DR. BEN LYNCH

The ABCs of Clean Genes

Bonus Chapter

Introduction

Dear Reader,

When I first learned about the power of genetics to influence our health, I was incredibly excited. Writing this book was a labor of love. Fifteen years of research, observations, personal testing, and client experience went into the making of *Dirty Genes*.

There was so much information, in fact, that my publisher couldn't fit everything into the book. As a bonus gift to you, I am providing this chapter to help you learn more.

Despite not making the cut, the information contained in this chapter is extremely important. In the pages that follow, you'll learn:

- Why you need to Soak and Scrub *all* your genes instead of targeting just a few dirty ones with supplements.
- The one, powerful question you need to start asking yourself.
- The power of habit and how to make room for the wiring of new habits.
- The ABCs: 26 pieces of knowledge I've gathered in the past decade and a half to help myself, my clients, and my family.

My hope for you is that you now have all the tools to clean up your dirty genes. You don't need expensive, complicated testing. With the *Dirty Genes* book and this chapter, you have the tools to be empowered and take back your health. You are *not* your genes.

Enjoy,

Dr. Ben Lynch

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The ABCs of Clean Genes

I know what you're expecting.

You're expecting what is all over the internet and, unfortunately, practiced by many health professionals:

"You have MTHFR. Take methylfolate twice a week."

"You have COMT. Take hydroxocobalamin. Avoid methylcobalamin. You'll do great."

"You have DAO. Avoid foods with histamines. Take expensive DAO enzyme every time you eat."

I can give you my answer in four words:

Don't Treat the SNP.

If you've read Parts I and II of this book, you already know my philosophy, which is based on fifteen years of research, treating clients, and treating my family and myself. Yeah, sure, *sometimes* a single supplement can work wonders, especially if the rest of your diet and lifestyle is pretty "clean." Sometimes a single supplement can jump-start an improvement so exciting, it feels like a miracle cure.

But sometimes targeting a single SNP with a single supplement actually makes your condition worse—because the dose is wrong, because other genes are dirty, because even that single dirty gene needs a lot more support than just a single pill. Having read this far, you already know that your genes talk with each other, all your genes, all the time. It's super-easy for them to get dirty—and to make each other dirty, creating a vicious cycle that often takes more than a single supplement to reverse. Your genes are easily dirtied by your lifestyle, diet, and environment, so to fully support them, we have to do a thorough Soak and Scrub.

I recently asked more than 1,500 people in a private Facebook group to name the number-one thing they'd learned from me over the years.

The most common response, by far, was, "Don't treat SNP's with supplements—detoxify your environment and eat right first."

I hear this same point from people everywhere I go. London, Tokyo, Banff, Seattle, Orlando, Philadelphia. This principle applies to everyone. The basics of lifestyle, diet and environment have helped even the most complex and challenging cases.

I know what you're thinking, "I do the basics already." Maybe so. But the way I approach them is totally different.

So for the next 14 days, that's exactly what we're going to do. We're going to clean up five areas that will really get the dirt out and give your genes a chance to function at their best.

The Clean Genes Protocol: Soak and Scrub DIET

- You'll remove from your diet any food that disrupts the optimal function of your genes.
- At the same time, you'll load up on the nutrients your genes need to function at their best
 —particularly the nutrients needed for the Methylation Cycle.

EXERCISE

- Too little exercise doesn't give your genes the support they need—but too much exercise adds stress that disrupts the Methylation Cycle and the optimal function of your genes.
- Accordingly, we'll focus on your finding the type and amount of exercise that is right for you.

SLEEP

- Sleep is when your body restores and heals, so you need deep, restorative sleep to support your genes.
- You'll learn how to remove the obstacles to restorative sleep, including caffeine; too much light in the bedroom; and too much screen time before bed.

TOXIC EXPOSURE

- Toxins disrupt your genes' function in a myriad of ways and block many aspects of the Methylation Cycle.
- You'll identify and then remove sources of toxic exposure in your food, air, water, home environment, and products.

