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As an elite nutrition coach and exercise physiologist, Dr. Berardi has worked with over 50,000 clients in over 100 countries, including Olympic gold medalists, world champion UFC fighters, and professional sports teams. He is also an advisor to Apple, Equinox, Nike, and Titleist.

Dr. Berardi was recently selected as one of the 20 smartest coaches in the world and one of the 100 most influential people in fitness.



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Camille received her HBA in English from the University of Toronto and trained at the Humber School for Writers. An advisor to Precision Nutrition, Camille lends her communication expertise to Precision Nutrition publications, course materials and marketing content.

As a consultant, Camille has helped dozens of top brands and business leaders refine their messaging and improve their customer relationships. Her work has been published extensively in popular websites, magazines and newspapers.

Camille writes for the *Precision Nutrition Encyclopedia of Food* and is a frequent contributor to the Precision Nutrition blog. She is also the author of the workbook *Share Your Story*, and self-publishes at [camilledeputter.com](http://camilledeputter.com).



**Dr. Helen Kollias** is a researcher and L1 Certification advisor at PN. She is also a regular content contributor to the blog, where she uses her witty and articulate writing style to make complex science accessible and entertaining.

Helen holds a PhD in Molecular Biology from York University, specializing in the area of muscle development and regeneration, and a Master's degree in Exercise Physiology and Biochemistry from the University of Waterloo. She has also held research positions at some of the most prestigious institutions in the world, including John Hopkins University and Toronto's Hospital for Sick Children.

Outside the lab, Helen has played and coached varsity soccer, and has been involved in fitness and weight training for almost two decades. She also has two daughters with whom she wants to share her joy of inquiry and experimentation, but above all, she wants to teach them resilience, bravery, and grit.





# Table of contents

## INTRODUCTION

Preface: How to use this text	6
Nutrition: The big picture	11
Case study	31

## UNIT 1

### Nutritional science 35

#### CHAPTER 1

Cells	37
-------	----

#### CHAPTER 2

Through the GI tract	57
Case study	91

#### CHAPTER 3

Energy transformation & metabolism	93
Case study	125

#### CHAPTER 4

Energy balance in the body	127
Case study 1	153
Case study 2	155

#### CHAPTER 5

Aerobic & anaerobic metabolism	157
Case study	177

#### CHAPTER 6

Macronutrients	179
Case study	220

#### CHAPTER 7

Micronutrients	223
Case study	258

#### CHAPTER 8

Water and fluid balance	261
Case study	285

## UNIT 2

### Nutritional practice 287

#### CHAPTER 9

What it means to be a good coach	289
Case study	309

#### CHAPTER 10

The PN Coaching methodology	311
Case study	340

#### CHAPTER 11

Working with nutritional levels	343
Case study	364

#### CHAPTER 12

Working with Level 1 clients	367
Case study	415

#### CHAPTER 13

Working with Level 2 clients	417
Case study	461

#### CHAPTER 14

Working with Level 3 clients	463
Case study	500

#### CHAPTER 15

Special scenarios	503
-------------------	-----

#### CHAPTER 16

Business 101 for fitness & nutrition pros	555
--	-----

#### CHAPTER 17

Continuing ed for the coach	573
-----------------------------	-----

GLOSSARY AND INDEX OF KEY TERMS	589
---------------------------------	-----

REFERENCES	600
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## PREFACE

# How to use this text

When faced with new information, students usually wonder one thing:

### “WILL I EVER NEED TO KNOW THIS IN THE REAL WORLD?”

Whether it's the cosine of an angle, Kepler's laws of planetary motion, or the enzyme responsible for forming citrate, students' most common questions about what they're learning are:

“Will this be on the test?”

“Will I ever need to know this again in my life?”

We, the authors, know these questions well. We've asked them ourselves, most often during our own high school, undergraduate, and graduate studies.

So now, as instructors living in the “real world”, we'd like to level with you: Probably not.

Unless you become an engineer, you probably won't need the cosine stuff. Unless you go to work for NASA, you can probably forget Kepler. And the Krebs cycle? Well, you won't need that unless you teach biochemistry.

### SO WHY LEARN ALL THIS INFORMATION?

Well, most of us don't know what we want to be when we grow up. Work (and life) is full of surprises.

You never know what career path you'll follow, or what hobbies you'll take up.

**Be prepared for anything.** Learn as much foundational knowledge as possible. Whether this Certification is part of your career path, an addition to your existing work, or simply a hobby (for now), the more you know, the more options you'll have.

But there's another, more inspiring, reason for learning this stuff.

**It's actually kinda interesting.** It helps explain your world. And makes you super-fun at parties.

In fact, when you really dig into this knowledge, you might just change what you want to do for a living because of it.

### WHAT THIS MEANS

In this program, we'll provide a lot of foundational knowledge.

We give you more details below.

This foundational knowledge — about stuff like cells, digestion, metabolism and whatnot — can feel a little heavy at times. Especially if you're new to this material. Or you're a practical, hands-on kind of person who would rather spend more time doing than reading.

Hang in there.

The payoff comes in the second unit, where that foundational information gets applied.

We'll give you case studies. Strategies for working with people in the real world.

Questionnaires and assessments to use. Psychological strategies for getting people excited about working with you. And all kinds of other fun things.

Even if you'll never use the more theoretical material we teach you, you'll still need to know the science to apply it under “test conditions” — in other words, when you're sitting across from a client, on a call with them, or sending them an email or text.

By the end of this course, we expect you to understand:

- how the body works;
- how to apply that knowledge to working with clients;
- how to assess, monitor, and revise client programs;
- how to communicate your knowledge effectively; and
- how to get your clients on board with your nutrition plans and programs — hopefully feeling just as inspired as you about making progress and changing their nutrition habits.

## How the Level 1 Certification program is organized

This certification course is split up into two units.

### UNIT 1: NUTRITION SCIENCE

In Unit 1, we'll go through all the nutrition information you'll need to know, such as:

- How and why your cells work the way they do
- How carbohydrates, **fats**, vitamins, minerals, and other **nutrients** interact with your cells
- How food becomes energy for maintenance functions, physical work, and repair
- How your body balances out the food you eat with the work it does
- How exercise affects nutritional needs and how nutrition affects exercise

#### FATS

*Also known as triglycerides. Derived from glycerol and three fatty acids.*

### UNIT 2: NUTRITIONAL PRACTICE

In Unit 2, we'll introduce you to how to coach, including:

- What it means to be a good coach
- How to prepare for clients
- How to interact with different clients
- How to assess clients
- How to know which approaches are best for which clients
- How to meet clients where they are (not where you want them to be)
- How to keep clients progressing from day one until they reach their goals

#### NUTRIENTS

*Biochemical substances used by the body that must be supplied in adequate amounts from the diet.*

## Other learning tools

Throughout the textbook, look for things like:

### CHAPTER OBJECTIVES

Each chapter contains clear objectives at the beginning. This will tell you what to focus on, and give you goals before you even start reading.

### CHAPTER SUMMARIES

At the end of each chapter, we'll summarize the most important points from that chapter. These will confirm that you've learned what really matters, and give you another handy tool for review.

## CHAPTER QUIZZES

At the end of each chapter, we'll give you your quiz. No waiting until the end of the program to cram and regurgitate. One chapter, one quiz.

Quizzes contain a mix of multiple choice and true / false-style questions.

You can find your quiz on your coaching homepage online at [my.precisionnutrition.com](http://my.precisionnutrition.com).

## KEY TERMS

The first time a key term appears in the text, it is highlighted and a definition provided in the margin. Familiarize yourself with each key term.

## CASE STUDIES

Most chapters end with relevant case studies. These give you “real-life” examples of applied nutrition.

