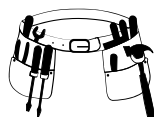


GUT RENOVATION

UNLOCK THE AGE-DEFYING POWER OF
THE MICROBIOME TO REMODEL YOUR HEALTH
FROM THE INSIDE OUT



ROSHINI RAJ, MD

with Sheila Buff



WILLIAM MORROW

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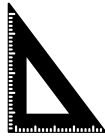
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THE ARCHITECT: YOUR BRAIN



GUT TOOLBOX

- ✂ *Brain food.* Remember, how your brain ages is up to you. To keep your brain fit and healthy as you age, keep systemic inflammation to a minimum with a healthy diet. Swap your daily glass of vino for a bunch of red grapes and a juice shot made from leafy greens.
- ✂ *Mix it up.* Exercise helps counteract brain shrinkage as you age. Try an app like Class Pass where you pay monthly for unlimited classes of different styles. You may be salsa dancing one day and kickboxing the next—learning the new routines is the perfect way to work out your brain.
- ✂ *Think outside the box.* Challenge your brain actively every day. Join a book club—or start one. Volunteer for something you care about in your community. Use an app to learn a new language or sign up for a MOOC—a massive open online course. MOOCs are free, convenient, and open to everyone (more info at mooc.org).
- ✂ *Press pause.* Make time to relax and let your brain recharge. Download a meditation app and start with ten minutes a day. When your subconscious mind takes over, you'll find new ideas and solutions to problems.

**THE KITCHEN:
EATING YOUR WAY TO A YOUNGER
BODY AND MIND**



Fiber: Feed Your Flora

I've already mentioned the importance of fiber in your diet, and I'm going to mention it a lot more throughout this book. I love talking about fiber so much that by the end of this book you will have fiber coming out of your . . . well, you get the point. But what exactly is fiber? And why is it your BFF?

Dietary fiber is the parts of plant foods that can't be digested in the small intestine and get passed through to your colon. There are two varieties: soluble fiber and insoluble fiber, and both are essential for healthy digestion. Soluble fiber attracts water as it passes through the digestive tract and turns into a soft gel. Soluble fiber is found in beans, lentils, peas, barley, oatmeal, nuts, seeds, and some fruits (apples and peaches, for example). Insoluble fiber is made up mostly of cellulose: tough plant cell walls that don't absorb water. It's found in whole grains, nuts, and fruits and vegetables—think crunchy, stringy celery. It's the insoluble fiber in the plant material that helps keep food moving through the small intestine and adds bulk to your stool in the colon. That bulk gives your colon muscles a workout as they propel the stool forward. In this way, a high-fiber diet ensures that your digestion goes along smoothly and that you have regular, well-formed bowel movements.

Because you don't digest it in the small intestine, fiber doesn't add any calories to your intake. One more reason to love fiber! Once it reaches your colon, though, some of the fiber does get digested—by the trillions of bacteria in your colon. They use metabolic processes to ferment it, sort of like having your own internal sourdough starter. Fermentation converts the carbohydrates in the fiber into short-chain fatty acids (SCFAs), including one called butyrate. The cells lining your colon wall love butyrate. It's the fuel that keeps them healthy and active. SCFAs also inhibit the growth of some unfriendly bacteria, which gives the helpful ones more space in your crowded colon.¹⁰ It's possible that SCFAs also protect you against intestinal inflammation

and colorectal cancer through their effects on your immune system.¹¹ They may also play a role in appetite regulation and how your body produces energy. That's a really interesting area, because it could explain why some people struggle to keep their weight down even though they don't eat excess calories. Some people's gut bacteria may extract more calories from the exact same amount of food—so unfair! This is why it's so important to keep your gut well stocked with the right types of bacteria.

And it doesn't take long for fiber to effect positive changes in your microbiome. One study showed that in just two weeks on a high-fiber diet, the participants' gut microbiome composition significantly altered, with higher numbers of beneficial bacteria compared to before the study.¹²

If your diet is high in fiber, you're giving your good bacteria the environment they like best. At the same time, when you add more fiber to your diet, you're helping your health in many other ways:

- ✕ *Lowering cholesterol.* Fiber in your digestive tract helps reduce how much cholesterol you absorb from your food and lowers your body's natural cholesterol production.
- ✕ *Keeping your weight down.* When you substitute high-fiber plant foods for low-fiber processed foods, you take in fewer calories. High-fiber foods also slow your digestion, which can really help you feel full for longer.
- ✕ *Controlling your blood sugar.* Because high-fiber foods are digested more slowly, the carbohydrates in them are slower to enter your bloodstream. That helps you keep your blood sugar on a more even keel, avoiding highs and lows (this is especially important for people with prediabetes or type 2 diabetes).
- ✕ *Reducing your risk of gastrointestinal cancer.* As a gastroenterologist who screens for cancer every day, I can't emphasize this enough. A diet high in fiber helps protect you against colon cancer and some other cancers, including breast cancer. It also helps protect

against some other gastrointestinal diseases, like diverticulitis and irritable bowel syndrome.

How much fiber do you need to keep your gut bacteria happy? According to the National Academy of Sciences, a woman should get 25 grams of fiber a day; a man at least 30. Another way of looking at this is aiming for 14 grams of fiber for every thousand calories in your diet. The sad reality is that very few people actually get that much fiber. The average woman gets only 12 to 15 grams a day, while the average man gets only 16 to 18 grams. As I see every day in my office, not enough fiber is a contributing cause to a lot of digestive problems. I tell my patients that the guidelines are actually just the bare minimum for fiber. I recommend aiming higher, by at least 10 more grams a day, and make sure you get a mix of both soluble and insoluble fiber. The best way to do this is by eating a diet with minimal sugar, very few processed foods, and lots of plant-based foods. In other words, a plant-forward, Mediterranean-style diet. When you start your day with a bowl of oatmeal (14 grams of fiber per 1 cup serving), then for lunch have a bowl of vegetarian chili (on average, about 12 grams of fiber per 1 cup serving) and a small salad (on average, about 4 grams of fiber per 1 cup serving), you're already at nearly 30 grams—and you haven't even had dinner yet.

Want to add more dietary fiber in a way that's been proven to improve your microbiome—and also tastes great? Eat an avocado. One avocado has 6 grams of fiber, along with 7 grams of healthy mono-unsaturated fat. A recent study showed that eating an avocado every day increases the number of gut bacteria that are especially good at breaking down dietary fiber, while also increasing your overall gut microbiome diversity.¹³ But feeding your microbiome is just one of the many benefits of eating avocados. They're also a great source of vitamins like folate, vitamin K, and vitamin E, as well as potassium, antioxidants, and healthy fats, which make them good for blood

pressure, vision, arthritis, cholesterol, and more. Talk about getting a bang for your buck! Pass the guac, please!

A word of caution (so you don't send me angry emails): it's important to work up to more fiber in your diet *gradually*. Suddenly adding a lot of fiber can cause uncomfortable gas, bloating, and diarrhea. Slow and steady wins the race here. (I'll talk more about this in the next chapter, one of my favorites: "The Bathroom.")

New Tools for Your Kitchen

As part of your kitchen Gut Renovation, I recommend a new coffee-maker, a teapot, an extra-big spice rack, a wine rack, and a freezer. Here's why:

Coffee. Don't you love the smell of fresh coffee in the morning? The delicious aroma comes from the many, many phytochemicals in coffee—not from the caffeine, which is odorless. The phytochemicals mostly function as antioxidants in your body. They're so effective that drinking just one cup of coffee a day is linked to a 3 to 4 percent overall lower risk of death. Moderate coffee drinkers (three to five 8-ounce cups a day) have less type 2 diabetes, heart disease, colon cancer, Parkinson's disease, and cognitive impairment. Coffee drinkers also have more diversity in their gut bacteria compared to non-coffee drinkers, and their microbiome tends to be higher in anti-inflammatory bacteria. The more coffee you drink (decaf included), the healthier your gut microbiome—even if your diet isn't that great otherwise.¹⁴

Green tea. Don't let the delicate flavor of green tea fool you—this stuff is full of phytonutrients. It's rich in antioxidant compounds, such as epigallocatechin-3-gallate (EGCG), that may help prevent colon cancer and other cancers.¹⁵ Green tea is also high in L-theanine, an amino acid that can help curb anxiety and help improve cognitive function.

Spices. The spices you use in cooking get their flavorful qualities from a very complex mix of phytonutrients. Take cinnamon, for instance. That simple little spice we use for our apple pies actually contains eleven different phytonutrients that have antioxidant effects. Turmeric is another powerhouse antioxidant spice that has been shown to cause positive changes in the microbiome, providing

greater bacterial diversity and decreasing dysbiosis.¹⁶ The more varied your spice rack, the more antioxidants you'll get. All the more reason to use spices liberally in your cooking and experiment with new ones from around the world.¹⁷

Red wine. Fermented foods are good for you, right? Well, red wine is made from fermented grapes—and *in moderation* (no more than one glass a day), it's good for your gut. The alcohol from the fermentation process isn't what helps (so sadly, other types of alcohol don't offer this benefit). It's the specific polyphenols in red wine that can improve the bacterial diversity in your microbiome. Red wine in moderation may also help your heart, lower your cholesterol, and help keep you at a healthy weight. As little as one glass every two weeks is enough to improve bacterial diversity, but more than one glass a day doesn't make diversity even better.¹⁸

Freezer. A key goal for gut health is increasing your intake of fruits and vegetables to at least five (preferably more) half-cup servings a day. The cost of that can add up. It's a sad reality that potato chips are cheaper than regular potatoes. To keep your costs down and always have a good supply of fruits and veggies on hand, stock up on frozen foods. From a nutrition standpoint, they're actually just as valuable as fresh foods, because they're picked and frozen at the peak of ripeness. In fact, frozen kale has even more antioxidants than fresh kale, and frozen peaches have more vitamin C than fresh peaches. Freezing also lets you take advantage of seasonal abundance from your own garden or the local farmers market and gives you a variety of choices year-round. The drawback is that the texture of the fresh version is changed by freezing. You can easily work around this by using the frozen stuff in soups, stews, casseroles, smoothies, and other dishes where the texture doesn't matter much.

Friendly Fats for Your Friendly Bacteria

Fat is bad for you, right? Not so! Bad fats are bad for you, but good fats are essential for your health. The difference lies in the structure of the fat molecules. Here's how it breaks down:

- ✂ *Saturated fats are fats that are solid at room temperature, like butter.* Most saturated fats come from animals (coconut oil is a rare exception). In general, saturated fats are bad for you because they raise your cholesterol and your risk of heart disease and stroke. Foods high in saturated fat can trigger colon contractions in people with bowel problems. They also affect your gut microbiome by increasing the number and type of inflammation-causing bacteria.
- ✂ *Monounsaturated fats are mostly plant oils, including olive oil and peanut oil.* When they're cold-pressed and minimally processed, they're good for you. Avocados are a fabulous source of mono fat—half an avocado has a whopping 12 grams. Monounsaturated fats help lower cholesterol and are good for your gut bacteria.
- ✂ *Polyunsaturated fats include some plant oils, like sunflower seed oil, and fish oil, also known as omega-3 fatty acid.* Fish oil is a great way to give your body the essential fat it needs to build cell membranes and make the neurotransmitters, hormones, enzymes, and other chemicals it needs to keep things humming along.
- ✂ *Trans fats are unsaturated vegetable oils that have been heavily processed (hydrogenated) to make them soft at room temperature—like margarine.* Trans fats are also widely used in processed and manufactured foods. They're so bad for your arteries that the FDA makes food manufacturers list them on the label if the amount per serving is more than half a gram.

