

### A Quickstart Guide

# Metabolic Balance for Surgery



# **COMBE GROVE**

# Welcome Message

Welcome to Your QuickStart Guide: Preparing for Surgery with Combe Grove

We're so pleased to welcome you to Combe Grove and introduce you to our Preparing for Surgery programme. This QuickStart resource has been thoughtfully created to support you as you take the first step towards optimising your metabolic health and improving your recovery outcomes.

In this guide, you'll find an introduction to the principles of metabolic health, why it matters before surgery, and how addressing key health markers can support your journey. You'll also be introduced to Combe Grove's unique approach, centred around the 5 Roots and 10 Markers of Metabolic Health — our foundation for lasting change.

To help you get started, we've included practical tips in the areas of nutrition, movement, sleep, mindset, and environment. These small changes can have a powerful impact and prepare you for the next stages of your journey.

Finally, we'll walk you through the components of our Preparing for Surgery Programme — from your Reset Starter Pack and Mini Metabolic Retreat to optimising your health markers and receiving continued support through recovery and beyond.

We're here to guide, support, and empower you at every stage. Here's to a confident, wellprepared, and healthy path forward.

### Warm wishes, The Combe Grove Team



The Centre for Metabolic Health

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When I went for my pre-operative consultation 10 weeks after I returned from Combe Grove's Metabolic Health Programme,

### my surgeons were astonished at the results I'd achieved

saying' this is going to make our job so much easier and your recovery so much better'



Claire Dunphy

Attended our Metabolic Health Programme in April 2024 prior to surgery



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# Introduction to Metabolic Health

### What is Metabolic Health?

Despite Metabolic health is the foundation of both physical and mental wellbeing, GPs estimate that 88% of the UK population are struggling with poor metabolic health. As the Centre for Metabolic Health, we are here to change that through education and support.

Metabolic Health refers to how effectively your body generates and uses energy, and plays a vital role in maintaining balance across all major systems — from blood sugar regulation to cardiovascular function and hormone balance.

Good metabolic health supports energy, resilience, mood, and long-term vitality. It is assessed using key markers such as blood glucose levels, blood pressure, waist circumference, body weight, and levels of visceral fat.

### Do you recognise any of these signs of imbalanced Metabolic Health?

- Feeling tired or sluggish or a daily basis?
- Weight gain, with a waist circumference of X in men and X in women?
- Waking up in the morning not feeling rested?
- Raised blood pressure of more than 120/80 mmHg?
- Frequent hunger or cravings?
- Raised blood glucose levels HbAlc of more than 38mmol?

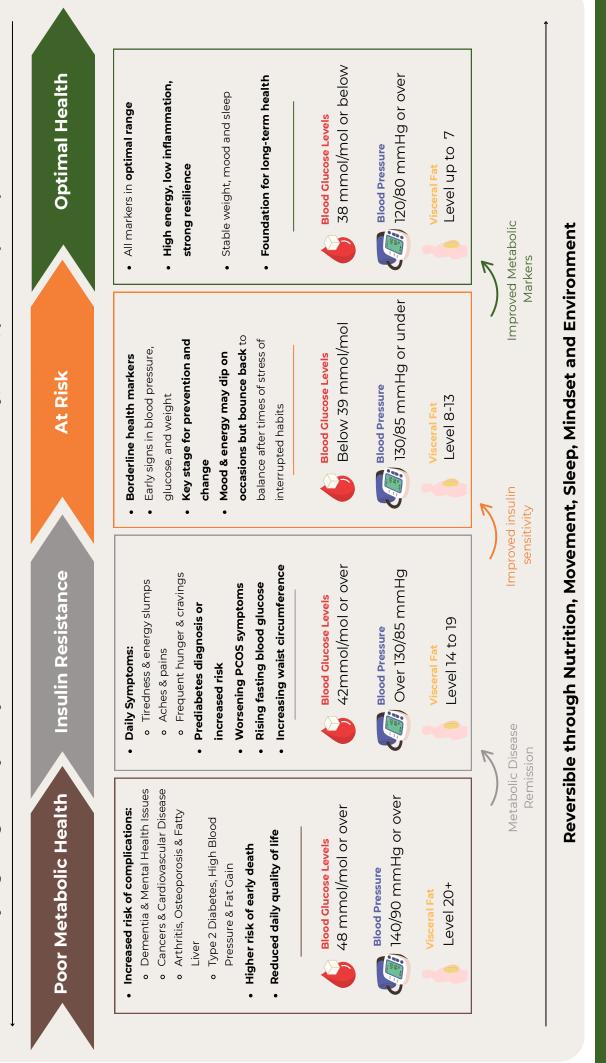
Importantly, metabolic health exists on a continuum — it can be improved at any stage, often with meaningful results in a short period of time through targeted lifestyle changes. Have a look at the Metabolic Health Continuum on the next page, where do you think you are now?



