

Chapter 1

Gluten-Free from A to Z: The Basics of Being Gluten-Free

In This Chapter

- ▶ Getting a grip on gluten
 - ▶ Discovering the advantages of the gluten-free lifestyle
 - ▶ Making the most of meals
 - ▶ Going from gluten-gorger to gluten-free forager — and loving it
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I figured the doctor had made a mistake. “You mean *glucose*,” I corrected him with a tinge of exasperation at his clumsy blunder. “You must mean my son can’t eat *glucose*.” Geesh. This was going to be tough. No more gummy bears.

“No, I mean *gluten*,” he insisted. “And to be honest, I really don’t know much about the gluten-free diet. You can see our hospital dietitian, but she won’t have much on the diet, either. You’re going to have to do some homework on your own.”

All I could muster was a blank stare. What the heck was *gluten*? Keep in mind this was 1991, when I knew as much about gluten as I know about piezoelectric polymers. Approximately nothing.

Stranded on some figurative island located somewhere between Terror Bay and the Dread Sea, I figured I had two options: Tyler could starve to death, or I could get busy trying to figure out what the heck gluten was all about. People probably frown on mommies who let kids starve to death.

Al Gore hadn’t invented the Internet yet, and I couldn’t find any books or support groups; it was time to get resourceful and creative. I was determined to find out everything I could — and then share it with the world (at least the other six people on the planet who were gluten-free at the time).

Little did I know that gluten-free-ness would explode into what it is today — one of the fastest-growing nutritional movements in the world — and this mission of mine would become all-consuming. This chapter gives you a basic rundown of what living gluten-free is all about.

What Is Gluten, Anyway?

Gluten has a couple of definitions; one is technically correct but not commonly used, and the other is commonly used but not technically correct. I give you more details on both definitions in Chapter 4, but to get you started and for the purposes of most of this book, here's the common definition: *Gluten* is a mixture of proteins in wheat, rye, and barley. Oats don't have gluten but may be contaminated, so they're forbidden, too.

Common foods that contain gluten

You can find lots of information about what you can and can't eat in Chapter 4, as well as a detailed listing of safe and forbidden ingredients at www.celiac.com or other Web sites. But you need to have a general idea of what kinds of foods have gluten in them so you know what to avoid. Things with flour in them (white or wheat) are the most common culprits when you're avoiding gluten. The following are obvious gluten-glomming foods:

- ✓ Bagels
- ✓ Beer
- ✓ Bread
- ✓ Cookies, cakes, and most other baked goods
- ✓ Crackers
- ✓ Pasta
- ✓ Pizza
- ✓ Pretzels

But there are not-so-obvious suspects, too, like licorice, cereals, and natural flavorings. When you're gluten-free, you get used to reading labels, calling manufacturers, and digging a little deeper to know for sure what you can and can't eat (more on that in Chapter 5).

You have to do without those foods, but you really don't have to do *without*. Food manufacturers make delicious gluten-free versions of just about every food imaginable these days. I talk more about those and where to buy them in Chapter 8.

Wheat-free doesn't mean gluten-free

You may see lots of labels proudly declaring a product to be wheat-free (some of which, like spelt and kamut, aren't really wheat-free at all). That doesn't mean the food's gluten-free.



Gluten is in wheat, but it's also in rye and barley — and most people don't eat oats on the gluten-free diet, either. So something can be wheat-free but still have other gluten-containing ingredients, like malt, which is usually derived from barley. In that case, the product's wheat-free, but it's not gluten-free.

Discovering the Benefits of a Gluten-Free Lifestyle

The gluten-free lifestyle isn't about your diet. Oh, sure, this book talks about food, but the diet itself takes up only a few pages. Being gluten-free involves a lot more than just cutting gluten out of your diet. It affects every aspect of your life, from how you communicate and with whom, to how you handle ordering at restaurants, attending social functions, and dealing with emotional challenges.

I believe it's important to take control of the diet, or if it's your kids who are gluten-free, help them gain control. Going gluten-free also gives you an opportunity to reach out and help others who may be embarking upon the wonderful world of gluten freedom, as well as a chance to discover more about nutrition and what you're actually putting in your body on a daily basis. If that sounds like a lot of work, relax. I guide you through it. And not only can you feel better, but you can also feel better about yourself!