So, in summary: Mono and poly fats, good; your good gut bacteria like them. Saturated fats, bad; they promote the gut bacteria that drive inflammation. Trans fats, *really* bad; they shift gut bacteria to those linked to obesity.

GUT TOOLBOX

- ✂ *Micromanage.* A diet rich in natural probiotic and prebiotic foods makes a big difference to your microbiome. When choosing probiotic foods, make sure you don't overcook them, which may kill off the good bacteria. It's better to eat them uncooked or added only toward the end of the cooking process.
- ✂ *Focus on fiber.* Dietary fiber—at least 25 grams a day—is the key to improving gut health. Stir 2 tablespoons of chia seeds into your morning yogurt or smoothie for an easy 11-gram fiber boost. Tuck a piece of fruit, some carrot sticks, or a high-fiber snack bar into your bag for a quick bite, order a side salad when eating out, munch on popcorn or high-fiber veggie chips while you watch TV.
- ✂ *Follow the rainbow.* Those fiber-filled fruits and veggies are also great sources of phytonutrients that provide important health benefits. Aim for at least one colorful fruit (apple, plum, orange, kiwi, berries) and two colorful veggies (tomato, carrot, kale) a day as part of your five-a-day goal.
- ✂ *Brush it off.* When I'm stressed, I find myself wanting to endlessly graze on snacks, foraging through cupboards for something crunchy or sweet. One trick I use to stop myself is to brush my teeth immediately after I finish a meal. Once I do this, I don't feel like eating again (my teeth are so clean!) and I also know nothing tastes great when it is mixed with that lingering bit of toothpaste.

✂ *Work it out.* Work stress or boredom can lead to desk-side munching. Keep healthy snacks on hand at work so you're not tempted by the breakroom donuts. A jar of nuts is convenient; so are dried fruit, yogurt cups, healthy snack bars, whole-grain pretzels, and low-fat string cheese.

✂ *Mind over matter.* While the goal is to eat mindfully, this isn't always possible. But if you have a clean kitchen (no junk food!), you'll be less likely to mindlessly grab an unhealthy snack. So, do a biweekly pantry purge to make sure you (in a weak moment) or your kids haven't sneaked in any highly processed foods.

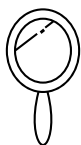
THE BATHROOM: ELIMINATING ISSUES



GUT TOOLBOX

- ✂ *Make sure it's brown before you flush it down.* I encourage you to visually inspect your stools before you send them away into oblivion. Note the color (red and black being the most worrisome) and pay attention to the size, shape, consistency, and smell.
- ✂ *Talk it out.* Bathroom issues such as bowel movements and gas are embarrassing to talk about, but everybody has them. Don't hesitate to bring them up with your doctor.
- ✂ *Lube your tube.* If you suffer from constipation, increased hydration can help things move along more smoothly. Set an alarm to go off at least four times a day and remind you to drink one to two extra glasses of plain water. And eat more fiber!
- ✂ *Ditch the dairy if you're battling a bout of diarrhea.* Avoid dairy products until your normal bowel movements resume.
- ✂ *Track your food.* To deal with food intolerances or sensitivities, use a food diary app like YouAte to easily keep track of what you eat. Once you identify a culprit, cut back on it or avoid it. Foods to watch for include nuts, eggs, milk and dairy, high-fructose foods, and foods on the FODMAPs list.
- ✂ *Friends with benefits.* Make a pact with similar-aged friends to screen for colon cancer with a colonoscopy. This is a must-do—seriously, it could save your life. Once you've all completed your colonoscopies, treat yourselves to a fun night out together.

THE POWDER ROOM: BEAUTY ISN'T JUST SKIN DEEP



GUT TOOLBOX

- ✂ *Don't skimp on the sunscreen.* Most people don't use enough when they apply it. You should be using at least one shot glass full of sunscreen (with an SPF of 30+), and don't overlook spots like your ears, your hands, your neck, and your chest. Apply every two hours, and use sunscreen 365 days a year—UV rays can penetrate clouds! And don't forget your wide-brimmed hats and sunnies. Not only do they look stylish, but they also help prevent crow's feet by protecting the delicate skin around your eyes.
- ✂ *Fight pollution.* While you probably can't move your home out of a polluted area, you can try to avoid walking in high-traffic areas and make sure to thoroughly cleanse your face when you return from a long period outdoors so those environmental toxins don't linger on your skin.¹⁰
- ✂ *Keep your coverage clean.* Makeup brushes and sponges can be a perfect breeding ground for bacteria—and not the good kind. So clean these weekly with warm water and a gentle cleanser. And don't share them with other people.
- ✂ *Toss the turtleneck.* When it comes to skin care, many women focus only on their faces and forget about their necks. Your neck skin gets a lot of wear and tear (especially from looking down at devices), and as a result this is a prime area of wrinkles and sagging skin. Make sure you don't stop your skin care regimen at your chin. Keep applying downward and give your neck some love.

- ✂ *Don't get skintense.* Stress can bring on hormone changes that trigger breakouts, so when you're feeling under the gun, take a break and practice deep breathing. If you prevent a blemish, that's one less thing to stress about!
- ✂ *Beauty rest.* Better sleep leads to better skin, especially when it comes to dark under-eye circles. So make sure to prioritize your zzz's and use a humidifier at night to prevent overnight drying. Dry skin is more fragile, duller, and shows more visible wrinkles.

**THE HOME GYM:
WORK OUT TO TURN BACK THE CLOCK**



GUT TOOLBOX

- ✂ *Hop in line.* As someone who hates waiting in lines, I now tolerate them much more because I use that time to practice my balance moves. You may raise a few eyebrows if you try this, but it's a perfect opportunity to work on your balance—and in my case, patience. Try it out!
- ✂ *Find a mat mate.* Working out or going to an exercise class with a friend is always more fun and motivating. Making this a standing date keeps you consistent and accountable.
- ✂ *Find fitness funding.* If you work for a company, you may find that they subsidize gym memberships or other wellness products. Many companies offer corporate fitness challenges or benefits, so explore your options!
- ✂ *Do push-ups to podcasts.* If you find exercising boring, then add some enjoyment with a favorite song playlist, audio book, or podcast. Time really does fly when you're having fun.

THE ZEN CORNER



GUT TOOLBOX

- ✂ *Silence, please.* It's impossible to relax when your phone is constantly beeping or buzzing. Turning off all notifications except the truly essential ones keeps you from being disturbed and potentially stressed out every five minutes. Instead, you can set regular times to check your various apps, rather than constantly being drawn to them.
- ✂ *Find your raisin d'être.* For a change of pace in your usual meditation practice, try the raisin meditation. Put a single raisin in front of you and imagine you've never before seen or tasted a raisin. Focus your attention on the raisin, exploring every aspect of it. How does it look, feel, smell? Then eat the raisin, chewing very slowly. How does it taste? You're using the raisin (or any other convenient small piece of food) to focus your attention away from the stressful things around you. This is a form of mindful eating, where you slow down your eating pace and pay close attention to each bite.
- ✂ *Go to the dark side.* One study showed that eating just 1.4 ounces of dark chocolate every day for two weeks reduced levels of cortisol and another family of stress hormones called catecholamines in highly stressed people.¹² Dark chocolate has also been shown to have a prebiotic effect on the microbiome, promoting the growth of beneficial bacteria.¹³ Good for your gut, good for your stress, and definitely good for your taste buds!
- ✂ *Stick it out.* Placing a motivational sticker on your wall or mirror that has a self-affirming message can do wonders for your daily mood. It may sound silly, but trust me, it works.

✂ *Be your own bestie.* Distanced self-talk, where you talk to yourself as if you were talking to another person, can be very helpful for breaking a negative loop and getting some perspective on your thinking. We're often much harsher on ourselves than we would be to a friend if they were in our situation.

THE BEDROOM: SLEEPING YOUR WAY TO BETTER HEALTH



The ABCs to Catching ZZZ's

As the evening wears on, your body starts telling you to get ready for sleep. Sadly, we have a tendency to ignore the message. Instead of gradually slowing down, we keep working, playing a video game, watching TV—pushing ourselves to stay awake that extra hour or two. It's not shocking that when you do finally go to bed, you can't turn your brain off enough to fall asleep.

The best way to get a solid night's sleep is with some tried-and-true basic sleep hygiene. A lot of the tips I give here have some scientific evidence behind them,¹⁴ but some are just common sense. Try them and see what works for you.

- ✂ *Have a consistent sleep schedule.* Go to bed at the same time each night and get up at the same time each morning, weekends included. Sleeping in sounds fabulous, but that morning in bed on Saturday may actually result in a net sleep deficit for the following few days.
- ✂ *Remove the TV, smartphone, computer, tablet, and video games from the bedroom.* Before you roll your eyes, it is totally possible to do this—take it from me. But if you can't, at least turn them all off. You want to avoid blue light from screens that can affect melatonin production and disrupt your circadian rhythm. Read a printed book instead.
- ✂ *Avoid large meals, caffeine, and alcohol starting at least three hours before bedtime.* If you're sensitive to caffeine, cut it out even earlier in the day.
- ✂ *Exercise for half an hour a day, preferably outdoors.* Being physically active during the day can help you fall asleep more easily at night. Exposure to daylight helps keep your circadian rhythm and melatonin production on track. Some people like to exercise before bed. This doesn't work for everyone—some get too revved up by the exercise to be able to sleep afterward. In the evening, stick to gentler exercise, like stretching or yoga, that's on the relaxing side.

✂ *Use relaxation techniques before bed to lower your stress and relax you physically.* The key to getting a good night's sleep is to start relaxing before you get under the covers. Slow your evening pace starting an hour before bedtime—use relaxation techniques to lower your stress and relax you physically. Try using a sleep relaxation app, and check back to chapter 7, “The Zen Corner,” for ways to quiet your mind.

GUT TOOLBOX

- ✂ *Choose wisely.* Pick a mattress that's right for you. Are you a back sleeper? Look for a medium-firm to firm mattress. Side sleeper? Consider a medium-soft to medium-firm mattress. Tummy sleeper? Look for a firm mattress. The Sleep Foundation website (<https://www.sleepfoundation.org>) has lots of great info to help you choose, but an in-person trial is always the best. Crazy as it sounds, some mattress stores even let you spend the night to decide on the right choice.
- ✂ *Neutralize noise.* White noise blocks sound that can keep you up. If you're traveling without your white noise machine, run a fan or the air conditioner, or check out free apps like Sleep Sounds and Relax Melodies. They have a range of soothing sounds that help you relax.
- ✂ *Wash your cares away.* A warm bath or shower before bed can be very relaxing mentally and physically. Mentally, you wash away your stress; physically, the warm water soothes and loosens your muscles. It also helps set your body temperature (you actually cool down after a hot bath) to a more optimal sleeping temperature.
- ✂ *Smell your way to sweeter dreams.* Spritz your pillowcases with a soothing lavender spray to help send you off to La La Land.

THE NURSERY: HEALTHY GUTS, HEALTHY KIDS



GUT TOOLBOX

- ✂ *Cuddle up.* Have lots of skin-to-skin contact with your baby to pass on your beneficial bacteria. Cuddle, kiss, and breast-feed, especially if your baby was born by C-section.
- ✂ *Shop savvy.* Kids' microbiomes are just as easily damaged by antibiotics as ours are. Shop for antibiotic-free dairy and animal products to minimize your children's exposure.
- ✂ *Intervene early.* If allergies run in your family, talk to your pediatrician about the right age to start giving your baby probiotics. They can help prevent childhood allergies such as atopic dermatitis (eczema) and wheezing.
- ✂ *Make fiber fun.* Make eating gut-healthy food fun for little ones with a fiber point system. Assign different fiber points to various foods and allow them a treat if they reach ten points.