STRESS RELIEF

- Stress causes your body to methylate more quickly, stressing the genes involved in the Methylation Cycle and ultimately disrupting methylation—so the stress relief you practice during the Soak and Scrub is crucial.
- Stress also burdens the many genes involved in methylating stress hormones—so again, the stress relief in your Soak and Scrub is crucial.

Soak and Scrub: The Big Picture

To truly understand why you need to Soak and Scrub *all* your genes instead of targeting just a few dirty ones with supplements, you need to take a step back and look at the big picture. Genes have jobs to do and they do not like to multitask. If you ask them to do too much work, they just pass the extra work onto a neighboring gene and have them pick up the slack. This is not good, since it sets up a kind of domino reaction where an excess burden—caused by your overeating, say, or being exposed to an excess of toxins, or skimping on sleep—keeps knocking over one gene after another after another, creating a multitude of symptoms and potential disorders.

Here's the bottom line: Every time *you* do something, your *genes* do something. Every time. If your dinner is pizza plus beer or soda with a slice of pie for dessert, you've just given your genes a heck of a lot of cleanup work to do. I called that "busy work," because unlike the work involved in completing the Methylation Cycle or supplying methyl groups to your COMT gene, there is *no* benefit to that work at all. None. You've just used up limited resources for no nutritional benefit.

Plus it takes time for your genes to clean up messes. They can work only so long and so hard, so now they've just spend valuable time cleaning up the fallout from the gluten and dairy and tomato sauce in the pizza, and the alcohol and yeast and sugar in the beer, and the additional gluten and sugar in the pie. In short, your genes are pissed at you and they will make you pay later.

How? The next time you call on them, they may be still busy dealing with the aftermath of the beer and pizza and dessert. You want them to shift over and help you deal with the stress you just experienced at work. "Nope, sorry, we're busy," they tell you. Not only that, but you didn't even provide them the vitamins and minerals they needed to effectively handle your stress. In fact, by chowing down on inflammatory foods, you actually took those tools away. Now you're staying stressed longer than you should have because of the beer and pizza you ate two hours ago, because your genes can't start processing your overload of stress neurotransmitters until they finish with the beer and pizza and dessert mess.

Oh wait. They can't even start on the stress issue, because you didn't provide them the nutrients they needed to eliminate the stress neurotransmitters. Oops.

Now you're really irritated and you can't calm down. Maybe a donut will help? It does—for a moment. Oh boy. You just added more dirt and took away even more tools. To make matters worse, you're suddenly short of breath, even more anxious, and starting a headache.

Get my point? I'm not saying you can never, for the rest of your life, indulge in a problem food. That's for you to decide, especially since me telling you "never" probably makes you want that food even more. What I *am* saying is that every time you do something that's hard on your genes, your genes struggle—and they keep struggling. So your first step is to figure out how you are affected by your choices in our big five areas:

- Diet
- Exercise
- Sleep
- Toxic exposure
- Stress

I can make it even easier for you:

I want you to become aware.

Start becoming aware of everything you do. With each choice, ask yourself one easy question,

Will this dirty my genes or clean them up?

Each day, every single one of us takes many actions that dirty our genes – it's impossible not to. We don't have the choice to not breathe—and our air is full of toxins. We don't have the choice to not drink water or bathe—and we can't always filter the water to which we have access. Our food is full of toxins to a remarkable extent, and while we can control our food intake to some extent, even organic food has some toxins, and we might not always be able to eat organic.

And then there's stress. Your kid gets sick. Your boss slams you with a monster deadline. Your spouse gets laid off. I don't expect you to smile serenely through a load of challenges—to be healthy, you don't need to be a saint! But you should be aware that those stresses and strains are taking their toll. How to limit them, and how to help your body come back from them—that's where you have a choice. The key is to limit the dirt and increase the clean, every way you can.

The Power of Habit

What I tell my clients—and my kids—and myself!—is that we're investing the time to build good habits. A habit is an unconscious act that requires no thinking on your part. You've wired your brain to do it for you automatically.

For example, when I go to the grocery store, I never even notice the aisles full of cookies, cakes, crackers, and other gluten-filled products. I never even notice the aisles full of soda and soft drinks. I don't put an enormous effort into avoiding those aisles or into resisting my urge to fill a cart with sweet and starchy products. It's just routine to avoid those aisles—no effort at all.