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May regress gradually over years due to factors such as inactivity, stress, poor sleep and poor diet

Metabolic Health Continuum

# Metabolic Health and Surgery

### Why Focus on Health Markers Before Surgery?

When preparing for surgeries like hip, knee and/or shoulder replacements, health markers such as high body weight, high blood pressure and high blood glucose levels are key risk factors for these surgeries.

If these markers are elevated, the risk of complications during and after surgery increases including longer hospital stays, delayed recovery, and a higher chance of returning to hospital within 30 days of your operation.<sup>1</sup>

Optimising your Metabolic Health pre surgery also supports a smoother, faster recovery, improves wound healing, and helps protect against post-operative infections and complications.<sup>2</sup>

### The Role of Multimodal Prehabilitation Programmes

A multimodal prehabilitation programme combining nutrition, exercise, stress management, and psychological support has been shown to reduce complications and improve recovery after surgery. <sup>3</sup>

Our Preparing for Surgery programme follows this holistic, evidence-based approach, including:

- Nutrition guidance to support metabolic balance
- Gentle exercise and strength work to build mobility and resilience
- Sleep and stress management to enhance recovery
- Mindset support to foster calm confidence

Together, these elements lay a strong foundation for a safer, smoother recovery.

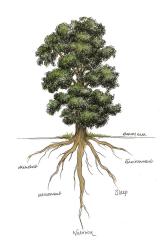


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# The 5 Roots of Metabolic Health<sup>TN</sup>

The 5 Roots of Metabolic Health<sup>™</sup> form the foundation of our Metabolic Health programmes, aimed at restoring, maintaining, and enhancing metabolic balance.

These roots emphasise the importance of nourishing natural foods and the benefits of movement and outdoor activities. They also bring to our awareness the power of nature, the value of a supportive environment and the influence of our mindset. Representing resilience, nurturing, and consistency, these roots anchor health like a tree, with imbalances in one root affecting others. See below an overview of each root.



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### Nutrition

Nutrition is our primary root. It is the cornerstone of metabolic health, crucial for providing the ingredients needed to aid metabolism and enable the regulation of blood sugar levels and improved insulin sensitivity. The Combe Grove nutrition guidelines promote real foods low in carbohydrates and rich in protein and natural fats. Nutrition interconnects with other roots; poor sleep can lead to unhealthy food choices, and emotional stress can drive comfort eating. Overall, proper nutrition is key to metabolic health, starting in the gut.

### Movement

Regular physical activity enhances insulin sensitivity, reduces inflammation, and prevents abdominal fat accumulation. It also improves flexibility, coordination, metabolism, stress management, and sleep quality.

### Sleep

Quality sleep is vital for metabolic health, directly affecting insulin resistance and lifestyle choices. Sleep allows for bodily repair, brain detoxification, cognitive function, and memory formation, fostering a healthier mindset.

### Environment

Interaction with the environment affects stress, mood, and wellbeing. An imbalanced environment where we struggle to switch off from work, or where we lack time and personal space can increase stress and inflammation, worsening metabolic health. Balancing our lives is crucial for reducing stress and fatigue, allowing for self-care and reflection to reset and recharge.

### Mindset

A positive mindset influences dietary choices, physical activity, and sleep quality. Behavioural changes and goal setting enhance root connection, promoting balance and stress reduction. Being clear on your driving force, 'why do you want to make changes' is essential for long term success.

