



Nutrition Manual

*A patient guide to understanding your body,
making informed choices, and building habits for lifelong health.*

MANCHESTER, NEW HAMPSHIRE

A Note From The Alchemy Clinic

Welcome to The Alchemy Clinic. We are honored to be a part of your wellness journey.

Whether your goals include improving your energy, supporting healthy aging, optimizing metabolic health, balancing hormones, reducing inflammation, enhancing athletic performance, improving skin health, or simply feeling your best, this guide was created with you in mind.

Nutrition is one of the most powerful tools we have to influence our health. Every bite of food we eat sends signals throughout our body, affecting our metabolism, hormones, immune system, gut microbiome, energy levels, brain function, and even how we age.

At The Alchemy Clinic, we believe true wellness is about much more than the number on a scale. It is about creating a healthy, resilient body from the inside out.

This manual is designed to help you better understand your body, make informed nutrition choices, and build sustainable habits that support lifelong health.

The Alchemy Clinic Team

MANCHESTER, NEW HAMPSHIRE

Philosophy & Approach

Our Philosophy

At The Alchemy Clinic, we believe health is built—not found.

Rather than focusing on restrictive diets, temporary trends, or quick fixes, we take a personalized, evidence-informed approach that recognizes every individual is unique.

Your genetics, lifestyle, stress levels, sleep quality, hormone balance, medical history, activity level, and nutrition all influence how your body functions.

Because of this, there is no one "perfect diet" for everyone.

Instead, we work together to identify nutrition strategies that support your body's unique needs and long-term health goals.

Our mission is to empower you with the knowledge, tools, and support needed to make confident decisions about your health—not just for today, but for years to come.

Our Approach

At The Alchemy Clinic, we combine evidence-based nutrition with functional medicine principles to understand why you may be experiencing symptoms—not simply how to manage them.

Rather than asking,

"What medication treats this symptom?"

we ask,

"What is contributing to this symptom, and how can we support your body naturally while using the best available medical evidence?"

Nutrition is one of the foundational pillars of health and often works alongside other treatments such as lifestyle modifications, exercise, medical therapies, peptide therapy, hormone optimization, medical weight management, and supplementation.

Our goal is to address the root causes of health concerns whenever possible while creating a personalized plan that is realistic, sustainable, and aligned with your goals.

What to Expect

During Your Nutrition Consultation

Your initial consultation is an opportunity for us to learn about you and create a plan that fits your lifestyle and health goals.

During your visit, we may discuss:

- ✧ Your current eating habits
- ✧ Medical history
- ✧ Medications and supplements
- ✧ Digestive health
- ✧ Sleep quality
- ✧ Stress levels
- ✧ Physical activity
- ✧ Laboratory findings (when available)
- ✧ Body composition analysis (if applicable)
- ✧ Previous nutrition experiences
- ✧ Short- and long-term health goals

Together, we will develop a personalized nutrition strategy designed to help you achieve sustainable results.

What This Manual Includes

This guide has been designed to serve as both an educational resource and a practical workbook.

Inside, you'll learn about:

- ✧ How your metabolism works
- ✧ Calories and energy expenditure
- ✧ Macronutrients and micronutrients
- ✧ Blood sugar regulation
- ✧ Gut health
- ✧ Inflammation
- ✧ Hormone-supportive nutrition
- ✧ Medical weight management
- ✧ Hydration
- ✧ Healthy aging
- ✧ Meal planning
- ✧ Grocery shopping
- ✧ Reading nutrition labels
- ✧ Supplement education
- ✧ Personalized goal setting

Throughout the manual, you'll also find worksheets, meal-building guides, and practical tips to help you apply what you learn to everyday life.

Our Commitment to You

At The Alchemy Clinic, we are committed to providing compassionate, evidence-based care that empowers you to take an active role in your health.

We are here to educate, support, and guide you—not to judge.

Together, we'll create a personalized plan that helps you feel stronger, healthier, and more confident in your body.

No matter where you're starting, we're honored to be part of your journey.



ALCHEMY INSIGHT

"Health isn't created by one perfect meal or one perfect workout. It is built through the choices we make consistently over time. Every nourishing meal, every walk, every good night's sleep, and every act of self-care is an investment in your future health."

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PART ONE

Understanding Your Body

*How your body turns food into energy, and the systems
that quietly shape how you feel every day.*

O I

Nourish Your Body

Food Is Information

IN THIS CHAPTER

Food is more than calories

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Food Is More Than Calories

Many people have been taught to think of food only in terms of calories.

While calories provide energy, food offers so much more.

Food supplies your body with:

- ✧ Amino acids to build and repair muscle
- ✧ Essential fatty acids for hormone production and brain health
- ✧ Vitamins and minerals that support hundreds of biochemical reactions
- ✧ Fiber to nourish your gut microbiome
- ✧ Antioxidants that help protect your cells from oxidative stress
- ✧ Phytonutrients that support immune function and healthy aging

Every meal provides your body with the building blocks it needs to function, recover, and thrive.

Rather than focusing solely on eating less, we encourage you to focus on eating well.

Nutrition Is Personalized

What works well for one person may not work for another.

Nutrition recommendations should be individualized based on factors such as:

- | | |
|-------------------|--------------------------|
| ✧ Age | ✧ Sleep quality |
| ✧ Sex | ✧ Stress |
| ✧ Medical history | ✧ Digestive health |
| ✧ Hormonal health | ✧ Laboratory findings |
| ✧ Activity level | ✧ Personal preferences |
| ✧ Muscle mass | ✧ Lifestyle and schedule |

Our recommendations are always tailored to your unique physiology, goals, and preferences—not a one-size-fits-all approach.

Food Is Information

Every Bite Matters

Most of us have been taught to think about food in terms of calories.

"How many calories are in this?"

"Is this food good or bad?"

"Will this make me gain weight?"

While calories are important, they tell only a small part of the story.

Food is much more than energy—it is information.

Every meal you eat provides your body with instructions. Those instructions influence how your cells function, how your hormones communicate, how your metabolism operates, and how your body heals, grows, and ages.

At The Alchemy Clinic, we encourage our patients to shift their mindset from "How little can I eat?" to "How well can I nourish my body?"

This simple change in perspective can transform the way you approach nutrition for the rest of your life.

Food Is Fuel

Imagine trying to drive a luxury vehicle with poor-quality fuel. It might continue running for a while, but over time, performance declines.

Your body works the same way.

The foods you choose provide the raw materials your body uses to:

- ✧ Produce energy
- ✧ Build muscle
- ✧ Repair tissues
- ✧ Create hormones
- ✧ Support brain function
- ✧ Strengthen your immune system
- ✧ Maintain healthy skin
- ✧ Protect your heart
- ✧ Reduce inflammation
- ✧ Support healthy aging

Every meal is an opportunity to provide your body with the nutrients it needs to perform at its best.

Food Is Information

Every time you eat, your body receives thousands of biochemical signals.

These signals influence:

- ✧ Blood sugar regulation
- ✧ Insulin production
- ✧ Hormone balance
- ✧ Inflammation
- ✧ Digestion
- ✧ Gut bacteria
- ✧ Energy production
- ✧ Cellular repair
- ✧ Muscle growth
- ✧ Fat storage
- ✧ Brain health
- ✧ Skin health

Your body is constantly responding to the foods you eat.

Nutrition is one of the most powerful ways to influence your health because it affects nearly every system in the body.

The Body Is Always Listening

Your body doesn't judge foods as "good" or "bad."

Instead, it simply responds to the information it receives.

A balanced meal rich in protein, healthy fats, fiber, vitamins, and minerals sends very different signals than a meal consisting primarily of refined carbohydrates and added sugars.

One meal will not determine your health.

Likewise, one indulgent meal will not undo your progress.

Health is shaped by consistent patterns—not isolated choices.

Food Builds Your Body

Every cell in your body is made from nutrients.

Protein supplies amino acids to repair muscles and tissues.

Healthy fats help produce hormones and build healthy cell membranes.

Carbohydrates provide glucose to fuel your brain and muscles.

Vitamins and minerals support thousands of chemical reactions that keep your body functioning normally.

Fiber feeds the beneficial bacteria living in your digestive tract.

Without these nutrients, the body cannot perform optimally.

Food Influences Hormones

Hormones act as chemical messengers that regulate nearly every process in the body.

Nutrition plays an important role in supporting healthy hormone production.

Balanced meals can help support:

- ✧ Blood sugar regulation
- ✧ Insulin sensitivity
- ✧ Cortisol balance
- ✧ Thyroid function
- ✧ Sex hormone production
- ✧ Healthy metabolism

While nutrition is only one piece of hormone health, it provides the foundation upon which many other treatments build.

Food Supports Your Immune System

Approximately 70% of your immune system is associated with your gastrointestinal tract.

The foods you eat help nourish the gut microbiome—a community of trillions of microorganisms that influences digestion, immune health, inflammation, and metabolism.

A diet rich in:

- ✧ Vegetables
- ✧ Fruit
- ✧ Whole grains
- ✧ Beans
- ✧ Healthy fats
- ✧ Lean proteins

helps provide the nutrients needed to support immune function and maintain a healthy gut environment.

Food and Inflammation

Inflammation is a normal part of healing.

However, chronic, low-grade inflammation may contribute to a variety of health conditions.

Nutrition can help support your body's natural inflammatory response.

Foods that support overall health include:

- | | |
|-----------------------|--------------------|
| ✧ Colorful vegetables | ✧ Nuts |
| ✧ Fruits | ✧ Seeds |
| ✧ Fatty fish | ✧ Herbs and spices |
| ✧ Olive oil | ✧ Legumes |

A balanced dietary pattern emphasizing whole, minimally processed foods can help support long-term wellness.

Food and Healthy Aging

Healthy aging isn't simply about living longer—it's about maintaining strength, mobility, independence, and quality of life.

Nutrition plays a central role in preserving:

- ✧ Lean muscle mass
- ✧ Bone density
- ✧ Brain function
- ✧ Cardiovascular health
- ✧ Skin integrity
- ✧ Immune function
- ✧ Energy levels

The choices you make today influence how you feel not only next week, but years from now.

Food and Skin Health

Healthy skin begins beneath the surface.

Your skin depends on nutrients to produce collagen, protect against oxidative stress, support wound healing, and maintain hydration.

Important nutrients for skin health include:

- ✧ Protein
- ✧ Vitamin C
- ✧ Vitamin A
- ✧ Zinc
- ✧ Omega-3 fatty acids
- ✧ Healthy fats
- ✧ Water

While skincare products work from the outside, nutrition helps support healthy skin from within.

Food and Metabolism

Many people believe metabolism is fixed.

In reality, metabolism is influenced by many lifestyle factors, including:

- ✧ Nutrition
- ✧ Sleep
- ✧ Physical activity
- ✧ Lean muscle mass
- ✧ Stress
- ✧ Hormonal health
- ✧ Age

Eating enough high-quality nutrients helps support normal metabolic function and overall health.