Each story describes a client's nutrition challenges, then provides practical solutions to work through these challenges.

## REFERENCES

We'll provide a comprehensive list of references used to create this certification. If you're interested in learning more about nutrition and health, you can look up and read more of this primary source literature.

## RECOMMENDED READING AND RESOURCES

Excited to learn more? We hope you are.

Throughout the text and on your coaching homepage online, we suggest more material to read and explore.

## How to focus your learning

Just like coaching or training, learning should be focused and systematic, with a clear purpose.

Here are some ways to stay on track and on target with your Level 1 journey.

### LEARN WHAT YOU NEED TO LEARN

You know your own learning style. (And if you don't, now's a great time to discover it.) Help yourself succeed by building a system that suits you.

Use as many ways of processing the material as possible: reading, writing, thinking and reflecting, listening, watching, talking about the material, drawing maps and flowcharts of ideas, etc.

We suggest completing one chapter per week as follows:

1. Read the chapter. (textbook)
2. Watch the video. (online)
3. Answer the workbook questions. (study guide)
4. Review the FAQs. (online)
5. Take the chapter quiz. (online)

Access the online course at [my.precisionnutrition.com](http://my.precisionnutrition.com)

Set up a weekly self-study schedule so you get into a routine. Consistency and structure will help you move forward steadily and confidently.

However, while we suggest one chapter per week, the program is completely self-paced. Our online learning management system allows you to move as quickly or slowly through the material as you like.

One chapter a day, one chapter a week, one chapter a month, one chapter a year; it's completely up to you. However you choose to do it, take charge of your own learning process and set yourself up for success.

### **FOCUS ON KEY CONCEPTS**

As the scientists working on the 1999 Mars lander mission found out when their precious spacecraft wandered off into oblivion because they mixed up imperial and metric measurements, details are important.

But details usually aren't the most important things in this program. You don't have to memorize entire chapters, nor usually recall minute details (such as the exact body density equation by Jackson & Pollock).

As long as you learn the concepts and study as we recommend, you have a great chance of doing well on the quizzes.

Plus, you'll always have your text available for reference. If you get stumped during a quiz or a client interaction, you can always look things up.

It's more important to know how to think. How to learn. How to connect ideas.

And to understand why things are important (and how they relate to one another) than to recall specific details. (Unless detail memorization is your thing. Then go for it.)

## **What to look forward to**

If you show up consistently, ready to learn and grow, and if you engage with this material using all the learning methods that work best for you, then this course will make you a better coach.

Seek to master both the basic science (Unit 1) and the applied art of coaching (Unit 2).

If you do, you'll finish this program as a highly trained professional with the knowledge to support your recommendations; the ability to communicate them effectively and well; and a foolproof system for delivering outstanding, reproducible results.

Let's get started.

## **Acknowledgements**

It's really important to us that everyone who helped bring this major project to completion is recognized for their work. Because, as we all know, nothing worth doing can be done alone. To this end we'd like to thank Paul Bradbury, Rachael Bell, Phil Caravaggio, Al Cimino, Alwyn Cosgrove, Alison Dungey PhD, Georgie Fear MS RD, Carmelo Galati RGD, Jonathan Goodman, Sean Greeley, Mariane Heroux PhD, Timothy Jones, Bedros Keuilian, Helen Kollias PhD, Sarah Maughan MS, Bob Moesta, John Nadalin, Spencer Nadolsky DO, Tom Nikkola BA, Eric Noreen PhD, Prasanna Paul, Alex Picot-Annand MS, Pat Rigsby, Francisca Ruff, m.c. schraefel PhD, Chris Spiek, Bryan Walsh ND, and Erin Weiss-Trainor.

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry, no matter how small, should be recorded to ensure the integrity of the financial data. This includes not only sales and purchases but also expenses, transfers, and adjustments. The text explains that consistent record-keeping is essential for identifying trends, managing cash flow, and preparing for tax obligations.

Next, the document addresses the need for regular reconciliation. It states that comparing the company's internal records with bank statements and other external sources is a critical step in the accounting process. This practice helps to detect and correct errors early on, preventing them from becoming more significant over time. The text also notes that reconciliation is a key component of internal control systems designed to safeguard assets and prevent fraud.

The following section focuses on the classification of expenses. It provides a detailed breakdown of various cost categories, such as direct materials, direct labor, and manufacturing overhead. The document explains how these costs are allocated to different products or services, which is necessary for determining their true production costs. This information is vital for pricing decisions and for evaluating the profitability of various business units.

In the final part of the document, the author discusses the role of financial statements. It highlights that the income statement, balance sheet, and cash flow statement are the primary tools used to communicate the company's financial performance to stakeholders. The text provides guidance on how to interpret these statements and how they can be used to make informed business decisions. It also touches upon the importance of transparency and accuracy in financial reporting.



## INTRODUCTION

# Nutrition: The big picture

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### Objectives

What is food?

What is good nutrition?

What's the best diet?

The cycle of food

What is nutrition coaching?

What this program will cover

Case Study

Summary

## Objectives

This chapter will introduce you to the big picture of good nutrition.

You'll learn:

- how we define and think about food
- how we define and think about good nutrition
- why good nutrition matters for personal health, as well as community and global health
- how to answer the often-asked question: "What's the best diet?"
- some of the things to think about when you sit down to eat a meal

## What is food?

Seems like a dumb question with an obvious answer. Food is stuff we eat that fuels our body. Right?

Well, that's one way to think about it. Food contains energy. Or, more correctly, "chemical bonds that, when broken, are used to create ATP, the fuel for our cells". (More on that in a later chapter.)

But food also includes micronutrients, phytochemicals, **zoochemicals**, fiber, water, and perhaps even **organic molecules** that we haven't yet discovered. All of these substances play crucial roles in our body, even though they don't necessarily "fuel" it directly.

### Micronutrients: Vitamins and minerals

We need **vitamins** and **minerals** in our diet. Without them, our body breaks down.

For example:

Vitamin C (also known as ascorbic acid) is a powerful antioxidant that can help control **inflammation** and cellular damage.

The mineral magnesium plays a role in more than 300 enzyme systems and helps with protein synthesis, muscle and nerve function, blood sugar control, blood pressure regulation, energy production, and transport of other minerals.

The list could go on and on. You'll learn more about these and other nutrients in later chapters.

While none of these nutrients provide "fuel", we still need them to live and thrive.

When you're missing key vitamins and minerals, your body doesn't work properly. You feel rotten. And you get sick. That's true no matter how much fuel is in the tank.

### Phyto- and zoochemicals

Phytochemicals (whose name comes from the ancient Greek *phuto*, or plant) are nutrients that only occur in plants. Phytochemicals are one of the main reasons that eating fruits and vegetables is good for us.

For instance, phytochemicals have been shown to:

- offer DNA protection against free radicals;
- protect against cancer;
- decrease the risk of heart disease; and
- reduce overall mortality.

Zoochemicals (from the Greek *zoon*, or animal) are nutrients found only in animal products, such as CLA (a fatty acid), creatine, and carnosine.

Zoochemicals have been shown to:

- reduce inflammation and blood clotting;
- protect against heart disease;
- suppress cancer cell development; and
- inhibit complications from diabetes.

Phyto- and zoochemicals don't provide "fuel". Which means that the "food as fuel" story leaves them out too.

