THE CLEVER GUT DIET HOW TO REVOLUTIONIZE YOUR BODY FROM THE INSIDE OUT By Dr. MICHAEL MOSLEY

Contents

Clever Gut Apple Cider Vinaigrette	5
Recipes	6
To start the day	6
Pumpkin Porridge	6
Nutty Cinnamon Granola	7
Creamy Cashew & Banana Breakfast Pot	9
Chia Pot	10
Healthy Gut Green Smoothie	11
Kiwi & Chia Seed Smoothie	11
Tanya's Leaky Gut Healing Smoothie	12
Nut Milk	13
Turmeric Latte	14
Homemade Yogurt	15
Milk Kefir	17
Raspberry Chia Jam	18
Green Flaxseed Bread	19
Breakfast Bread	20
Lunchtime	21
Buckwheat Blinis	21
Cashew Nut Cheese	23
Walnut & Red Pepper Dip	23
Green Seaweed Dip	24
Gut-soothing Bone Broth	25
Creamy Cauliflower & Jerusalem Artichoke Soup	27
Happy Gut Chicken Soup	28
Carrot & Turmeric Soup	29
Green Pea Soup	30
Classic Greek Salad	30
Carrot & Beet Salad	31
Phyto Salad Bowl	32

Phyto Burst Lunchbox	35
Flaxseed, Chia & Red Pepper Crackers	37
Rainbow Hummus	39
Basic Hummus	39
Green Hummus	39
Purple Hummus	39
Red Hummus	40
Yellow Hummus	40
Dressings	41
Anti-inflammatory Turmeric Dressing	41
Cashew Nut Dressing	41
Simple Oil & Lemon Dressing	42
Lemony Vinaigrette	42
Green Vinaigrette	42
Apple Cider Vinegar Dressing	43
Hummus Dressing	43
Main Dishes	44
Asian Coleslaw with Leftover Chicken	44
Shrimp & Seaweed in Tomato Sauce with	46
Zucchini Noodles	
Veggie Burgers	47
Salmon & Tomato Burgers	48
Kashmiri Chicken Curry	49
Goan Fish Curry with Seaweed	51
Chicken Goujons	53
Harissa & Beet Salmon	54
Mackerel or Cod in Salsa Verde	55
Turkey Burgers	56
Beef Goulash	57
Caribbean Coconut & Vegetable Curry	58
Lamb & Sweet Potato Stew	60
Creamy Cashew Mushrooms	61

Baked Rainbow Ratatouille	63
Cauliflower "Rice"	65
Purple Sauerkraut	66
Treats	68
Chocolate Eggplant Brownies	68
Quick Baked Apple Slices	69
Phase 1—Remove & Repair Meal Planner	71
Phase 2—Reintroduction Meal Planner	73
Clever Gut Daily Food & Symptoms Diary	75
Foods high in resistant starch	77
Which probiotics work and for what	79

Clever Gut Apple Cider Vinaigrette

tablespoon French mustard
 garlic clove, crushed
 tablespoons apple cider vinegar
 tablespoon balsamic vinegar
 tablespoons olive oil

RECIPES

by Tanya Borowski, mBANT, IFMCP, and Dr. Clare Bailey, GP

To start the day . . .

Standard breakfasts have become very centered around grains in the form of processed cereals and toast. Grains are a source of carbohydrates that can cause flatulence and bloating. We recommend sticking to whole grains while following our Clever Gut Diet, and eating less of them in general.

Pumpkin Porridge

(serves 2)

To put a warm glow in your belly and set you up for the day, why not try our Pumpkin Porridge? Pumpkins are high in beta-carotene, a powerful antioxidant, and in vitamins A (which supports the gut lining), C, and E. They are also rich in fiber, which boosts our microbiome diversity.

12 ounces pumpkin or butternut squash, diced and cooked

1/4 cup coconut butter, or 2 tablespoons coconut oil

1 cup full-fat coconut milk

1 teaspoon vanilla bean paste or 1 teaspoon vanilla extract

Pinch of salt

½ teaspoon ground cinnamon

Handful of pomegranate seeds or blueberries, for serving

Blend all the ingredients except the fruit until you have a smooth paste. Warm the mixture gently in a pan. You may thin it with a little extra coconut milk.

Serve it warm with the pomegranate seeds.

Nutty Cinnamon Granola

(makes 10 portions)

This is one of Michael's favorites. It's a delicious combination of nuts, flaxseed, and whole grains that will keep you full for longer. It's much tastier and lower in sugar than the store-bought versions. Have it with some homemade yogurt or kefir (see page 15), and for a bit of juicy sweetness add an unpeeled diced pear.