In the next chapter, we'll explore exactly how your metabolism works and how your body uses the food you eat to create energy.

The Alchemy Plate Philosophy

Rather than focusing on restriction, we encourage building balanced meals that provide the nutrients your body needs to thrive.

Most meals should include:

⁰⁷ Protein

Supports muscle, metabolism, recovery, and satiety.

⁰⁷ Vegetables & Fruits

Provide fiber, vitamins, minerals, antioxidants, and phytonutrients.

⁰⁷ Complex Carbohydrates

Supply steady energy and support brain and muscle function.

⁰⁷ Healthy Fats

Support hormone production, brain health, skin health, and nutrient absorption.

⁰⁷ Hydration

Supports every cell, tissue, and organ in the body.

When these components work together, they create meals that are satisfying, nutrient-dense, and supportive of long-term health.



ALCHEMY INSIGHT

Every meal is an opportunity to nourish your body. Instead of asking, "Is this food good or bad?" try asking, "What does this meal provide my body?" Small, intentional choices made consistently over time create meaningful and lasting improvements in health.

02

Understanding Your Metabolism

The Foundation of Your Health

IN THIS CHAPTER

Basal metabolic rate

Total daily energy expenditure

NEAT and the thermic effect of food

Why muscle matters



- ✧ What is metabolism?
- ✧ Basal Metabolic Rate (BMR)
- ✧ Total Daily Energy Expenditure (TDEE)
- ✧ NEAT
- ✧ Thermic Effect of Food
- ✧ Why muscle matters
- ✧ Metabolic flexibility

One of the most common misconceptions about metabolism is that it is either "fast" or "slow." In reality, metabolism is far more complex than that.

Metabolism refers to all of the chemical processes that occur within your body to keep you alive. Every heartbeat, every breath, every thought, and every movement requires energy. Your body is constantly converting the food you eat into fuel that powers these essential functions.

Understanding how your metabolism works is one of the most important steps toward building a sustainable nutrition plan. Rather than focusing solely on calories, we encourage patients to understand how their body uses energy, because this knowledge empowers you to make informed choices that support your long-term health.

What Is Metabolism?

Metabolism is the collection of chemical reactions your body uses to:

- | | |
|-----------------------------|-------------------------------|
| ✧ Produce energy | ✧ Digest and absorb nutrients |
| ✧ Build and repair tissues | ✧ Eliminate waste |
| ✧ Create hormones | ✧ Maintain healthy organs |
| ✧ Support immune function | ✧ Support brain function |
| ✧ Regulate body temperature | |

Even while you're sleeping, your body is working around the clock to keep you alive.

Energy In = Energy Out

Body weight is influenced by many factors, but at its core, energy balance is determined by the relationship between the calories you consume and the calories your body uses.

ENERGY INTAKE

The calories you consume from food and beverages.

ENERGY EXPENDITURE

The calories your body burns throughout the day.

When energy intake and energy expenditure are balanced, body weight generally remains stable over time.

However, it's important to remember that the quality of the calories you eat matters just as much as the quantity. Foods rich in protein, fiber, vitamins, minerals, and healthy fats support your body's physiology very differently than highly processed foods with little nutritional value.

What Determines How Many Calories You Burn?

Your body burns calories in four primary ways:

1. Basal Metabolic Rate (BMR)
2. Physical Activity
3. Non-Exercise Activity Thermogenesis (NEAT)
4. Thermic Effect of Food (TEF)

Together, these components make up your Total Daily Energy Expenditure (TDEE).

Basal Metabolic Rate (BMR)

Your Basal Metabolic Rate (BMR) is the number of calories your body requires each day to perform essential life-sustaining functions while completely at rest.

These functions include:

- | | |
|------------------|-------------------------------|
| ✧ Breathing | ✧ Hormone production |
| ✧ Heart function | ✧ Cell repair |
| ✧ Brain activity | ✧ Body temperature regulation |
| ✧ Organ function | ✧ Immune function |

Even if you stayed in bed all day, your body would still burn calories to perform these essential tasks.

For most people, BMR accounts for approximately 60–70% of total daily energy expenditure, making it the largest contributor to the calories you burn each day.

Calculating Your Basal Metabolic Rate

One of the most widely used methods for estimating BMR is the Mifflin–St Jeor Equation.

MEN

$$\text{BMR} = (10 \times \text{weight in kg}) + (6.25 \times \text{height in cm}) - (5 \times \text{age in years}) + 5$$

WOMEN

$$\text{BMR} = (10 \times \text{weight in kg}) + (6.25 \times \text{height in cm}) - (5 \times \text{age in years}) - 161$$

These formulas provide an estimate of the calories your body needs at rest. Your healthcare provider may adjust these estimates based on factors such as body composition, health conditions, medications, and metabolic goals.

Total Daily Energy Expenditure (TDEE)

Your Total Daily Energy Expenditure (TDEE) is the total number of calories your body burns over a 24-hour period.

It includes:

1. BASAL METABOLIC RATE (BMR)

Approximately 60–70%

The calories required to sustain basic bodily functions.

2. PHYSICAL ACTIVITY

Approximately 15–30%

Structured exercise such as walking, running, resistance training, cycling, or sports.

3. NON-EXERCISE ACTIVITY THERMOGENESIS (NEAT)

Approximately 15–30%

The energy burned through everyday movement outside of formal exercise, including:

- ✦ Walking around the office
- ✦ Cleaning
- ✦ Gardening
- ✦ Standing
- ✦ Shopping
- ✦ Taking the stairs
- ✦ Playing with children

4. THERMIC EFFECT OF FOOD (TEF)

Approximately 10%

Your body uses energy to digest, absorb, transport, and metabolize the food you eat.

Protein has the highest thermic effect, requiring approximately 20–30% of its calories for digestion, compared with 5–10% for carbohydrates and 0–3% for fats

Calculating Total Daily Energy Expenditure

To estimate your daily calorie needs, multiply your BMR by an activity factor.

ACTIVITY LEVEL	MULTIPLIER
Sedentary	1.20
Lightly Active	1.375
Moderately Active	1.55
Very Active	1.725
Extremely Active	1.90

This calculation provides an estimate of the calories needed to maintain your current weight.

Why Muscle Matters

Lean muscle is one of the most metabolically active tissues in the body.

Maintaining and building muscle supports:

- ✦ A healthy metabolism
- ✦ Blood sugar regulation
- ✦ Strength and mobility
- ✦ Healthy aging
- ✦ Bone health
- ✦ Improved body composition

This is why we emphasize both adequate protein intake and regular resistance training as cornerstones of long-term wellness.

Why Calories Aren't the Whole Story

While energy balance is important, health cannot be measured by calories alone.

A nutrient-dense meal rich in protein, fiber, healthy fats, vitamins, and minerals provides your body with the building blocks needed for repair, hormone production, immune function, and healthy aging.

Nutrition is not simply about eating less—it is about nourishing your body with the nutrients it needs to thrive.



ALCHEMY INSIGHT

Your metabolism is not something to "fix"—it's something to support. By nourishing your body, preserving lean muscle, staying active, sleeping well, and managing stress, you can promote a healthy metabolism that supports long-term wellness.

03

Understanding Macronutrients

The Building Blocks of Nutrition

IN THIS CHAPTER

Protein

Carbohydrates and fiber

Fats

How macronutrients work together



One of the most important concepts in nutrition is understanding macronutrients.

Macronutrients are the nutrients your body requires in large amounts because they provide energy (calories) and the raw materials needed to build, repair, and maintain healthy tissues.

Every food you eat contains one or more macronutrients, and each plays a unique role in supporting your health.

The three primary macronutrients are:

- ✧ Protein
- ✧ Carbohydrates
- ✧ Fat

There is no "most important" macronutrient. Your body needs all three to function optimally. The key is choosing high-quality sources and balancing them in a way that supports your health, lifestyle, and goals.

Calories vs. Nutrients

A calorie is simply a unit of energy.

While calories are important, they do not tell us how nutritious a food is.

For example, two meals may contain the same number of calories, but one may provide significantly more protein, fiber, vitamins, minerals, and healthy fats than the other.

At The Alchemy Clinic, we encourage patients to focus on nutrient density rather than calorie counting alone.

The goal isn't simply to eat fewer calories—it's to eat foods that nourish your body.

What Are Calories?

Each macronutrient provides a different amount of energy.

MACRONUTRIENT	CALORIES PER GRAM
Protein	4 calories
Carbohydrates	4 calories
Fat	9 calories
Alcohol*	7 calories

*Alcohol is not considered an essential nutrient but does contribute calories.

Protein

Why Protein Matters

Protein is one of the most important nutrients for overall health.

Your body uses protein to:

- ✦ Build and repair muscles
- ✦ Produce hormones
- ✦ Create enzymes
- ✦ Support immune function
- ✦ Build healthy skin, hair, and nails
- ✦ Heal wounds
- ✦ Preserve lean muscle during weight loss
- ✦ Promote fullness after meals

Protein is made up of smaller building blocks called amino acids.

Some amino acids can be made by the body, while others—called essential amino acids—must come from food.

Why We Prioritize Protein

At The Alchemy Clinic, adequate protein intake is a cornerstone of nearly every nutrition plan.

Protein helps:

- ✦ Preserve lean muscle mass
- ✦ Support metabolism
- ✦ Improve satiety
- ✦ Stabilize blood sugar
- ✦ Support healthy aging
- ✦ Promote recovery after exercise
- ✦ Support collagen production

Adequate protein becomes increasingly important as we age because maintaining muscle mass helps preserve strength, mobility, metabolic health, and independence.

High-Quality Protein Sources

ANIMAL SOURCES

- ✦ Chicken
- ✦ Turkey
- ✦ Fish
- ✦ Salmon
- ✦ Eggs
- ✦ Lean beef
- ✦ Greek yogurt
- ✦ Cottage cheese

PLANT SOURCES

- ✦ Tofu
- ✦ Tempeh
- ✦ Edamame
- ✦ Lentils
- ✦ Beans
- ✦ Chickpeas
- ✦ Quinoa
- ✦ Soy milk

How Much Protein Do You Need?

Protein needs vary based on:

- ✧ Age
- ✧ Activity level
- ✧ Muscle mass
- ✧ Health conditions
- ✧ Pregnancy
- ✧ Weight-loss goals
- ✧ Recovery from illness or surgery

On average most people require 1.2g/kg of protein per day. Average is about 80-90g per day

Carbohydrates

What Are Carbohydrates?

Carbohydrates are your body's preferred source of energy.

When you eat carbohydrates, your digestive system breaks them down into glucose, which your cells use for energy.

Glucose fuels:

- ✧ Your brain
- ✧ Nervous system
- ✧ Muscles
- ✧ Red blood cells
- ✧ Exercise performance

Carbohydrates are not the enemy—they are an important part of a balanced diet.

Types of Carbohydrates

SIMPLE CARBOHYDRATES

These digest quickly and provide rapid energy.

