180. https://link.springer.com/article/10.1007/s00394-020-02296-z

#### An apple a day... (Rule 8)

- Beukema, M., Faas, M.M. & de Vos, P. (2020). The effects of different dietary fiber pectin structures on the gastrointestinal immune barrier: impact via gut microbiota and direct effects on immune cells. Journal of Experimental and Molecular Medicine 52, 1364–1376. https://doi.org/10.1038/s12276-020-0449-2
- Brouns, F., Theuwissen, E., ... & Mensink, R. P. (2012). Cholesterol-lowering properties of different pectin types in mildly hyper-cholesterolemic men and women. European journal of clinical nutrition, 66(5), 591–599. https://doi.org/10.1038/ejcn.2011.208

#### Carbohydrate Balance

- Goldenberg, J. Z., Day, A., ... & Johnston, B. C. (2021). Efficacy and safety of low and very low carbohydrate diets for type 2 diabetes remission: systematic review and meta-analysis of published and unpublished randomized trial data. British Medical Journal 372(4743). https://www.bmj.com/content/372/bmj.m4743
- Volek, J.S., Phinney, S.D., ... & Feinman, R. D. (2009). Carbohydrate Restriction has a More Favorable Impact on the Metabolic Syndrome than a Low Fat Diet. Lipids 44, 297–309. https://doi.org/10.1007/s11745-008-3274-2

#### Supporting

- Miller, W., Koceja, D. & Hamilton, E. (1997). A meta-analysis of the past 25 years of weight loss research using diet, exercise or diet plus exercise intervention. International Journal of Obesity 21, 941–947. https://doi.org/10.1038/sj.ijo.0800499
- Mozaffarian, D., Hao, T., ... & Hu, F. B. (2011). Changes in diet and Lifestyle and Long-Term Weight Gain in Women and Men. The New England Journal of Medicine 364, 2392-2404. https://www.nejm.org/doi/full/10.1056/nejmoa1014296
- Pot, G. K., Almoosawi, S., & Stephen, A. M. (2016). Meal irregularity and cardiometabolic consequences: results from observational and intervention studies. Proceedings of the Nutrition Society, 75(4), 475-486. https://doi.org/10.1017/S0029665116000239





This is a quick list of some of the most commonly asked Metabolic Balance questions and their answers, to help you find the answer faster.

What is measured in the blood test?	Full Blood Count; E/LFT; C-reactive protein; Amylase/Lipase; Creatine Kinase; Lipid panel; Iron studies; Thyroid Function Tests; Fasting glucose and electrolytes.
What foods are included in my Metabolic Balance nutritional plan?	Metabolic Balance is a whole food program with all recommendations easily sourced from local supermarkets and general food outlets. Following the analysis of your personal data, you receive a detailed list of your ideal protein sources, fats, starches, fresh vegetables, and fruit. While you are in the process of creating change, if a food is listed on your plan you can eat it, if it is not listed, you should avoid it. Strictly following your food list is not forever, it's only while you are resetting and boosting your health. There are no meal replacement shakes, energy bars, artificial products, or supplements associated with Metabolic Balance.
Is Metabolic Balance solely for weight loss?	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 issues. We describe healthy weight loss as a natural and beneficial side effect of eating the right foods for you. Weight loss naturally results from improved overall balance and health.
Why is the blood test necessary?	The blood is a widely established and accurate method to determine essential information about the function of organs and body systems, and an indication of inflammation or elevated risk for metabolic diseases. The information gained includes evidence indicating which nutrients are above or below adequate and optimum levels. The results of the blood analysis are evaluated together with personal data, like current weight and body measurements, health history, pre-existing conditions, current medication, and individual eating preferences.





Who is able
to offer
Metabolic
Balance in
their
practice?

Metabolic Balance coaches are selected to participate after a review of their background and experience and are then trained in the principles and practice of the program. Once certified, they may offer the Metabolic Balance program to their clients.

### Can anybody participate as a client?

As a whole food program, Metabolic Balance is safe and appropriate for all. Some clients may not be eligible if they have significant health problems that could be adversely influenced by dietary change or weight loss. Exclusions include pregnant and breastfeeding women as well as those with significant kidney or liver problems. Metabolic Balance is a nutrition program and is never a replacement for medical advice or following the recommendations of your doctor. Metabolic Balance advises all clients to check with their doctor before starting the Metabolic Balance program.

## What is the cost of Metabolic Balance for the client?

The program is solely available via certified Metabolic Balance coaches and all costs are determined by the individual practitioners. A Metabolic Balance plan is accompanied by a minimum of 5 consultations. However, given the unique situations of all clients, Metabolic Balance coaches assess the degree of support a client requires based on individual needs. All inquiries regarding costs and the support offered should be directed to the chosen Metabolic Balance practitioner.