I didn't get that way automatically. As I've already told you, I used to eat half a gallon of ice cream at a sitting. I lived on soda for more years than I care to admit. I'm human. I liked sugar!

But when I realized what the sugar was going to my genes—and to my mood, and my mental clarity, and my temper, and my energy levels—I made a conscious decision to cut it out. When I understood how gluten was messing with my gut, and adding to my histamine levels, and causing my nose to run and my feet to sweat and my whole body to itch like there's no tomorrow—I made a conscious decision to cut it out.

That conscious decision was just a first step, though. Then I had to *practice*. I had to *practice* making a salad for lunch instead of putting a piece of meat between two slices of bread. I had to *practice* eating a piece of fruit or some chia seed pudding instead of a slice of pie or a handful of cookies. Habits take time and they also take consistency. In three weeks, you will create a new behavior pattern and after three months of practicing, it becomes a habit.

And that's what I want you to do.

You're about to learn my ABCs of Clean Genes—all the knowledge I've gathered in the past decade and a half to help myself and my clients and my family. But I don't expect you to implement all these suggestions overnight. That's hard to do—and it rarely sticks.

What I would like you to do is to unplug your current hardwired bad habits to make room for the wiring of the new habits.

Keep this in mind as you look through the ABCs:

Which three of the ABC's of Clean Genes resonates most strongly with you?

Then imagine implementing them and what the *outcome* of it would mean to you.

The ABCs of Clean Genes Avoid

I love that this comes first. Industrial chemicals, folic acid, and processed foods are everywhere. Air, water, food, and soil end up on you, in you, and around you, all day and all night. I want you to limit your exposure to these problematic compounds so your genes don't have to do so much work. If you make it easy for your genes, they will make it easy for you. Avoiding the compound your genes have trouble with is your fastest, most reliable way to become symptom- free!

Breathe

Without air, we die. With too little air, we struggle in every way. So please, focus on your breath. If your nose is congested, use a neti pot. (See Resources). Breathe in through your nose from your belly button up all the way up to your upper chest. Standing makes it easier to breathe than sitting, so if you have to work at your desk for long hours at a time, try to get yourself a stand-up desk or at least get up and walk around for a few minutes every hour. Your genes need the oxygen flowing in and the carbon dioxide flowing out at a slow, relaxed rate.

Chew

Your stomach and intestines don't have teeth. If you want them to absorb nutrients from your food, give them a break and chew twenty times before you swallow. Because those nutrients will be delivered throughout your body to support your genes—and if you haven't done your chewing, those nutrients will be in short supply. How can your digestive enzymes break through a chunk of food? They can't but your teeth can. Use them.

Drink

Right when you wake up in the morning, have a glass of filtered water. First thing after you pee. Keep a glass and a glass pitcher in your bathroom. I do. And I fill it each night before bed. Remember, you're sleeping for eight hours (we hope!) and not drinking at all, which makes you absolutely dehydrated when you get up. What do most people drink upon waking? Coffee. That just makes you pee more often, which makes you more dehydrated and deficient in electrolytes. Your genes will do a way better job if you're properly hydrated all day, all the time.

Eighty Percent

Food of any type is dirty if you eat too much of it. Your genes begin to stagger under the burden, and all sorts of things start to go wrong. So when you are 80 percent full, stop taking in food. Allow the sense of satisfaction to come to you—don't rush it. You can continue to enjoy sitting with friends and family—you just don't have to keep eating. Once your cells have enough fuel from your food, they don't want anymore. Not only does the excess food get stored as fat, it messes up your genes by creating loads of free radicals, which then increase inflammation. At eighty percent, your gene are efficient. At more than that, they cause you grief: headaches, brain fog, irritability, fatigue, diabetes, fatty liver and so on.