THE LAUNDRY ROOM: DETOXING YOUR HOME



GUT TOOLBOX

- ✂ *Bug spray.* Want to be really cutting-edge? Invest in a probiotic air purifier. This innovative product actually sprays good bacteria into the air of your home (or office) where, according to the manufacturer, the bacteria consume the pet dander, dust mites, pollen, and other allergens that would normally trigger allergies in your indoor environment.
- ✂ *Clean consciously.* Make your own all-purpose cleaner: Mix equal parts water and distilled white vinegar in a spray bottle. Add ten drops of a fragrant essential oil like lemon, peppermint, or tea tree. Shake well and spray away the grime safely.
- ✂ *Remodel happy hour.* If you and your coworkers are trying to cut down on drinking, then make your work events less alcohol dependent and more health oriented. Happy hour could transform into Frisbee in the Park Hour or a group Healthy Cooking Class. The best part? No hangovers at work the next day!
- ✂ *Shop local, think global.* Shopping at your local farmers market not only allows you to buy locally grown organic produce—adding lots of local color to your plate—it's also better for the environment, because it cuts back on long-distance driving for food delivery.

THE LIVING ROOM: THE GUT RENO PROGRAM



The lists below are of natural foods that are especially high in fiber per serving, but pretty much all fruits and vegetables have some fiber—and some fiber is better than no fiber.

Fruits

Apple	Fresh coconut	Pear
Banana	Mango	Raspberries
Blackberries	Orange	Strawberries
Blueberries	Passion fruit	

Grains, Seeds, and Nuts

Almonds	Chia seeds	Quinoa
Barley	Oatmeal	Sunflower seeds
Brown rice	Pistachios	Walnuts
Buckwheat	Pumpkin seeds	

Vegetables

Artichokes	Brussels sprouts	Squash
Avocados	Carrots	Sweet potatoes
Beets	Cauliflower	
Broccoli	Pumpkin	

Beans

Chickpeas	Lentils
Kidney beans	Split peas

EAT LIKE A PRO

To keep your microbiome balanced and healthy, you should aim for one to two probiotic and prebiotic foods every day. The probiotic foods give you extra beneficial bacteria, and the prebiotic foods support their growth.

PROBIOTIC-RICH FOODS

Milk-based probiotic foods include live- and active-cultures yogurt (make sure it says that on the label) and kefir. In the kitchen, you can swap out sour cream, heavy cream, and milk for plain yogurt (which is also a great substitute for mayo and eggs).

Cheeses that contain probiotics include cottage cheese, mozzarella, cheddar, Edam, Gouda, Gruyere, Parmesan, provolone, and Swiss. Sour cream is made by fermenting cream, but the product is then pasteurized, which kills the bacteria. Some brands add live bacteria back in, however—check the label.

Fermented plant foods that contain probiotics include sauerkraut, pickles (but not the kind made with vinegar), kimchi, miso, tempeh, and natto. Kombucha, a very mildly alcoholic drink made from fermented black or green tea, is said to contain probiotic bacteria, but many commercial products don't contain large amounts of live beneficial bacteria, and there is little evidence to support the many health claims associated with this drink.

PREBIOTIC FOODS

As you'll see from the list, you have a lot of choices here, so it's easy to aim for at least one daily serving of a prebiotic food. I like a handful of almonds mixed with a handful of raisins—two prebiotic servings in one snack.

Acai berries	Barley	Honey
Alliums (garlic and onion family)	Beans, especially white beans, chickpeas, and lentils	Jerusalem artichokes
Almonds	Chicory	Mushrooms
Apples	Dandelion leaves	Oatmeal
Artichokes	Flaxseeds	Raisins
Asparagus	Green plantains	Seaweed
Bananas		Yucca (cassava)

Some foods that don't have any fiber still have prebiotic benefits because of their natural sugars or polyphenols (a type of phytonutrient). Leading this list is red wine. Others include honey, maple syrup, and dark chocolate.

Phytonutrients

As we learned back in chapter 3, “The Kitchen,” *phytonutrients* is a catch-all term for the many natural chemicals found in plant foods. The plant world contains *hundreds* of these. They all act as powerful antioxidants that protect your cells from damage and help them repair any damage that does occur, and are important antiaging nutrients. Eating a diet with plenty of phytonutrient-rich foods is probably the best antiaging dietary advice I can give.

It's simple: just eat the rainbow. The more colorful a plant, or the darker the green, or the more pungent the flavor (think garlic), the more phytonutrients it probably contains. Use the following list as a guide.

PHYTONUTRIENT FOODS

- ✂ *Red, orange, and yellow vegetables and fruits:* apples, beets, berries, carrots, citrus fruits, mangos, melons, peaches, peppers, squash, sweet potatoes, tomatoes
- ✂ *Dark green leafy vegetables:* arugula, chicory, bok choy, broccoli, collards, kale, dark lettuces, spinach, Swiss chard
- ✂ *Alliums (onion family):* chives, garlic, leeks, onions, scallions
- ✂ *Whole grains:* barley, brown rice, buckwheat, oats, quinoa, wild rice, whole-wheat bread, whole-wheat pasta, and whole-grain cereals
- ✂ *Nuts and seeds:* almonds, flaxseeds, sunflower seeds, walnuts
- ✂ *Beans:* all beans, lentils, peas, soy foods (in moderation)
- ✂ *Beverages:* green and black tea, herbal teas, coffee
- ✂ *Dark chocolate*

GUT RENO WORKOUT WEEK

When it comes to exercise, I like to mix it up. It keeps my workouts interesting and fun, and it also varies the muscles I use each time. Some days are heavier on the legs, for example, while others work your core more or use more upper body muscles. It all evens out over the course of the week.

I know for me it's been helpful to map out what a week of fitness looks like, so the program I outline here is just a jumping-off point. Think of it as a framework for how you can build your own workouts over the course of seven days. If you find you really hate doing a particular exercise, or if doing it is too uncomfortable or difficult for you, cross it off your list—but find something to replace it. Don't forget, there are tons of outdoor activities that count as exercise—everything from walking to gardening. It's all about choosing what works for you and ramping up from there!

If you're new to exercise, or are getting back to it after a long break, start slowly and gently. Challenge yourself, but don't overdo—gradually build up your strength, flexibility, and endurance.

Monday

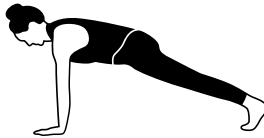
30 minutes running.

12 minutes core floor exercises. Your core muscles consist of your abdominal muscles but also the obliques (the muscles on the sides of your trunk) and the muscles of your pelvis, lower back, and hips. Together, these muscles help stabilize your body. Do each of the following exercises for 45 seconds, then rest for 15 seconds, then repeat for 45 seconds.

1. *Russian twists.* Sit on your exercise mat with your knees bent and feet flat. Lean back a bit so your spine is at a 45-degree angle from the floor—you want to create a V shape with your torso and thighs. Clasp your hands together against your chest and lift your feet up a couple of inches. Using your abdominal muscles, twist to the right, then back to the center, and then to the left. Repeat. For more of a challenge, hold a dumbbell.
2. *Classic crunch.* Lie on your back on the mat with your knees bent and feet flat, both hip-width apart. Cross your arms on your chest. Inhale and contract your ab muscles. Lift your upper body, keeping your head and neck relaxed (don't lift with them) while exhaling. Inhale as you lower yourself back to the starting position.
3. *Bicycle crunch.* Lie on your back on the mat with your knees bent and feet flat, hip-width apart. Place your arms behind your head, with your elbows pointing out. To start, inhale and brace your abs. Lift your knees to 90 degrees and raise your upper body up. Exhale and rotate your trunk, moving your right elbow and left knee toward each other while also straightening your right leg. Hold for 5 seconds, then inhale as you return to the starting position. Repeat on the other side: move your left elbow to your right knee and extend your left leg. Pause and return to the starting position. Note: keep your lower back on the floor and don't hunch your shoulders. Rotate from your core, not your neck.
4. *Reverse crunch.* Lie on your back on the mat with your knees bent and feet flat, hip-width apart. Put your arms at your sides, palms down.

Exhale, brace your core, and slowly lift your feet off the floor, raising your thighs until your legs are vertical (or as near vertical as you can get). Pull your knees in toward your head as far as you can without lifting your middle back from the mat—your hips and lower back should be off the mat. Hold for 5 seconds, then slowly lower your feet down to the starting position.

5. *Straight-arm plank.* Get on all fours with your wrists aligned under your shoulders. Step one foot back and then the other until your legs are straight with your toes on the mat. Press down on your hands to raise your body into a straight line from your shoulders to your heels, as if you were in the up position of a push-up. Look down and keep your spine straight—don't hunch your back or your shoulders. Hold for as long as you can with good form, then lower yourself back down.
6. *Mountain climbers.* Start in the straight-arm plank position. Pull one knee into your chest as far as you can, then extend it again while exhaling. Switch legs and repeat. Once you get the hang of this, do it as fast as you can. Be sure to keep your hips and butt down and your shoulders over your wrists.

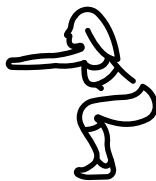


Tuesday

30 minutes aerobic dance video (belly dance, hip hop, and Bollywood are some of my faves).

12 minutes weight-bearing (bone strength) exercises. For these exercises, you'll need a straight-backed chair for support. Do 10 reps (1 set) of each exercise, resting for 1 minute between sets, then repeat routine. Note: these exercises are particularly good for short exercise snacks at the office.

1. *Sit to stand.* Stand with the chair behind you, bend at the knees and hips, and slowly lower yourself to a seated position, then slowly stand up.
2. *Forward lunge.* Stand with your feet shoulder-width apart. Step forward with one foot, planting it firmly on the ground. Slowly shift your weight to your front foot, lowering your body as you do so. Return to starting position.
3. *Single leg standing.* Stand with your feet shoulder-width apart. Bend one knee slightly, and slowly lift that leg 3 to 6 inches off the floor. Hold for 10 seconds, then return your foot to the floor.
4. *Squats.* Stand with your feet slightly wider than shoulder-width apart. Bend downward at the hips, shifting them back and down as you bend your knees. Lower yourself to a comfortable position—your knees shouldn't extend beyond your toes. Push through your heels to return to the starting position.



Wednesday

30 minutes swimming or running.

10 minutes yoga stretches. Hold each pose for 45 seconds with 15 seconds rest in between. Repeat routine 1 time. Yoga poses are best learned by having someone teach them to you. I recommend taking a few basic yoga classes or watching one of the many excellent yoga videos online. There are hundreds of yoga poses. The ones below are good basic starting points for developing your own practice.

1. *Mountain pose*
2. *Standing forward bend*
3. *Downward dog*
4. *Tree pose*
5. *Upward salute*
6. *Triangle pose*
7. *Warrior pose*
8. *Side-angle pose*
9. *Twisted triangle*
10. *Locust pose*



Thursday

30-minute HIIT video (Popsugar has a great one).

10 minutes balance exercises. Do each exercise for 1 minute, rest for 15 seconds, then repeat. Note: these exercises are particularly good for short exercise snacks at the office.