You have lots of company. The gluten-free movement is sweeping the nation for lots of reasons, but the one that stands out is that when people give up gluten, they often feel better. This section tells you what the gluten-free diet can do for your body — the benefits you can enjoy in addition to all the emotional perks of the lifestyle.

People today live in a quick-fix, panacea-pursuing, pill-popping, make-me-better-fast society, and if they see promise of a quick way to fix what's ailing them, they're buying it. Changing both your diet and lifestyle is neither quick nor easy, but the benefits of going gluten-free can be fantastic — no surgery or medication required!

Abstinence makes the gut grow stronger

When gluten is what's making you sick, what your symptoms are doesn't matter; even if your symptoms don't seem to be related to your gastrointestinal tract, nasty battles are going on inside your gut.

Hairlike structures called villi are on the lining of your small intestine. The job of the villi is to increase the surface area of the small intestine so it can absorb more nutrients.

For people who have gluten intolerance, the body sees gluten as a bad guy or toxin and attacks it. In doing so, it also accidentally attacks the villi, and those villi get blunted and shortened, sometimes to the extreme of becoming completely flat.

Flat villi can't absorb stuff, so those good-for-ya nutrients just slide right by and you don't get enough of the important vitamins, minerals, and

other things that are vital for good physical and emotional health. You develop what's called *malabsorption* and become poorly nourished.

Don't worry! This story has a happy ending. Your villi are tenacious little things, and when you quit eating gluten, they begin to heal right away. Before you know it, your villi grow back and absorb nutrients again, and your health is fully restored. That's why I say abstinence makes the gut grow stronger.

By the way, lactase, which is the enzyme that breaks down the sugar lactose, is produced in the tip of the villi. When the villi get blunted, sometimes your ability to digest lactose decreases and you become lactose intolerant. When you quit eating gluten and the villi heal, you're usually able to tolerate dairy foods again.

Eating isn't supposed to hurt

Food is supposed to give you energy and make you feel good, not make you hurt. But when you eat things that your body doesn't like for one reason or another, it has a sometimes not-so-subtle way of telling you to knock it off. Food that your body objects to can cause gas, bloating, diarrhea, constipation, and nausea — and even things that don't seem to be associated with the gastrointestinal tract, like headaches, fatigue, depression, joint pain, and respiratory distress.

The cool thing about all this is that when you figure out which food or foods your body doesn't approve of, you can stop eating them, and then your body stops being so pouty. In fact, feed it right, and it can make you feel great in lots of different ways.

Making nutrition your mission: Head-to-toe health benefits

The 12th-century physician Maimonides said, “Man should strive to have his intestines relaxed all the days of his life.” No doubt! When your intestines aren’t relaxed — or when they’re downright edgy or uptight — they affect all your other parts, too. It’s kind of like when you’re in a really good mood and your best friend is grumpy — the situation can make you grumpy, too; one cantankerous intestine can be a buzz-kill for the entire body.

In a way, the body’s reaction to gluten doesn’t compute. In some people, eating gluten can cause headaches, fatigue, joint pain, depression, or infertility; at first those types of symptoms may seem unrelated to something going on in your gut, much less something you eat — much less something as common in your diet as wheat.

But those — and about 250 others — are symptoms of celiac disease and gluten sensitivity. People with celiac disease or gluten sensitivity do sometimes have gastrointestinal symptoms, but more often the symptoms are *extraintestinal*, meaning they take place outside the intestinal tract.

If your body has problems with gluten, the gluten-free diet may help relieve lots of symptoms, such as

- ✓ Fatigue
- ✓ Gastrointestinal distress (gas, bloating, diarrhea, constipation, vomiting, heartburn, and acid reflux)
- ✓ Headaches (including migraines)
- ✓ Inability to concentrate
- ✓ Weight gain or weight loss
- ✓ Infertility
- ✓ Joint, bone, or muscle pain
- ✓ Depression
- ✓ Respiratory problems

The list’s impressive, isn’t it? The idea that eliminating one thing from your diet — gluten — could improve so many different conditions is almost hard to believe. Yet it’s true — and it really makes sense when you realize that if the food you’re eating is toxic to your body, your body’s going to scream in lots of different ways.