Forward

Irritated? Stressed? Sad? Frustrated? Experiencing any type of emotion that you have labeled "negative"? Be present with it. Experience it. Then let it flow away as you move on. So often, we identify with our negative emotions, saying, "I am depressed" instead of "Right now I feel depressed," or "You make me angry" instead of "Right now I feel angry." It can be a huge release of burdens to understand that even in the worst times, with the hardest challenges, our emotions can change and flow, and we can find moments of peace and comfort and even joy. I'm not saying to deny your feelings or to put on a happy face. I'm suggesting that you let them flow and change without dwelling on them, and that you change whatever is in your power to change as you just keeping letting go and moving forward. Obviously this one takes a lot of practice—but being aware of it is step one in the right direction. I'm not perfect—no way. I need to remind myself of this more.

Go

When you feel the urge to go to the bathroom—go. Do not hold it for another ten minutes or so while you finish an email or some other task that can't wait. Just go. Otherwise, you are actually undermining your digestive tract—and your genes—because every minute that you wait, your colon continues removing the water from your stool, thereby dehydrating it and making you constipated. If you wait too long, your urge to go will be gone and now you are walking around with toxic waste in your colon, reabsorbing that dirt back into your system and dirtying your genes. Feel the urge? Do your genes a favor and go.

Hundred Percent

If you are struggling with a food sensitivity, and especially if you have decided to avoid gluten or cow's-milk dairy, there is no such thing as "most of the time" or "usually." Anything that triggers your

immune system is going to do so even in the tiniest possible portion. Isn't that how you'd want your immune system to respond if your system was accidentally invaded by a toxic food or dangerous bacteria? Well, even a few molecules of gluten or dairy—even hidden in another food—might trigger a reaction from overexcited immune system, and then you've got symptoms. If you need to cut out a trigger food, 99 percent isn't good enough. You've got to go the full one hundred. The good news is that for some foods at least, you might be able to bring them back into your diet once your genes are clean, your leaky gut healed and your immune system calms down.

I

I am responsible for my own health. Not my doctor. Not my parents. No one. I have the ultimate responsibility for my actions. It is up to me to find the most supportive and helpful group of people so I can reach my genetic potential. If I am not happy with something, I have to choose to change it. That's my philosophy—I hope you choose to adopt it too.

Joke

Laugh often and laugh freely! Laughter is indeed the best medicine. When you laugh, your genes are calm, relaxed, and conserving energy. This allows them to be ready to spring into action when something unexpected hits, such as a blast of second-hand smoke or someone cutting you off in traffic and causing your stress neurotransmitters to spike. Give your genes a break by giving yourself a laugh!

Knowledge

Always keep learning. The moment you think you know it all is the moment you'll get stuck. The healthiest people I know are the best students. I try to follow their example: Every day, I try to learn something that improves me physically, mentally, or spiritually.

Lazy

Bet you didn't think you'd see this one! But it might be the most important one on the list. I want you to take time out for yourself. Daily. If you don't put a lazy time on your calendar, it won't get done. I heard a great quote, "The hardest thing to do is nothing." So true. Give your genes a rest. Be lazy (but not *too* lazy!).

Move

However you want to move, move. I need to chase a ball. Tennis ball, football, soccer ball, bocce ball, racquetball—that's me. I need to have a purpose to move. I cannot stand going to the gym. Another great way to move is a rebounder, a tiny trampoline that is surprisingly effective as an all-round conditioner, a form of aerobic exercise, and, believe it or not, a super mood booster. (See Resources.) But you've got lots more choices. Walking in the forest, strolling down the street, dancing in a club or in your own living room, yoga, t'ai chi, martial arts—doesn't matter. Movement greatly reduces the burden on your genes.

No

Most of us could stand to say it more. When you're overloaded with work or trying to rest and someone asks you a favor, just say *no*. You need to focus on what matters most in your life, and sometimes that means putting yourself first. If you say *yes* when you really mean *no*, you'll be making your genes "dirty with regret," and that is hard to clean. To be honest, this is one of the hardest things for me to do, especially as a health professional whose job it is to help people. Saying *yes* to people who ask my help is my instinct. But if I said *yes* to every request, I would not have learned a tenth of what I have thus far—and you would not be reading this book! Remember, you have the right to say *no*. Of course, saying *no* is an art so you don't come across like a punk. "I really would love to help you out, however. . . "I've recommended some books in Resources to help you dive deeper if you want to.