½ cup coconut oil

½ cup honey or maple syrup (add extra 1 to 2 tablespoons if you have a sweet tooth)

2 teaspoons ground cinnamon

1 tablespoon vanilla extract

1 large egg white, whisked

1¾ cups rolled oats, rice flakes, or buckwheat flakes (or a combination of all 3)

14 ounces mixed nuts (choose from walnuts, almonds, hazelnuts, pecans, or cashews), chopped 1/3 cup ground flaxseed

1 teaspoon sea salt

Preheat the oven to 220°F. Gently heat the oil, honey, and cinnamon in a saucepan until the honey melts. Remove the pan from the heat and stir in the vanilla.

Allow the mixture to cool before mixing in the egg white.

Meanwhile, combine the oats, nuts, and flaxseed in a large bowl, then stir in the contents of the pan. Place the mixture in small clumps on a baking sheet and bake until it's golden.

This should take 1 to 1½ hours. Check it regularly and turn it once or twice. To ensure the granola is really crisp, you can then turn the oven off and leave it for a few hours or even overnight.

Allow it to cool thoroughly before storing it in an airtight container. Serve it with organic Greek yogurt and berries of your choice or a diced pear.

Creamy Cashew & Banana Breakfast Pot (serves 2)

Bananas are a prebiotic and encourage the growth of those health-giving gut bacteria.

10 ounces raw cashews

1 medium frozen banana

34 cup unsweetened almond milk

½ teaspoon ground cinnamon

2 teaspoons nut butter

1 teaspoon vanilla extract

Place the cashews in a bowl and cover them with water. Soak them overnight or for at least 6 hours, then drain them, place them in a blender or food processor, and blend them with all the other ingredients at a high speed, until you have a smooth paste. Pour the mixture into 2 dishes and place them in the fridge. Serve cold.

Tip: Keep some peeled, diced bananas in a ziplock bag in the freezer.

Chia Pot

(serves 1)

2 tablespoons chia seed

 2 3 cup dairy-free milk of your choice (e.g., coconut,

hazelnut, or almond milk)

½ teaspoon vanilla extract

½ teaspoon ground cinnamon

1 tablespoon berries (fresh or frozen)

Put the chia seed, milk, vanilla, and cinnamon in an airtight, or covered jar (about 12-ounce volume) and stir well. Add half the berries and stir again. Put the jar in the fridge, ideally overnight but for at least 30 minutes. The chia seed will have absorbed the liquid and plumped up. Serve with the remaining berries and one of these additional toppings:

- 1 to 2 tablespoons toasted coconut flakes
- 1 tablespoon ground almonds or flaxseed
- 1 to 2 tablespoons blueberries or raspberries
- 1 to 2 tablespoons whey protein powder (a great source of protein)

Healthy Gut Green Smoothie

(serves 1)

We don't like store-bought smoothies as they are usually way too sweet, but we love this homemade one. Spinach is rich in vitamins and flavonoids, which have been shown to boost beneficial bacteria in the gut, while avocado is packed with good natural fats and vitamin E.

- 2 handfuls of organic spinach leaves
- 1 cup water
- ½ avocado
- 1 medium banana
- 1 tablespoon tahini
- 1 tablespoon chopped fresh ginger (optional)

Juice of 1 lemon

Mix all the ingredients together in a blender until thick and creamy.

Kiwi & Chia Seed Smoothie

(serves 1)

Perhaps we should call this one "The Unblocker." It should certainly help move things along if you are prone to constipation.

1 kiwi
¼ medium avocado
4 tablespoons chia seed
Juice of ½ lime
1 cup water

Mix all the ingredients together in a blender until smooth.

Tanya's Leaky Gut Healing Smoothie (serves 1)

This is one that Tanya often recommends to her patients. The collagen provides extra protein, and is particularly helpful for those with a leaky gut. A 2014 study showed consuming collagen powder can improve skin elasticity, too.⁴⁴

3/4 cup unsweetened coconut or almond milk

- 1 (10-ounce) package frozen spinach, or a handful of fresh spinach leaves
- 2 ounces frozen berries (e.g., raspberries or blueberries)
- 2 tablespoons organic collagen powder (optional)
- 1 teaspoon ground cinnamon

Mix all the ingredients briefly on high speed in a blender.

Nut Milk

(makes 1 cup)

Dairy foods, with the exception of homemade yogurt (if tolerated), are best avoided if you have gut problems as the casein can trigger inflammation and irritate the gut lining, while lactose can cause bloating and diarrhea. You can buy nondairy milks such as almond, coconut, or hazelnut—or make your own, following this simple recipe. It produces a luxurious, nutritious, creamy milk, plus you know exactly what's in it.

4 ounces raw cashews

3/3 cup filtered or bottled water

Small pinch of sea salt

1/2 teaspoon vanilla bean paste, or 1/4 teaspoon vanilla extract

Soak the nuts in tap water overnight, or for at least 4 hours. Drain and rinse them. Put them in a blender with the rest of the ingredients and blend at high speed until they have broken down.

To create a smooth texture, strain the mixture into a bowl through a piece of muslin or fine sieve. Squeeze out the fluid and discard the contents of the muslin. Store the milk in an airtight container for up to 4 days. Serve it chilled or heat it gently to make a creamy hot drink.