1. *In-place marches.* Stand upright with feet hip-width apart. Lift one knee until your thigh is parallel with the floor. Pause, then slowly return your foot to the floor. Alternate your right and left legs.
2. *Tightrope walk.* Stand up straight with your arms straight out from your sides. Walk heel to toe in a straight line—one foot touching right in front of the other, pausing for 2 seconds every time you lift one foot off the ground.
3. *Quad stretch.* Stand upright with your feet hip-width apart. Balancing on your right leg, grab your left ankle from behind with your left hand and pull your foot up to meet your butt. Hold for one minute, then switch to the other leg. If you can't lift your leg that high, just bring it up as far as you can without losing your balance.
4. *Head rotations.* Stand upright with your feet hip-width apart. Slowly move your head from side to side, then up and down for 30 seconds. Move your head around clockwise for 15 seconds and then counter-clockwise for 15 seconds.



Friday

30 minutes biking (real or stationary).

10 minutes core exercises. Do each exercise for 45 seconds, rest for 15 seconds, then repeat. Once you get to the point where doing these isn't that hard, don't do them for longer periods of time. Instead, use resistance bands to make them more challenging.

1. *Heel taps.* Lie on your back with your hands under your butt, knees bent, and feet lifted into a tabletop position. Flex your feet and slowly lower them to the ground until your heels barely touch the floor. Squeezing your abs, lift your feet back up to starting tabletop position.
2. *Scissor kicks.* Lying on your back, lift your head and shoulders off the floor. Lift your right leg until it is at about a 45-degree angle from your body and then lower it. Switch legs and repeat. Keep switching for 45 seconds.
3. *Straight leg raises.* Lie on your back. Breathing in and tightening your abs, raise both legs (keeping them straight) until they're perpendicular to your torso (or as perpendicular as you can get them). Then exhale and slowly lower your legs until they're a few inches above the floor (or as close to that as you can get without lifting your lower back from the floor).
4. *Roll ups.* Lie on your back with your arms and legs outstretched. As you inhale, bring your arms overhead and slowly start to curl your upper body off the floor. Keep rolling forward to reach your toes (or as close to your toes as you can get). Then reverse the move as you exhale, allowing one vertebra at a time to rest back down on the ground.
5. *High knees.* Stand with your feet hip distance apart, then start to run in place, lifting your knees up in front of you as high as they'll go. As you pump your legs, swing your opposite arm to give yourself more momentum.

Saturday

30 minutes brisk walking.

10 minutes arm exercises. Do 15 reps (1 set) of each exercise using 5-pound hand weights, dumbbells, or resistance bands. Rest 30 seconds between sets and repeat. As you build strength, use heavier weights—don't do more reps. Breathe out as you lift the weights and in as you lower them.

1. *Biceps curls.* Hold the dumbbells parallel to the floor and stand up straight, your legs shoulder-width apart and your elbows pressed against your sides. Raise the dumbbells to the count of 3 by bringing your forearms up to the front of your shoulders, rotating the dumbbells so your palms face your shoulders. Pause for a breath, then lower the dumbbells to the count of 3 to the starting position.
2. *Overhead press.* Stand up straight with your legs shoulder-width apart and the dumbbells held up at shoulder height with your palms facing forward. Raise the dumbbells to the count of 3 by bringing your arms straight up over your head. Pause for a breath, then lower the dumbbells to the count of 3 to the starting position.
3. *Upright row.* Stand up straight with your legs shoulder-width apart and the dumbbells resting on the fronts of your thighs, with your palms facing inward. Pull the dumbbells up to the count of 3 until they're just below your chin. Pause for a breath, then lower the dumbbells to the count of 3 to the starting position.
4. *Triceps extension.* Stand up straight with your legs shoulder-width apart and hold a single dumbbell in the center with both hands. Extend your arms up over your head with both hands, keeping your arms close to your ears and your elbows pointed forward. Lower the weight to the count of 3 behind your head until your elbows are at about 90-degree angles. Pause for a breath, then raise your arms up again to the count of 3 to the starting position.

5. *Side (lateral) raises.* Stand up straight with your legs shoulder-width apart and hold a dumbbell in each hand with your arms at your sides, palms facing in. Raise both arms out and up to the sides to the count of 3 until your elbows are shoulder-height. Pause for a breath, then lower your arms to the count of 3 to the starting position.



Sunday

Take a day off—you've earned it!



GUT RENO RECIPES



I wear a lot of hats: mom, doctor, entrepreneur. Ergo, I don't have a lot of time to spend in the kitchen. And while I have a pretty comprehensive résumé, a stint at the Cordon Bleu is conspicuously absent. All the recipes here are ones that meet my basic criteria for entering the permanent repertoire: they taste great, they're good for your gut, they're quick and easy to make, they don't require a lot of expensive or hard-to-find ingredients, and my boys eat them without complaint (usually).

Breakfast

Breakfast is a good time to get started on your daily fiber and prebiotics servings. For quick, no-fuss breakfasts, try oatmeal or a bowl of commercial whole-grain or bran cereal with milk or yogurt, topped with berries or other fruit. Look for cereal brands that contain 100 percent whole grains, have at least 5 grams of fiber per serving, and don't have added sugar. For more variety, try low-sugar granola. Check the label: the first ingredient listed should be whole grains.

Probiotic Parfait

This is my usual workday quick breakfast. The key ingredients are the yogurt and granola; beyond that, anything prebiotic goes. I like to toss in some sliced toasted almonds.

Makes 1 serving

INGREDIENTS

½ cup low-sugar granola	1 tablespoon chia seeds
1 cup plain nonfat Greek yogurt	½ cup berries (any kind or a mixture)
1 tablespoon flaxseeds	

PREPARATION

Put the granola in a cereal bowl, add the yogurt, top with the seeds and berries.

Avocado Toast

This basic recipe becomes a heartier breakfast or a lunch dish when you top it with sliced veggies, a fried or hard-boiled egg, salsa, or some feta cheese.

Makes 1 serving

INGREDIENTS

1 ripe avocado	2 slices whole-grain bread
$\frac{1}{4}$ teaspoon lemon juice	1 teaspoon extra-virgin olive oil
$\frac{1}{4}$ teaspoon salt	pinch of cumin
$\frac{1}{4}$ teaspoon black pepper	

PREPARATION

1. Scoop out the avocado into a small bowl. Add the lemon juice, salt, and black pepper and mash coarsely with a fork.
2. Toast the bread to your preferred darkness. Spread the avocado mix on the bread, drizzle with the olive oil, and sprinkle with cumin.



Overnight Oats

The quickest, easiest, healthiest breakfast I know. Top the oatmeal with anything you like, singly or in combination. Berries, bananas, apple or peach slices, raisins, nuts, and shredded coconut all work. To add some sweetness, try some maple syrup or honey. My personal favorite topping is a spoonful of almond butter, some banana slices, and a sprinkle of cocoa nibs. You can multiply the recipe by as many servings as you need for family breakfast but use them the next morning or the day after for best flavor and texture.

Makes 1 serving

INGREDIENTS

$\frac{1}{2}$ cup dairy milk, nut milk, or oat milk

$\frac{1}{2}$ cup old-fashioned rolled oats
(don't use quick or instant oats)

$\frac{1}{2}$ cup plain nonfat Greek yogurt

1 teaspoon chia seeds

PREPARATION

1. Combine all ingredients in a Mason jar or other airtight container, stir well, cover, and refrigerate for at least 5 hours, preferably overnight.
2. To serve, stir in some extra milk or yogurt if desired and top with anything you want.



Buckwheat Pancakes

The rich, nutty flavor of these fiber-filled buckwheat pancakes will make you rethink your commitment to regular pancakes. And if you love pancakes but can't tolerate the gluten, buckwheat is the grain for you. Important note: your pancake griddle needs to be really hot before you start cooking the pancakes. This recipe is so quick and easy that I recommend heating the griddle while you prepare the batter.

Makes 6 pancakes

INGREDIENTS

$\frac{1}{2}$ cup buckwheat flour	$\frac{1}{2}$ cup milk or unsweetened milk substitute
$\frac{1}{2}$ teaspoon baking powder	3 tablespoons maple syrup
$\frac{1}{8}$ teaspoon salt	

PREPARATION

1. Combine the buckwheat flour, baking powder, and salt in a medium mixing bowl. Whisk in the milk and maple syrup.
2. If using a regular griddle, lightly grease it with a small amount of neutral oil (grapeseed works well). Drop the batter by large spoonfuls onto the griddle and cook until the entire surface is covered with dry bubbles, about 2 to 4 minutes. Flip and cook for an additional 2 to 4 minutes.



Healthy Lunches

These quick and easy lunches are great on weekends and make a good alternative to fast food or deli meats.

Vegetable Frittata

A frittata is best served warm or at room temperature, making it ideal for make-ahead lunches. This recipe gives you the general idea, but use any mixture of veggies you like.

Makes 4 servings

INGREDIENTS

10 eggs	4 ounces white or baby brown mushrooms, thinly sliced
$\frac{1}{2}$ cup dairy milk	1 medium red bell pepper, seeded and thinly sliced
$\frac{1}{2}$ teaspoon salt	4 asparagus spears, cut into $\frac{1}{2}$ -inch pieces
$\frac{1}{4}$ teaspoon black pepper	4 ounces feta cheese
2 tablespoons extra-virgin olive oil	
$\frac{1}{2}$ red onion, thinly sliced	

PREPARATION

1. Preheat the oven to 350°F.
2. Whisk together the eggs, milk, salt, and pepper.
3. Heat the olive oil in a large, oven-proof skillet. Add the red onion and mushrooms and cook, stirring now and then, for 4 minutes or until the mushrooms start to take on color. Add the pepper and asparagus spears and cook for another 4 minutes.
4. Pour the egg mixture over the veggies and cook without stirring for another few minutes, or until the eggs begin to set around the edges.
5. Sprinkle the feta cheese over the eggs. Put the skillet into the oven and bake for 20 minutes. Remove from the oven and let rest for 5 minutes before serving.

Healthy Tuna Salad

This quick sandwich lunch substitutes yogurt for mayo. The microgreens add additional fiber and flavor—use whatever greens are in season. Serve on whole-grain bread or in a whole-wheat wrap.

Makes 4 servings

INGREDIENTS

2 5-ounce cans water-packed
tuna, drained
1 celery stalk, diced

2 tablespoons red onion, diced
1 cup microgreens, such as baby
arugula or radish sprouts

Dressing

$\frac{1}{3}$ cup plain nonfat Greek yogurt
2 tablespoons lemon juice
1 tablespoon Dijon or yellow
mustard

$\frac{1}{4}$ teaspoon salt
 $\frac{1}{4}$ teaspoon black pepper
2 tablespoons chopped parsley

PREPARATION

In a medium bowl, combine the yogurt, lemon juice, mustard, salt, pepper, and parsley. Add the tuna, the celery, red onions, and microgreens. Stir gently to combine.



Portobello Sandwich

Meaty portobello mushrooms are great in sandwiches, a much better alternative to lunch meats. Make this sandwich on whole-grain bread or rolls brushed with olive oil. Add a side of sauerkraut or pickles for a dose of probiotics.