Examples include:

- ✧ Fruit
- ✧ Milk
- ✧ Honey
- ✧ Table sugar

Some simple carbohydrates, like fruit and dairy, are naturally nutrient-rich, while others, such as sugary beverages and candy, provide fewer nutrients.

COMPLEX CARBOHYDRATES

Complex carbohydrates digest more slowly and provide steady energy.

They are often rich in fiber, vitamins, and minerals.

Examples include:

- ✧ Oats
- ✧ Brown rice
- ✧ Quinoa
- ✧ Sweet potatoes
- ✧ Beans
- ✧ Lentils
- ✧ Whole grains
- ✧ Vegetables

Why Fiber Matters

Fiber is a type of carbohydrate that your body cannot fully digest.

Although it doesn't provide energy, it plays a critical role in health.

Fiber helps:

- ✧ Support digestive health
- ✧ Feed beneficial gut bacteria
- ✧ Promote fullness
- ✧ Support healthy cholesterol levels
- ✧ Slow digestion
- ✧ Help regulate blood sugar

Most adults would benefit from increasing their fiber intake through whole foods.

Healthy Fats

Why Fat Is Essential

For many years, dietary fat was viewed negatively.

Today we know that healthy fats are essential for optimal health.

Healthy fats support:

- ✧ Hormone production
- ✧ Brain function
- ✧ Healthy skin
- ✧ Cell membranes
- ✧ Vitamin absorption
- ✧ Heart health
- ✧ Satiety

Fat is not something to fear—it is something to choose wisely.

Healthy Fat Sources

- ✧ Olive oil
- ✧ Avocados
- ✧ Nuts
- ✧ Seeds
- ✧ Nut butters
- ✧ Salmon
- ✧ Sardines
- ✧ Chia seeds
- ✧ Flaxseed

Saturated vs. Unsaturated Fats

Most of the fats in your diet should come from unsaturated fats, which are found in foods such as olive oil, avocados, nuts, seeds, and fatty fish.

Saturated fats, found in foods like butter, cheese, and fatty cuts of meat, can be enjoyed in moderation as part of an overall balanced dietary pattern.

How Macronutrients Work Together

Rather than viewing protein, carbohydrates, and fat as separate nutrients, think of them as teammates.

Each contributes something different:

- ⁹⁷ Protein builds and repairs tissues.
- ⁹⁷ Carbohydrates provide energy.
- ⁹⁷ Healthy fats support hormones, brain health, and vitamin absorption.

Balanced meals that include all three macronutrients often provide longer-lasting energy, greater satiety, and more stable blood sugar than meals centered around only one nutrient.

The Alchemy Plate

One of the easiest ways to build a balanced meal is by using The Alchemy Plate.

Aim for:

- ⁹⁷ ½ Plate: Non-starchy vegetables
- ⁹⁷ ¼ Plate: Lean protein
- ⁹⁷ ¼ Plate: Whole-food carbohydrates
- ⁹⁷ Add: A serving of healthy fat
- ⁹⁷ Drink: Water with meals

This simple framework provides a variety of nutrients without requiring calorie counting or complicated meal plans.

Nutrient Density

At The Alchemy Clinic, we emphasize nutrient density.

Nutrient-dense foods provide large amounts of vitamins, minerals, protein, fiber, and healthy fats relative to their calorie content.

Examples include:

- ✧ Vegetables
- ✧ Fruits
- ✧ Lean proteins
- ✧ Fish
- ✧ Eggs
- ✧ Beans
- ✧ Lentils
- ✧ Nuts
- ✧ Seeds
- ✧ Whole grains
- ✧ Plain Greek yogurt

The goal is not perfection but choosing nourishing foods most of the time.

Progress Over Perfection

Healthy eating isn't about labeling foods as "good" or "bad."

It's about creating a sustainable eating pattern that supports your goals while still allowing flexibility, enjoyment, and balance.

One meal won't determine your health.

One day won't define your progress.

Consistency is what creates lasting change.



ALCHEMY INSIGHT

Every macronutrient has a purpose. Protein builds, carbohydrates fuel, and healthy fats protect. When you consistently include all three in balanced meals, you give your body the nutrients it needs to perform, recover, and thrive.

04

Understanding Micronutrients

Small Nutrients, Big Impact

IN THIS CHAPTER

Fat-soluble vitamins

Water-soluble vitamins

Essential minerals

Food first



While macronutrients—protein, carbohydrates, and fats—provide your body with energy, micronutrients are the vitamins and minerals that allow your body to use that energy efficiently.

Although they are needed in much smaller amounts, micronutrients play a vital role in nearly every process within the body. They help support metabolism, immune function, hormone production, brain health, muscle function, bone strength, skin health, wound healing, and healthy aging.

Unlike macronutrients, micronutrients do not provide calories. Instead, they act as helpers, allowing thousands of chemical reactions to occur every second.

Without adequate vitamins and minerals, your body cannot perform at its best—even if you're consuming enough calories.

Why Micronutrients Matter

Every cell in your body relies on vitamins and minerals to function properly.

Micronutrients help support:

- | | |
|-------------------------------------|--------------------------|
| ✦ Energy production | ✦ Muscle contraction |
| ✦ Immune health | ✦ Heart health |
| ✦ Brain and nervous system function | ✦ Wound healing |
| ✦ Hormone production | ✦ Healthy aging |
| ✦ Healthy skin, hair, and nails | ✦ Antioxidant protection |
| ✦ Bone health | ✦ DNA repair |

This is why a nutrient-dense diet is just as important as meeting your calorie needs.

Vitamins vs. Minerals

Micronutrients are divided into two categories:

VITAMINS

Vitamins are organic compounds that support countless biological functions, including metabolism, immunity, and tissue repair.

Examples include:

- ✦ Vitamin A
- ✦ Vitamin C
- ✦ Vitamin D
- ✦ Vitamin E
- ✦ Vitamin K
- ✦ B Vitamins

Minerals

Minerals are naturally occurring elements that help regulate fluid balance, muscle contraction, nerve function, oxygen transport, and bone health.

Examples include:

- ✧ Calcium
- ✧ Magnesium
- ✧ Iron
- ✧ Zinc
- ✧ Potassium
- ✧ Selenium
- ✧ Sodium

Fat-Soluble Vitamins

Fat-soluble vitamins are absorbed along with dietary fat and can be stored in the body's tissues.

These include:

- ✧ Vitamin A
- ✧ Vitamin D
- ✧ Vitamin E
- ✧ Vitamin K

This is one reason healthy fats are an important part of a balanced diet—they help your body absorb these essential nutrients.

Vitamin A

WHY IT'S IMPORTANT

Vitamin A supports:

- ✧ Healthy vision
- ✧ Skin health
- ✧ Immune function
- ✧ Cell growth
- ✧ Tissue repair

FOOD SOURCES

- ✧ Sweet potatoes
- ✧ Carrots
- ✧ Spinach
- ✧ Kale
- ✧ Egg yolks
- ✧ Liver

Vitamin D

Vitamin D is unique because your body can produce it through sunlight exposure. However, many people—especially those living in northern climates—may not get enough through sun exposure alone.

WHY IT'S IMPORTANT

Vitamin D supports:

- ✧ Bone health
- ✧ Immune function
- ✧ Muscle strength
- ✧ Mood regulation
- ✧ Healthy aging

FOOD SOURCES

- ✧ Salmon
- ✧ Sardines
- ✧ Egg yolks
- ✧ Fortified dairy products
- ✧ Fortified plant-based milks

Vitamin E

Vitamin E is a powerful antioxidant that helps protect cells from oxidative stress.

SUPPORTS

- ✧ Skin health
- ✧ Immune function
- ✧ Cellular protection

FOOD SOURCES

- ✧ Almonds
- ✧ Sunflower seeds
- ✧ Avocados
- ✧ Olive oil
- ✧ Spinach

Vitamin K

Vitamin K is essential for normal blood clotting and bone health.

FOOD SOURCES

- ✧ Kale
- ✧ Spinach
- ✧ Broccoli
- ✧ Brussels sprouts

Water-Soluble Vitamins

Unlike fat-soluble vitamins, water-soluble vitamins are not stored in large amounts and must be consumed regularly.

These include:

- ✧ Vitamin C
- ✧ B Vitamins

Vitamin C

Vitamin C is one of the most important nutrients for skin health and collagen production.

SUPPORTS

- ✧ Collagen synthesis
- ✧ Wound healing
- ✧ Immune function
- ✧ Antioxidant protection
- ✧ Iron absorption

FOOD SOURCES

- ✧ Bell peppers
- ✧ Strawberries
- ✧ Citrus fruits
- ✧ Kiwi
- ✧ Broccoli

B Vitamins

The B vitamins work together to help your body convert food into usable energy.

THEY SUPPORT

- ✧ Energy metabolism
- ✧ Brain function
- ✧ Nervous system health
- ✧ Red blood cell production
- ✧ DNA synthesis

FOOD SOURCES

- ✧ Meat
- ✧ Poultry
- ✧ Fish
- ✧ Eggs
- ✧ Whole grains
- ✧ Legumes
- ✧ Leafy greens

Essential Minerals**Calcium**

Calcium is best known for supporting strong bones, but it also plays a role in muscle contraction, nerve signaling, and heart function.

FOOD SOURCES

- ✧ Dairy products
- ✧ Fortified plant milks
- ✧ Tofu
- ✧ Sardines
- ✧ Kale

Magnesium

Magnesium is involved in more than 300 enzymatic reactions throughout the body.

SUPPORTS

- ✧ Muscle relaxation
- ✧ Sleep quality
- ✧ Blood sugar regulation
- ✧ Energy production
- ✧ Stress response
- ✧ Heart health

FOOD SOURCES

- ✧ Pumpkin seeds
- ✧ Almonds
- ✧ Cashews
- ✧ Black beans
- ✧ Spinach
- ✧ Dark chocolate

Iron

Iron helps carry oxygen throughout your body.

Low iron levels may contribute to fatigue, weakness, and reduced exercise tolerance.

FOOD SOURCES

- ✧ Lean red meat
- ✧ Lentils
- ✧ Spinach
- ✧ Beans
- ✧ Fortified cereals

Potassium

Potassium is an electrolyte that helps regulate fluid balance, nerve function, muscle contractions, and blood pressure.

FOOD SOURCES

- ✧ Bananas
- ✧ Potatoes
- ✧ Avocados
- ✧ Yogurt
- ✧ Beans
- ✧ Leafy greens

Electrolytes

Electrolytes are minerals that carry an electrical charge and help maintain normal body function.

Zinc

Zinc supports immune health, skin repair, wound healing, and normal hormone production.

FOOD SOURCES

- ✧ Beef
- ✧ Shellfish
- ✧ Pumpkin seeds
- ✧ Chickpeas
- ✧ Yogurt

Important electrolytes include:

- ✧ Sodium
- ✧ Potassium
- ✧ Magnesium
- ✧ Calcium

Electrolytes help regulate:

- ✧ Hydration
- ✧ Muscle contractions
- ✧ Nerve signaling
- ✧ Heart rhythm
- ✧ Exercise performance

Most people can meet their electrolyte needs through a balanced diet, though additional supplementation may be appropriate during prolonged exercise, illness, or excessive sweating.