Turmeric Latte

(serves 2)

Turmeric, like ginger, is a natural anti-inflammatory. Combined here with cardamom and ginger, it makes a warming, aromatic drink.

 ¼ inch fresh ginger, or ½ teaspoon ground
 ¾ inch fresh turmeric, or 1 teaspoon ground
 1 cup plus 2 tablespoons almond or coconut milk (from a carton not a can)
 Seeds of 2 cardamom pods
 1 teaspoon honey
 2 teaspoons coconut oil
 Pinch of ground cinnamon

Peel and grate the ginger and turmeric. Gently heat the milk in a small pan, then add the cardamom seeds, honey, and coconut oil, whisking constantly so the milk heats through and is foamy. Pour the mixture into a cup and sprinkle with the cinnamon.

Homemade Yogurt

(makes about 1 quart)

Not only does homemade yogurt usually have a higher probiotic content than store-bought versions, it's also much tastier. And if you get into a routine, it just keeps on producing.

When fermented for 24 hours, most of the lactose is removed, which means that some people who are usually intolerant to lactose may well be able to "tolerate" it. The easiest way to make your own yogurt is probably with a yogurt maker, although there are plenty of people who do it in the traditional way, keeping it in a warm place, covered, overnight. Some store it overnight in the microwave, which acts like a large thermos flask keeping it warm.

1 quart organic whole milk (or half whole milk and half light cream for a creamier texture)
2 heaping tablespoons good-quality live organic yogurt, or 2 tablespoons yogurt starter
1 quart thermos flask, or a covered bowl or a yogurt maker Digital thermometer (optional)
1 quart glass container

Make sure all your equipment and containers are meticulously clean and have been sterilized in boiling water (or on a hot cycle in the dishwasher).

If using live yogurt as a starter, it helps if it is at room temperature. The containers for storing the yogurt should also ideally be at room temperature.

Put the milk in a pan and heat it gently, stirring frequently so it doesn't burn. Take it off the heat just before it comes to a boil (when it starts to bubble at the sides). Allow the milk to cool to about 85° to 104°F—it should feel just warm to the touch. (If using cream, stir it in earlier as this will also aid the cooling-off process). Then pour a cupful of milk into a bowl and stir in the starter. Add the rest of the milk and stir again so that they are well combined.

For incubation, transfer the mixture to a yogurt maker, a dry sterilized thermos flask, or a covered bowl and let it stand on the kitchen counter for 24 hours (many yogurt makers can't be set for longer than 15 hours, so just reset again when the 15 hours are up if needed). The warmer the temperature, the faster it will set (it should never be allowed to get any warmer than 115°F).

Transfer the yogurt to clean glass containers and store them in the fridge (to stop fermentation) for up to 5 days. Keep 4 tablespoons yogurt to seed the next batch within the 5 days and just keep the production line going . . .

Tip: Use goat or sheep's milk if you are sensitive to dairy. They contain a different type of casein, which you may be able to tolerate.

Milk Kefir

(makes 2 cups)

Kefir has been an enjoyable discovery. It is a fermented milk drink with a delicate flavor, and is easy to make. As with yogurt, fermentation breaks down the lactose. Kefir culture is grown from a complex ecosystem of "grains" that look a bit like tiny, soft cauliflower florets but are in fact living communities of around forty to fifty types of bacteria and yeasts. Together they produce one of the most probiotic-rich drinks available.

1 to 2 packages (each about ½ ounce) of kefir starter culture powder, or 2 to 3 tablespoons fresh grains

1 quart organic whole milk

1 quart glass container with lid

Follow the instructions for Homemade Yogurt (page 15) for sterilizing your equipment.

If using powder, mix it into a smooth paste with a little milk in a glass measuring cup or bowl, then add this to the rest of the milk in a glass container and stir. If using grains, simply drop them into the bottom of the container, add the milk, and stir briefly. Place it in a warm spot for about 24 hours—the ideal temperature is 72° to 75°F. The kefir sets more quickly in warmer temperatures and can take up to 30 hours on a cold day. Don't stir it during the fermentation process.

It is ready when it is lightly set; you can test by scooping out a teaspoonful—it should leave a small indent in the surface. Strain it through a fine nylon sieve or muslin and place it in a covered glass container in the fridge to cool. The grains can be used again—if not using them immediately, rinse them in filtered water and freeze. In fact, if you get into the flow, you will soon have more grains than you need—give some away to create another colony!

For variations in flavor you might add a spoonful of chopped fruit, a few drops of vanilla extract, or a fruit-flavored tea bag. Kefir is delicious served with granola (page 7) and fruit.

Raspberry Chia Jam

(makes about ¾ cup)

A delicious fruity low-sugar jam which is wonderfully quick and easy to make. You can also serve it as a coulis, stirred into whole milk yogurt, or coconut-based yogurt.