In people with gluten intolerance, eating gluten may make the symptoms of some psychiatric conditions worse. (I talk more about that in Chapter 2, and you can also find out more at www.gfcfdiet.com or www.autismndi.com.) Some researchers think removing gluten from the diet can improve the behaviors of people with

- ✓ Autism
- ✓ Schizophrenia and other mood disorders
- ✓ Attention-deficit (hyperactivity) disorder (ADD/ADHD)

Millions of people have wheat *allergies*, which are different from gluten sensitivity or celiac disease — and they, too, improve dramatically on a wheat-free/gluten-free diet.

But beyond the obvious improvement you enjoy if you have an intolerance, other conditions and symptoms can improve on a wheat-free diet: PMS and menopausal symptoms, for instance. Eliminating wheat may even slow or even reverse the signs of aging, reducing wrinkles and improving the tone and texture of skin.

But I thought wheat was good for me!

Of course you did. Anyone who's spent more than a day on planet Earth has been barraged with messages hailing the virtues of wheat — especially in its whole form! It and other grains hog most of the food pyramid(s), suggesting you should eat gobs of it, and it's touted as a good source of fiber and nutrients. Wheat does provide some health benefits, but you can find them in other food sources, too. So how can wheat be at the root of so many health problems? Here are some reasons wheat may not be the key to perfect dietary health.

Wheat was invented yesterday

Wheat wasn't introduced until the Agricultural Revolution, about 10,000 years ago — that's yesterday, evolutionarily speaking. Before that, people ate lean meats, fish, seafood, nonstarchy vegetables, and fruits.

When wheat came on the scene, it was completely foreign. Human bodies have to adapt in order to tolerate it, and lots of people don't tolerate it well at all.

Humans don't fully digest wheat

Most humans have only one stomach — and one just isn't enough to digest wheat. Cows have four stomachs (actually, four chambers within one stomach). That's why Bessie the Bovine does okay with wheat. It goes from one stomach to another and another and — well, you get the picture. By the time it reaches tummy number four, it's fully digested, and Bessie's feeling fine.



Wheat contributes to leaky gut (“Z” is for zonulin)

When people eat wheat, they produce extra amounts of a protein called *zonulin*.

The lining of the small intestine is basically a solid wall of cells that most materials can't pass through on their own. On the lining of the small intestine, zonulin waits for nutrients to come along. When important vitamins and minerals are present, zonulin tells the passageways in the intestinal wall to open so those nutrients can pass into the bloodstream. The blood then carries the nutrients to other parts of the body.

But when some people eat wheat, they produce too much zonulin, and the gates open too wide. All sorts of stuff gets in the bloodstream, some of which shouldn't be there, like toxins. This increased permeability of the lining of the small intestine, or *leaky gut syndrome*, can cause lots of different health issues.

Mastering the Meals

This book is about a lifestyle, not a diet. But no matter where that lifestyle takes you — eating in, eating out, social events, choosing, planning, shopping, preparing — being gluten-free all comes down to one thing: food.

If you're a culinary hacker and you're afraid you'll have to wake up at 4 a.m. to bake gluten-free bread and make pasta from scratch, turn off the alarm and go back to sleep. There are plenty of gluten-free specialty foods available to take the place of all your old favorites.

Whether you're a kitchenphobe or a foodie, living a gluten-free lifestyle offers you an enormous selection of foods and ingredients to choose from.

Planning and preparing

Putting together smart and healthful gluten-free meals is a lot easier if you plan ahead. Walking through a store, perusing restaurant menus, or (gasp!) sitting in a bakery with a growling tummy isn't exactly conducive to making good food choices.



Give yourself a healthy advantage by planning and even preparing meals in advance, especially if your busy schedule has you eating away from home frequently. If you know you're pressed for time at breakfast or lunch, make your meals the night before, and bring healthful gluten-free snacks in resealable plastic bags.

One of the coolest things about adopting a new dietary lifestyle is exploring new and sometimes unusual or unique foods. You may never have heard of lots of gluten-free foods and ingredients, many of which not only are gluten-free and delicious but are also nutritional powerhouses. With the new perspective on food that the gluten-free lifestyle can offer you, you may find yourself inspired to think outside the typical menu plan, exploring unique and nutritious alternatives.