Food First

Whenever possible, we encourage meeting your vitamin and mineral needs through whole foods.

Whole foods provide nutrients in combination with fiber, healthy fats, protein, and naturally occurring compounds that work together to support overall health.

Supplements may be helpful for certain individuals, but they are intended to supplement a healthy diet—not replace it.



ALCHEMY INSIGHT

Micronutrients may be needed in small amounts, but their impact is enormous. Every vitamin and mineral plays a role in helping your body produce energy, support immunity, repair tissues, protect your cells, and promote healthy aging. When you choose nutrient-dense foods every day, you're investing in your health at the cellular level.

05

How Your Body Makes Energy

The Science Behind Your Nutrition

IN THIS CHAPTER

ATP, your energy currency

Glycolysis and glycogen

Fat oxidation and ketones

Metabolic flexibility



Every second of every day, your body is producing energy to keep you alive.

Whether you're taking a walk, lifting weights, thinking through a difficult problem, sleeping, or simply breathing, your body is constantly converting the nutrients from food into usable energy.

This process is incredibly complex, yet beautifully efficient.

The body has developed several systems that work together to ensure your cells always have access to the fuel they need. Understanding these systems can help you make more informed nutrition choices and appreciate why balanced meals, adequate protein, and consistent eating patterns are important.

Meet ATP: Your Body's Energy Currency

The immediate source of energy for every cell in your body is a molecule called ATP, or adenosine triphosphate.

Think of ATP as the body's energy "currency."

Every time a muscle contracts, your heart beats, your brain thinks, or a cell repairs itself, ATP is being used.

Because your body stores only a small amount of ATP at any given time, it must continually produce more from the foods you eat.

Protein, carbohydrates, and fats all contribute to ATP production through different metabolic pathways.

Where Does ATP Come From?

Your body can produce ATP from:

- ✦ Carbohydrates
- ✦ Fat
- ✦ Protein (when needed)

Which fuel source your body uses depends on factors such as:

- ✦ The intensity of activity
- ✦ Duration of activity
- ✦ Meal timing
- ✦ Glycogen stores
- ✦ Hormone levels
- ✦ Overall metabolic health

Your metabolism is remarkably adaptable and can switch between fuel sources based on your body's needs.

This ability is known as metabolic flexibility.

Glycolysis

When you eat carbohydrates, your digestive system breaks them down into glucose.

Your cells then use a process called glycolysis to convert glucose into energy.

Glycolysis is your body's fastest way to produce ATP and is especially important during:

- ✧ High-intensity exercise
- ✧ Short bursts of activity
- ✧ Brain function
- ✧ Everyday movement

While glycolysis is efficient, it relies on having an adequate supply of glucose available.

Glycogen: Your Body's Energy Reserve

Not all of the glucose you consume is used immediately.

Your body stores extra glucose in the form of glycogen, primarily in the:

- ✧ Liver
- ✧ Skeletal muscles

You can think of glycogen as your body's "backup battery."

Between meals or during exercise, glycogen can be broken down into glucose to provide energy.

However, glycogen storage is limited. Once those stores become depleted, your body begins relying more heavily on fat and, in some situations, protein to meet its energy needs.

Fat Oxidation

Fat is your body's largest source of stored energy.

When energy demands are lower, such as during rest or prolonged, lower-intensity activity, your body often relies more heavily on fat for fuel.

This process is called fat oxidation.

Examples include:

- ✧ Walking
- ✧ Hiking
- ✧ Sleeping
- ✧ Daily activities
- ✧ Long-duration exercise

Because the body stores much more fat than glycogen, fat provides a long-lasting energy source.

Gluconeogenesis

Your body is incredibly adaptable.

When carbohydrate intake is low, glycogen stores are depleted, or you've gone several hours without eating, your liver—and to a lesser extent, your kidneys—can produce new glucose through a process called gluconeogenesis.

The word literally means "creating new glucose."

Rather than using carbohydrates, your body creates glucose from:

- ✧ Amino acids from protein
- ✧ Glycerol from fat
- ✧ Lactate produced during normal metabolism

This process helps maintain healthy blood sugar levels and ensures that tissues requiring glucose, such as red blood cells and parts of the brain, continue to function properly.

Gluconeogenesis is a normal, healthy, and highly regulated metabolic process.

It is not harmful, nor does it mean that eating protein automatically raises blood sugar. Your body produces glucose only when it is needed.

Ketones

During prolonged fasting or very low-carbohydrate intake, your body may also begin producing ketones from fat.

Ketones provide an alternative fuel source for many tissues, including much of the brain.

This metabolic adaptation allows the body to continue functioning even when carbohydrate intake is limited.

Not everyone needs to follow a ketogenic diet to be healthy. Ketone production is simply one of the body's many ways of adapting to changing fuel availability.

Metabolic Flexibility

One hallmark of a healthy metabolism is metabolic flexibility.

Metabolic flexibility is your body's ability to efficiently switch between carbohydrates and fat as fuel depending on your activity level, meal timing, and energy needs.

A metabolically flexible body can:

- ✧ Use carbohydrates efficiently after meals
- ✧ Transition to burning fat between meals
- ✧ Adapt to exercise demands
- ✧ Maintain steady energy throughout the day
- ✧ Support healthy blood sugar regulation

Healthy eating patterns, regular physical activity, adequate sleep, and maintaining lean muscle mass all help support metabolic flexibility.

Why Protein Matters

Although protein is not your body's preferred energy source, it plays a critical role in metabolism.

Protein provides amino acids that support:

- ✧ Muscle growth and repair
- ✧ Hormone production
- ✧ Immune function
- ✧ Enzyme production
- ✧ Tissue healing

When necessary, certain amino acids can also be used during gluconeogenesis to help maintain healthy blood sugar levels.

This is one reason why adequate protein intake is especially important during weight loss, aging, and recovery from illness or injury.

Why Muscle Matters

Muscle is one of the body's most metabolically active tissues.

Maintaining lean muscle mass helps:

- ✧ Improve insulin sensitivity
- ✧ Increase strength and mobility
- ✧ Support healthy aging
- ✧ Enhance exercise performance
- ✧ Promote a healthy metabolism

Strength training combined with adequate protein intake is one of the most effective ways to preserve muscle throughout life.

Bringing It All Together

Your body is constantly adjusting how it produces energy based on your environment and nutritional intake.

After eating a balanced meal, your body primarily uses glucose for energy.

Between meals, it begins utilizing stored glycogen.

As glycogen stores decline, your body gradually relies more on fat oxidation and, when needed, gluconeogenesis to maintain energy and healthy blood sugar levels.

This remarkable flexibility allows your body to continue functioning under a wide range of conditions.

Key Takeaways

PUTTING IT INTO PRACTICE

- ✓ ATP is the energy currency of the body.
- ✓ Carbohydrates, fats, and proteins all contribute to energy production.
- ✓ Glycolysis converts glucose into energy.
- ✓ Glycogen serves as the body's stored form of glucose.
- ✓ Fat oxidation provides a long-lasting source of energy.
- ✓ Gluconeogenesis allows your body to produce glucose when needed.
- ✓ Metabolic flexibility reflects your body's ability to efficiently switch between different fuel sources.



ALCHEMY INSIGHT

Your body was designed to adapt. Every day, it carefully balances carbohydrates, fats, and proteins to keep you energized, maintain healthy blood sugar, and support the trillions of cells that keep you alive. The goal of good nutrition isn't to force your body to use one fuel source over another—it's to provide the nutrients it needs so it can adapt, perform, and thrive.

06

Blood Sugar & Insulin

The Foundation of Metabolic Health

IN THIS CHAPTER

What insulin does

Why stable blood sugar matters

Insulin resistance

Labs that matter



Every time you eat, your body begins an incredible process of converting food into energy. One of the most tightly regulated systems in the body is blood sugar (glucose) regulation. Maintaining healthy blood sugar levels is essential for stable energy, brain function, hormone balance, exercise performance, and long-term health.

Although blood sugar is often associated with diabetes, it plays an important role in everyone's health. Whether your goal is healthy aging, weight management, improving energy, or reducing inflammation, understanding blood sugar is one of the most valuable tools you can have.

What Is Blood Sugar?

Blood sugar, also called blood glucose, is the amount of glucose circulating in your bloodstream.

Glucose is the body's primary source of energy and is used by nearly every cell.

Your body obtains glucose from:

- ✧ Carbohydrates
- ✧ The breakdown of stored glycogen
- ✧ Gluconeogenesis (creating new glucose when needed)

Because too much or too little glucose can be harmful, your body works continuously to keep blood sugar within a healthy range.

What Is Insulin?

Insulin is a hormone produced by the pancreas.

Its primary job is to help move glucose from your bloodstream into your body's cells, where it can be used for energy or stored for later use.

Think of insulin as a key.

Glucose is the fuel, and insulin unlocks the door, allowing that fuel to enter your cells.

Without insulin, glucose remains in the bloodstream instead of reaching the tissues that need it.

What Happens After You Eat?

When you eat a meal—especially one containing carbohydrates—your digestive system breaks those carbohydrates down into glucose.

As blood glucose rises:

1. Your pancreas releases insulin.
2. Insulin helps move glucose into your cells.
3. Your cells use glucose to produce ATP (energy).
4. Any excess glucose may be stored as glycogen in the liver and muscles for later use.

As glucose is removed from the bloodstream, insulin levels gradually decrease, helping maintain balance.

This beautifully coordinated process happens after every meal.

Why Stable Blood Sugar Matters

Healthy blood sugar regulation helps support:

- ✧ Consistent energy
- ✧ Mental clarity and focus
- ✧ Healthy hormone function
- ✧ Exercise performance
- ✧ Appetite regulation
- ✧ Healthy metabolism
- ✧ Mood stability
- ✧ Long-term cardiovascular health

Large swings in blood sugar can leave you feeling tired, irritable, hungry, or craving more sugar.

Blood Sugar Spikes and Crashes

Meals high in refined carbohydrates or added sugars—and low in protein, fiber, or healthy fats—may cause blood sugar to rise quickly.

This rapid rise can trigger a larger insulin response.

As glucose is cleared from the bloodstream, some people experience a rapid drop in blood sugar, often referred to as a "crash."

Common symptoms may include:

- ✧ Fatigue
- ✧ Brain fog
- ✧ Irritability
- ✧ Hunger shortly after eating
- ✧ Sugar cravings
- ✧ Difficulty concentrating
- ✧ Feeling shaky

Not everyone experiences these symptoms, but balanced meals can help reduce large fluctuations in blood sugar.

What Is Insulin Resistance?

Over time, some individuals develop insulin resistance, a condition in which the body's cells become less responsive to insulin.

Imagine knocking on a door repeatedly, but the door becomes harder to open.