- 1 to 1½ ounces pitted dates, finely diced, or 1 to 2 teaspoons maple syrup
- 4 ounces raspberries (frozen or fresh)
- 2 to 3 teaspoons chia seed (depending on how thick you like it)

Gently heat the dates in a small pan with 2 tablespoons water for about 2 minutes, stirring to form a smooth paste.

Add the raspberries and chia seed and simmer for 2 to 3 minutes. Mash the raspberries with a potato masher or the back of a spoon. The jam can be stored in an airtight container in the fridge for up to 1 week.

Green Flaxseed Bread

(makes a 2-pound loaf, 10 to 12 slices)

Flaxseed gives this bread a delicious, nutty flavor. Not only that, it is also rich in omega-3 and fiber, which your biome and your bowels will enjoy.

1/3 cup ground almonds

34 cup plus 2 tablespoons ground flaxseed

1/4 cup chia seed

1/4 cup pumpkin seeds

4 large eggs

7 ounces fresh spinach (or thawed frozen)

1/4 cup coconut oil or butter

1 teaspoon baking soda

2 tablespoons lemon juice

¼ cup water

1 teaspoon sea salt

Preheat the oven to 325°F. Line a loaf pan with parchment paper or grease the pan with coconut oil. Put all the ingredients in a food processor and blend until you have a smooth

dough. Press it into the prepared pan and bake for 45 minutes, until it's cooked through (if you pierce it with a skewer it should come out clean). This is a fairly dense bread. Let it cool, then turn it out and cut it into slices. Store it in a ziplock bag in the fridge or in the freezer. It's delicious toasted.

Breakfast Bread

(makes a 2 pound loaf, 10 to 12 slices)

The ground almonds, flaxseed, and eggs make this a highprotein, low-grain breakfast or snack. This bread is best served warm or toasted. Try it spread with a little nut butter.

- 34 cup ground almonds
- 2 tablespoons coconut flour
- 3 tablespoons ground flaxseed
- 1 teaspoon sea salt
- 1½ teaspoons baking powder
- 5 large eggs
- 2 tablespoons coconut oil
- 1 tablespoon maple syrup
- 1 tablespoon raw apple cider vinegar

Preheat the oven to 350°F. Line a loaf pan with parchment paper or grease the pan with coconut oil. Put the almonds, coconut flour, flaxseed, salt, and baking powder in a food processor and pulse until everything is combined. Then

add the rest of the ingredients and pulse again to form a smooth dough. Bake for about 40 minutes, or until it's golden and cooked through (if you pierce it with a skewer it should come out clean). Let cool, then turn it out. Store it in a ziplock bag in the fridge or in the freezer, sliced.

Lunchtime

Before a meal, to get your digestive juices going, why not have a small "gin and tonic": a glass of carbonated or still water with a tablespoon of live (raw) apple cider vinegar. Ideally the vinegar should contain "the mother," strands of proteins, enzymes, and friendly bacteria that give it a murky, cobweb-like appearance and can make it look slightly congealed).

Or enjoy a salad made with a handful of bitter greens such as arugula, dandelion leaves, frisée, or chicory and Apple Cider Vinegar Dressing (page 43), which will have a similar enzyme-stimulating effect.

Buckwheat Blinis

(makes 10 to 12 medium blinis)

Despite its name, buckwheat is not related to wheat and is gluten-free. It is also a good source of minerals and antioxidants. These blinis look like a cross between a drop scone

and a flat crumpet and make a brilliant savory or sweet brunch.

34 cup buckwheat flour or another whole grain flour 1 teaspoon baking powder Generous pinch of salt 1 large egg 2/3 cup any milk (e.g., coconut, dairy, soy, almond)

Put the flour in a mixing bowl with the baking powder and salt. Make a well in the center and add the egg and a little of the milk. Start beating the egg and milk with a fork, gradually incorporating the flour and adding more milk until you have a smooth batter. Let it stand for 20 minutes.

Lightly grease a large, flat-based frying pan or a griddle and place it over medium heat. Drop spoonfuls of the batter in the pan—you can make 3 or 4 at the same time but leave room for them to spread. Turn them over when holes appear in the surface and the top starts to firm up, 2 to 3 minutes.

Flip them over again and cook for another 1 to 2 minutes before removing them from the pan. They're delicious hot straight from the pan or you can store them in an airtight container and pop them in the toaster briefly before serving.

Tip: You could spread these with whole cream cheese or a nondairy equivalent and top them with pickled fish or smoked mackerel or salmon, a squeeze of lemon, and freshly ground black pepper.

Cashew Nut Cheese

(makes about 2 cups)

A delicious spread to try on one of our breads.

- 12 ounces raw cashews, soaked in water and drained
- ½ cup water
- 4 tablespoons nutritional yeast
- 2 tablespoons lemon juice
- 2 garlic cloves
- 1 tablespoon raw apple cider vinegar
- 1 tablespoon Dijon mustard

Sea salt and freshly ground black pepper to taste

Mix all the ingredients in a blender until you have a thick, creamy paste.