Observe

Tune in to how you are feeling and what you are doing. This is rated as one of the most significant things I've taught to health professionals, patients and clients. If you are feeling great, why do you need to take supplements that are supposed to increase your energy? If you're feeling sleepy, why do you need to take a drug or supplement that will only make you more sleepy? Are you "craving" a food or are you actually hungry? If craving, stand up and deny that pesky voice, saying, "No. I am not hungry. I am just craving something. I can chew some xylitol gum or drink a glass of water instead." Are you feeling tired yet think you need to go and exercise? Don't. Maybe you're coming down with an illness. Perhaps you slept poorly last night. There is no benefit to exercising if your body isn't ready for it. Know how you are feeling before you eat, take a pill, exercise hard, or anything else that will affect your body.

Pulse

In the Clean Genes Protocol, you are going to learn about my philosophy for using supplements, which I call the "Pulse Method," a way of taking exactly the supplements you need and no more. As the name indicates, supplements are designed to "add or enhance," not to be an end in themselves. Yet countless people have the idea that you should take some supplements every day—and as many as possible. No! As soon as your genes are working well, reduce the amount of any supplement you take. Giving more nutrients to your genes is not helpful to them. In fact, an excess of nutrients overwhelms your genes and makes them dirty, just as if you overate. Your genes are the original Goldilocks—they want neither too little nor too much, but just the right amount. In Spot Cleaning, I'm going to teach you how to use the Pulse Method by helping you to tune in and recognize how you are feeling before you take any supplement, as well as turning in to how you feel after you take them.

Ouit

There are two types of habits. The ones that improve your health and the ones that make you sick. Quit the ones that make you sick. Do you smoke? Get help and stop. Are you staying up late each night watch movies or hanging out on social media? Stop. Make time in your day to enjoy those things—schedule it in. You deserve that time to kick back and relax—just do it at a different time. Are you routinely taking an over-the-counter medication like antacids instead of addressing the underlying problem? You are dirtying your genes big time. If you are taking antacids, aspirin, Tylenol, or any other type of painkiller on a regular basis—by which I mean more than once every two or three months—you need to stop. If you don't, you won't reach your genetic potential.

Read

Yes, this book is of course fabulous but many others are waiting for you. It's up to you to seek out the information that can transform your life. Don't wait for people to *tell* you what to do. You have to look for what you need—and for the tools that you didn't even realize you needed. Stay in touch with the latest health, personal growth and mindset information and read as much as you can.

Sleep and Sweat

These two are *big*. If you are not getting deep sleep and REM sleep every night, then you are not sleeping. Sleeping doesn't mean in bed with your eyes closed for 7 to 8 hours, it means being in the physical state of deep sleep and REM.

You don't always know whether you have been sleeping deeply, so use a tracking device like OURA ring or Sleep Cycle to monitor your sleep. (See Resources). When I did this, I was stunned. I realized that working at night before bed was really bad because it really kept me from sleeping deeply. I also realized that if I ate after 7:30 pm, my sleep was bad. Plus if I exercised too close to bedtime, my sleep was bad. I made adjustments and now my sleep has improved tremendously.

Is it perfect? No. I still eat too late at times and I still watch movies too late or work at night. But now I know I have to adjust the next day because of it. Since I've made my genes dirty with these actions, I'll have to compensate with some extra vitamins the next day. And if I repeat those late nights too many times in a row, I'm in for some dirty genes and the symptoms that go with them.

Sweating is also a must. You need to sweat at least a few times a week, any which way you can. Sauna, Epsom salt bath, exercise, going outside on a hot day, hot yoga – just sweat. Your skin is your largest detoxification organ. Use it. (See Resources for some information on home saunas.)

Thank

Be grateful for what you have. We get comfortable and we get into a routine where we take all the good things in our life for granted. We start complaining about our genes or about people who are irritating us, and before we know it, our life seems much worse than it really is.

But you can easily turn that around. When you wake up or as you are going to bed—whichever works for you—ask yourself, "What am I grateful for today?" It can be as simple as being able to walk, talk, or think clearly. Or maybe you're grateful for the coworker who covered for you when you showed up late, or the neighborhood kid who gave you a beaming smile.