The pancreas responds by producing more insulin to achieve the same effect.

Over time, this may contribute to:

- ✧ Elevated insulin levels
- ✧ Elevated blood sugar
- ✧ Increased risk of prediabetes and type 2 diabetes
- ✧ Changes in blood lipids
- ✧ Increased abdominal fat
- ✧ Higher cardiovascular risk

Many factors influence insulin sensitivity, including genetics, sleep, stress, physical activity, body composition, and nutrition.

Supporting Healthy Blood Sugar

Healthy blood sugar is supported by consistent lifestyle habits—not one perfect meal.

Here are strategies that can help:

PRIORITIZE PROTEIN

INCLUDE FIBER

Choose Quality Carbohydrates

INCLUDE HEALTHY FATS

MOVE YOUR BODY

Meal Timing

Eating patterns can also influence how you feel throughout the day.

While there is no single meal schedule that works for everyone, many people benefit from:

- ✧ Eating balanced meals consistently
- ✧ Avoiding long periods without eating if they lead to overeating later
- ✧ Including protein at each meal
- ✧ Staying hydrated throughout the day

Your provider can help determine the meal timing strategy that best fits your goals, lifestyle, and medical history.

Common Laboratory Markers

Several laboratory tests can provide insight into metabolic health.

FASTING GLUCOSE

Measures blood sugar after an overnight fast.

HEMOGLOBIN A1C (HbA1C)

Reflects your average blood sugar over approximately the previous 2–3 months.

FASTING INSULIN

Can provide information about how hard your body is working to regulate blood sugar.

LIPID PANEL

Measures cholesterol and triglycerides, which are important components of cardiovascular and metabolic health.

Laboratory results should always be interpreted within the context of your medical history, medications, and overall health.

Blood Sugar Myths

Myth: Carbohydrates are bad.

Fact: Carbohydrates are an important source of energy. The type, quality, portion size, and what they're eaten with all matter.

Myth: Sugar alone causes diabetes.

Fact: Type 2 diabetes develops from a combination of genetics, lifestyle, body composition, and other health factors. No single food causes diabetes.

Myth: You have to eliminate all carbohydrates to lose weight.

Fact: Many people achieve and maintain a healthy weight while including nutrient-dense carbohydrates as part of a balanced eating pattern.

Bringing It All Together

Your body is constantly working to keep blood sugar within a healthy range.

Balanced meals that include protein, fiber, healthy fats, and quality carbohydrates can help support steady energy, healthy metabolism, and overall well-being.

The goal is not perfection or restriction—it's learning how to nourish your body consistently.



ALCHEMY INSIGHT

Healthy blood sugar isn't about avoiding carbohydrates—it's about creating balance. When you combine protein, fiber, healthy fats, and whole-food carbohydrates, you give your body the tools it needs to produce steady energy, support metabolic health, and help you feel your best throughout the day.

Quick Habits to Support Healthy Blood Sugar

- ✧ ✓ Include a source of protein at every meal.
- ✧ ✓ Fill half your plate with non-starchy vegetables.
- ✧ ✓ Choose whole-food carbohydrates most often.
- ✧ ✓ Add a healthy fat to meals for satiety.
- ✧ ✓ Take a 10–15 minute walk after meals when possible.
- ✧ ✓ Stay hydrated throughout the day.
- ✧ ✓ Aim for regular movement and strength training each week.



PART TWO

Building a Healthy Foundation

*Inflammation, gut health, hormones, longevity, and
weight, the pillars of lasting, resilient wellness.*

07

Understanding Inflammation

Friend and Foe

IN THIS CHAPTER

Acute versus chronic

Phytonutrients and antioxidants

Lifestyle and inflammation

Daily support



Inflammation often gets a bad reputation, but it is actually one of your body's most important protective mechanisms.

Without inflammation, cuts wouldn't heal, infections couldn't be fought, and injuries would struggle to recover.

Inflammation is your body's natural defense system.

The goal is not to eliminate inflammation—it is to support a healthy, balanced inflammatory response.

Problems arise when inflammation becomes chronic and persists longer than necessary.

At The Alchemy Clinic, we focus on supporting your body's natural healing processes through nutrition, movement, restorative sleep, stress management, and evidence-based medical care.

What Is Inflammation?

Inflammation is your immune system's response to injury, infection, or other perceived threats.

When your body detects damage, it releases chemical messengers that help:

- ✧ Fight infection
- ✧ Repair injured tissue
- ✧ Remove damaged cells
- ✧ Promote healing

This process is essential for survival.

Acute vs. Chronic Inflammation

Not all inflammation is the same.

ACUTE INFLAMMATION

Acute inflammation is short-term and serves a beneficial purpose.

Examples include:

- ✧ Healing a cut
- ✧ Recovering from a workout
- ✧ Fighting a virus
- ✧ Healing after surgery

Signs may include:

- ✧ Redness
- ✧ Warmth
- ✧ Swelling
- ✧ Pain

Once healing is complete, the inflammatory response naturally resolves.

Chronic Inflammation

Chronic inflammation is a long-lasting, low-grade immune response that can persist for months or years.

Unlike acute inflammation, chronic inflammation may not produce obvious symptoms but can contribute to changes throughout the body over time.

Researchers continue to study the role chronic inflammation may play in a variety of health conditions.

What Can Influence Inflammation?

Inflammation is affected by many factors—not just food.

These include:

- | | |
|---------------------|---------------------------|
| ✧ Nutrition | ✧ Alcohol use |
| ✧ Physical activity | ✧ Body composition |
| ✧ Sleep quality | ✧ Environmental exposures |
| ✧ Chronic stress | ✧ Medical conditions |
| ✧ Smoking | ✧ Genetics |

Because so many factors are involved, there is no single food or supplement that "causes" or "cures" inflammation.

Nutrition and Inflammation

A consistent dietary pattern rich in whole, minimally processed foods may help support a healthy inflammatory response.

Foods that are commonly included in anti-inflammatory dietary patterns include:

- | | |
|------------------------|----------------------|
| ⁹⁷ Colorful vegetables | ⁹⁷ Olive oil |
| ⁹⁷ Fruits | ⁹⁷ Beans and lentils |
| ⁹⁷ Fatty fish | ⁹⁷ Whole grains |
| ⁹⁷ Nuts | ⁹⁷ Herbs and spices |
| ⁹⁷ Seeds | |

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Phytonutrients

Plants contain naturally occurring compounds called phytonutrients.

These compounds often give fruits and vegetables their vibrant colors and may help support your body's antioxidant defenses.

Examples include:

- ✧ Carotenoids
- ✧ Flavonoids
- ✧ Polyphenols
- ✧ Anthocyanins

Eating a variety of colorful plant foods helps ensure you consume a wide range of these beneficial compounds.

Antioxidants

Every day, your body produces unstable molecules called free radicals as part of normal metabolism.

Free radicals can also increase with:

- ✧ Smoking
- ✧ Air pollution
- ✧ Excessive UV exposure
- ✧ Chronic stress

Antioxidants help protect cells from oxidative stress by neutralizing free radicals.

Foods naturally rich in antioxidants include:

- ✧ Berries
- ✧ Leafy greens
- ✧ Citrus fruits
- ✧ Tomatoes
- ✧ Green tea
- ✧ Nuts
- ✧ Dark chocolate (in moderation)

Omega-3 Fatty Acids

Omega-3 fats are essential fats that play important roles in heart, brain, and immune health.

Good sources include:

- ✧ Salmon
- ✧ Sardines
- ✧ Mackerel
- ✧ Walnuts
- ✧ Chia seeds
- ✧ Flaxseed

Including omega-3-rich foods regularly can support an overall healthy dietary pattern.

Lifestyle Factors That Support a Healthy Inflammatory Response

Food is only one piece of the puzzle.

Daily habits also influence your body's inflammatory balance.

SLEEP

Aim for 7–9 hours of quality sleep each night whenever possible.

EXERCISE

Regular physical activity supports overall health and helps regulate many systems throughout the body.

Both aerobic exercise and resistance training offer health benefits.

STRESS MANAGEMENT

Chronic stress can influence many body systems.

Helpful stress-management practices may include:

- ✧ Walking outdoors
- ✧ Meditation
- ✧ Yoga
- ✧ Deep breathing
- ✧ Journaling
- ✧ Spending time with loved ones

HYDRATION

Adequate hydration supports normal cellular function and overall health.

Inflammation and Healthy Aging

As we age, maintaining a healthy inflammatory balance becomes increasingly important.

Long-term healthy habits—such as regular movement, balanced nutrition, restorative sleep, and stress management—can help support healthy aging and overall well-being.

Supporting Your Body Every Day

Simple daily habits can make a meaningful difference over time:

PUTTING IT INTO PRACTICE

- ✓ Fill half your plate with colorful vegetables.
- ✓ Eat fruit daily.
- ✓ Include fatty fish twice per week, or choose other sources of omega-3 fats.
- ✓ Cook with olive oil instead of highly processed oils when appropriate.
- ✓ Stay physically active.
- ✓ Prioritize quality sleep.
- ✓ Manage stress.
- ✓ Stay hydrated.

Remember, no single food determines your health. It is the overall pattern of your lifestyle that matters most.

Bringing It All Together

Inflammation is an essential part of your body's defense and repair system.

The goal is not to eliminate inflammation, but to support a healthy, balanced inflammatory response through consistent lifestyle habits.

By choosing nutrient-dense foods, staying active, sleeping well, managing stress, and caring for your overall health, you provide your body with the resources it needs to heal, adapt, and thrive.



ALCHEMY INSIGHT

Inflammation isn't the enemy—it's one of your body's greatest protectors. The key is helping your body know when to turn the response on and, just as importantly, when to turn it off. Healthy habits practiced consistently help support this natural balance.

This week, try to:

PUTTING IT INTO PRACTICE

- ✓ Fill half your plate with colorful vegetables at lunch and dinner.
- ✓ Include berries or another colorful fruit each day.
- ✓ Eat fish rich in omega-3 fats at least twice this week (or discuss alternatives with your provider if you don't eat fish).
- ✓ Aim for 7–9 hours of sleep each night.
- ✓ Take a 20–30 minute walk most days of the week.
- ✓ Practice one stress-management technique for 5–10 minutes each day.

08

Gut Health

The Foundation of Whole-Body Wellness

IN THIS CHAPTER

The gut and immunity
The gut-brain connection
The journey of digestion
Fiber and daily habits



When most people think about gut health, they think about digestion.

While digestion is certainly one of the gut's most important jobs, your digestive system does far more than simply break down food.

Your gastrointestinal tract is home to trillions of microorganisms and plays a vital role in nutrient absorption, immune function, hormone regulation, metabolism, and overall health.

At The Alchemy Clinic, we believe that many aspects of wellness begin in the gut. A healthy digestive system helps your body absorb the nutrients it needs, maintain a balanced immune response, and support healthy aging from the inside out.

What Is the Gut?