Tip: Use this "cheese" as an alternative to mayonnaise on a chopped boiled egg, or as a dip with vegetables or gluten-free crackers.

Walnut & Red Pepper Dip

(makes about 1 cup)

- 2 red bell peppers, halved and seeded
- 3 tablespoons extra-virgin olive oil
- 5 ounces walnuts, roasted

Bunch of cilantro or parsley
Salt and freshly ground black pepper to taste

Preheat the oven to 400°F. Place the bell peppers on a baking tray and drizzle the oil over them. Bake them near the top of the oven for 30 minutes, then chop them coarsely, and puree them in a blender with the remaining ingredients. Add more walnuts if you want a thicker spread. Serve it with a selection of crudités such as carrot batons, celery, cauliflower florets, or zucchini, or spread on Flaxseed, Chia & Red Pepper Crackers (page 37).

Green Seaweed Dip

(makes about 2 cups)

Seaweed is a significant part of many diets around the world, particularly in Asia, prized for its high nutritional content—it is rich in protein, fiber, and omega-3—and wonderful flavors. We are excited about finding tasty ways to incorporate more of it in our recipes.

- 1 yellow bell pepper
- 1 medium zucchini
- 1 (14-ounce) can beans or chickpeas, rinsed and drained
- 1 garlic clove, crushed
- 2 tablespoons olive oil
- 2 heaping tablespoons pesto sauce
- ½ pack nori sushi sheets (about ½ ounce), diced into ¼-inch squares

Place a wok or large pan with a lid over high heat and scorch the whole bell pepper and the zucchini for about 10 minutes, turning them occasionally. When they are charred in a few places, turn off the heat and leave them to soften in the pan with the lid on for about 5 minutes. Alternatively, char the vegetables under a hot broiler. Remove and discard the stalk, seeds, and any patches of very blackened skin. Dice the zucchini and the bell pepper. Then put them into a food processor, along with the beans, garlic, and pesto. Pulse for a minute or so, leaving a bit of texture.

Mix the nori seaweed with the vegetables, keeping aside a small handful for garnishing. Blend briefly. Pour the dip into a bowl, scatter the remaining seaweed on top, and serve it with a selection of crudités such as carrot batons, mini corn on the cob, cauliflower and/or broccoli florets, or Flaxseed, Chia & Red Pepper Crackers (page 37).

Gut-soothing Bone Broth

(serves 4 to 6)

The lining of your intestine can be damaged by all sorts of things: infections, some medications, or certain proteins. It is composed of a single layer of cells, and if the tight junctions that hold these cells together open up, you are prone to a condition called "leaky gut" or "increased intestinal permeability." Eating collagen may help. This is found in meat, gristle, skin, and bones, and boiling down bones releases the collagen into the broth.

Bone broth is hugely popular with the health and fitness crowd, even among those who don't have a leaky gut, because it also contains lots of important nutrients. It is also an ideal aid to recovery from illness.

1 medium organic chicken, or 3 pounds chicken parts (bone-in)

- 1 onion, chopped
- 3 carrots, chopped
- 2 celery stalks, chopped
- 2 to 3 zucchini, sliced
- 2 garlic cloves
- 2 tablespoons raw apple cider vinegar
- 2 tablespoons coconut oil
- 2 to 3 slices root ginger
- 1 teaspoon ground turmeric
- Sea salt and black peppercorns

Place all the ingredients in a large saucepan with just enough water to cover them. Bring the broth to a boil, then lower the heat, put the lid on, and let it simmer, ideally for 6 to 8 hours, but for at least 2 to 3 hours, adding more water as needed.

Transfer the chicken to a platter to cool. Remove all the meat from the carcass—the meat can be used for a chicken salad (see page 44).

This broth will keep in the fridge for 3 to 4 days or can be frozen for up to 1 month. It can also be sipped as a warm drink. It is especially good with a squeeze of lemon and a little sea salt.

Creamy Cauliflower & Jerusalem Artichoke Soup

(serves 4)

Cauliflower is a good source of vitamin C and contains compounds that stimulate detoxification enzymes, while Jerusalem artichokes are full of gut-friendly inulin fiber.

- 2 tablespoons olive oil
- 1 onion, finely chopped
- 3 garlic cloves, coarsely chopped
- ½ teaspoon ground turmeric, or 1 teaspoon grated fresh
- 1 large head cauliflower, cut into florets
- 5 ounces Jerusalem artichoke, scrubbed, peeled, and sliced
- 1½ cups canned full-fat coconut milk
- 2½ cups vegetable stock
- 2 teaspoons tamari sauce
- Freshly ground black pepper
- Handful of fresh cilantro leaves, chopped

In a large saucepan, heat the oil over medium heat and gently fry the onion, garlic, and turmeric for 5 minutes. Add the cauliflower and artichoke and stir well, then pour in the coconut milk, stock, and tamari. Bring it to a boil, then immediately lower the heat, and simmer for 15 minutes, or until the vegetables are tender. Season with pepper to taste. Process the soup in a blender until it's smooth. Serve with cilantro and a slice of Green Flaxseed Bread (page 19).