### ZOOCHEMICALS

*Components found in animal food sources*

### ORGANIC MOLECULES

*Chemical compounds that contain carbon-hydrogen bonds*

### VITAMINS

*Organic compounds required by an organism as a vital nutrient in limited amounts*

### MINERALS

*Naturally occurring, inorganic substances*

### INFLAMMATION

*The reaction of a tissue to injury or infection, characterized by heat, redness, swelling, and pain*

## FOOD IS SO MUCH MORE THAN FUEL.

### Living organisms are not machines.

They're incredibly complex, self-regulating, and dynamically responsive — almost magical — systems.

Machines have precise inputs and outputs. For instance, when you fill your car's tank with gas, you know more or less how far you can drive.

But if you've spent any time doing “calorie math”, you'll know that trying to calculate precise inputs and outputs for a human body is frustrating.

- Maybe you ate more calories than you thought you should... but got leaner.
- Or you ate fewer calories than you thought you should... and gained weight.
- Or you started eating breakfast instead of skipping it...or vice versa... and dropped a couple of inches off your waistline.

According to the simplistic “food as fuel” view, none of this should be possible. Yet it happens all the time.

### Human bodies aren't combustion engines.

They're complex, dynamic, organic, and infinitely sensitive systems.

For example: Research now shows that all food isn't created equal, and what we eat isn't necessarily what we *absorb* or *use*. Dozens — maybe even hundreds — of factors affect how we digest, process, and utilize the food we eat.

This means that the fuel, or calorie, value of food *outside* the body isn't necessarily the same as the value *inside* the body.

Plus, our body has its own priorities.

For instance, the body will extract nutrients to keep you alive by any means necessary, often making tough compromises along the way. This would be sort of like your car suddenly driving itself to the gas station and holding up the cashier until it gets what it needs, or cannibalizing its own headlights for fuel.

What's more...

### Your body isn't even completely “human”.

The trillions of microbial critters living in and on us do much of our digestion and nutrient extraction. Analysis of our bacterial environments shows that each of us has an individual gut flora “**microbiome**”, like a fingerprint.

Changing our microbiome changes our digestion and absorption, and hence our body composition and health.

We're incredibly complicated, self-organizing, agenda-driven, only-sorta-human systems.

Frankly, the machines should be jealous.

So, if the “food as fuel” idea doesn't give us the whole story, what is food?

## FOOD IS — IN PART — INFORMATION.

When we eat, we're delivering messages to our body.

- Do this.
- Don't do this.

### MICROBIOME

*The genetic content of all the microorganisms that inhabit the GI tract*

- Release this hormone.
- Don't release that one.
- Express this protein.
- Don't express that one.

Food (and the act of eating) sends instructions that kick off a chemical chain letter. Each molecule of food contributes to a beautiful cascade of events, sending all kinds of signals throughout our body.

Make hormones! Trigger immune cells! Switch genes on and off! Tell the work crew to clean up and the builders to get on standby! Lights! Camera! Action!

It's like the biggest, busiest movie set you can imagine. And somehow — unlike many film sets — it runs almost perfectly.

Our body processes millions of calories and (let's be scientific about this) zillions of chemical compounds a year, with nearly 100% efficiency. (Just for comparison, gas-powered engines, like our car, would be happy to hit 30% efficiency.)

Even cooler: Our thoughts, feelings, and environment can affect these processes. If we smell a tasty meal, have a positive or negative thought about food (or anything else), are happy and relaxed or worried and rushing... it affects nutrient processing.

### **FOOD IS SMART. AND SO IS YOUR BODY.**

Thinking about food *only* as fuel reduces food to gasoline, your body to a dumb machine, and you to a calorie accountant. You're more than that.

Food and your body deserve a lot more recognition and honor.

The more we learn, research, and coach, the more we're amazed at the power of food.

### **Food is packed with meaning, information, and communication.**

Every food decision we make sends a message to our body.

Every food choice is an opportunity to direct, shape, and remake our health. Our body composition. Our performance. Our wellbeing.

### **Food tells a story.**

Many of us in this field are physiologists and biochemists. Sure, we look at food through a science lens. But that's not our only perspective.

We know, too, that sharing food is a fundamental human act. Breaking bread (or whatever other food is on the table) is part of our history. Our culture. Our legacy as humans.

### **Food isn't just a chemical story. It's a story about people.**

How we eat, where we eat, and what we eat (or don't) tells a story. Food helps us communicate about who we are, what we think about, and what's important to us.

For instance:

- I'm sophisticated. I'm a "foodie".
- I'm a thoughtful consumer. I'm a regular at the farmers' market.
- I'm from Mexico / Italy / Nigeria / Laos / [insert region / origin / ethnicity] and proud.
- I'm the social hub for my big family. Come on over this Sunday for dinner!
- I'm adventurous. I'll eat anything once. Once, when I was traveling, I ate...
- I'm careful with my choices. I avoid processed food.
- I'm low maintenance; my fridge is empty. Let's grab something on the go.

- I'm a *bon vivant*. I love eating at fancy restaurants.
- I'm a caregiver. I love you. So I cook for you.

And so on.

These stories are essential information about ourselves, about our family and friends, and the people we work with. For a nutrition coach, knowing these stories is relevant. Crucial. Powerful, life-shaping knowledge.

Take a few minutes and consider these questions:

**What is food?**

**What is food... for you?**

**For your clients?**

Is it fuel? Is it information? Is it personal freedom? Is it shame? Is it self-esteem? Is it comfort?

Then consider these questions:

**What would you *like* food to be?**

**What do you imagine it *could* be?**

We encourage you to think big. Get imaginative. Learn a little more about physiology. Learn a little more about humanity.

Discover what makes food one of the greatest stories ever told.

A story of the wonder of evolution and biology. A collective grand epic of our humanity. A chemical story written in molecules, not words. It's a story that shapes your daily life, your health, and your function.

Food is fuel? No. It's so much more than that.

## What is good nutrition?

If food is more complicated than just fuel, then good nutrition is probably more complicated than "following the rules".

Take a minute to answer this question for yourself:

**What is good nutrition?**

We've given this question a lot of thought over the years. As of today, here's how we answer it:

### **GOOD NUTRITION CONTROLS ENERGY BALANCE.**

As we've seen, food is more than fuel... but it *does* give us energy.

Without enough energy coming into the body, we just don't work right. Our body starts to shut down processes that we don't absolutely need to survive, such as reproduction, some aspects of metabolism, and brain function.

Too much energy coming into the body also causes problems. We can become resistant to important hormones (such as insulin or leptin). Inflammation may increase. Plaques can form on vessels and blood pressure can go up. We risk getting many **chronic diseases**.

Good nutrition helps control energy balance. We don't eat too much or too little. This means we can stay healthy, fit and strong. We feel good, and our body shows it.