### Is Metabolic Balance suitable for long-term health?

Absolutely! This is one of the main driving principles behind the Metabolic Balance personalized nutrition plan. It offers a lifestyle change that can be used to achieve and maintain overall health. In addition, the support of a certified Metabolic Balance coach to interpret and implement the program helps create ongoing success. Research has shown that for sustainable and long-term health improvements, clients need personalized support over an extended period. This is precisely what Metabolic Balance aims to provide - the opportunity for clients to achieve and maintain a healthy lifestyle today and in the future.

For all references associated with this eBook please visit: www.metabolic-balance.co.uk



### **HOW DOES IT WORK?**

#### A STEP-BY-STEP APPROACH TO HEALTHIER EATING



#### Initial Consultation

Book and attend a first consultation with a qualified Metabolic Balance coach to make sure the Metabolic Balance Program is the right fit for you and your health goals.

At your initial consultation, your current health and well-being will be assessed, the Metabolic Balance program introduced, and objectives and goals set.



#### **Blood Test**

Next, Blood is taken at a local lab using a simple online request. The blood test allows for your functional health analysis.

Once your plan is ready, a new consultation is arranged to go through your plan and make sure you know exactly what you need to do to get started.



### Your Plan & Coaching Sessions

Your personal nutrition plan presents healthy, varied meals which are easy to adapt to, with the 8 essential principles, and a smartphone app to assist.

Follow up sessions with your coach ensure your plan is further adapted for you and your health goals. Your coach helps you stay on track through the various phases of the program.



### **KNOWLEDGE FOR LIFE**





### THE 4 PHASES

### PHASE 01

During the two preparation days, your body is gently prepared for nutritional change. This is a gentle detox to ease you into your new eating habits.

### PHASE 02

In the first two weeks, you are asked to be focused and stick to your food list in your nutrition plan. Around the 2-week mark, your coach will guide you to include your healthy oils. Typically, after 4 weeks, it's also important to bring in an off-plan meal once a week. This is where you start to transition to recognizing additional foods that work well for you.

### PHASE 03

The food list on the plan is extended and, with the help of your coach, you start to introduce additional healthy foods throughout your week.

### PHASE 04

This is about an ongoing healthy eating lifestyle which is naturally followed, based on your learning and experience during the first three phases. By slowly incorporating new foods from outside your plan, you can personally assess how you feel with them. The aim is to find a natural balance of your ideal eating habits to keep yourself healthy and balanced.



### **BREAKFAST**

### Apple oat delight

This delightful apple oat breakfast is incredibly nourishing. The fiber in the oats and the natural sweetness of the apples help regulate digestion and provide steady energy throughout the morning.

### **MAKES 1 SERVING**

### **INGREDIENTS:**

- 3/4 cup I 180 mL whole, soy, or goat's milk
- 1 medium tart apple, cored and finely chopped
- 1/2 cup I 50g rolled oats
- · 2 tsp ground cinnamon



### **DIRECTIONS:**

- Preheat the oven to 350°F I 175°C.
- Mix all the ingredients together in a small baking dish.
- Bake for 35 minutes, or until the liquid has been absorbed and the oats are lightly browned.
- Enjoy warm.

RECIPE AND IMAGE TAKEN FROM THE METABOLIC BALANCE KITCHEN BY JANE DURST-PULKYS PHD



### LUNCH

### Salmon and Avocado Open-faced sandwich

This wonderful open-faced sandwich is extremely satisfying. The protein in the salmon and the fat in the avocado maintain your blood sugar balance and keep insulin at a healthy level.

### **MAKES 1 SERVING**

### **INGREDIENTS:**

- 4 1/2 oz I 130 g salmon fillet
- 1/2 avocado
- 1/4 red onion finely chopped
- 1/2 celery rib, finely chopped
- 1 tbsp finely chopped fresh dill, plus more for garnish
- Salt and black pepper
- 1 slice of rye bread toasted if desired. or 2 rye crackers (such as Wasa or Ryvita)



### DIRECTIONS:

- In a small skillet, sear the salmon over medium-high heat until just cooked through, 2-3 minutes each side. Transfer the salmon to a plate and allow it to cool.
- · In a small bowl, mash the avocado, then add the onion. celery, and dill mix well.
- Add the salmon to the avocado mixture, breaking it apart with a fork into bite-size pieces.
- Season with salt and pepper to taste and spread on the rye bread,
- Add fresh dill a garnish, if desired.