Happy Gut Chicken Soup

(serves 4)

- 1 white onion, chopped
- 1 small garlic clove, chopped
- 2 tablespoons olive oil
- 2 large boneless chicken thighs, diced
- 3 cups water or Gut-soothing Bone Broth (page 25)
- 1 teaspoon chopped ginger

Juice of 1 lime

- 4 medium carrots, sliced
- 1 red bell pepper, seeded and chopped
- 1 yellow bell pepper, seeded and chopped
- 1 head broccoli, chopped
- 1 teaspoon chopped fresh thyme, or ½ teaspoon dried

Sea salt and freshly ground black pepper

Handful of fresh cilantro and parsley, chopped

2 teaspoons chopped fresh chives

Gently cook the onion and garlic with the chicken in the oil in a large pan until everything is golden. Then add the chicken, broth, ginger, lime juice, carrots, bell peppers, and broccoli and simmer on low heat for 60 to 90 minutes, or until the vegetables are soft and the flavors have blended. Season generously with salt and black pepper.

Add the cilantro and chives a few minutes before serving.

Carrot & Turmeric Soup

(serves 4)

Turmeric, our anti-inflammatory friend, adds color and flavor to this delicious carrot soup.

3 tablespoons olive oil

1 white onion, chopped

Pinch of sea salt

2 teaspoons ground turmeric, or ¾ inch grated fresh

1 tablespoon chopped fresh ginger

2 garlic cloves, chopped

1 pound carrots, cut into ¾-inch chunks

1½ cups Gut-soothing Bone Broth (page 25) or bouillon

Juice of 1 lime

Freshly ground black pepper

Heat the oil in a large pan over medium heat and gently cook the onion with a large pinch of salt for 5 minutes. Add the turmeric, ginger, and garlic and cook for 1 to 2 minutes, then add the carrots and stir in the broth. Bring it to a boil, then reduce the heat and let it simmer, covered, for about 25 minutes. With a hand or immersion blender, blend the soup until there are no lumps. Add the lime juice and a little more water if needed. Season with sea salt and pepper to taste.

Green Pea Soup

(serves 4)

- 1 pound frozen peas
- 2 ripe avocados
- A few fresh mint leaves, chopped
- 2 spring onions, chopped
- 1 tablespoon tamari sauce or soy sauce

Cook the peas in boiling water for 3 to 4 minutes, drain and blend them with the rest of the ingredients. Season to taste.

Classic Greek Salad

(serves 2)

This old favorite makes the ideal nutritious salad—plenty of antioxidants, fiber, and vitamins (including C, A, and B_2) from the vegetables; calcium, protein, and fats from the cheese to keep you satiated and help you absorb the vitamins; and last but not least, the lovely bugs to feed that biome . . .

- ½ medium cucumber, seeded and cut into ¼-inch slices
- 2 large ripe tomatoes, or 4 medium, cut into wedges
- ½ small green bell pepper, seeded and finely sliced (optional)

Handful of pitted Kalamata olives
½ small red onion, finely sliced
3½ ounces good-quality feta cheese
Leaves from 1 sprig fresh oregano, finely chopped
(or a generous pinch of dried)
2 to 3 mint leaves, finely chopped
2 tablespoons extra-virgin olive oil
1 tablespoon red wine vinegar
Sea salt and freshly ground black pepper

Spread the cucumber and tomatoes around the sides of a wide bowl. Add the bell pepper, if using, followed by the olives and onion. Place the chunk of feta on top and sprinkle the herbs over it. Drizzle generously with oil (the salad should be coated, but not drowning in it) and vinegar. Finish with a pinch of fine sea salt such as Maldon and black pepper.

Tip: Greek salads are traditionally served dressed, not tossed, with the cheese in one piece on top.

Carrot & Beet Salad

(serves 4)

Not only do beets add great flavor to a dish, they are also one of the few "superfoods" that really deserve their title. They are rich in nitrates and have even been shown to lower blood pressure.

- 2 tablespoons freshly squeezed orange juice
- 2 teaspoons freshly squeezed lemon juice
- 4 to 5 tablespoons olive oil
- 2 tablespoons tamari sauce
- ¼ teaspoon sea salt
- 12 ounces carrots, grated
- 12 ounces beets, peeled and grated (it is best to wear plastic gloves for this)
- 5 ounces pumpkin seeds
- 4 ounces hazelnuts
- 1 teaspoon coriander seed
- 4 ounces feta, if using dairy

Whisk the orange and lemon juices, oil, tamari, and salt to make the dressing. Toss the carrots and beets together in a salad bowl.

Put a small pan on the stove and gently fry the pumpkin seeds and hazelnuts, turning them frequently until they're golden. Throw in the coriander seed for the last minute or so. When it is cool, scatter it over the salad. Crumble the feta, if using, over the salad.