#### **CHRONIC DISEASES**

*A long-acting disease that does not quickly resolve, e.g., cardiovascular disease, cancers, chronic respiratory diseases and diabetes*

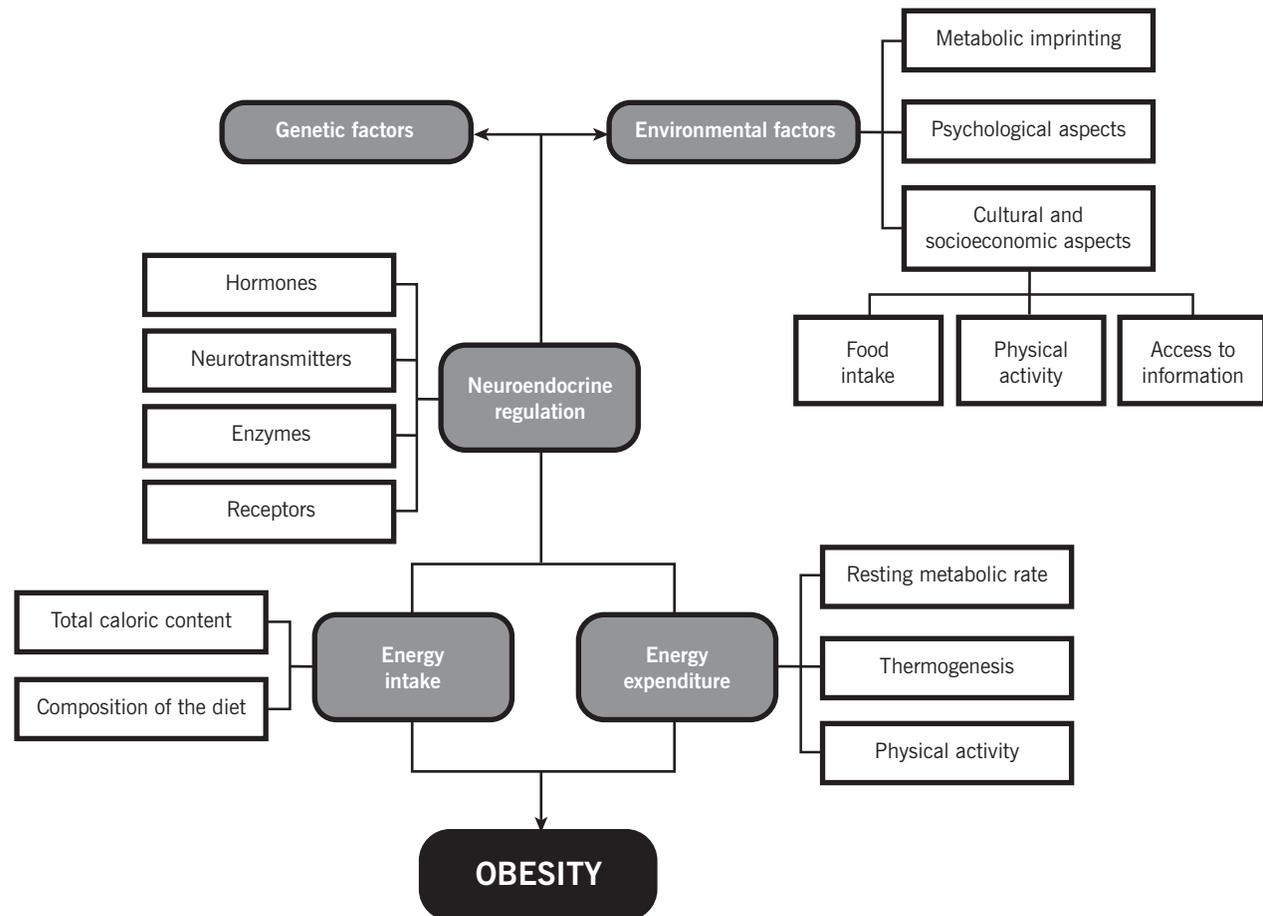


FIGURE 0.1  
Factors involved in obesity

### GOOD NUTRITION GIVES US NUTRIENTS.

Each food has a certain nutrient density, or nutrients per amount of food. Since we want to eat the right amount of food for our needs, we want to make sure that that food is loaded with nutrients.

Imagine several plates, each one full of one type of food:

- a plate of kale
- a plate of lentils
- a plate of cookies
- a plate of salmon
- a plate of berries
- a plate of saltine crackers

Now, per plate of food, ask:

- How many calories are in each plate?
- How many nutrients are in each plate?

In some cases, like the cookies, there are lots of calories but few nutrients. That's called low nutrient density.

On the other hand, with the kale, there are lots of nutrients but few calories. That's called high nutrient density.

TABLE 0.1

## Some high- versus low-nutrient density foods

## EXAMPLES OF FOODS WITH HIGHER NUTRIENT DENSITY

Bright or deeply colored vegetables  
 Bright or deeply colored fruits  
 Beans, meats, eggs  
 Whole grains

## EXAMPLES OF FOODS WITH LOWER NUTRIENT DENSITY

Potato chips  
 Soda and fruit juices  
 Hot dogs, deli meats  
 Refined grains/flours, pastries

We need nutrients to live, and to thrive. Nutrients help us be as healthy as possible, perform at our best, and live long, active and vibrant lives.

Good nutrition helps us balance energy intake and getting enough of these valuable, essential nutrients.

**GOOD NUTRITION HELPS US LOOK, FEEL, AND PERFORM OUR BEST.**

Good nutrition — and good nutrition coaching — helps our clients do what is most important to them, without other things getting out of balance.

An athletic client might be focused mostly on performance. You can also help them stay healthy and strong as they train. Or to be the right weight (or body fat percentage) for their sport.

An older client might want to simply live healthier and better. You can also help them keep the bone and muscle that will keep them active and mobile.

A client who dreams of looking good at the beach or at a big event (such as a wedding) might want to lose weight. You can also help them prevent chronic diseases.

Good nutrition is about helping people look better. Feel better. Perform better. Live better. And just *be* better overall.

As a coach, take a holistic approach. Help your clients balance specific goals with general benefits — perhaps even benefits they didn't realize were possible.

**GOOD NUTRITION IS OUTCOME-BASED.**

Every nutrition choice you make will lead to an outcome. Those outcomes can be measured. And they're a great mirror of reality.

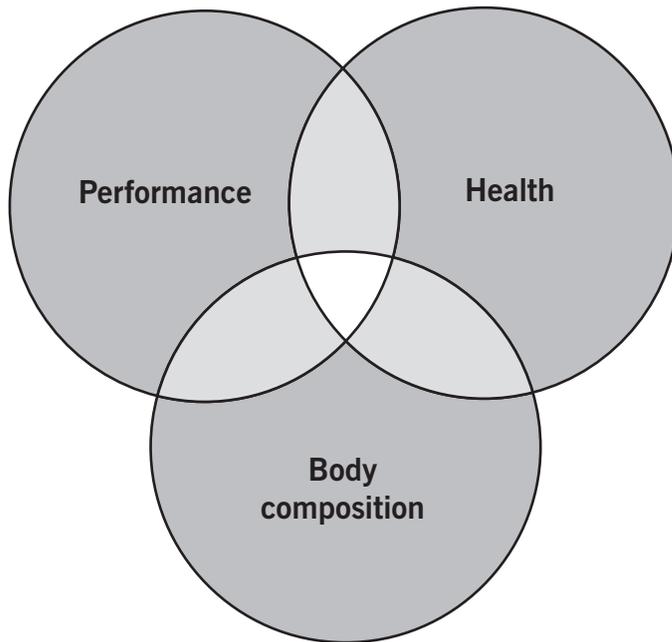
That's why we love the question "How's that working for you?"

Whenever someone tells us they eat really "healthy" — which is just a concept in their head — the best follow-up is "Great! How's that working for you?"

We use this question because it tests perception against reality.

If someone thinks they're eating really "healthy", but they just don't have the body, health, or performance that could be expected, maybe that person's idea of "healthy" doesn't match reality. Maybe they're not making outcome-based decisions.

Indeed, lots of people in North America *think* they have a really healthy and balanced diet.



Yet, for example:

- A study of Canadians found that over 60% of the calories they eat come from highly processed foods.
- In the US, just over 11% of calories come from fast food.
- That “5 servings a day of fruit and vegetables” habit? Data show that only 30% of people in the UK are doing it... and only 8% of Australians. (And often, those vegetable servings are potatoes.)
- Over 90% of our PN Coaching clients report eating at least one meal in a cafeteria or restaurant a day. While some people are undoubtedly making healthy, less-processed choices when they eat out, many folks are probably not.

That’s why good nutrition includes using outcomes (data and reality) to inform future decisions.