# Nutrition Top Tip

Most people currently consume around 15% of their daily energy from protein, which is adequate for basic needs, but research suggests increasing this to around 25% may be more beneficial for metabolic health. A higher protein intake has been shown to enhance satiety, reduce cravings, and improve long-term body composition by promoting fat loss and preserving or increasing muscle mass. It also supports key metabolic health markers, including visceral fat reduction, better blood glucose control, improved blood pressure, and healthier triglyceride levels.

# A simple, effective strategy is to prioritise protein first at every meal aiming for 25% of your plate.

By creating balanced, sustaining meals, you're less likely to reach for processed snacks and more likely to support long-term health improvements. Protein-rich foods include meat, fish, eggs, tofu, tempeh, legumes, and nuts.

When planning meals, start with your **protein source**, then add in **vegetables/salad**, and high-fibre **carbohydrates** if you choose.



This one dietary shift can quickly influence blood glucose control, appetite regulation, body weight, and visceral fat levels.



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# Smoked Salmon or Mackeral Pate with Sourdough Crackers

Please try one of our favourite dishes from our Combe Grove menu which provides 32g of protein.

This Smoked Salmon or Mackerel Pâté is a creamy, flavourful dish that's rich in omega-3 fatty acids, supporting brain function and metabolic health. Made with fresh fish, cream cheese, and a hint of horseradish and lemon, it's packed with nutrients and comes together in minutes. Serve with crisp sourdough crackers and a fresh mixed salad for a satisfying and nourishing meal.

### Ingredients (serves 4):

- 380g smoked mackerel or salmon
- 285g full-fat cream cheese
- 6g creamed horseradish sauce (just over 1 teaspoon)
- 1 tbsp lemon juice
- 1 tsp freshly chopped parsley
- 1 tsp freshly chopped dill

Serve on Peters yard Sourdough Crispbreads Original or similar alternative (3 per portion)

### Method:

**1. Blend:** Pop all the ingredients into a blender and pulse until it has a consistency that you desire.

2. Serve: Divide into 4 portions and serve with sourdough crackers and a side salad.



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# Movement Top Tip

Supporting your metabolic health before surgery is one of the most valuable things you can do and even gentle, low-impact movement can make a big difference. If you're waiting for a knee, hip, or shoulder operation, it's important to choose exercises that work around your limitations while still improving blood glucose control, preserving muscle mass, and boosting circulation.

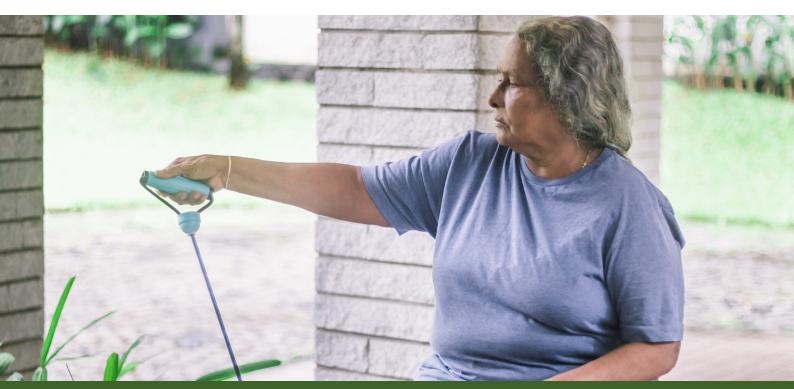
### Complete 10 minutes of resistance band exercises after your evening meal

This light, controlled activity encourages your body to manage blood glucose more efficiently, helps maintain muscle strength, and supports digestion and recovery — without placing unnecessary strain on your affected joint.

### Exercises to try (adjust based on your joint comfort):

- Seated bicep curls
- Overhead or lateral band pulls (skip if awaiting shoulder surgery)
- Seated core twists
- Seated leg extensions (if tolerable and not awaiting knee/hip surgery)
- Seated marching or ankle pumps
- Resistance band chest presses or rows

Start gently, using light resistance and a controlled pace. Focus on areas you can move comfortably, and avoid stressing the joint you're waiting to have operated on. These small, consistent movements can meaningfully support your metabolic health, reduce surgical risk, and aid recovery.