The gastrointestinal (GI) tract is a long system of organs responsible for digesting food, absorbing nutrients, and eliminating waste.

The digestive system includes:

- ✧ Mouth
- ✧ Esophagus
- ✧ Stomach
- ✧ Small intestine
- ✧ Large intestine (colon)
- ✧ Rectum

Together, these organs work continuously to break down the foods you eat into nutrients your body can absorb and use.

Meet Your Gut Microbiome

Inside your intestines live trillions of microorganisms, including bacteria, fungi, viruses, and other microbes.

Together, they make up your gut microbiome.

Although the word "bacteria" often carries a negative connotation, many of these organisms are beneficial and essential for good health.

A healthy microbiome helps:

- | | |
|--|---|
| ✧ Digest certain foods | ✧ Produce beneficial compounds called short-chain fatty acids |
| ✧ Produce vitamins such as vitamin K and some B vitamins | ✧ Protect against harmful microbes |
| ✧ Support immune function | ✧ Communicate with the brain |
| ✧ Maintain the integrity of the intestinal lining | ✧ Influence metabolism |

Each person's microbiome is unique and is influenced by genetics, diet, medications, environment, sleep, stress, and lifestyle.

Your Gut and Your Immune System

Approximately 70% of the body's immune cells are found within the gastrointestinal tract.

Your gut acts as a protective barrier between your body and the outside world.

Every day, your digestive system decides what should be absorbed as nutrients and what should be eliminated as waste.

A healthy gut helps:

- ✧ Support a balanced immune response
- ✧ Protect against harmful bacteria
- ✧ Maintain a healthy intestinal barrier
- ✧ Promote overall wellness

This close relationship is one reason nutrition plays such an important role in immune health.

The Gut-Brain Connection

Your digestive system and your brain are constantly communicating through a network called the gut-brain axis.

This two-way communication influences:

- ✧ Appetite
- ✧ Mood
- ✧ Digestion
- ✧ Stress responses
- ✧ Sleep
- ✧ Energy levels

Have you ever experienced "butterflies" before giving a presentation or noticed digestive changes during stressful times?

These experiences highlight the close connection between the brain and the digestive system. Supporting one often supports the other.

The Journey of Digestion

Every meal you eat goes through an incredible process.

STEP 1: MECHANICAL DIGESTION

Chewing and stomach contractions begin breaking food into smaller pieces.

STEP 2: CHEMICAL DIGESTION

Digestive enzymes and stomach acid break proteins, fats, and carbohydrates into smaller molecules.

STEP 3: ABSORPTION

The small intestine absorbs nutrients into the bloodstream.

STEP 4: ELIMINATION

Water is absorbed in the large intestine, and waste is eventually eliminated from the body.

Efficient digestion and absorption are essential for receiving the nutrients your body needs to function optimally.

Common Digestive Symptoms

Digestive symptoms are common and may have many different causes.

Examples include:

- ✧ Bloating
- ✧ Gas
- ✧ Constipation
- ✧ Diarrhea
- ✧ Acid reflux
- ✧ Abdominal discomfort
- ✧ Food intolerances
- ✧ Feeling overly full after meals

Persistent or severe digestive symptoms should always be evaluated by a qualified healthcare provider.

Fiber: One of the Most Important Nutrients for Gut Health

Fiber is a type of carbohydrate that your body cannot fully digest.

Instead, it serves as food for many beneficial bacteria living in your intestines.

Fiber supports:

- ✧ Regular bowel movements
- ✧ Digestive health
- ✧ Satiety
- ✧ Blood sugar regulation
- ✧ Healthy cholesterol levels
- ✧ A diverse microbiome

Unfortunately, many adults consume less fiber than recommended.

Soluble and Insoluble Fiber

Both types of fiber provide unique benefits.

Soluble Fiber

Dissolves in water and forms a gel-like substance.

Supports:

- ✧ Blood sugar regulation
- ✧ Healthy cholesterol levels
- ✧ Beneficial gut bacteria

Sources include:

- ✧ Oats
- ✧ Beans
- ✧ Lentils
- ✧ Apples
- ✧ Chia seeds
- ✧ Psyllium

Insoluble Fiber

Adds bulk to stool and helps food move through the digestive tract.

Sources include:

- ✧ Whole grains
- ✧ Leafy greens
- ✧ Nuts
- ✧ Seeds
- ✧ Carrots
- ✧ Cauliflower

Both types of fiber are important components of a balanced diet.

Prebiotics

Prebiotics are specialized fibers that feed the beneficial bacteria already living in your digestive tract.

Think of them as fertilizer for your gut microbiome.

Good food sources include:

- ✧ Garlic
- ✧ Onions
- ✧ Leeks
- ✧ Asparagus
- ✧ Bananas
- ✧ Oats
- ✧ Jerusalem artichokes

A variety of plant foods helps support a healthy and diverse microbiome.

Probiotics

Probiotics are live microorganisms found in certain foods and supplements.

Some fermented foods naturally contain probiotics.

Examples include:

- ✧ Yogurt with live cultures
- ✧ Kefir
- ✧ Sauerkraut
- ✧ Kimchi
- ✧ Miso
- ✧ Tempeh

While probiotics may be beneficial for some individuals, they are not appropriate for everyone. Your provider can help determine whether a probiotic supplement is right for you.

Hydration and Digestive Health

Water plays an essential role in healthy digestion.

Adequate hydration supports:

- ✧ Nutrient absorption
- ✧ Regular bowel movements
- ✧ Digestive comfort
- ✧ Overall cellular function

If you increase your fiber intake, it's important to increase your water intake as well.

Lifestyle Habits That Support Gut Health

Your gut responds not only to what you eat, but also to how you live.

Healthy habits include:

- ✧ Eating a variety of plant foods
- ✧ Staying hydrated
- ✧ Exercising regularly
- ✧ Managing stress
- ✧ Prioritizing sleep
- ✧ Avoiding tobacco
- ✧ Limiting alcohol consumption

These habits help create an environment where beneficial gut bacteria can thrive.

Gut Health and Skin

At The Alchemy Clinic, we often remind patients that healthy skin starts from within.

Although many factors influence skin health—including genetics, hormones, and environmental exposures—nutrition and digestive health play an important role in supporting normal skin function.

A healthy digestive system supports:

- ✧ Nutrient absorption
- ✧ Immune function
- ✧ A balanced inflammatory response
- ✧ Hydration

Together, these factors contribute to healthy, resilient skin.

Diversity Matters

Research suggests that eating a wide variety of plant foods supports a more diverse gut microbiome.

Aim to include:

- | | |
|----------------|-----------|
| ✧ Fruits | ✧ Lentils |
| ✧ Vegetables | ✧ Nuts |
| ✧ Whole grains | ✧ Seeds |
| ✧ Beans | ✧ Herbs |

✧ Spices

One helpful goal is to eat 30 different plant foods each week. Variety—not perfection—is what helps nourish a healthy microbiome.

Bringing It All Together

Your gut is far more than a digestive organ.

It influences your immune system, metabolism, nutrient absorption, brain function, and overall health.

By eating a diet rich in fiber, colorful plants, and minimally processed foods—while supporting your body with regular movement, quality sleep, hydration, and stress management—you create an environment where both you and your microbiome can thrive.



ALCHEMY INSIGHT

A healthy gut does more than digest food—it helps nourish every system in your body. Every fiber-rich meal, every colorful vegetable, and every healthy lifestyle choice supports the trillions of microorganisms that work alongside you every day to promote health and resilience.

This week, challenge yourself to support your gut health by:

PUTTING IT INTO PRACTICE

- ✓ Eating at least 30 different plant foods throughout the week.
- ✓ Including a source of fiber at every meal.
- ✓ Drinking enough water to support healthy digestion.
- ✓ Trying one fermented food if it fits your dietary preferences.
- ✓ Moving your body for at least 30 minutes most days.
- ✓ Prioritizing quality sleep.
- ✓ Practicing one stress-management technique each day.

Small, consistent habits can have a profound impact on your digestive health and overall well-being.



Hormones & Nutrition

Supporting Your Chemical Messengers

IN THIS CHAPTER

The endocrine system

Thyroid and blood sugar hormones

Women's and men's hormonal health

Nutrition that supports hormones



Supporting Your Body's Chemical Messengers

What Are Hormones?

Hormones are often called the body's chemical messengers because they help coordinate communication between organs, tissues, and cells.

Produced by glands throughout the endocrine system, hormones travel through the bloodstream and help regulate countless processes that keep the body functioning properly.

Hormones influence nearly every aspect of your health, including:

- ✧ Energy production
- ✧ Metabolism
- ✧ Blood sugar regulation
- ✧ Appetite
- ✧ Growth and development
- ✧ Sleep
- ✧ Mood
- ✧ Reproduction
- ✧ Body composition
- ✧ Bone health
- ✧ Muscle maintenance
- ✧ Skin health
- ✧ Healthy aging

Because hormones work together as an interconnected system, an imbalance in one hormone may influence many others.

Nutrition alone cannot "balance hormones," but it provides the building blocks your body needs to produce hormones and supports many of the systems that influence hormonal health.

The Endocrine System

Several glands work together to produce hormones.

These include:

- ✧ Hypothalamus
- ✧ Pituitary gland
- ✧ Thyroid gland
- ✧ Parathyroid glands
- ✧ Adrenal glands
- ✧ Pancreas
- ✧ Ovaries
- ✧ Testes

Each gland has a unique role, but they communicate continuously to help maintain balance, also known as homeostasis.

Hormones and Nutrition

The foods you eat provide many of the nutrients your body uses to support hormone production and normal endocrine function.

A balanced eating pattern can help support:

- ✧ Healthy blood sugar regulation
- ✧ Normal thyroid function
- ✧ Muscle maintenance
- ✧ Bone health
- ✧ Healthy body composition
- ✧ Reproductive health
- ✧ Overall metabolic wellness

At The Alchemy Clinic, we view nutrition as one important component of comprehensive hormone care.

Blood Sugar Hormones

One of the first hormone systems affected by nutrition involves insulin and glucagon.

INSULIN

Produced by the pancreas, insulin helps move glucose from the bloodstream into cells where it can be used for energy or stored for later use.

GLUCAGON

Glucagon works opposite insulin.

When blood sugar begins to fall, glucagon signals the liver to release stored glucose, helping maintain healthy blood sugar levels between meals.

Together, these hormones work continuously to keep blood glucose within a healthy range.

Thyroid Hormones

The thyroid gland produces hormones that influence:

- ✧ Metabolism
- ✧ Heart rate
- ✧ Body temperature
- ✧ Energy production
- ✧ Growth and development

Maintaining adequate intake of nutrients such as iodine, selenium, iron, and zinc supports normal thyroid function.

Examples of food sources include:

- ✧ Seafood
- ✧ Dairy products
- ✧ Brazil nuts
- ✧ Eggs
- ✧ Lean meats
- ✧ Whole grains

*If you have a thyroid condition, always follow the guidance of your healthcare provider regarding nutrition and medication.