RECIPE AND IMAGE TAKEN FROM THE METABOLIC BALANCE KITCHEN BY JANE DURST-PULKYS PHD



### DINNER

### Sautéed mushroom and vegetable delight

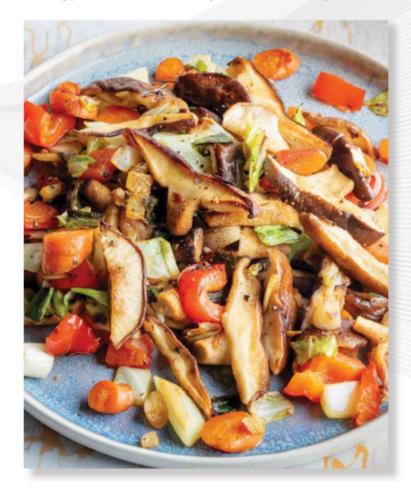
This vibrant meal is both wholesome and delicious. The rich antioxidants in the mushrooms, along with the fiber and vitamins from the mixed vegetables, support healthy digestion and provide a balanced, low-glycemic meal that keeps your energy levels stable throughout the evening.

#### **MAKES 1 SERVING**

### **INGREDIENTS:**

- 5 1/4 oz l 150g shiitake or oyster mushrooms
- 1 tbsp | 15 mL olive oil
- 1 small garlic clove minced
- 1 (1-in I 2.5-cm) piece ginger, grated
- 1 medium carrot, cut into 1/2-in | 1.25-cm pieces
- 1/4 cup I 40g chopped red and/or orange bell pepper
- 1/2 cup | 115g chopped cabbage
- 1 tsp dried oregano
- Salt and black pepper
- 1/2 cup I 120mL vegetable broth
- 1 green onion sliced diagonally

### **DIRECTIONS:**



- Clean any dirt off the mushrooms with a paper towel or the edge of a knife, but don't wash them with water.
- Thinly slice the mushrooms. Set aside.
- Heat the oil in a medium skillet over medium heat, add the garlic and ginger and sauté for 1 minute.
- And the carrot, bell pepper, cabbage, oregano, and salt and pepper to taste and sauté for 5 minutes, stir in the broth.
- Add the green onion and mushrooms and cook until the mushrooms are soft, 5-7 minutes.

RECIPE AND IMAGE TAKEN FROM THE METABOLIC BALANCE KITCHEN BY JANE DURST-PULKYS PHD

### **EXCITING NEWS!**

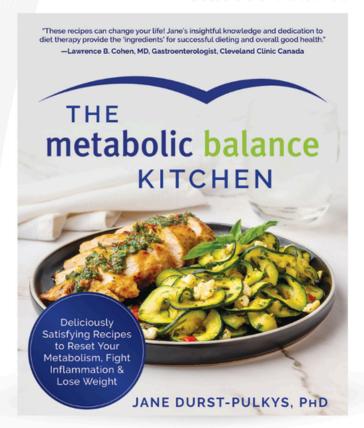
metabolic balance

THE BRAND NEW METABOLIC BALANCE RECIPE BOOK IS READY TO LAND IN YOUR KITCHEN TO TAKE YOUR HEALTH AND WELLNESS JOURNEY TO THE NEXT LEVEL!!!

We're excited to announce that our highly anticipated cookbook,

"The Metabolic Balance Kitchen" by Jane Durst-Pulkys PhD, was launched on December 10, 2024.

This book features **90 delicious and** healthy recipes from around the world, designed to revolutionize your health journey and help you discover strategies to reduce inflammation, boost metabolism, and achieve your optimal weight.





the USA Durst-Pulkys, Ambassador for Metabolic Balance, shares her expertise through simple, customizable recipes designed to target visceral fat, increase metabolism, and lower insulin levels. These recipes are not only delicious but also come with proven health benefits, including increased energy, vitality, improved metabolic function.

### **BOOK DETAILS**

Publisher: BenBella Books

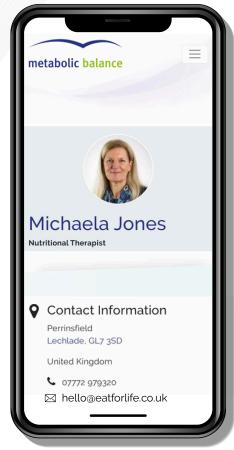
Title: The Metabolic Balance Kitchen Subtitle: Deliciously Satisfying Recipes to Reset Your Metabolism, Fight Inflammation, and Lose Weight Author: Jane Durst-Pulkys, PhD

Distributed by Penguin Random House Distribution Publication Date: Dec.2024 ISBN: 9781637743843 eBook ISBN: 9781637743850 Format: Trade Paperback Page Count: 240



## GET IN TOUCH TODAY!

Ready to start your journey toward better health? Don't wait any longer. Get in touch with me today and take the first step toward a healthier, happier you.





DISCLAIMER: metabolic balance® is not a medically supervised program. The metabolic balance® plan and system is designed to help healthy individuals lose weight and achieve a healthier lifestyle. It is a recommended dietary program only and in no way represents 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. All medical conditions and your current health status should be discussed with your physician prior to beginning this, or any other, weight loss program.