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# Sleep Top Tip

Quality sleep is a crucial pillar of metabolic health, especially when preparing for surgery. One simple, highly effective habit to support your sleep-wake cycle and improve overall metabolic function is to

### Get exposure to natural daylight within 30 minutes of waking.

Morning light exposure helps regulate your circadian rhythm; the body's internal clock that influences sleep quality, energy levels, hormone regulation, and blood glucose control. Consistently exposing your eyes to natural light soon after waking signals to your brain that it's daytime, which boosts alertness in the morning and helps you wind down more naturally in the evening.

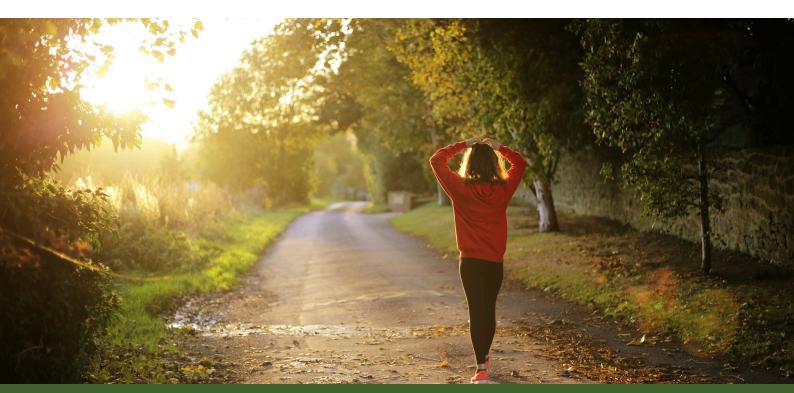
### Benefits of early daylight exposure include:

- Improved sleep quality and duration
- Better blood glucose regulation
- Stabilised energy levels
- Reduced daytime fatigue
- Enhanced mood and mental clarity

### How to do it:

Aim to step outside or sit by a window within 30 minutes of waking for around 5–10 minutes. Natural daylight is best; even on cloudy days, it's far brighter and more beneficial for your internal clock than indoor lighting.

If you can, combine it with light movement (like a gentle walk or stretching) for added metabolic and mental health benefits. This simple daily habit can have a powerful, positive effect on your sleep, recovery, and overall wellbeing.



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# Mindset Top Tip

Our mindset plays a powerful role in supporting metabolic health, recovery, and overall wellbeing — especially when preparing for surgery. One simple, grounding habit to help you stay focused, reduce stress, and take control of your week is to

### Have a meeting with yourself every Sunday to reflect.

Taking a few quiet minutes to reflect on how you're feeling physically and emotionally, review what's worked well, and plan simple priorities for the week ahead can improve clarity, motivation, and resilience. It's an opportunity to check in on your sleep, nutrition, movement, and mindset habits without judgement — and make small, positive adjustments where needed.

### Benefits of a weekly relfection meeting:

- Improved self-awareness and emotional resilience
- Reduced overwhelm and anxiety
- Clearer focus on personal goals
- Stronger sense of control and preparation for the week
- Increased consistency with health-supportive habits

### How to do it:

Set aside 5–10 minutes every Sunday — it could be with a cup of tea, a notebook, or a simple mental check-in. Reflect on how your week has gone, what made you feel good, what challenged you, and what you'd like to prioritise for the coming week. It's not about perfection — just progress and self-kindness.

This mindful, consistent habit can help anchor you during uncertain or stressful times, and support your health and recovery journey with greater confidence.

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# Environment Top Tip

Your environment; both physical and digital, has a big influence on your stress levels, energy, and overall metabolic health, especially when you're preparing for surgery. One of the most effective ways to protect your wellbeing is to

### Set clear boundaries to reduce stress.

Chronic stress can disrupt blood glucose control, impact sleep, and undermine recovery, so it's essential to create healthy limits around your time, energy, and commitments.