Cortisol: The Stress Hormone

Cortisol is produced by the adrenal glands and plays an important role in:

- ✧ Responding to stress
- ✧ Regulating blood sugar
- ✧ Supporting immune function
- ✧ Maintaining blood pressure
- ✧ Energy metabolism

Cortisol naturally rises in the morning to help you wake up and gradually declines throughout the day.

Chronic stress, inadequate sleep, illness, and other factors can influence cortisol levels and overall well-being.

Supporting healthy stress management through nutrition, sleep, movement, and mindfulness practices may benefit overall health.

Reproductive Hormones

Hormones such as estrogen, progesterone, and testosterone influence many aspects of health beyond reproduction.

These hormones help regulate:

- | | |
|---------------|-------------------------|
| ✧ Bone health | ✧ Libido |
| ✧ Muscle mass | ✧ Skin health |
| ✧ Mood | ✧ Body composition |
| ✧ Energy | ✧ Cardiovascular health |

Hormone levels naturally change throughout life, including during puberty, pregnancy, postpartum, perimenopause, menopause, and aging.

Hormones Across a Woman's Life

Throughout life, women experience natural hormonal transitions.

MENSTRUAL YEARS

Balanced nutrition supports overall health during the reproductive years.

Important nutrients include:

- ✧ Iron
- ✧ Calcium
- ✧ Vitamin D
- ✧ Magnesium
- ✧ Protein
- ✧ Omega-3 fatty acids

PERIMENOPAUSE

Perimenopause is the transition leading up to menopause and may last several years.

Common symptoms include:

- ✧ Irregular menstrual cycles
- ✧ Hot flashes
- ✧ Sleep disturbances
- ✧ Mood changes
- ✧ Brain fog
- ✧ Changes in body composition

MENOPAUSE

Menopause is a natural stage of life marked by the end of menstrual cycles.

Nutrition remains important for supporting:

- ✧ Bone health
- ✧ Muscle preservation
- ✧ Cardiovascular health
- ✧ Healthy aging
- ✧ Overall wellness

Men's Hormonal Health

Testosterone naturally changes throughout adulthood.

Maintaining healthy lifestyle habits—including regular resistance training, adequate protein intake, quality sleep, stress management, and a balanced diet—supports overall health and healthy aging.

Nutrition That Supports Hormonal Health

Although there is no single "hormone-balancing diet," several habits consistently support endocrine health.

EAT ENOUGH PROTEIN

Protein provides amino acids needed for tissue repair, muscle maintenance, and overall metabolic health.

CHOOSE HEALTHY FATS

Healthy fats support hormone production and help absorb fat-soluble vitamins.

Sources include:

- ✧ Olive oil
- ✧ Avocados
- ✧ Nuts
- ✧ Seeds
- ✧ Fatty fish

Include Fiber

Fiber supports digestive health and contributes to an overall balanced dietary pattern.

Good sources include:

- ✧ Vegetables
- ✧ Fruits
- ✧ Beans
- ✧ Lentils
- ✧ Whole grains

Stay Hydrated

Adequate hydration supports circulation, metabolism, and overall cellular function.

PRIORITIZE SLEEP

Sleep influences many hormone systems, including cortisol, insulin, growth hormone, and appetite-regulating hormones.

Most adults benefit from 7–9 hours of sleep each night.

STAY PHYSICALLY ACTIVE

Regular exercise supports:

- ✧ Healthy metabolism
- ✧ Insulin sensitivity
- ✧ Muscle mass
- ✧ Bone health
- ✧ Cardiovascular health

Strength training is particularly valuable for preserving lean muscle and supporting healthy aging.

Hormones and Healthy Aging

As we age, natural changes in hormone production occur.

Although these changes are normal, maintaining healthy lifestyle habits can help support:

- ✧ Muscle preservation
- ✧ Bone strength
- ✧ Metabolic health
- ✧ Mobility
- ✧ Energy
- ✧ Overall quality of life

Nutrition remains one of the most powerful tools for supporting healthy aging throughout every stage of life.

The Alchemy Approach

At The Alchemy Clinic, we recognize that hormone health is highly individualized.

Our providers consider your:

- ✧ Medical history
- ✧ Symptoms
- ✧ Laboratory findings
- ✧ Lifestyle
- ✧ Nutrition
- ✧ Sleep
- ✧ Physical activity
- ✧ Wellness goals

Together, these factors help us develop a personalized care plan that may include nutrition counseling, lifestyle modifications, medical therapies, hormone replacement therapy when appropriate, and ongoing follow-up.

Our goal is not simply to improve laboratory values—it is to help you feel your best and support long-term health.

Bringing It All Together

Hormones influence nearly every system in the body, and nutrition provides many of the nutrients needed to support healthy endocrine function.

While no single food can "balance hormones," consistent healthy eating, regular movement, quality sleep, stress management, and personalized medical care create a strong foundation for hormonal health.

Small, sustainable habits often have the greatest impact over time.



ALCHEMY INSIGHT

Hormones don't work in isolation—they function as an interconnected network. Supporting your body with nourishing food, regular movement, restorative sleep, and personalized care helps create an environment where your hormones can work as they were designed to.

PUTTING IT INTO PRACTICE

- ✓ Eating protein at each meal.
- ✓ Including healthy fats daily.
- ✓ Filling half your plate with colorful vegetables.
- ✓ Prioritizing 7–9 hours of sleep each night.
- ✓ Strength training at least two to three times this week.
- ✓ Practicing one stress-management technique each day.
- ✓ Staying hydrated throughout the day.

IO

Healthy Aging & Longevity

Investing in Your Future Health

IN THIS CHAPTER

Lifespan versus healthspan

Protein and muscle

Skin health from within

The pillars of longevity



Aging Is Inevitable—How We Age Is Influenced by Our Choices

Aging is a natural part of life.

While we cannot stop the passage of time, research has shown that our daily habits can influence how we age.

At The Alchemy Clinic, our goal isn't simply to help you live longer—it's to help you live better. We focus on increasing your healthspan, which refers to the number of years you spend living with good health, independence, mobility, and vitality.

Healthy aging means preserving your ability to do the things you love while reducing the risk of chronic disease and maintaining your quality of life.

Lifespan vs. Healthspan

These two terms are often used interchangeably, but they describe different concepts.

LIFESPAN

The total number of years a person lives.

HEALTHSPAN

The number of years a person lives in good health, free from significant disability or chronic disease.

Our goal is not simply to extend life—it is to improve the quality of those years.

What Happens as We Age?

Aging affects every system of the body.

Natural changes may include:

- ✧ Gradual loss of muscle mass
- ✧ Reduced bone density
- ✧ Changes in hormone production
- ✧ Slower recovery after illness or injury
- ✧ Changes in metabolism
- ✧ Reduced skin elasticity
- ✧ Changes in vision and hearing
- ✧ Alterations in immune function

Although these changes are normal, lifestyle choices can influence how we adapt to them.

Muscle: One of the Best Predictors of Healthy Aging

One of the most important factors in healthy aging is maintaining lean muscle mass.

Beginning around the age of 30, adults gradually lose muscle if it is not maintained through adequate nutrition and resistance exercise.

Loss of muscle can contribute to:

- ✧ Reduced strength
- ✧ Slower metabolism
- ✧ Poor balance
- ✧ Increased risk of falls
- ✧ Loss of independence
- ✧ Reduced quality of life

Maintaining muscle supports:

- ✧ Mobility
- ✧ Healthy metabolism
- ✧ Blood sugar regulation
- ✧ Bone strength
- ✧ Independence
- ✧ Recovery from illness

For this reason, preserving muscle is one of the cornerstones of healthy aging.

Protein and Healthy Aging

Protein becomes increasingly important with age.

Adequate protein intake helps support:

- ✧ Muscle maintenance
- ✧ Recovery
- ✧ Immune function
- ✧ Bone health
- ✧ Healthy skin
- ✧ Satiety

Rather than consuming most of your protein at dinner, many experts recommend distributing protein throughout the day by including it with each meal.

Examples include:

- | | |
|------------------|-------------|
| ✧ Eggs | ✧ Lean beef |
| ✧ Greek yogurt | ✧ Tofu |
| ✧ Cottage cheese | ✧ Tempeh |
| ✧ Fish | ✧ Beans |
| ✧ Chicken | ✧ Lentils |

Bone Health

Healthy bones provide the foundation for movement throughout life.

Nutrition plays an important role in supporting bone health.

Key nutrients include:

- ✧ Calcium
- ✧ Vitamin D
- ✧ Protein
- ✧ Magnesium
- ✧ Vitamin K

Weight-bearing exercise and resistance training also help support strong bones.

Brain Health

Your brain depends on proper nutrition to function throughout life.

Healthy dietary patterns rich in fruits, vegetables, whole grains, fish, legumes, and healthy fats are associated with better overall brain health.

Important nutrients include:

- ✧ Omega-3 fatty acids
- ✧ B vitamins
- ✧ Vitamin D
- ✧ Antioxidants
- ✧ Healthy fats

Regular physical activity, quality sleep, lifelong learning, and social connection also support cognitive health.

Heart Health

The heart works continuously throughout your lifetime.

Supporting cardiovascular health includes:

- ✧ Regular physical activity
- ✧ Managing blood pressure
- ✧ Healthy cholesterol levels
- ✧ Not smoking
- ✧ Managing blood sugar
- ✧ Eating a balanced dietary pattern

Nutrition patterns emphasizing vegetables, fruits, whole grains, legumes, fish, nuts, and olive oil support overall cardiovascular wellness.

Skin Health from Within

Healthy skin is influenced by more than skincare products.

Nutrition supports skin by providing the building blocks needed for:

- ✧ Collagen production
- ✧ Wound healing
- ✧ Hydration
- ✧ Protection from oxidative stress
- ✧ Healthy skin barrier function

Important nutrients include:

- ✧ Protein
- ✧ Vitamin C
- ✧ Zinc
- ✧ Vitamin A
- ✧ Vitamin E
- ✧ Healthy fats
- ✧ Water

Medical aesthetic treatments and skincare work best when supported by a healthy lifestyle and good nutrition.

Exercise: The Closest Thing to a Longevity Prescription

Regular movement is one of the most powerful lifestyle interventions for healthy aging.

Exercise supports:

- | | |
|-------------------------|--------------------------|
| ✧ Muscle strength | ✧ Mobility |
| ✧ Bone density | ✧ Brain health |
| ✧ Cardiovascular health | ✧ Mental well-being |
| ✧ Balance | ✧ Blood sugar regulation |

Aim to include:

- ✧ Aerobic exercise
- ✧ Resistance training
- ✧ Balance exercises
- ✧ Flexibility or mobility work

Consistency is more important than perfection.

Sleep and Recovery

Sleep is when much of the body's repair and recovery occurs.

During sleep, your body supports:

- ✧ Tissue repair
- ✧ Immune function
- ✧ Memory consolidation
- ✧ Hormone regulation
- ✧ Muscle recovery

Most adults benefit from 7–9 hours of quality sleep each night.