Shopping shrewdly

The healthiest way to enjoy a gluten-free lifestyle is to eat things you can find at any grocery store or even a farmer's market: meat, fish, seafood, fruits, and nonstarchy vegetables (see Chapter 6). If you want to add canned, processed, and even junk foods to your shopping list, you can still do most of your shopping at a regular grocery store, and you can even buy generics.

If you hope to enjoy the delicious gluten-free specialty products that are available these days, you can find them in health food aisles or at health food stores or specialty shops. Or you can shop in your jammies on one of the many Internet sites specializing in gluten-free products (if you're using your library's Internet or an Internet café to shop online, I suggest you change out of your jammies).

Some people worry about the cost of the gluten-free lifestyle, but it doesn't have to be more expensive. I talk about eating gluten-free affordably in Chapter 8.

Kitchen considerations

For the most part, a gluten-free kitchen looks the same as any other kitchen — without the gluten, of course. You don't need to go out and buy special gadgets and tools, and with only a couple of exceptions, which I cover in Chapter 9, you don't need two sets of pots, pans, utensils, or storage containers, either.

If you're sharing a kitchen with gluten, you need to be aware of some contamination issues so you don't inadvertently glutenate (contaminate with gluten) a perfectly good gluten-free meal. Keeping your crumbs to yourself isn't just a matter of hygiene but can mean the difference between a meal you can eat and one you can't.



Some people find having separate areas in the pantry or cupboards for their gluten-free products helpful. This is an especially good idea if you have gluten-free kids in the house, because they can see that there are always lots of things for them to eat and can quickly grab their favorite gluten-free goodies from their special area.

Cooking outside the recipe box

I believe if you give someone a recipe, you feed 'em for a meal. Show them how to make *anything* gluten-free, and you feed 'em for a lifetime. The point is, you can make anything gluten-free, and you're not constrained by recipes or the fact that you can't use regular flour or breadcrumbs. All you need is a little creativity and some basic guidelines for using gluten-free substitutions, which you can find in Chapter 9.

If you're a die-hard recipe fan, never fear — I give you recipes in Chapters 10 through 15. Most of them are super simple to follow but leave your guests with the impression that you spent all day in the kitchen (and being thus indebted, they may volunteer to do the dishes).

Getting Excited about the Gluten-Free Lifestyle

Most people who embark on a gluten-free lifestyle are doing so because of health issues — and that means they have little or no choice in the matter. When people are forced to make changes in their routine, especially changes that affect what they can and can't eat, they're not always so quick to see the joy in the adjustments.

If you're a little gloomy about going from gluten-glommer to gluten-freebie, I understand. But prepare yourself to read about the scores of reasons to be excited about the gluten-free lifestyle (for you impatient types like me, feel free to skip to Chapters 19 and 20 for a jump-start on the Kumbayah side of being gluten-free).

“A” is for adapting your perspective on food

If you've been eating gluten (I believe that would make you a *glutenivore*) for a long time — say, for most of your life — then giving up foods as you know them may seem like a tough transition at first. Besides the obvious practical challenges of learning to ferret out gluten where it may be hidden, you have to deal with emotional, physical, social, and even financial challenges.

You have to do only one thing in order to learn to love the gluten-free lifestyle, and that's to adjust your perspective on food just a tinge. You really don't have to give anything up; you just have to make some modifications. The foods that used to be your favorites can still be your favorites if you want them to be, just in a slightly different form.

Or you may want to consider what may be a new and super-healthy approach for you: eating lean meats, fresh fruits, and nonstarchy vegetables. Again, you may have to tweak your perspective a bit before the diet feels natural to you, but it is, in fact, natural, nutritious, and naturally nutritious. I talk more about this approach in Chapter 6.

Savoring gluten-free flavors

People who are new to the concept of being gluten-free sometimes comment that the diet is boring. When I ask what they're eating, their cuisine routine usually centers on carrots and rice cakes. Who wouldn't be bored with that? That type of a diet is appalling, not appealing.