Makes 4 servings

INGREDIENTS

4 large portobello mushroom caps	1 teaspoon dried thyme
1 tablespoon extra-virgin olive oil	½ teaspoon garlic powder
1 teaspoon salt	1 large tomato, thickly sliced
	4 slices avocado

PREPARATION

1. Brush the mushroom caps with half the olive oil and sprinkle with salt, thyme, and garlic powder.
2. Add the remaining olive oil to a skillet and heat over medium heat. Place the mushrooms in the skillet, round side down, and cook for 5 minutes.
3. Make sandwiches with the caps and top with tomato slices and avocado slices.



Salads

Basic Vinaigrette Dressing

If you want more fiber in your diet, eat more salad. Make your salads more interesting by using a variety of different lettuces and baby greens and adding whatever other raw vegetables you like. Add some additional crunch with sunflower seeds or chopped nuts. Because bottled salad dressings often contain added sugar and other unhealthy ingredients, learn to make your own, starting with this basic vinaigrette.

Makes 1 cup

INGREDIENTS

3 tablespoons balsamic, red wine, or cider vinegar	1 teaspoon kosher salt
1 garlic clove, finely chopped	$\frac{1}{2}$ teaspoon black pepper
1 teaspoon Dijon or whole-grain mustard	$\frac{3}{4}$ cup extra-virgin olive oil

PREPARATION

Combine all the ingredients in a pint jar with a lid. Shake well to combine. Store the dressing in the refrigerator. Let the dressing come to room temperature before serving.



Watermelon, Spinach, and Tomato Salad

This is the ultimate summer salad. The watermelon, spinach, and tomatoes are all excellent sources of lycopene, a natural antioxidant that helps protect your skin from sun damage.

Makes 4 servings

INGREDIENTS

Dressing

3 tablespoons extra-virgin olive oil

1 tablespoon apple cider vinegar

$\frac{1}{2}$ teaspoon kosher salt

Salad

4 cups fresh spinach leaves

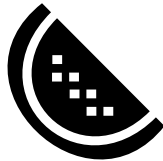
1 cup cherry tomatoes, cut in half

1 cup thinly sliced red onion

2 cups watermelon chunks

PREPARATION

1. Whisk the olive oil, apple cider vinegar, and salt together in a small bowl.
2. Combine the spinach, red onion, and tomatoes in a salad bowl. Add the vinaigrette and toss to coat. Add the watermelon just before serving and toss gently again.



Quinoa Salad with Artichokes, White Beans, and Pistachios

The pistachios add a nice crunch to this salad. Quinoa is a great source of fiber—it has twice as much as most grains.

Makes 4 servings

INGREDIENTS

1 cup quinoa	1 cup cherry tomatoes, cut in half
1 15-ounce can small white beans or navy beans	$\frac{1}{4}$ cup red onion, chopped
$\frac{1}{2}$ cup marinated artichoke hearts, chopped	$\frac{1}{2}$ cup pistachios

Dressing

3 tablespoons extra-virgin olive oil	$\frac{1}{4}$ teaspoon cumin
1 tablespoon lime juice	$\frac{1}{4}$ teaspoon cayenne pepper
1 clove garlic, minced	1 teaspoon salt

PREPARATION

1. Combine the quinoa with 2 cups water in a medium saucepan over medium heat. Bring to a boil, reduce the heat to a simmer, cover the pot, and cook for 15 to 20 minutes, or until all the water is absorbed.
2. While the quinoa cooks, drain the beans and rinse them in a colander. Prepare the artichokes, cherry tomatoes, and red onions.
3. For the dressing, whisk the olive oil, lime juice, garlic, cumin, cayenne pepper, and salt together in a small bowl.
4. When the quinoa is ready, fluff it with a fork and put it into a large serving bowl. Gently mix in the beans, artichokes, cherry tomatoes, red onions, and pistachios. Drizzle with the dressing and let sit for 5 minutes before serving so the flavors can blend.

Corn and Avocado Salad

Makes 4 servings

INGREDIENTS

1½ cups corn kernels	2 jalapeño peppers, seeded and finely chopped
1 avocado, cut into small cubes	
½ cup thinly sliced red onion	½ cup coarsely chopped cilantro leaves

Dressing

3 tablespoons extra-virgin olive oil	½ teaspoon cumin
1 tablespoon balsamic vinegar	½ teaspoon salt

PREPARATION

1. Combine the corn kernels, avocado cubes, red onion, jalapeños, and cilantro in a serving bowl.
2. Whisk together the olive oil, vinegar, cumin, and salt in a small bowl. Pour the dressing over the corn and avocado mixture and toss very gently. Let stand at room temperature for 30 minutes before serving so the flavors can blend.



Vegetable Side Dishes

Lemony Broccoli Rabe with White Beans

Broccoli rabe (also called rapini) has a bitter flavor when raw but mellows out beautifully when cooked.

Makes 4 servings

INGREDIENTS

1 pound broccoli rabe	1 15-ounce can cannellini or navy beans, drained and rinsed
2 tablespoons extra-virgin olive oil	$\frac{1}{2}$ teaspoon hot red pepper flakes
1 lemon, very thinly sliced	$\frac{1}{2}$ teaspoon salt
1 large garlic clove, chopped	1 tablespoon grated Parmesan

PREPARATION

1. Trim the broccoli rabe and cut it into 4-inch pieces. Cut the thicker stalks in half lengthwise so all the broccoli rabe cooks evenly.
2. Heat the olive oil in a large skillet over medium heat. Add the lemon slices in an even layer and cook for 2 minutes. Turn the slices and cook for another 2 minutes. Add the broccoli rabe pieces and garlic and cook, stirring occasionally, about 5 minutes, or until the pieces are bright green and tender.
3. Add the beans, red pepper flakes, salt, and $\frac{1}{2}$ cup water. Bring to a boil, lower the heat, and simmer for another 5 minutes or so, stirring occasionally, until the liquid is reduced by half. Stir in the Parmesan.

Roasted Turmeric Chickpeas

One of my favorite side dishes and a great source of fiber and probiotics.

Makes 4 servings

INGREDIENTS

2 15-ounce cans chickpeas	$\frac{1}{2}$ teaspoon ground black pepper
3 tablespoons extra-virgin olive oil	$\frac{1}{2}$ cup plain nonfat Greek yogurt
1 teaspoon turmeric	4 tablespoons lemon juice
1 teaspoon fennel seeds	1 teaspoon hot red pepper flakes (optional)
$\frac{1}{2}$ teaspoon salt	

PREPARATION

1. Preheat the oven to 400°F. Drain the chickpeas in a colander, rinse, and spread them on towels to dry.
2. Combine the olive oil, turmeric, fennel seeds, salt, and black pepper in a medium mixing bowl.
3. Add the chickpeas and toss well to coat.
4. Spread the chickpeas in a single layer on a nonstick baking tray or sheet pan. Bake for 20 to 30 minutes, or until the chickpeas are golden brown and a bit crispy.
5. Remove from the oven and let cool. Put the chickpeas in a medium mixing bowl and stir in the yogurt, lemon juice, and red pepper flakes if desired.

Sweet Potatoes and Peppers

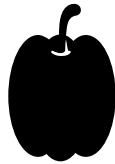
Makes 4 servings

INGREDIENTS

2 large sweet potatoes	2 teaspoons dried thyme
1 large red bell pepper	2 teaspoons smoked paprika
1 large green bell pepper	1 teaspoon hot red pepper flakes
1 medium red onion	1 teaspoon salt
2 tablespoons extra-virgin olive oil	

PREPARATION

1. Preheat the oven to 425°F.
2. Peel the sweet potatoes and cut them into 1-inch chunks. Seed the peppers and cut them into thin slices. Cut the red onion into 1-inch chunks.
3. Put the olive oil into a medium mixing bowl. Add the thyme, paprika, red pepper flakes, and salt and stir well. Add the sweet potatoes, red and green peppers, and the onion. Toss to coat them with the spice mixture.
4. Spread the vegetables out on a sheet pan and roast for 15 minutes. Use a spatula to turn the vegetables and roast for 15 minutes longer, or until the sweet potatoes are lightly browned and soft.



Carrots with Cumin

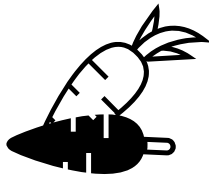
Makes 4 servings

INGREDIENTS

1 pound carrots	1 cup orange juice
1 teaspoon cumin seeds	$\frac{1}{2}$ teaspoon salt
1 large garlic clove, finely chopped	1 teaspoon sugar
$\frac{1}{4}$ cup extra-virgin olive oil	2 tablespoons chopped cilantro
	1 teaspoon lemon juice

PREPARATION

1. Peel and trim the carrots. Cut them into $\frac{1}{2}$ -inch slices.
2. Combine the cumin seeds, garlic, olive oil, orange juice, salt, and sugar in a medium saucepan. Bring the mixture to a boil over medium heat, stirring as you do.
3. Add the carrots, cover the saucepan, and reduce the heat to very low. Continue to cook, stirring now and then, for 30 minutes, or until the carrots are very soft. Stir in the cilantro and lemon juice and serve.



Sweet Potato Fries

As simple, tasty, and healthy as it gets.

Makes 4 servings

INGREDIENTS

4 large sweet potatoes	1 teaspoon paprika
2 tablespoons extra-virgin olive oil	1 teaspoon sea salt
1 teaspoon garlic powder	$\frac{1}{2}$ teaspoon black pepper

PREPARATION

1. Preheat the oven to 400°F.
2. Peel the sweet potatoes and cut them into sticks about $\frac{1}{2}$ inch wide and 3 inches long. Don't discard any smaller leftover pieces—just cook them along with the sticks.
3. Combine the olive oil with the garlic powder, paprika, salt, and black pepper in a medium mixing bowl. Add the sweet potato sticks and any smaller pieces and toss to coat them with the olive oil mixture.
4. Spread the pieces evenly on a nonstick baking sheet (you might need two).
5. Bake until browned and crisp on the bottom, about 15 minutes. Flip the sticks over and bake until the other side is browned, about 10 minutes more.



Baked Zucchini Fries

A great alternative to low-fiber french fries. You can substitute yellow summer squash for the zucchini or use a mixture of the two.

Makes 4 servings

INGREDIENTS

4 medium zucchini	$\frac{1}{2}$ teaspoon dried basil
1 cup panko breadcrumbs	$\frac{1}{2}$ teaspoon hot red pepper flakes
$\frac{1}{2}$ cup grated Parmesan	$\frac{1}{2}$ teaspoon salt
1 teaspoon garlic powder	$\frac{1}{2}$ teaspoon black pepper
1 teaspoon dried oregano	2 eggs
1 teaspoon dried parsley	

PREPARATION

1. Preheat the oven to 425°F.
2. Trim the zucchini and cut them lengthwise into quarters. Cut each quarter in half.
3. Combine the breadcrumbs, Parmesan, garlic powder, oregano, parsley, basil, red pepper flakes, salt, and black pepper together in a shallow dish.
4. Whisk the eggs in a shallow bowl.
5. Dip the zucchini sticks into the egg wash, then roll them firmly in the panko mixture to coat and lay them on a nonstick baking sheet.
6. Bake for 15 minutes, then flip and bake 10 minutes longer, until the sticks are golden-brown and crispy.

Simple Kimchi

A staple of Korean cooking, kimchi is spicy fermented cabbage. It's a wonderful source of both probiotics from the bacteria and prebiotics from the fiber in the cabbage and other vegetables. Make a big batch—it keeps in the refrigerator for three to four months. The hotness of kimchi comes from liberal amounts of gochugaru—Korean red pepper flakes. If you can't find these, substitute Aleppo red pepper flakes. Do not use the standard hot red pepper flakes from the supermarket. You'll need a 1-quart jar with a lid to ferment the kimchi. A Mason jar is great, but really any glass container with a screw-top lid will work.