### **GOOD NUTRITION IS SUSTAINABLE FOR BOTH US AND THE PLANET.**

Can we keep eating and producing food the way we are now? For how long?

Research suggests that we waste between 30 and 50% of all food produced.

Food often travels thousands of miles between the farm and our dinner plate.

While global food production has gone up, hunger and malnutrition are still big problems worldwide. And more crops than ever before are being grown to feed livestock (not people).

With a planet that isn’t growing and a population that is, our food decisions need to be more sustainable and environmentally considerate than ever before.

Luckily, what helps the planet usually helps our body and health as well. That’s why good nutrition is about finding a diet that is sustainable for us and the planet.

FIGURE 0.2

**Good nutrition improves performance, health, and body composition**

**EPIGENETICS**

*The study of changes in organisms caused by modification of gene expression rather than alteration of the genetic code itself*

**AMINO ACIDS**

*The building blocks of protein. Organic compounds containing both COOH and NH<sub>2</sub>*

**GENE VARIANTS**

*Diversity in gene sequence within a population or among populations that are most commonly due to single nucleotide polymorphisms (SNPs) or copy number variants (CNVs)*

**GOOD NUTRITION IS ABOUT REMOVING LIMITING FACTORS.**

If you can help people identify their limiting factors — the things that stand between them and reaching their goals — you'll become a great coach.

While you're building up your expertise, here's a quick list of possible limiting factors to look for. (We'll share more examples later on.)

**Genetics and epigenetics**

Genetics (the blueprints of our body) and **epigenetics** (factors that control how our genes are expressed) can affect how your clients respond to nutrition.

For example:

- Few people will have the genetic makeup to reach the upper limits of human performance.
- Some people will have genetic factors that can make losing weight, gaining muscle, completely avoiding chronic diseases, or other physical outcomes easier or harder.
- Some people will be genetically more or less able to metabolize certain foods or chemicals, such as caffeine or particular **amino acids**.

Genes are not destiny. Epigenetic factors — such as nutrition, stress, or a healthy environment — can strongly affect genetic expression.

So you might carry several of the known **gene variants** for obesity... but you can also choose what to eat for dinner, or put on running shoes and get outside.

Almost everyone can make daily choices that will keep them as healthy, fit, and vibrant as possible, for their individual body. (For more on genetic testing and how it might be relevant to your clients, check out our comprehensive free e-book, *Genetics: The Universe Within*. [precisionnutrition.com/genetic-testing-ebook](http://precisionnutrition.com/genetic-testing-ebook))

**Exercise**

Activity changes how our body uses nutrients. Active and fit people can eat more, use nutrients more efficiently and effectively, and keep their metabolisms healthier than sedentary and unfit people.

So exercise (or lack thereof) can be an important limiting factor.

At the same time, exercise *alone* isn't enough to keep your clients healthy or lean. (Which is one reason that *your* work as a nutrition coach is so important.)

**Physiology**

If you've ever had a serious metabolic or hormonal problem, or an imbalance of neurotransmitters, you'll know: Physiology is powerful.

Work with, rather than against, your clients' unique physiological makeup, and help them understand what's realistic. (But stay hopeful.)

Take an integrated approach: Collaborate with your clients' other health care providers, if needed, to work together as a team.

**Mindset**

Every action starts with a thought. Thoughts become things.

Negative, sabotaging or inaccurate thoughts, self-talk and beliefs can hold your clients back. Not only do negative mental dynamics affect clients' behavior, they also have physiological effects: Our brain and body treat these like any other stressor, and respond accordingly.

Luckily, as a coach you can help replace negative mindsets with things like positive self-talk or better information.

Notice how your clients think, and the stories they tell themselves. Consider how you can also improve those thoughts and beliefs as part of your nutrition coaching. (We'll look more at this in Unit 2.)

Also consider how you can help your clients move from knowing information to taking action.

A winning mindset plus a great nutrition action plan... that's a recipe for success.

### Environment

What's around your clients?

Who is on their team? (Besides you.) How are their relationships at work, home, school, or elsewhere?

What's their schedule like?

What's their physical environment like? Are healthy choices close and convenient?

Most of our daily decisions are unconscious. We don't think about them. We just make them. So our environment strongly shapes what we do, eat, and think about.

Even if your clients really *want* to make better choices, they'll probably also need to adjust their environment to do so.

### GOOD NUTRITION LOOKS FOR STRENGTHS AND WINS.

Good nutrition isn't about "following the rules" or "being strict". It's about enabling happier, healthier, fuller lives.

As a nutrition coach, you're looking for limiting factors, but also for your clients' advantages, strengths, and opportunities for success.

How can you take what's already working, and improve on it?

Now, of course, if you're looking for strengths and wins, you'll probably wonder...

## What's the best diet?

If other people know you're learning about nutrition, or are a certified nutrition coach, they may ask you which "nutrition camp" you fall into. Are you into **Paleo**? What about vegan? **Intermittent fasting**? Detoxing? Or any number of other "flavors of the month" (so to speak)?

Many people will want to know:

**"What's the best diet?"**

The secret:

There isn't one.

Here's why.

### PEOPLE ARE DIVERSE.

Here are just a few ways that your clients can differ:

- **Body type:** Some people are tall and thin; others short and stocky. Or everything in between.
- **Fitness level and body composition:** Some people are active, strong, lean, and dense. Some people have been sedentary for the last 50 years and may be frail, without a lot of muscle.

### PALEO

*A diet built upon foods presumed to have been eaten by early humans*

### INTERMITTENT FASTING

*A diet that cycles between periods of eating and not eating*

- **Dietary preferences and exclusions:** Whether kosher, halal or Jainist; plant-based or carnivore; scavenger or “picky eater”; iron stomach or “allergic to everything”, people have a vast range of food preferences and many reasons for them.
- **Budget:** Your client might be a broke student, a family trying to make ends meet, a highly paid executive, or a pro athlete. Each person will have a different budget.
- **Organic / conventional:** Some people live on boxed and packaged foods. Some people try to read labels, sometimes. Some people may choose only kale that has been lovingly grown by a sect of Californian monks who hand-pluck the bugs off.
- **Nutrition knowledge and diet history:** Some clients will be devout followers of a certain dietary practice, or a history of trying different diets. Others have very little nutrition knowledge at all.
- **Time:** Some people have an open schedule, ready for any kind of health and fitness project. Others have a crowded daily schedule and countless conflicting priorities.
- **Ethnic background and heritage:** Our coaches practice all over the world, and we work with people who are from, or live, all over the world. A meal or cuisine that suits an Anglo family may not suit their Hispanic, Somali, or Punjabi neighbors. A person from a northern European ethnic group may digest dairy easily, while a person of Japanese heritage may not.
- **Age:** As we age, our metabolisms change, our food tolerances and appetites change, and our digestive abilities change.

You get the picture.

As a nutrition coach, your job is to help your people achieve their goals: to do what matters to *them*, in the way that’s best for *them*.

### THE BEST COACHES DON’T HAVE A SINGLE NUTRITION PHILOSOPHY.

You might have the approach you like, or one that worked for you. Great. That’s a solid start. But good coaches take a flexible approach. They borrow the best ideas from everywhere and everyone, and are always looking for new insights or tools. They don’t get stuck in dogma.

### THE BEST COACHES USE DATA AND EVIDENCE TO MAKE DECISIONS.

Throughout this course, we’ll encourage you to wear your scientist hat and gather data for outcome-based decision making.

Good coaches look at the evidence. This can include:

- peer-reviewed clinical and scientific research;
- understanding the basis of how and why things work (or don’t); and
- “real-life” testing and client experience.

Good coaches stay skeptical, think critically, and take a broad perspective.