### Benefits of setting clear boundaries include:

- Lower stress and improved metabolic health
- Better sleep and energy balance
- Greater focus on personal wellbeing
- Reduced overwhelm and burnout risk
- Improved emotional resilience

### How to do it:

- **Identify Your Limits:** Notice what situations or habits consistently cause stress, discomfort, or resentment these signal where a boundary is needed.
- **Prioritise Self-Care:** Protect time for rest, nourishing meals, movement, and activities that support your wellbeing without guilt.
- **Manage Digital Boundaries:** Limit work emails and social media during personal time to avoid overstimulation and mental fatigue.
- **Create Time Buffers:** Avoid overcommitting leave space in your schedule to recharge and reduce stress from back-to-back obligations.
- Set Healthy Work Limits: Define work hours clearly and avoid work-related tasks outside those times.
- Learn to Let Go: Release people-pleasing habits; setting boundaries isn't selfish it's a vital act of self-care and stress management.

By actively shaping your environment and commitments to support your wellbeing, you create space for recovery, resilience, and better metabolic health.

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# The Preparing For Surgery Programme Overview

If you wish to accelerate your metabolic journey ahead of your surgery, and gently support your recovery in the weeks that follow, we warmly invite you to join our Preparing for Surgery programme. The timeline below outlines the supportive stages of the programme and what you can expect along the way.



**Connect with one of our metabolic health experts** for a noobligation discovery call to explore the programme, discuss potential dates, and **reserve your place on one of our Mini Metabolic Health Retreats.** 



Begin your journey with **immediate access** to our thoughtfully curated **Reset Starter Pack**, designed to lay the foundations for metabolic health. Inside, you'll find **nourishing recipes, mindset guidance, sleep support, and strength exercises** — all created to inspire meaningful, lasting lifestyle change.



**Experience 3 days of personalised care,** expert guidance, and practical tools to accelerate your progress. **Return home confident and equipped with a tailored plan** from our metabolic health team, including Clinical Physiotherapist Barry Edwards.



**Optimise your health markers** and support your recovery by applying your personalised plan alongside practical tools from the Reset Starter Pack, building a strong foundation for lasting change.

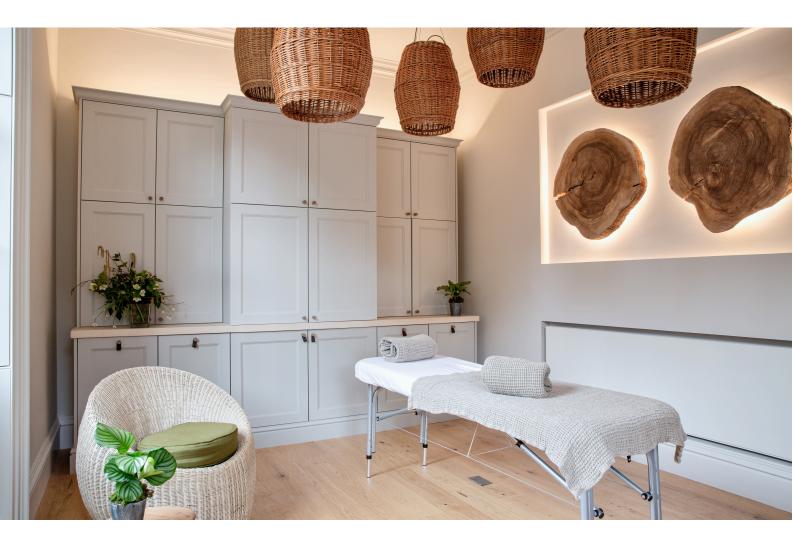


**Feel reassured knowing ongoing support is available** both before and after your surgery from our team of metabolic health experts, including dietitians, nutritionists, physiotherapists, strength trainers, and **Combe Grove's resident GP, Dr Campbell Murdoch.** 

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# Your Offer

Prioritising your metabolic health is one of the most powerful steps you can take before surgery. As part of our commitment to supporting your full-body wellbeing, we're offering a complimentary massage when you book onto our Metabolic Health Retreat. Use the code **QUICKSTARTGUIDE** claim your free massage, designed to ease stress, support circulation, and help you feel your best as you prepare for your procedure.



Thank you for taking the time to familiarise yourself with this Quickstart Guide. We hope you've found the information helpful as you prepare for your surgery. Wishing you a smooth procedure and a steady, healthy recovery. We would be honoured to support you further on your metabolic health journey, should you choose to join us.

> Kind regards, Combe Grove