Stress and Healthy Aging

Chronic stress can affect many aspects of health.

Healthy stress-management strategies may include:

- ✧ Walking outdoors
- ✧ Deep breathing
- ✧ Meditation
- ✧ Yoga
- ✧ Spending time with loved ones
- ✧ Journaling
- ✧ Hobbies

Managing stress supports both physical and emotional well-being.

The Pillars of Longevity

At The Alchemy Clinic, we believe healthy aging is built on a strong foundation.

The six pillars of longevity include:

NOURISHING NUTRITION

Focus on whole, nutrient-dense foods that support your body's needs.

STRENGTH & MOVEMENT

Prioritize regular exercise, especially resistance training, to preserve muscle and bone health.

RESTORATIVE SLEEP

Aim for consistent, high-quality sleep each night.

STRESS MANAGEMENT

Support emotional well-being through healthy coping strategies and mindfulness.

SOCIAL CONNECTION

Strong relationships and meaningful connections are associated with better health and longevity.

PREVENTIVE HEALTHCARE

Routine screenings, vaccinations, laboratory monitoring, and regular follow-up visits help identify concerns early and support long-term wellness.

Healthy Aging Is Built One Day at a Time

Longevity is not created by one supplement, one workout, or one healthy meal.

It is built through consistent daily habits practiced over months and years.

Every nutritious meal, every walk, every strength-training session, every good night's sleep, and every moment spent caring for your health contributes to your future well-being.

Small choices truly matter.



ALCHEMY INSIGHT

Healthy aging doesn't happen by chance—it happens by choice. Every healthy habit is an investment in your future self. The small decisions you make today become the foundation for the strength, vitality, and independence you enjoy tomorrow.

This week, choose one habit from each pillar of longevity:

PUTTING IT INTO PRACTICE

- ✓ NUTRITION Eat at least one colorful vegetable with lunch and dinner.
- ✓ STRENGTH Complete two resistance-training sessions.
- ✓ MOVEMENT Walk for 20–30 minutes on most days.
- ✓ RECOVERY Aim for 7–9 hours of sleep each night.
- ✓ STRESS Spend 10 minutes each day practicing mindfulness, deep breathing, or another stress-reducing activity.
- ✓ CONNECTION Reach out to a friend or family member or spend intentional time with someone you care about.

Small, consistent actions can have a lasting impact on your health and quality of life.

II

Medical Weight Management

A Personalized, Science-Based Approach

IN THIS CHAPTER

Body composition

Why muscle matters

GLP-1 medications

Long-term success



For many years, weight management was viewed as a simple equation of "eat less and move more."

Today, we know that body weight is influenced by many interconnected factors, including genetics, hormones, metabolism, sleep, stress, medications, medical conditions, environment, and lifestyle.

Weight management is not simply about willpower.

At The Alchemy Clinic, we recognize that every patient's journey is unique. Our goal is not only to support healthy weight changes when appropriate, but also to improve overall metabolic health, preserve lean muscle, and help patients feel their best.

Rather than focusing solely on the number on the scale, we emphasize long-term health, sustainable habits, and personalized care.

What Is Medical Weight Management?

Medical weight management is a comprehensive, evidence-based approach to improving body composition and metabolic health under the guidance of a qualified healthcare provider.

A personalized plan may include:

- ✦ Nutrition counseling
- ✦ Physical activity recommendations
- ✦ Behavior and lifestyle modifications
- ✦ Sleep optimization
- ✦ Stress management
- ✦ Laboratory evaluation
- ✦ Body composition monitoring
- ✦ Prescription medications when appropriate
- ✦ Ongoing education and follow-up

There is no one-size-fits-all solution. Treatment is individualized based on your medical history, goals, and overall health.

Understanding Body Composition

Weight alone does not tell the whole story.

Two people can weigh the same but have very different body compositions.

Body composition looks at:

- ✦ Lean muscle mass
- ✦ Body fat
- ✦ Body water
- ✦ Bone mass

At The Alchemy Clinic, body composition assessments may be used to monitor progress over time.

Our goal is not simply to reduce weight—it is to preserve or build lean muscle while improving overall health.

Why Muscle Matters During Weight Loss

When losing weight, it's important to minimize the loss of lean muscle mass.

Muscle supports:

- ✧ Metabolism
- ✧ Strength
- ✧ Mobility
- ✧ Bone health
- ✧ Blood sugar regulation
- ✧ Recovery from illness or injury

Strategies that help preserve muscle during weight loss include:

- ✧ Consuming adequate protein
- ✧ Participating in regular resistance training
- ✧ Eating enough calories to meet your body's needs
- ✧ Following a personalized nutrition plan

Understanding GLP-1 Medications

Some patients may benefit from medications that support appetite regulation and metabolic health.

One class of medications is known as GLP-1 receptor agonists.

GLP-1 stands for glucagon-like peptide-1, a hormone naturally produced in the intestines after eating.

GLP-1 helps:

- ✧ Increase feelings of fullness
- ✧ Slow the rate at which the stomach empties
- ✧ Support healthy blood sugar regulation by enhancing insulin release when blood sugar is elevated and reducing glucagon secretion
- ✧ Influence appetite centers in the brain

Some medications also activate GIP (glucose-dependent insulinitropic polypeptide) in addition to GLP-1. These medications are called dual GIP/GLP-1 receptor agonists and may provide additional benefits for some patients.

These medications are tools—not cures—and work best when combined with healthy nutrition, regular movement, and ongoing medical supervision.

Nutrition During Medical Weight Management

Whether or not medications are part of your treatment plan, nutrition remains the foundation of successful weight management.

PRIORITIZE PROTEIN

Protein helps:

- ✧ Preserve lean muscle
- ✧ Promote fullness
- ✧ Support metabolism
- ✧ Aid recovery

Many patients benefit from including a quality source of protein at every meal.

Eat Fiber-Rich Foods

Fiber supports:

- ✧ Digestive health
- ✧ Satiety
- ✧ Healthy blood sugar regulation
- ✧ A healthy gut microbiome

Aim to include vegetables, fruits, beans, lentils, and whole grains regularly.

STAY HYDRATED

Hydration is essential for:

- ✧ Energy
- ✧ Digestion
- ✧ Muscle function
- ✧ Recovery
- ✧ Overall well-being

Some weight management medications may increase the importance of maintaining adequate hydration.

EAT REGULARLY

Some patients experience reduced appetite while taking weight management medications.

Even when appetite decreases, it's important to consume enough nutrients to support muscle maintenance, energy, and overall health.

Skipping meals consistently may make it more difficult to meet your protein, vitamin, mineral, and calorie needs.

Common Nutrition Considerations

Some individuals using GLP-1 or dual GIP/GLP-1 medications may experience gastrointestinal side effects, particularly when starting treatment or increasing the dose.

Strategies that may help include:

- ✧ Eating smaller, more frequent meals
- ✧ Eating slowly and chewing thoroughly
- ✧ Staying hydrated
- ✧ Choosing protein-rich foods first
- ✧ Limiting high-fat or greasy meals if they worsen symptoms
- ✧ Following your provider's guidance regarding medication adjustments

If symptoms are severe or persistent, contact your healthcare provider.

Physical Activity During Weight Management

Exercise plays an important role in preserving lean muscle, supporting cardiovascular health, and improving overall well-being.

A balanced exercise routine may include:

STRENGTH TRAINING

At least 2–3 sessions per week to support muscle and bone health.

CARDIOVASCULAR EXERCISE

Walking, cycling, swimming, or other aerobic activities to support heart health and endurance.

DAILY MOVEMENT

Increasing daily activity—such as taking the stairs, gardening, or walking after meals—can contribute meaningfully to overall energy expenditure.

Sleep and Stress

Weight regulation is influenced by more than food and exercise.

Poor sleep and chronic stress can affect appetite, food choices, energy levels, and hormone regulation.

Supporting healthy sleep and managing stress are important parts of a comprehensive weight management plan.

Progress Beyond the Scale

Success is measured in many ways.

Examples include:

- | | |
|------------------------------|-------------------------------|
| ✦ Increased energy | ✦ Better sleep |
| ✦ Improved laboratory values | ✦ Reduced waist circumference |
| ✦ Better blood sugar control | ✦ Improved body composition |
| ✦ Increased strength | ✦ Greater confidence |
| ✦ Improved mobility | ✦ Improved quality of life |

The number on the scale is only one measure of progress.

Long-Term Success

Healthy weight management is not about perfection or temporary restriction.

Long-term success comes from building habits that are realistic and sustainable.

These habits include:

- | | |
|-------------------------|--|
| ✦ Eating balanced meals | ✦ Managing stress |
| ✦ Prioritizing protein | ✦ Staying hydrated |
| ✦ Staying active | ✦ Attending regular follow-up visits |
| ✦ Sleeping well | ✦ Adjusting your plan as your needs change |

The Alchemy Approach

At The Alchemy Clinic, we believe medical weight management is about improving overall health—not simply losing weight.

Our approach focuses on:

- ✧ Personalized nutrition
- ✧ Metabolic health
- ✧ Preserving lean muscle
- ✧ Supporting healthy aging
- ✧ Building sustainable habits
- ✧ Compassionate, evidence-based care

We partner with you to create a plan that supports your goals while helping you feel stronger, healthier, and more confident.

Bringing It All Together

Healthy weight management is a journey, not a destination.

There is no perfect diet or quick fix.

By combining personalized nutrition, regular movement, quality sleep, stress management, and medical guidance when appropriate, you can build habits that support both your immediate goals and your long-term health.



ALCHEMY INSIGHT

The goal isn't simply to lose weight—it's to build a healthier body. Protecting your muscle, nourishing your metabolism, and creating sustainable habits will always be more valuable than chasing a number on the scale.

Final Thoughts

Healing doesn't happen overnight.

The choices you make every day—what you eat, how you move, how you sleep, and how you care for yourself—have the power to influence how you feel today and how you age tomorrow.

At The Alchemy Clinic, we believe that nutrition isn't about restriction or perfection. It's about creating sustainable habits that nourish your body, support your metabolism, reduce inflammation, and help you live a healthier, more vibrant life.

Small changes practiced consistently often lead to the greatest transformations.

We are honored to be part of your wellness journey.

Resources

A few of the tools, books, and podcasts our team returns to. Ask your provider for recommendations tailored to you.

APPS

^{o7} MyFitnessPal

^{o7} Lose It

BOOKS

^{o7} The Rain Barrel Effect

PODCASTS

^{o7} The Cabral Concept

| Questions about anything in this manual? Your Alchemy Clinic provider is the best place to start.



Nourish Your Body. Elevate Your Health. Age Well.

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Manchester, New Hampshire

CONCIERGE MEDICAL AESTHETICS & INTEGRATIVE WELLNESS

This manual is an educational resource and does not replace individualized medical advice. Please discuss any changes to your nutrition, supplements, or medications with your Alchemy Clinic provider.