People think gratitude is a touchy-feely concept, like stress, but I'm telling as a scientist, it is anything but. If you live in a perpetual state of feeling ungrateful, your genes become dirty because of it. Your genes act how you act. In the long term, no supplement or medication is more powerful than gratitude.

Understand

You can't fix something that you don't understand. So when you get some new information, or when your body reacts in a puzzling way, figure things out until they make sense. You now know some incredible things about your genes and what they do for you. This information is incredibly empowering, but maybe a bit overwhelming, too? Just take it one step at a time. Apply one new piece of information, then another, then another. You will absolutely understand everything you need to know if you just stick with it. Understanding is key. Take the time invest in yourself.

If you think about it, no one ever taught us how to effectively understand something. Truly understanding is being able to teach someone else. I have a great book recommendation for you in how to truly 'learn' in Resources.

At one point, I too was clueless about this stuff. I knew it was powerful and a game changer, though, which is why I wouldn't let it go. And now I've shared it with you! Full circle.

Volunteer

Help some other living creature without any expectations of return. Give. The feeling you get from seeing someone else's grateful smile wipes that dirt off your genes with one swipe. The dog thanking you with his big dopey eyes. The trees free of being choked by ivy standing majestic once again. Give when you think you cannot give and see what happens. You will be absolutely amazed.

Win

Have a winning mindset. This is not about beating someone else. It's about facing the odds and overcoming them with confidence. Refuse to accept being sick or medicated for the rest of your life. If you have a "Woe is me" or "I can't" mindset, then you're right. You won't get better. Your genes will stay dirty and you'll stay sick. If you have an "I can do it" mindset, then you will win. The choice is yours.

Xperience

Get out there. Live life. Are you feeling stuck in your job? When was the last time you had a vacation? When was the last time you did something for the first time ever? Why have you stopped giving yourself those new experiences? Because you're too busy? No. You haven't scheduled it in. You haven't felt you deserved it. You haven't thought it was that important. It is.

Experiences last a lifetime. Get out there and experience the world. Figure out how to fit it in. Are you sick and feel that you can't experience anything new? Wrong. There is something that you can do. Get with a friend and discuss this. Make it happen. Day- to-day routines make us flat and depressed and as a result, dirty our genes. Get out there and spice it up.

Yell

Or at least, speak up about what is bothering you. Communicate clearly. Are you mad? Let it out. Holding your anger inside is far more toxic to you and others compared to a burst that clear the air.

Now of course, if you're angry and yelling all the time, there's a problem. Something isn't working right—whether in your genes, your life, or both—and we want to address the root cause. But every so often, there are good reasons to be angry, and then it's important to communicate clearly—even passionately. Don't be afraid to make your voice heard.

Zealous!

Start your day and finish it with enthusiasm. Even when you think you cannot muster that zest for life, give it a shot and see what happens. You'll flood your body with chemicals that will help your dirty genes clear out the garbage. Don't let your mindset control you. Step in and control it. Sometimes all it takes is being positive and enthusiastic even if you don't feel it in the beginning.

Shopping again? Really? Get in that car and turn on some awesome music! Laundry again? Ugh. Start whistling and sliding your feet. Being positive in boring moments is so invigorating to your genes!

Okay, those are the basics. Living according to the ABCs of Clean Genes will clean up your genes and make you feel immensely better.

Don't Stress!

Over and over I hear from both health professionals and clients: "What has helped me the most is your practical approach to cleaning up the foundations: food, exercise, sleep, toxic exposure, and stress. When I take care of all of these, improvements really start happening."

The key, though, is to take your changes one step at a time and give yourself the time to turn each change into a habit. I'm going to tell you everything I can about how to clean up your genes, because I want you to have all the information right here ready to hand. But stressing yourself over making too many changes at once will likely undo any benefit they provide you. Implement them *one* at a time as you are comfortable doing so. The timeline in Chapter 13 is just a suggestion—it's not a must. The key is to take charge of *your* own cleanup—at your own pace and your own way.

Create a Habit

Now take a moment. Time to implement. Time to make a new healthy habit.