Makes about 1 quart

INGREDIENTS

1 medium head Napa cabbage, about 2 pounds	1 to 5 tablespoons Korean red pepper flakes
¼ cup kosher salt	1 daikon, peeled, halved lengthwise, and thinly sliced
6 large garlic cloves, finely chopped	4 scallions, trimmed and cut into 1-inch pieces
2 teaspoons grated ginger	

PREPARATION

1. Cut the cabbage lengthwise into quarters and remove the core. Cut the cabbage crosswise into strips about 2 inches wide.
2. Place the cabbage pieces in a large mixing bowl and sprinkle with the salt. Use your hands to work the salt into the cabbage. Add enough cold water to just cover the cabbage. Put a plate on top and weigh it down with something heavy, like a large can of tomatoes or a pitcher of water. Let stand for 1 to 2 hours. The cabbage will give off a lot of liquid.
3. Drain the salted cabbage in a colander, pressing down to get out as much liquid as possible. While it drains, prepare the hot pepper mixture. In the large mixing bowl you used to salt the cabbage, combine the garlic, ginger, and 2 tablespoons water and stir into a paste. Add the hot pep-

per flakes to taste and stir again. Add the drained cabbage, daikon, and scallions and mix thoroughly to coat the vegetables with the spice paste.

4. Pack the kimchi into the quart jar, pressing down to remove air bubbles. Leave an inch of headspace in the jar. Cover the jar loosely and put it on a plate to catch any overflow from the brine as the kimchi ferments. Seal the jar and put it in a cool, dark place. Check the jar daily. As it ferments, you'll see tiny bubbles forming in the brine; some may overflow the jar and you'll note a definite pungent aroma. If necessary, push down on the vegetables to keep them submerged in the brine. You may see a thin white film on top. This is a yeast known as kahm and is a normal part of the fermentation process. Just skim it off and make sure your veggies are submerged.
5. Taste the kimchi after a few days. When it's fermented enough for your taste, put the jar in the refrigerator. You can eat the kimchi right away, but it's better if you let it sit for at least another week. It will keep for at least three months.



Kimchi Cauliflower Rice

Cauliflower rice has become so popular that you can now find frozen bags of it in any supermarket. It makes a quick substitute for traditional rice and is an excellent source of prebiotic fiber. If you want to make your own, use a box grater or food processor to grate a head of cauliflower into rice-like granules. Cauliflower rice cooks very quickly. Don't defrost the frozen kind before using. When using fresh or frozen cauliflower rice, cook until it's just heated through. In this basic recipe, you can substitute or add vegetables, such as grated carrots, broccoli florets, or edamame. If you don't have or don't like cauliflower rice, use 3 cups of cold brown rice instead.

Makes 4 servings

INGREDIENTS

1 tablespoon cold-pressed peanut oil or grapeseed oil	½ cup frozen peas
2 large garlic cloves, finely chopped	2 tablespoons soy sauce
1 cup kimchi	3 cups cauliflower rice or brown rice
	3 eggs, beaten

PREPARATION

1. Heat the oil in a large skillet over medium heat. Add the garlic and sauté for a minute or two, then add the kimchi, peas and any other vegetables, and the soy sauce. Cook, stirring occasionally, for 3 minutes.
2. Add the cauliflower rice and cook for only 1 minute. Push the vegetable mixture to the sides of the skillet and pour the beaten eggs into the hole in the center. Cook for 1 to 2 minutes, then use a spatula to stir the eggs and mix them into the vegetables.

Fish and Seafood

For the sake of the planet and your own health, choose fish and seafood carefully. Whenever possible, look for labeling that indicates the fish meets Marine Stewardship Council (MSC) sustainability standards for wild-caught fish or has a green label from the Monterey Bay Aquarium Seafood Watch Program. For farmed fish and shrimp, look for labeling indicating it was responsibly farmed. Don't be fooled by farmed fish and seafood labeled "organic." So far, the USDA hasn't established organic standards for aquaculture.

Miso-Glazed Salmon

All cold-water fish, salmon included, are great for omega-3 fatty acids. Serve this with stir-fried baby bok choy or snap peas and brown rice for extra fiber. Miso (a great source of probiotics) is a salty paste made from fermented soybeans. It's what gives a lot of Japanese cooking its deep umami flavor.

Makes 4 servings

INGREDIENTS

4 6-ounce salmon fillets, skin on	2 tablespoons white or yellow miso
Salt	
Black pepper	1 tablespoon rice wine vinegar
4 teaspoons maple syrup or honey	2 teaspoons dark soy sauce
	1 large garlic clove, finely chopped

PREPARATION

1. Heat the oven to 400°F. Line a sheet pan with aluminum foil or use a nonstick pan.
2. Season the salmon fillets with salt and black pepper and place them in a shallow bowl or baking dish.

3. In a small bowl, whisk together the maple syrup or honey, miso, vinegar, soy sauce, and garlic. Pour the marinade over the fish fillets. Let marinate for 10 minutes.
4. Place the salmon fillets skin-side down on the sheet pan and bake until the salmon is opaque and flakey, about 12 minutes.



Fish Kebabs with Fennel

This recipe works well with any firm fish, such as salmon, Pacific cod, or Arctic char. Fennel is a great source of fiber. Because I like to keep things really simple in the kitchen, this recipe calls for baking the kebabs, but you could put them on the grill or under the broiler instead. And if you don't have kebab skewers, just combine all the ingredients in one layer and bake them that way.

Makes 4 servings

INGREDIENTS

4 6-ounce fish fillets	3 teaspoons hot red pepper flakes
1 large fennel bulb	
2 lemons	4 tablespoons olive oil
1 medium red onion	1 teaspoon salt
2 large garlic cloves, finely chopped	Black pepper

PREPARATION

1. Cut the fish into bite-sized chunks and place them in a large mixing bowl.
2. Trim the fennel bulb, remove the hard inner core, and cut the bulb into bite-sized pieces. Add them to the bowl with the fish.
3. Cut the lemons into thin slices. Cut the red onion into quarters and separate the layers. Add the lemons and red onion to the mixing bowl. Add the garlic, red pepper flakes, olive oil, salt, and a generous amount of black pepper. Gently mix the ingredients to coat the fish and fennel chunks.
4. Preheat the oven to 325°F.
5. Assemble the kebabs: using metal skewers, add alternating chunks of fish, fennel, lemon, and red onion until all the ingredients are used. Put the kebabs onto a sheet pan or baking dish and bake for 6 minutes. If the fish isn't flaky and done by then, cook 2 minutes longer.

Fish Tacos with Mango Salsa

Use a flaky fish such as tilapia, Pacific cod, or pollock for these simple tacos.

Makes 4 servings

INGREDIENTS

1 teaspoon cumin	4 6-ounce fish fillets
1 teaspoon smoked paprika	1 tablespoon lime juice
½ teaspoon ancho chili powder	2 tablespoons extra-virgin olive oil
1 teaspoon salt	

Mango salsa

1 large mango, diced	1 jalapeño pepper, seeded and diced
2 tablespoons diced red onion	1 tablespoon lime juice
1 tablespoon chopped cilantro	½ teaspoon salt

Taco toppings

12 corn tortillas	2 avocados, thinly sliced
1 cup thinly sliced red or white cabbage	

PREPARATION

1. Preheat the oven to 375°F.
2. Combine the cumin, smoked paprika, ancho chili powder, and salt in a small bowl. Mix well and rub the mixture into the fish. Sprinkle with the lime juice and drizzle with the olive oil.
3. Put the fish fillets into a baking dish and bake for 10 minutes, or until the fish is flaky.
4. While the fish cooks, make the mango salsa. Combine the mango, red onion, cilantro, jalapeño, lime juice, and salt and toss gently.
5. When the fish and salsa are ready, assemble the tacos. Place a third of a fish fillet on a corn tortilla and top with cabbage, avocado slices, and mango salsa.

Main Dishes

Stir-Fried Tofu with Cauliflower

Celery and cauliflower give this dish a hefty dose of fiber.

Makes 4 servings

INGREDIENTS

12 ounces extra-firm tofu	1½ tablespoons ketchup
3 tablespoons cornstarch	2 tablespoons cold-pressed peanut oil
1 cup chicken broth or vegetable stock	3 cups cauliflower florets
3 tablespoons soy sauce	2 celery stalks, thinly sliced on the diagonal
1 tablespoon rice wine vinegar	6 garlic cloves, thinly sliced
2 teaspoons hoisin sauce	½ cup thinly sliced scallions
½ teaspoon hot red pepper flakes	

PREPARATION

1. Drain the tofu and cut it into 1-inch cubes. Drain on paper towels. Place 1½ tablespoons of the cornstarch in a shallow dish and toss the tofu cubes to coat.
2. In a small mixing bowl, combine 1½ tablespoons cornstarch with ¼ cup chicken broth and whisk until smooth. Add the rest of the chicken broth, soy sauce, vinegar, hoisin sauce, red pepper flakes, and ketchup and whisk until smooth.
3. Heat the peanut oil in a large skillet over high heat. Add the tofu cubes and cook until they are crispy and golden-brown, about 6 minutes. Put the cubes aside on a plate.
4. Add the cauliflower to the skillet and cook, stirring often, for 3 minutes, or until the florets are lightly browned in spots. Add the celery and garlic and cook, stirring often, for another 2 minutes. Add the cornstarch mixture

and continue to cook, stirring often, until the mixture starts to thicken. Gently stir in the tofu cubes and continue to cook for 1 minute more or until the tofu is heated through. Sprinkle in the scallions.



Eggplant Pizza

This recipe works best with large eggplants. The skin on large eggplants can be tough, however, so I recommend trimming it off.

Makes 4 servings

INGREDIENTS

1 large eggplant, about 10 inches long	½ cup basil leaves, coarsely chopped
Kosher salt	1 teaspoon hot red pepper flakes
2 tablespoons extra-virgin olive oil	4 ounces grated Parmesan
1½ cups marinara sauce	4 ounces shredded mozzarella

PREPARATION

1. Cut the eggplant crosswise into circles about ½ inch thick. Place the slices on a double layer of paper towels and sprinkle with kosher salt to release the extra liquid. Let sit for 30 minutes. Rinse the slices well and pat dry.
2. Preheat the oven to 375°F.
3. Brush the eggplant slices on both sides with olive oil and arrange them on a nonstick baking sheet. Roast the slices for 15 to 20 minutes.
4. Remove the eggplant from the oven and preheat the broiler to high.
5. Spread a few tablespoons of the marinara sauce on top of each eggplant slice. Sprinkle with basil and red pepper flakes and then top each slice with the Parmesan and mozzarella.
6. Put the slices under the broiler for 5 to 10 minutes, or until the mozzarella cheese is melted and slightly browned.

Turkey Chili

A family favorite. Modify the seasoning to make it hotter by adding more jalapeños. If you like your chili soupier, add some water or chicken broth along with the diced tomatoes. I like to make a double batch and freeze half for a quick dinner later on.