Indeed, here’s one crucial piece of evidence:

### THE HEALTHIEST PEOPLE IN THE WORLD DON’T HAVE A SINGLE NUTRITION PHILOSOPHY.

Physiologically, the human body can do well under all kinds of different nutritional conditions.

We can see this clearly if we look at the traditional diets of indigenous groups and ethnic groups throughout the world.

- For example, indigenous Arctic people and African Masai eat traditional diets that are high in fat and animal products, with few vegetables.

- Conversely, Kitavans in the South Pacific, the Hadza of East Africa, and many groups in the Amazon basin (such as the Tsimane of Bolivia) eat traditional diets that are low in fat but high in vegetables and starchy carbohydrates.
- The !Kung of Africa eat traditional diets that are made up of mostly nuts and seeds.

This is also true if we look at the world's Blue Zones, areas where people live exceptionally long and healthy lives.

You probably wouldn't mistake Okinawan cuisine for the Mediterranean cuisine of Sardinia, Italy or Ikaria, Greece. Or the Central American cuisine of Costa Rica's Nicoya peninsula.

These cuisines and dietary patterns differ.

Yet people eating these ancestral or traditional diets have much fewer of the chronic "diseases of affluence" (such as cardiovascular disease, stroke, diabetes, obesity, etc.) considered normal in industrialized areas.

### THE HUMAN BODY ADAPTS AMAZINGLY WELL TO MANY DIFFERENT WAYS OF EATING.

You can be healthy and fit whether you eat mostly meat or mostly veggies, mostly fat or mostly **carbohydrates**, many times a day or just a few times, and so on.

Which means that, as a nutrition coach, you shouldn't really belong to any specific nutrition camp at all.

When you work with actual human beings, you must be a nutrition agnostic:

- Explore and try anything and everything that could work.
- Be willing to test new methods, even if they fly in the face of current beliefs or practices.
- Be humble and open-minded enough to let yourself be wrong, even if you really like being right. (Which we do.)

Don't focus on the food itself. Or on making sure everyone follows your "nutrition rules".

Focus instead on your clients. What do *they* need to be their best?

### GOOD NUTRITION IS MORE SIMILAR THAN DIFFERENT.

You might be wondering: How can such varied diets all keep people fit and healthy? Well, despite their disparities, most effective nutrition programs are more alike than different.

#### 1. Good nutrition asks people to care about their food and eating.

Research shows that your actual choices are probably less important than simply *paying better attention to what you eat*.

When you really care about what you eat, and make mindful, deliberate choices, you almost inevitably eat better.

#### 2. Good nutrition focuses on food quality.

Almost no decent diet plan asks you to eat *more* processed, nutrient-depleted pseudo-food.

Instead, pretty much every camp recommends eating whole, minimally processed, nutrient-rich foods — foods with which our body has a longstanding relationship.

Regardless of the macronutrient breakdowns or specific choices, just eating *better quality* food will improve most people's health significantly.

### CARBOHYDRATES

*A group of compounds including sugars, starch, and cellulose*

**HYPER-PALATABLE**

*Foods that are exceptionally pleasing to the sense of taste.*

**3. Good nutrition helps eliminate nutrient deficiencies.**

When we care about what we eat, choose foods mindfully, and try to get the best-quality foods we can afford, we usually get lots of valuable nutrients along for the ride.

Often, when people start a certain diet program, they just start eating better overall. They get more nutrients. They may get more variety. Or fresher foods. Or less-processed foods. Or foods they chose mindfully.

Because of these factors, they feel better. And that's one reason they start making wild claims about the rejuvenating power of their new diet.

They didn't do anything special, really. They often just started getting what their bodies needed.

**4. Good nutrition helps control appetite and food intake.**

For most people, "it's hard to eat just one" of the **hyper-palatable** deliciousness bombs of processed foods. We often keep eating and eating them, but don't feel satisfied.

We may also eat them on the go, when we're rushed and busy. So not only are we eating foods that encourage us to eat more of them, we're not even really paying attention to the experience at all.

Conversely, when we're more aware of what we're eating; choose a variety of more satisfying, higher-quality foods; and eliminate nutrient deficiencies, we almost always end up eating less food overall.

We feel more satisfied — both physiologically and psychologically. We lose fat, gain muscle, and perform better.

Notice that you don't need calorie counting here. Focusing on food awareness and food quality is usually enough for people to tune into their own hunger and appetite. That means calorie control without the annoying calorie math.

It also means that your clients can stick with this, since almost nobody can count calories (or wants to) forever.

**5. Good nutrition promotes regular exercise.**

When people start paying attention to their eating, they usually start thinking about physical activity too. Or vice versa: If you take up an activity you love, eventually you start wondering if your nutrition could help you do that activity better.

Good nutrition fits with regular activity like a key into a lock.

And most nutrition programs suggest that people exercise along with eating well.

**WHAT THIS MEANS FOR YOU AS A COACH**

Stay open-minded and flexible. Question everything.

Learn more about global nutrition and eating habits. Broaden your focus. Expand your world. (If possible, travel and actually experience different foods, cuisines, and food philosophies.)

Test your theories and programs. See how they work on actual clients with real lives and real bodies in the real world.

Look for evidence. Gather data and measure outcomes.

Remember to ask our favorite question: "How's that working for you?"

And where possible, look for underlying themes that make all good nutrition programs "work".

One key feature about successful diet plans — especially in the Blue Zones — is that good nutrition connects people to the food itself.

So now that you've thought about what food is, and what good nutrition involves, let's think about where food comes from. Or where it goes.

## The cycle of food

Check your fridge and pull out a fruit or vegetable.

Where was it grown?

How was it grown?

Who picked it for you?

How did it get to you?

What steps did it take?

How far did it have to travel?

What factors ensure you can get more of that fruit or vegetable?

Do you think that people could still be eating that fruit or vegetable in 100 years?

What about 500? Why?

In the world of nutrition for health, performance, and body transformation, we don't talk much about where food comes from. Or where it ends up if we discard it.

Sure, we might check a few labels for the word "organic". But beyond that... well, many folks think that chicken is just "protein" that comes in rectangular plastic packages.

(Wait... a chicken is a bird? That has feet, and feathers, and stuff?)

### FOOD AS INFORMATION ABOUT THE WORLD

Just as food is information for your body, food is also information about ecosystems and the environment.

Food is information about how things get produced, processed and sold all over the world.

Someone had to grow that fruit or vegetable from your fridge. Other people picked it, and packed it, and transported it, and sold it.

Obviously, a full discussion about the social, political, economic, and environmental issues involved in agriculture is beyond the scope of this textbook. We'll touch on it just briefly, to help you understand a few more parts of the bigger picture of food. If you'd like to learn more about these issues, check out the agriculture resources in Chapter 17.

### Sustainability

Something sustainable is something that you can do for a long time. That could be a well-planned nutrition program, of course. Or in this case, a way of growing and producing food.