Phyto Salad Bowl

(serves 1)

This salad will help you achieve a good balance of flavor and nutrients, particularly those all-important phytonutrients. While at least three-quarters of your bowl should be

plant-based, you should also ensure you get the required fats and proteins. We suggest you choose:

• 3 to 4 portions of colored vegetables (one of which can be substituted with fruit), such as:

1 sliced carrot

½ sliced bell pepper (red, orange, yellow)

½ sliced zucchini

5 cherry tomatoes

4 steamed asparagus spears

3 to 4 artichoke or palm hearts

½ cup sliced radishes, sugar snap peas, or mushrooms

Fruit: strawberries, unpeeled pear or apple, papaya, mango, grapes, pomegranate seeds, blueberries, or raspberries (about ½ cup)

- 1 to 2 cups of any of the following greens, such as:
 Spinach, mixed leaves, arugula, kale, broccoli, chicory, cauliflower, bok choy, sprouts, Swiss chard, cabbage
- 1 to 2 portions of protein, such as:

2 hard-boiled eggs

Meat: chicken, turkey, cold meat (about 3 ounces)

Oily fish: tuna, salmon, mackerel, sardines; or white fish such as trout, cod, haddock (about 4 ounces)

Dairy: hard cheese, halloumi, goat cheese, feta (1 to 2 ounces)

Plant protein: a generous handful of lentils, beans (reduce both of these if you suffer from IBS or bloating), nuts, seeds, tofu, tempeh, hummus

• 2 to 3 portions of health-boosting fats, such as:

½ small avocado

6 olives

1 to 2 tablespoons dressing made with extra-virgin olive oil, sesame, walnut, or rapeseed oilToasted seeds or nuts: pumpkin, pine nuts, sunflower, hazelnuts, cashews

• 1 to 2 portions of legumes, squash, or whole grains (optional):

¼ cup cooked quinoa, brown rice, whole barley, or wild red rice

1 slice whole grain bread: millet, spelt, or rye (or gluten-free as required)

¼ cup cooked beans, lentils, or chickpeas ½ cup diced cooked pumpkin or butternut squash

• And for extra flavor:

Fermented vegetables, such as sauerkraut or kimchi Pickled vegetables, such as cornichons, jalapeño peppers Seaweed: nori cut into strips, kelp/dulse flakes Fresh herbs: cilantro, mint, parsley, basil, etc.

Get those phytonutrients

Phytonutrients are the natural components of plants that keep them healthy by protecting them from disease and damage. Their antioxidant and anti-inflammatory properties also provide significant health benefits for us. Eating them helps preserve the microbial balance in the gut, keeping it in good working order.

Phytonutrients in fruit and vegetables come in a range of colors—green, yellow-orange, red, bluepurple, and white. The key is to eat a wide variety of colors, aiming for two or more of each per day.

Phyto Burst Lunchbox

(serves 1)

- 1. Legumes, whole grains, or squash (optional):
 - 4 ounces butternut squash or pumpkin, cubed and roasted with a drizzle of olive oil
- 2. Greens:
 - 1 cup spinach leaves
 - 4 to 5 broccoli florets, steamed

3. Colors:

½ cup finely sliced red cabbage

- 1 small-medium carrot, grated or finely sliced
- 1 small red bell pepper, seeded and sliced
- 4 canned artichoke hearts, drained (they taste even better scorched on a hot griddle)

4. Proteins:

- 2 hard-boiled eggs, coarsely chopped
- 2 tablespoons mixed seeds, toasted

5. Health-boosting fats:

½ avocado, sliced

Dressing, e.g., Apple Cider Vinegar Dressing
(page 43)

And for extra flavor:

Handful of fresh cilantro, chopped Sea salt and freshly ground black pepper to taste

In a large bowl, or a Tupperware container if you're taking it to work, mix the cooled pumpkin, if using, with the spinach, broccoli, cabbage, carrot, bell pepper, and artichoke hearts. Add the eggs, then scatter the seeds, avocado, and cilantro leaves on top. Season with salt and pepper. Make your dressing and put it in a small screw-top jar if you're taking it to work, so you can dress your salad at lunchtime.

Flaxseed, Chia & Red Pepper Crackers

(makes about 40)

These tasty crackers go well with cheese or a dip, such as Green Seaweed Dip (page 24) or hummus (see page 39). The only trouble is they are very addictive.

- 1 medium red bell pepper
- 1 teaspoon olive oil
- 34 cup plus 2 tablespoons ground flaxseed
- 1/4 cup ground almonds
- 1/4 cup chia seed
- 2 teaspoons tomato purée
- Zest and juice of ½ lemon
- 1 tablespoon tamari sauce or soy sauce
- 1 teaspoon vegetable bouillon, such as Marigold, or ½ cube organic vegetable stock

Preheat the oven to 300°F. Lightly coat the bell pepper with the oil and roast it for 20 minutes, or until it's soft. Take it out of the oven, and when it has cooled, cut it in half, remove the seeds, and dice it.