Makes 4 servings

INGREDIENTS

1 tablespoon extra-virgin olive oil	1 bay leaf
1 pound ground turkey	1 tablespoon chili powder
1 cup diced onions	1 teaspoon cumin
1 tablespoon chopped garlic	1 15-ounce can diced tomatoes
1 large red bell pepper, seeded and coarsely chopped	1 teaspoon salt
1 jalapeño pepper, seeded and coarsely chopped	½ teaspoon black pepper
2 teaspoons dried oregano	1 15-ounce can red kidney beans or pinto beans, drained and rinsed

PREPARATION

1. Heat the olive oil over high heat in a large saucepan. Add the turkey and cook, stirring often to break up the lumps, for 5 minutes, or until the meat is lightly browned.
2. Add the onions, garlic, red pepper, jalapeño pepper, oregano, bay leaf, chili powder, and cumin. Stir well and cook for 5 minutes.
3. Add the tomatoes, salt, and black pepper. Bring the mixture to a boil, then reduce the heat to low and simmer, stirring occasionally, for 15 minutes. Add a small amount of water if the mixture starts to get too dry or if you like your chili soupier.
4. Add the beans and cook, stirring occasionally, for 10 more minutes.

Pasta with Mushrooms and Swiss Chard

Yes, you can make a great pasta dish with just one pot. Swiss chard is an excellent source of fiber and gives you tons of vitamin A, vitamin K, and minerals such as iron and potassium. Use baby bella (also called cremini) mushrooms for at least 4 ounces of the mushrooms. If you want some variety, use any other sort of mushrooms (white or shiitake, for example) for the other 8 ounces.

Makes 4 servings

INGREDIENTS

4 ounces baby bella mushrooms	8 ounces small whole-wheat pasta
8 ounces mixed other mushrooms or baby bellas	3½ cups chicken broth or vegetable stock
12 ounces Swiss chard	½ teaspoon salt
6 tablespoons unsalted butter	½ teaspoon black pepper
4 large garlic cloves, chopped	½ cup grated Parmesan

PREPARATION

1. Wipe the mushroom caps and trim the stems. Cut the baby bella mushrooms into halves; cut the other mushrooms, if used, into pieces about the size of half a baby bella. Trim the stems of the chard and tear the leaves into pieces.
2. In a large saucepan over medium heat, melt 4 tablespoons of the butter, whisking constantly, until the butter begins to bubble. Cook for 5 minutes, or until the butter just begins to brown. Remove from the heat and pour the butter into a bowl.
3. Add the remaining butter to the saucepan over medium heat. When it's melted, add the mushrooms and garlic and cook until the mushrooms soften and take on color, about 6 to 8 minutes. Stir in the pasta, chard, chicken broth, salt, and pepper and bring to a boil. Reduce heat to

medium-low, cover, and simmer, stirring occasionally, until pasta is al dente, about 10 minutes. (It's okay if a little liquid remains in the bottom of the saucepan.)

4. Remove from the heat and stir in the reserved butter and Parmesan.



Walnut Pesto Pasta with Greens

This recipe calls for arugula and spinach as the greens, but you can use just one or the other if you prefer or substitute Swiss chard for the spinach.

Makes 4 servings

INGREDIENTS

1 box whole-wheat thin spaghetti	Salt
$\frac{3}{4}$ cup walnuts	Black pepper
3 garlic cloves	3 cups mixed arugula and spinach leaves, torn
$2\frac{1}{2}$ cups basil	$1\frac{1}{2}$ cups cherry or grape tomatoes, halved
$\frac{3}{4}$ cup grated Parmesan	
$\frac{1}{4}$ cup extra-virgin olive oil	

PREPARATION

1. Cook the spaghetti in a large pot of boiling water until it is al dente, about 7 to 8 minutes.
2. While the pasta cooks, make the pesto. Combine the walnuts and garlic in a food processor. Pulse for 30 seconds. Add the basil and Parmesan and pulse for 30 seconds. With the motor running, slowly drizzle in the olive oil and process until smooth. Season to taste with salt and pepper.
3. When pasta is done, drain it in a colander, reserving 1 cup of the cooking water, and immediately return the pasta to the pot. Stir in the arugula and spinach—the heat from the pasta will wilt the greens. Add the halved tomatoes. Fold in the pesto; add some of the reserved cooking water if the mixture is too dry. Season with additional salt and pepper.



Zucchini Noodles with Bean Bolognese

The “noodles” in this dish are spirals or ribbons of zucchini or yellow summer squash. The noodles don’t have to be cooked, but I think this dish is better if they are.

Makes 4 servings

INGREDIENTS

2 medium zucchini or yellow squash	$\frac{1}{2}$ teaspoon salt
2 tablespoons extra-virgin olive oil	1 14-ounce can diced tomatoes
1 small onion, chopped	1 teaspoon dried oregano
$\frac{1}{2}$ cup chopped carrot	$\frac{1}{2}$ teaspoon hot red pepper flakes
$\frac{1}{4}$ cup chopped celery	$\frac{1}{4}$ cup chopped parsley, divided
4 cloves garlic, chopped	1 15-ounce can cannellini beans, drained and rinsed
	$\frac{1}{2}$ cup grated Parmesan

PREPARATION

1. Spiralize the zucchini or use a vegetable peeler to slice it into thin ribbons. Bring a large pot of water to a boil.
2. Heat the olive oil in a medium saucepan over medium heat. Add the onion, carrot, celery, garlic, and salt. Cook over medium heat, stirring often, until the carrots are softened, about 10 minutes. Add the diced tomatoes, oregano, red pepper flakes, and parsley. Bring to a simmer and cook, stirring often, until the mixture thickens, about 6 minutes.
3. Add the beans and lower the heat. Cook, stirring often, until the beans are heated through, about 3 minutes.
4. After adding the beans to the sauce, drop the noodles into the boiling water and cook for 3 minutes. Drain well in a colander and divide the noodles among four individual serving bowls.
5. Spoon the sauce over the noodles. Pass the Parmesan at the table.

Meals for Kids

Cauliflower Crust Pizza with Tomatoes and Mozzarella

You can make your own cauliflower crust for this healthier version of traditional pizza, but really, who has time for this when the kids are hungry? Frozen cauliflower crusts are the answer. When tomatoes are in season, substitute seeded chunks for the marinara sauce.

Makes 4 servings

INGREDIENTS

1 frozen cauliflower pizza crust	$\frac{1}{4}$ cup basil leaves, torn
$1\frac{1}{2}$ cups shredded mozzarella	$\frac{1}{2}$ teaspoon hot red pepper flakes
$\frac{1}{2}$ cup marinara sauce	

PREPARATION

1. Preheat the oven to 425°F.
2. Remove the frozen cauliflower crust from the wrapping and place it on a baking sheet. Do not defrost in advance.
3. Sprinkle $1\frac{1}{4}$ cups of the mozzarella over the crust. Spread the marinara sauce over the cheese all the way to the edge of the crust. Sprinkle with the torn basil leaves and red pepper flakes. Top with the remaining cheese.
4. Put the pizza in the oven and bake until the cheese is golden-brown and the crust is crispy, about 12 to 15 minutes.



Healthy Chicken Nuggets

Kids love chicken nuggets, but most fast-food and frozen versions are full of unhealthy food additives, salt, and bad fats. Try this homemade, healthier version. Time-saving hint: put some broccoli florets in a baking dish, toss with a drizzle of olive oil and a sprinkle of salt, and bake them along with the chicken nuggets. It all comes together in about 40 minutes.

Makes 4 servings

INGREDIENTS

1 pound boneless chicken breasts	$\frac{1}{2}$ teaspoon garlic powder
$\frac{1}{2}$ cup almond meal	$\frac{1}{2}$ teaspoon salt
$\frac{1}{2}$ teaspoon paprika	$\frac{1}{2}$ teaspoon black pepper
	2 eggs

PREPARATION

1. Preheat the oven to 375°F. Place a wire rack on top of a baking sheet.
2. Cut the chicken breasts into strips about $\frac{1}{2}$ inch wide.
3. Combine the almond meal, paprika, garlic powder, salt, and black pepper in a medium mixing bowl.
4. Whisk the eggs in a shallow dish.
5. Dip the chicken strips into the egg wash and then roll them firmly in the almond meal mixture. Lay the coated chicken strips on the wire rack.
6. Bake for 10 minutes, then flip the strips over and bake for 5 to 10 more minutes, or until the strips are browned and crispy.

Healthier Mac and Cheese

The Greek yogurt makes this comfort food recipe a little lighter. Chickpea pasta has about twice the protein and three times the fiber of regular semolina pasta—and it's gluten-free. When cooking chickpea pasta, some foam on the cooking water is normal. When it's done, rinse the pasta before using it in the next step of your recipe.

Makes 4 servings

INGREDIENTS

1 pound chickpea elbow macaroni	$\frac{1}{4}$ teaspoon black pepper
2 tablespoons unsalted butter	2 cups milk
2 tablespoons flour	$1\frac{1}{2}$ cups grated Cheddar cheese
1 teaspoon salt	$\frac{3}{4}$ cup plain nonfat Greek yogurt
	2 tablespoons breadcrumbs

PREPARATION

1. Preheat the oven to 450°F.
2. Cook the pasta in a large pot of boiling water until it is al dente. Be careful not to overcook. Drain the pasta in a colander and rinse with cool water.
3. In a large saucepan, melt the butter over medium heat. Sprinkle in the flour, salt, and pepper and whisk to form a smooth roux.
4. Whisk in the milk $\frac{1}{4}$ cup at a time and cook until the mixture is thickened. Don't let it boil.
5. Whisk in the cheese and stir until the cheese is melted and the sauce is thick. Stir in the yogurt. Add the pasta and stir gently until it is evenly coated with the sauce.
6. Pour the pasta mixture into an 8×8-inch baking dish or 2-quart gratin dish and spread evenly. Top with breadcrumbs.
7. Bake for 15 minutes, or until the top and breadcrumbs are golden-brown.

Turkey Burgers

Turkey burgers are a leaner alternative to beef burgers. They tend to be on the bland side, however, so don't hesitate to spice up this basic recipe. Chili powder works well; so does a hot Cajun seasoning blend. You can double this recipe and freeze the extra patties by putting them on a baking sheet, freezing for 2 hours, and then transferring them to an airtight container. Thaw in the refrigerator before using.

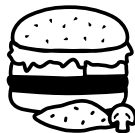
Makes 4 servings

INGREDIENTS

1 pound ground turkey	2 teaspoons garlic powder
$\frac{1}{4}$ cup breadcrumbs	2 tablespoons dried parsley
1 onion, finely chopped	$\frac{1}{2}$ teaspoon salt
1 scallion, chopped	$\frac{1}{4}$ teaspoon black pepper
1 egg	

PREPARATION

1. Combine the ground turkey, breadcrumbs, onion, scallion, egg, garlic powder, parsley, salt, and pepper together in a large bowl. Mix well. Cover the bowl and refrigerate for 1 hour or longer.
2. Preheat the oven to 400°F.
3. Form the chilled mixture into 4 patties. Arrange the patties in a baking dish.
4. Bake for 30 minutes, or until the juices run clear and the burgers are no longer pink in the center.



Snacks

When I advise my patients to add more fiber to their diet, I recommend swapping low-nutrition snacks like cookies and chips for healthier choices. Cooked edamame, nuts of any sort, sunflower and pumpkin seeds, dried fruit such as apricots, raisins, mango, and pineapple (get the no-sugar-added kind), and even dried seaweed are convenient and delicious. You can also try hummus or salsa as a dip with vegetable sticks.

Almond Raisin Energy Bites

My boys love these as a snack before cross-country practice.