I *love* food. I love the flavor, the feeling of being full, the nutritional value it provides. Most of all, I love to explore foods I've never tried before — as long as they're gluten-free, of course. I'd never encourage you to endure a diet of blandiose foods that could double as packing materials.

A healthy, gluten-free diet doesn't have to be boring or restrictive. You're not constrained to eating 32 individual portions of fruits and vegetables each day, like a rabbit nibbling nervously on carrots. If you enjoy bland foods, snaps for you. But if you think gluten-free has to be flavor-free, you're in for a pleasant surprise.

Getting out and about

You don't have to let the gluten-free lifestyle hold you back from doing anything you want to do. Well, okay, there are some things you can't do — like eat a pizza from the place around the corner or devour a stack of gluten-laden donuts. But as far as your activities and lifestyle are concerned, you can — and should — get out and about as you always have.

For the most part, ordering out isn't as easy as walking into a restaurant and asking for a gluten-free menu (a girl can dream). But eating at restaurants is definitely doable; you just need to learn to special order and tune in to contamination concerns. Traveling is a breeze after you master eating at restaurants (and get a handle on language considerations if you're traveling abroad). Going to social events just requires a little advance planning, and holidays may barely faze you — after you get the hang of getting out and about gluten-free style. Chapter 16 gives you more information on this.

Raising kids to love the lifestyle

When we heard that Tyler would have to be gluten-free for the rest of his life, we were flooded with a bunch of emotions, most of which weren't very pleasant. At first, we felt burdened and overcome with grief and frustration, and we longed for the perfectly healthy little baby we thought we were entitled to. It was easy to focus on what we had lost and all that we'd have to change in our lives. But making adjustments didn't take long, and soon we'd learned not just to live the gluten-free lifestyle — but to *love* the gluten-free lifestyle.

Most importantly, we wanted Tyler to love the lifestyle. After all, it was his diet, his life, and his future that would be most impacted. Thankfully, Tyler does love the gluten-free lifestyle, and your kids can, too.

Lots of ideas are key in raising happy, healthy, gluten-free kids. Some of the highlights include giving them control of their diet from day one; always having yummy gluten-free treats on hand; reinforcing the benefits of the gluten-free lifestyle (if you need some crib notes, see Chapter 19); and always remembering that they're learning how to feel about the lifestyle from *you*. Promoting an optimistic outlook can instill a positive approach in them. Chapter 17 deals in detail with raising kids to love the gluten-free lifestyle, and for even more inspiration and practical advice, see *Kids with Celiac Disease: A Family Guide to Raising Happy, Healthy, Gluten-Free Children*, by yours truly.



Kids are flexible and resilient. Adopting a new lifestyle is usually harder for the parents than for the child.

Setting realistic expectations

Some people call me PollyDanna because they think I have an unrealistically optimistic view of the gluten-free lifestyle. It may be optimistic, but it's not unrealistic.

Setting reasonable expectations for what things will be like when you adopt a gluten-free lifestyle is important, because you *will* encounter challenges, and you need to prepare to handle them well. Friends, family, and loved ones may not understand. They may not accommodate your diet when you hope or expect they will. You may find social events to be overwhelming at first; or you may get confused or frustrated and feel like giving up on the diet. You can overcome these trials and come out stronger for them.

How the gluten-free lifestyle saved my son

I didn't aspire to do any of this. I was deeply involved in a successful career, and was a mommy first and foremost. But today I'm an accidental author, researcher, and support group founder who was pushed into the deep end of the gluten-free pool and realized I needed to learn to swim. Fast.

Until 1991, my family and I ate a fairly typical American diet. I tried to keep it nutritious (extra cheese on the spaghetti to add protein), and I was aware of the need to limit fat and calories (scratch the extra cheese), but we didn't spend a lot of time worrying about what we ate or the long-term effects food may have on our bodies. We pretty much took eating for granted.

All that changed when my first child, Tyler, was about 9 months old and developed what seemed to be chronic diarrhea. The pediatrician chalked it up to the antibiotics Ty was taking for ear infections and told me to call if it hadn't cleared up in a few weeks. Three weeks later, I was back in the pediatrician's office. "Yep, he still has diarrhea," the doctor declared with confidence. "Yeah, I know. That's why I'm here," I mumbled with self-restraint worthy of the Nobel Peace Prize. "Give him foods that will plug him up like crackers and bread — and call me if it hasn't cleared up in a few weeks."