Sustainable agriculture is agriculture that we can do for a long time. It involves things like:

- preserving and replenishing soil with nutrients;
- preserving and replenishing water reserves, especially clean fresh water;
- growing a wide range of diverse crops that are properly adapted for their surroundings;
- making the best use of valuable farmland;
- making animal welfare a priority;
- understanding the interaction of living organisms as a complex ecosystem rather than as a food factory;

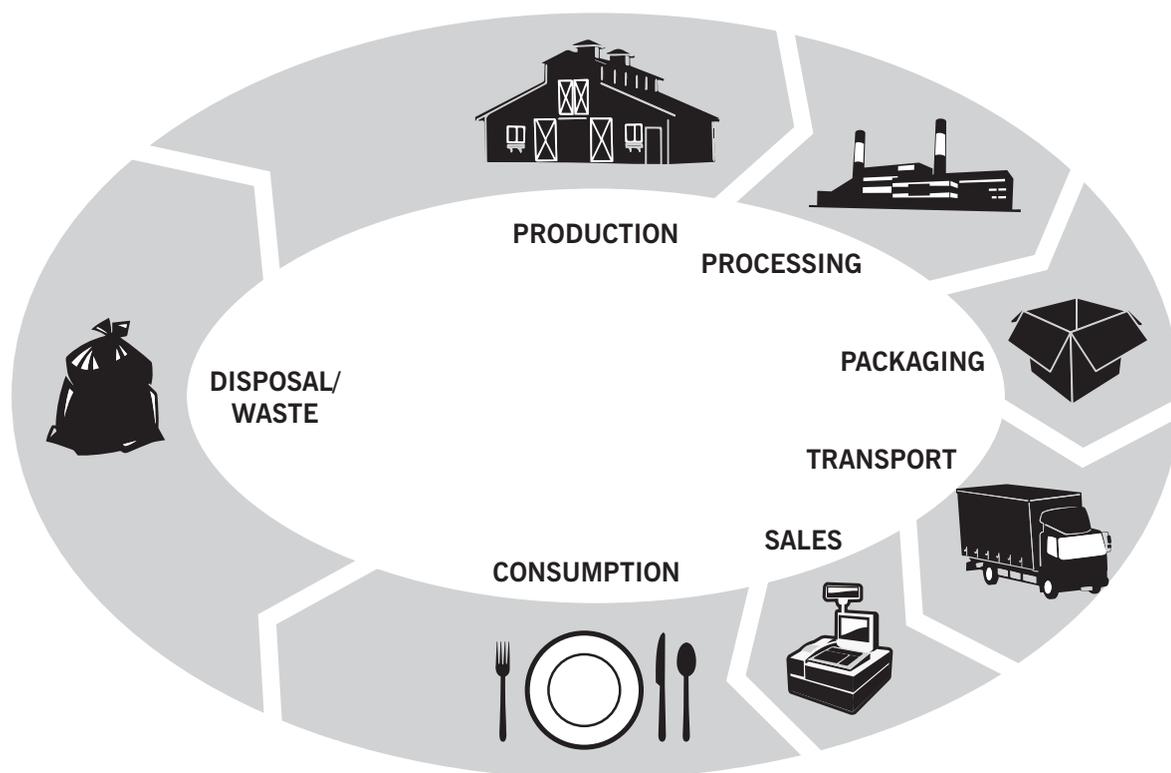


FIGURE 0.3  
The food life cycle

- making sure that people involved (such as growers or pickers) are safe and fairly treated;
- ensuring food safety and public health; and
- minimizing waste and pollution.

At its most basic level, sustainable agriculture is about ensuring that we can produce safe, high-quality food for everyone, for a long time to come.

Sustainability in agriculture isn't just a nice thing to have. It's what will ensure we can keep eating the things we want and need to eat.

We'll talk more about sustainability and organic versus conventional foods in a later chapter.

### FOOD AS A SET OF CHOICES

We've suggested that food is information, and a way of telling a story.

Here's another thing to think about: Food and eating is a set of choices.

As a nutrition coach, one of your jobs is to make your clients more *aware* of what they're doing. Indeed, awareness *itself* can often change people's behavior. (We'll talk about this more in Unit 2.)

As we've stressed, nutrition coaching isn't about getting people to follow "the rules". It's about helping them make more conscious choices. Choices that align with their values, priorities, and goals.

We (and our clients) think about lots of things before we buy and eat a food, such as:

- what's convenient;
- what it costs;

- what's healthy (or not);
- what we've done before (and in that case, we don't really "think" about it);
- what's available;
- what might taste good;
- what might feel good, distract us, or change our emotional state; and
- what is better for the environment, or more sustainable.

Every person has their own decision-making process and priorities.

Your role as a coach is to help the people you work with become more aware of these processes and priorities — to help them see that choices are at the end of a pathway.

And, if needed, you can help them change those pathways to change their choices.

As you look to deepen your own practice and increase your awareness, think about food within a larger web.

We'll talk more about how to implement small, manageable habits later in the course.

For now, just get the general idea:

- **Think about the big picture of nutrition, food, and eating.** Notice how adding some context helps expand your understanding of what nutrition, food, and eating are all about.
- **Think about what might be most important for both you and your clients.** Notice how there are lots of options for all the unique people you work with. (Don't worry, we'll help you sort things and focus later.)
- **Think about how you might work towards those values and priorities as part of nutrition coaching.** We know it's a long-term project. Just start with today... and keep reading.

## What is nutrition coaching?

We've started to give you some ideas about what nutrition coaching is.

Let's look more closely now at what the role of nutrition coach involves.

First, congratulations.

### BEING A NUTRITION COACH IS AN IMPORTANT JOB.

**You're often the first person a client sees when they want to look, feel, and / or perform better.**

Even if they have other health care providers, a client might start talking to you first about changes they are considering.

**You're part of your client's social support system.**

Many clients don't have family or friends who are willing to help and support them as they improve their exercise and nutrition choices. In fact, sometimes those family and friends can actively sabotage your client's efforts.

In the beginning, you may be the only team member a client has.

**You have the power to change lives.**

If food and eating is information and a story, we can offer new information and revise that story.

You can help change your clients' bodies. You can also help change their mindset about who they are and what they can do. You can help change their ability to make choices and try new things — to fully experience the world around them.

By helping prevent chronic diseases or nutrition-related disabilities, or helping them change their relationships with food, you might even save their lives sometimes.

### WHAT DOES A GOOD NUTRITION COACH DO?

Fundamentally, a nutrition coach is a guide for change. We'll talk about this more in Unit 2. Here are some things that all good nutrition coaches should do.

#### Be client-centered.

This means you're an advocate and ally of the client. You want to help them do what matters most to *them*... not what matters most to *you*.

You listen to them. Try to understand their needs. Try to understand their lives.

You see them as unique individuals, and try to match your nutrition programming to what's best for *them*.

#### Help clients take action.

Knowledge and information are great, but they're not enough. Your clients need to *do* stuff.

Good nutrition coaches create clear, goal-driven, evidence-based nutrition plans that clients can *immediately* start putting into action.

#### Keep learning. Stay up to date.

Your clients want reliable, current, practical information they can understand and use.

This means that you should have a process of ongoing learning, information gathering and filtering, and sharing that knowledge.

We recommend you start with the Precision Nutrition blog. Our experts have already done the research and digested it for you. It's a one-stop shop for up-to-date nutrition and coaching information.

#### Collaborate.

Being a nutrition coach is a big and important job. But you don't work alone.

Good nutrition coaches build and maintain a professional network with other health care professionals such as:

- doctors
- registered dietitians
- nurses
- physical therapists
- naturopaths

(In fact, you may also be one of these types of health care professionals. Congratulations on adding nutrition to your practice! Regardless of your career role and skill set, think about collaboration rather than competition with other client care providers. You're all working together on your client's team.)

We also suggest you build a professional network to support your own practice. Look for people such as:

- business coaches
- accountants
- marketers
- web designers

**Have good boundaries. Know your scope of practice.**

Good nutrition coaches understand clearly what they can and can't do.

We'll look more at client assessment and scope of practice in Unit 2, but here's a general overview.

**WHAT'S YOUR SCOPE OF PRACTICE?**

You're probably here because you'd like to be able to talk about nutrition with your clients, and to help them improve their food and eating habits. But it's not always clear what you can and can't talk about with clients.