Makes 6 bites

INGREDIENTS

$\frac{3}{4}$ cup raisins	$\frac{1}{2}$ cup organic peanut butter or almond butter
$1\frac{1}{4}$ cups quick oats (don't use instant oats)	1 teaspoon vanilla extract
1 teaspoon cinnamon	$\frac{1}{4}$ cup honey

PREPARATION

1. In a medium mixing bowl combine the raisins, oats, and cinnamon. Add the nut butter, vanilla extract, and honey and stir to combine. Cover the bowl and let it sit in the refrigerator for an hour.
2. Roll the chilled mixture into balls or form it into bars. In the unlikely event any are left, store them in the refrigerator.

Healthy Microwave Popcorn

Packaged microwave popcorn contains added chemical ingredients that are best left out of your diet. Use this incredibly simple method instead. Top the popcorn with the traditional salt and butter, or try something different: grated Parmesan, grated lemon zest, chili powder, garlic powder, and curry powder are all good choices. For a different take, try unsweetened cocoa powder, ground cinnamon—or both.

INGREDIENTS

$\frac{1}{4}$ cup popcorn kernels

PREPARATION

1. Put the popcorn kernels into a brown paper sandwich bag. Fold the top of the bag over 2 or 3 times and place it, folded side down, in the microwave.
2. Microwave on the popcorn setting until you hear the popping slow.
3. Remove from the microwave, pour the popcorn into a bowl, and season to taste.



Baked Plantain Chips

Plantain chips are a good alternative to potato chips—all the crunchy flavor plus lots of prebiotic fiber. Serve with guacamole or salsa.

Makes about 3 cups

INGREDIENTS

2 large green plantains	½ teaspoon salt
2 tablespoons avocado or grapeseed oil	Grated lime zest

PREPARATION

1. Preheat the oven to 375°F.
2. Peel the plantains and slice them as thinly as possible (use a mandoline if you have one). Put the slices into a medium mixing bowl and add the oil and salt. Toss gently to coat the slices.
3. Arrange the slices in a single layer on a large nonstick baking sheet. Bake for 18 minutes and check to see how they're doing. If they're not crispy and turning golden-brown, bake for another 5 minutes and check again.
4. Remove from the oven and sprinkle with more salt and the lime zest. Let cool before serving. If there are any left, store in an airtight container.

Spinach Artichoke Dip

What better way to get the fabulous prebiotic fiber of artichokes and spinach than this classic dip, modified to lighten it up. The recipe calls for jarred artichoke hearts, but you can use frozen instead. Just cook them first and let cool before adding them. Serve the dip with vegetable sticks, pita chips, or tortilla chips. It will keep in the refrigerator for three days.

Makes about 3 cups

INGREDIENTS

10 ounces frozen spinach, defrosted and drained	$\frac{1}{2}$ cup shredded mozzarella
1 8-ounce package reduced-fat cream cheese	3 large garlic cloves, finely chopped
1 cup plain nonfat Greek yogurt	$\frac{1}{4}$ teaspoon hot red pepper flakes
$\frac{1}{2}$ cup jarred artichoke hearts, drained and chopped	1 teaspoon lemon juice
$\frac{1}{4}$ cup grated Parmesan	$\frac{1}{2}$ teaspoon kosher salt

PREPARATION

1. Preheat the oven to 350°F. Grease a 1-quart baking dish.
2. Squeeze the defrosted spinach in a cheesecloth or a clean kitchen towel to remove excess water.
3. In a large mixing bowl, mix the cream cheese and yogurt together until smooth.
4. Add the spinach, artichokes, Parmesan, mozzarella, garlic, red pepper flakes, lemon juice, and salt and stir well until all the ingredients are well mixed.
5. Pour the mixture into the greased baking dish and bake for 20 to 25 minutes, or until the mixture is lightly browned on top.

Simple Guacamole

Guacamole with plantain chips or vegetable sticks makes a quick, energy-producing snack, so I like to keep some on hand in the fridge. To keep the guacamole from turning brown on top, put it in an airtight storage container and smooth down the surface. Gently pour in just enough cold water to cover the surface by about a quarter inch. Cover and store in the refrigerator. Pour off the water and give the guac a stir before using.

Makes between 2½ and 3 cups, depending on the size of the avocados

INGREDIENTS

3 medium-ripe avocados	¼ cup finely chopped cilantro leaves and stems
¼ cup finely chopped red onion	
1 jalapeño pepper, seeded and finely chopped	½ teaspoon kosher salt
	2 tablespoons lime juice

PREPARATION

Cut the avocados in half and remove the pits. Scoop out the flesh into a medium mixing bowl. Add the onion, jalapeño, cilantro, and salt. Mix gently to combine; leave some lumps in the avocado. Stir in the lime juice.



Hummus

I always have some convenient canned chickpeas in my pantry—they're a great source of prebiotic fiber. Hummus is a wonderful snack or quick lunch with vegetable sticks or toasted pita bread. Try it as an alternative to mayo on a sandwich. When preparing this quick version, be sure to take the tahini out of the fridge in advance and let it come to room temperature before you try to measure it out.

Makes about 2 cups

INGREDIENTS

1 15-ounce can chickpeas,
drained and rinsed
6 tablespoons tahini
6 tablespoons water
2 tablespoons lemon juice

1 large garlic clove, finely
chopped
1 teaspoon kosher salt
½ teaspoon cumin

PREPARATION

1. Put the chickpeas into a gallon-size zip-top plastic bag. Lay the bag flat on the counter and use a rolling pin to crush the chickpeas into coarse pieces. Alternatively, use a food processor to coarsely chop the chickpeas.
2. Whisk together the tahini, water, lemon juice, garlic, salt, and cumin in a large mixing bowl. Add the chickpeas and stir until all the ingredients are well combined. Store in an airtight container in the refrigerator for up to a week.



Smoothies

Post-Workout Protein Smoothie

When I have the time after exercising, I like to make myself a protein smoothie. It hydrates me, tastes great, and gives me an energy boost—plus it's a healthy reward for exercising. Once you've mastered this basic recipe (it doesn't take long), have fun with it and invent your own blends. Add or substitute ingredients such as a tablespoon or two of chia, hemp, flax or pumpkin seeds, coconut milk, unsweetened coconut flakes, or some chopped dates. For an extra boost, add some chopped raw kale or spinach. And definitely try adding a tablespoon of cocoa nibs or unsweetened cocoa powder.

Makes 1 serving

INGREDIENTS

1 cup frozen fruit or berries or 1 ripe banana	$\frac{1}{2}$ cup plain nonfat Greek yogurt
3 tablespoons peanut butter or almond butter	$\frac{1}{2}$ to 1 cup water, nut milk, oat milk, or orange juice
	1 tablespoon honey (optional)

PREPARATION

Combine everything in a blender and blend on high for 1 minute or until smooth. Add more water or an ice cube or two if the smoothie isn't blending well or is too thick for your taste.



Skin So Smoothie

This really simple, fast smoothie is great for the skin. The fruit gives you antioxidants, the yogurt gives you probiotics, and the wheat germ provides a vitamin E boost. I like this for a quick breakfast when I'm having a rushed morning.

Makes 1 serving

INGREDIENTS

1 cup plain nonfat Greek yogurt	1 tablespoon wheat germ
1 cup fresh or frozen blueberries	3 ice cubes
$\frac{1}{2}$ cup fresh or frozen mango chunks	

PREPARATION

Combine all the ingredients in a blender and process until smooth.



Desserts

Healthy Frozen Yogurt

Healthy dessert in under 10 minutes. Any kind of frozen fruit, singly or in combination, works.

Makes 4 servings

INGREDIENTS

4 cups frozen fruit

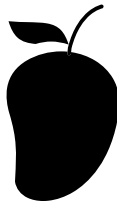
2 teaspoons vanilla extract

$\frac{1}{2}$ cup plain nonfat Greek yogurt

3 tablespoons honey

PREPARATION

1. Combine all ingredients in the bowl of a food processor and process until the mixture is smooth and creamy, about 5 minutes or less, depending on the type and size of the frozen fruit.
2. Serve immediately or store in the freezer in an airtight container. Defrost before serving.



Blueberry Cobbler

I always have a bag of blueberries in the freezer, but you can use other fresh or frozen berries to make this easy dessert.

Makes 4 to 6 servings

INGREDIENTS

Fruit base

4 cups fresh or frozen blueberries	1 teaspoon vanilla extract
2 tablespoons maple syrup	1 tablespoon cornstarch
1 tablespoon lemon juice	

Cobbler topping

1 cup old-fashioned oats (do not use instant oats)	$\frac{1}{2}$ teaspoon salt
1 cup chopped walnuts, almonds, or pecans	$\frac{1}{2}$ cup maple syrup
1 cup almond flour	$\frac{1}{3}$ cup walnut or grapeseed oil
	1 teaspoon vanilla extract

PREPARATION

1. Preheat the oven to 350°F.
2. In a large mixing bowl, combine the blueberries, maple syrup, lemon juice, vanilla, and cornstarch. Toss to combine.
3. Spoon the berry mixture into an 8x8-inch baking dish. Leave out any juices still in the bowl.
4. In another mixing bowl, combine the oats, nuts, almond flour, and salt. Stir to combine, then add maple syrup, oil, and vanilla. Stir well.
5. Spread the cobbler topping over the berries; don't worry if there are some gaps. Bake for 40 to 45 minutes, or until the topping is golden-brown. Let cool for 15 minutes before serving.

Chocolate Mousse

Quick, easy, chocolatey—my favorite homemade dessert.

Makes 4 servings

INGREDIENTS

$\frac{3}{4}$ cup milk or milk substitute	1 tablespoon honey
3 ounces dark chocolate, chopped	$\frac{1}{2}$ teaspoon vanilla extract
	2 cups plain nonfat Greek yogurt

PREPARATION

1. Combine the milk and chocolate in a small saucepan over medium heat. Stir until the chocolate melts, then stir in the honey and vanilla extract.
2. Put the yogurt in a medium mixing bowl and slowly pour in the chocolate mixture. Stir until evenly blended. Cover the bowl and chill in the refrigerator for 2 hours.
3. Serve cold, topped with berries or other fruit.

Baked Bananas

I call this dessert, but I've been known to eat it for breakfast with some low-sugar granola. The recipe below is for just one serving. To make more, just multiply the ingredients by whatever number of servings you want. For a nutrition boost, sprinkle the banana with chopped walnuts or sliced almonds before you put it into the oven.

Makes 1 serving

INGREDIENTS

1 medium-ripe banana, cut in
half lengthwise

$\frac{1}{2}$ tablespoon honey

$\frac{1}{4}$ teaspoon ground cinnamon,
nutmeg, or allspice

PREPARATION

1. Preheat the oven to 400°F.
2. Put the banana halves in a baking dish with a cover. Drizzle with the honey and sprinkle with the spice.
3. Cover the dish and bake for 12 minutes.



Fruit Compote

A simple fruit topping that's great on pancakes. I like mango and blueberries, but any combination will work. If you use fresh fruit, cut it into pieces about the size of a strawberry.

Makes 3 cups

INGREDIENTS

3 cups fresh or frozen fruit	$\frac{1}{4}$ teaspoon ground cinnamon,
3 tablespoons orange juice	nutmeg, or allspice
	$\frac{1}{4}$ teaspoon ground ginger

PREPARATION

1. Combine the fruit and the orange juice in a medium saucepan over medium heat. Cook until the mixture is bubbling, then reduce the heat to a simmer and cook, stirring often to break up the fruit, for 10 to 12 minutes.
2. Remove from the heat and stir in the spice and ginger. Serve warm.
3. Store leftovers in an airtight container in the refrigerator or freeze them in ice cube trays. Reheat before serving.

NOTES

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