I waited. Not patiently (patience isn't my greatest strength), but I waited. Three weeks later, after another perfunctory examination of Tyler's ears, nose, and throat, the doctor made that "mmhhmm" noise that doctors make when they figure out the problem. Yay! We were finally going to get some answers! "Yep. He still has diarrhea." All those years of medical school had really paid off. "Don't worry about it. He's not dehydrated, and he's in the 75th percentile for height and weight. It's nothing to be concerned about." Gee, could the fact that I practically infuse him with liquids have anything to do with the fact that he's not dehydrated? And does the fact that he started off in the 99th percentile

and has *dropped* to the 75th mean anything? Apparently not. I was instructed not to bring him back for diarrhea because there was nothing to be concerned about. If I was going to insist on bringing him back, I'd be kicked out of that pediatric office. I guess they meant it.

Doctor number two agreed with doctor number one. After a quick look in the ears, nose, and throat, he declared that we had a healthy baby boy. "But what about the diarrhea?" I eeked. "Really, it's nothing to worry about. He's a healthy height and weight, he's not dehydrated, and he looks fine to me," he chirped as he raced to his next four-minute appointment. I considered offering to give Doctor Do-Nothing a close look at the 22 diarrhea diapers a day that I was changing but somehow managed to control myself.

In desperation, we changed doctors again, and — long story short — a quick look in the ears, nose, and throat turned up — you guessed it — nothing. By this time, Tyler's belly had grown hugely distended, his arms and legs had wasted to skinny little limbs, his hiney had disappeared completely, and his personality had changed. He had transformed from a lively, energetic toddler to a listless, irritable, clingy, and quiet little boy. It had been nearly a year since the diarrhea first started, and we figured we were just neurotic first-time parents with a mellow kid who pooped a lot.

Eventually, we ended up in the hands of doctor number four. By this time, "realizing" there was nothing wrong with Tyler, I thought nothing of dragging a lifeless baby with a Biafra belly into the pediatrician's office for a routine visit. After looking in Tyler's ears, nose, and throat, he laid Tyler down on his back and thumped on his belly like you might thump a honeydew melon to see whether it's ripe. "My goodness," he said with that I'm-alarmed-but-I'm-a-doctor-and-don't-want-to-freak-you-out tone. "What's going on

with his belly? It's very distended." I couldn't answer through the tears of relief.

After testing for cystic fibrosis, blood diseases, and cancer, we finally got the bittersweet diagnosis. "Your son has celiac disease." *Huh?* Is that anything like the flu? Surely a few weeks of antibiotics will wipe it out. "He'll need to be on a gluten-free diet for the rest of his life."

I don't have room here to give the details of the rest of the story, but you can read it in my other books or on my Web sites. Suffice to say that the words "for the rest of his life" had a huge impact, and we realized it was time to step up to the plate and do some research and lifestyle and attitude adjustments to help ourselves — and others.

When we heard that Tyler would have to lead a gluten-free lifestyle, we had come to a fork in the road. At first, we were devastated, confused, frustrated, and grief-stricken. But we knew there was another path we could choose — a path that would have a more positive effect on Tyler's life. As we found out how to live with the diet and its ramifications, we worked hard to find a way to turn the adversity into a positive force in our lives. More than a decade later, I realize that what we once interpreted as misfortune has actually been a huge blessing in our lives — and most importantly, Tyler agrees.

This book is the resource you need — wade your way through it, and dog-ear the pages you want to come back to when you need some practical or emotional reminders for how to deal with difficult issues. If you have an optimistic but realistic approach, you'll encounter fewer obstacles along the way.

Arming yourself with good information

The good news is that because the gluten-free diet is exploding in popularity, there's lots of information about it. The bad news is that not all of it's accurate.

Be leery of what you hear and read, and check the reliability of the source on everything. If you find conflicting information — and you will — dig deeper until you find out which source is right.

I cite a few good sources of information in Chapter 5, and I'm sure you can find more on your own. Just remember to keep a skeptical eye out for the good, the bad, and the completely ludicrous.