Here are the guidelines.

**You can talk about nutrition with your clients... if you're qualified to do so.**

In most jurisdictions, certified personal trainers or other licensed health care professionals who have fundamental nutrition knowledge can answer questions or address concerns that their clients may have about nutrition.

Notice we emphasize the "fundamental knowledge" part.

With specific training, such as that provided in this course, you'll have that fundamental knowledge and be able to discuss nutrition with clients.

**Know your options where you live.**

Each state, province, and country has different rules for dispensing nutrition advice.

We've given you some resources below, and on our website, for learning more.

**Offer general nutrition advice, not medical nutrition therapy.**

(Unless you're qualified to do so, of course.)

With this PN Certification, you're able to make general nutrition suggestions in most jurisdictions. You can also share nutrition education using materials from a public or well-known entity such as the American Heart Association, the Centers for Disease Control and Prevention, and the Academy of Nutrition and Dietetics. (And of course, Precision Nutrition.)

But unless you're licensed or otherwise certified to do so, you can't offer specific advice in the form of medical nutrition therapy.

Without this professional designation or licensing, you can't prescribe nutrition for specific health conditions and illnesses, such as:

- post-surgical nutrition
- diabetic nutrition
- cancer therapy nutrition
- nutrition to treat liver disease or kidney stones
- nutrition for clinical eating disorders such as anorexia

Of course, the general advice you give your clients will probably improve their health and lower their disease risk.

You just can't offer directed advice that could reasonably be considered part of medical therapy. You can't use words like "diagnose", "treat", "cure" or "prescribe". (And you can't claim to magically eliminate all human suffering with your wondrous diet plans.)

It's not always completely clear where the boundaries are, so when in doubt:

**Collaborate with your professional network of other health care providers.**

To find registered dietitians, sports dietitians, and fellow PN Certified professionals, check out the FAQs in the online course at [my.precisionnutrition.com](http://my.precisionnutrition.com).

**Learn the rules and regulations of your area.**

To learn more about the rules and regulations in your area, check out the FAQs in the online course at [my.precisionnutrition.com](http://my.precisionnutrition.com).

## What this program will cover

Here's what we'll do in the rest of this textbook and this course.

- Dispel common myths and fallacies associated with nutrition.
- Give you the foundational knowledge you'll need to make general nutritional recommendations to a variety of people.
- Provide and explain nutrition theory and science.
- Give you a clear process and walk you through the steps of preparing for, assessing, evaluating, and making recommendations for clients.
- Give you a set of resources that you can use almost immediately in your coaching practice (if you have one already).

You should finish this course with both a better understanding of exercise nutrition and the tools used to deliver nutritional recommendations.

**Important note**

**Completing this course will not qualify you as a registered dietitian, licensed dietitian, or licensed nutritionist. Check with the licensing bodies in your area if you are hoping to get licensed.**

**Nor will this course allow you to provide medical nutrition therapy.**

Instead, this course will provide you with continuing education in the field of nutrition.

It will enhance your credibility, your confidence, and your skill set.

And it will help you overcome the biggest limiting factor your clients face every day: poor nutrition.

## Case Study

*Many clients come to us with “diet experience”.*

*Some have done lower-carbohydrate diets, like the Atkins Diet. Others have done low-fat diets, like the Ornish Diet. And others have done more “balanced” plans, like the Zone Diet.*

*One client followed all three plans at one point or another, along with exercise.*

*In each case, the process and results were the same:*

- *He followed the diet.*
- *He lost about the same amount of weight.*
- *He gained it all back... and usually more.*
- *He tried another diet.*

*No matter what diet he tried — despite how “different” these diets were from each other — the same stuff happened.*

*How can this be?*

*Well, instead of focusing on what makes diet plans different, let’s look at what makes them similar.*

*The client got the same results with different diets because all three plans forced him to follow a key rule of good nutrition:*

***All three plans, together with his exercise plan, forced him to control his energy balance.***

*To lose weight, we need a negative energy balance. In other words, we need to take in less energy (in the form of food) than we expend (in the form of metabolism and activity).*

*If someone loses weight, they’ve somehow managed to get into negative energy balance.*

*In this case, that’s what did the trick — not the lack of carbohydrates. Or reducing fat. Or a specific macronutrient ratio.*

*All three plans create a negative energy balance in three ways:*

1. *When clients follow a “weight loss plan”, they usually eat less. This decreases “energy in”.*
2. *Exercise increases “energy out”.*
3. *Both Atkins and Ornish ask dieters to restrict either dietary carbohydrate or dietary fat. The Zone plan asks dieters to eat a specific ratio of macronutrients — which usually means that people eat less of whatever they were eating “too much” of. Is it any wonder that by asking dieters to avoid eating something, they’ll end up eating less?*

*It wasn’t some magical macronutrient mix that made the client lose weight. It was plain old energy deficit. (You’ll learn more about energy balance in an upcoming chapter.)*

*However, all three experiments ultimately failed.*

*Each time, the client rebounded. He gained more weight after losing it. After giving up, he got off track, stopped exercising, and started eating poorly again.*

*However, it wasn’t the food that caused this rebound. It was many other lifestyle factors. The problem wasn’t what he was eating necessarily... but how he was eating and living.*

*Only when we started to address these key factors did the client change his fundamental habits... and lose his excess body fat for good.*

*In this program, you’ll learn that both the what (i.e., the food itself) and the how (i.e., how we eat and live) are crucial elements in change.*

## Summary

- Food is fuel, but it's so much more than that. Food gives us important substances such as micronutrients, phyto- and zoochemicals. We need all of these nutrients to live and thrive.
- Living organisms are not machines. Human bodies aren't combustion engines. They're more complex than simple inputs and outputs.
- Food is information and a story. Physiologically, socially, and even environmentally, food and eating gives us important information about things like:
  - chemical interactions in our body;
  - how we relate to ourselves and one another socially and culturally;
  - how we make choices about what to eat (or not); and
  - how larger forces shape how food is produced and consumed.
- Good nutrition plans:
  - control energy balance;
  - give us nutrients;
  - help us look, feel, and perform our best;
  - are outcome-based;
  - are sustainable for both us and the planet;
  - are about removing limiting factors; and
  - look for strengths and wins.
- What's the best diet? Trick question! There isn't one. The best coaches don't have a single nutrition philosophy, and use data and evidence to make decisions.
- People are diverse. The human body adapts amazingly well to many different ways of eating. You can be healthy and perform well on many diets.
- Good nutrition is more similar than different. It:
  - asks people to care about their food and eating;
  - focuses on food quality;
  - helps eliminate nutrient deficiencies;
  - helps control appetite and food intake; and
  - promotes regular exercise.
- Being a nutrition coach is an important job. You're often the first person a client sees when they want to look, feel, and / or perform better. You're part of your client's social support system. You have the power to change lives.
- A good nutrition coach will:
  - be client-centered;
  - help clients take action;
  - keep learning; stay up to date;
  - collaborate; and
  - have good boundaries; know your scope of practice.

- What's your scope of practice?
  - You can talk about nutrition with your clients... if you're qualified to do so.
  - Know your options where you live.
  - Offer general nutrition advice, not medical nutrition therapy.
  - Collaborate with your professional network of other health care providers.
  - Learn the rules and regulations of your area.
- This program will:
  - help to dispel common myths and fallacies
  - give you the foundational knowledge you'll need to make general nutritional recommendations to a variety of clients
  - provide and explain nutrition theory and science
  - give you a clear process for preparing, assessing, evaluating, and making recommendations for clients
  - give you resources that you can use almost immediately
  - give you a better understanding of exercise nutrition and the tools used in delivering nutritional recommendations