Meanwhile, blend the rest of the ingredients in a food processor with ¼ cup water (or put them in a bowl and use a hand or immersion blender).

Add the bell pepper and pulse again. If the dough is too

dry and crumbly, add ½ to 1 tablespoon water, a little at a time.

Roll the dough as thin as you can without breaking it, to about ½ inch thick. This is easiest done between 2 sheets of parchment paper greased with coconut oil or butter. Remove the top layer of paper and place the dough on a baking sheet.

Lightly score the dough into squares and then bake for 20 to 30 minutes. Check it frequently toward the end to catch it as it starts to turn golden (you don't want it to get too brown).

At this point, remove it from the oven, turn it over and bake it for about 20 minutes or so to crisp up, checking regularly so it doesn't burn. Break it into squares, allow these to cool, and store them in a sealed container.

Tip: If you have one, use a silicone-based baking mat instead of the bottom layer of parchment paper as silicone tends to be more nonstick. If the crackers need crisping up before eating, simply pop them in the oven at 250°F for 5 minutes.

Rainbow Hummus

Basic Hummus (serves about 4)

1 cup canned chickpeas, rinsed and drained

Juice of ½ to 1 lemon

1 tablespoon tahini

1 teaspoon sea salt

1 garlic clove, finely chopped

5 tablespoons olive oil

Blend all the ingredients in a food processor or with a hand blender until you have a creamy paste.

Now, add some color . . .

Green Hummus (serves about 6)

Blend an extra garlic clove and a generous ½ cup cooked peas with the hummus.

Purple Hummus (serves about 6)

Blend 2 peeled, chopped roasted beets, and a few mint leaves with the hummus.

Red Hummus (serves about 6)

1 large red bell pepper, halved and seeded Pinch of red pepper flakes (optional)

Place the red bell pepper under a hot broiler for 15 to 20 minutes, turning several times, until the skin is slightly charred in places and the flesh has softened. Coarsely chop it and blend it with the hummus, along with the red pepper flakes, if using.

Yellow Hummus (serves about 6)

- 1 small head cauliflower
- 1 tablespoon olive or coconut oil
- 1 extra garlic clove
- 2 teaspoons ground turmeric

Preheat the oven to 325°F. Remove the leaves from the cauliflower. Chop it into ¾- to 1½-inch pieces and toss them in the oil, garlic, and turmeric. Spread it out on a baking pan and bake for 15 to 20 minutes, or until it's soft and just turning golden, but not charred. Blend it with the hummus.

Dressings (1 to 2 tablespoons per serving)

Be generous with the oil in your dressings, not least because it will make salad taste better. Oil increases the absorption of some nutrients while slowing the absorption of starchy carbohydrates and sugars, helping you feel full for longer.

Anti-inflammatory Turmeric Dressing

4 tablespoons extra-virgin olive oil

Juice and zest of 2 lemons

1/4 avocado

1 garlic clove, minced

1 tablespoon grated fresh turmeric, or 1 teaspoon of ground

1 teaspoon honey

Pinch of sea salt, or to taste

Blend all the ingredients in a blender. Add more avocado for a thicker consistency.

Cashew Nut Dressing

1 tablespoon Cashew Nut Cheese (page 23)

2 tablespoons raw apple cider vinegar

Beat the ingredients in a bowl until blended.

Simple Oil & Lemon Dressing

¾ cup extra-virgin olive oil
¼ cup lemon juice
½ teaspoon honey or maple syrup
½ teaspoon cayenne pepper, or ½ red chile, chopped (optional)

Shake all the ingredients in a lidded jar.

Lemony Vinaigrette

Juice of ½ lemon

Zest of 1 lemon

- 1 tablespoon raw apple cider vinegar
- 1 teaspoon Dijon mustard
- 1 tablespoon finely chopped preserved lemon
- 5 tablespoons extra-virgin olive oil

Blend all the ingredients, except for the oil, in a blender. Pour in the oil slowly to the desired consistency.

Green Vinaigrette

1 teaspoon capers, rinsed Small handful of fresh parsley Small handful of fresh basil
Small handful of fresh mint
1 tablespoon chopped fresh chives
1 garlic clove, chopped
1½ tablespoons raw apple cider vinegar
5 tablespoons extra-virgin olive oil

Blend all the ingredients in a blender.

Apple Cider Vinegar Dressing

¾ cup extra-virgin olive oil
¼ cup raw apple cider vinegar
1 tablespoon lemon juice
½ teaspoon honey or maple syrup
1 garlic clove, finely chopped

Shake all the ingredients in a lidded jar.

Hummus Dressing

2 tablespoons hummus
2 to 4 tablespoons raw apple cider vinegar
2 tablespoons nutritional yeast
Squeeze of lime
5 tablespoons extra-virgin olive oil
Salt and freshly ground black pepper

Shake all the ingredients in a lidded jar.

Main dishes

Asian Coleslaw with Leftover Chicken (serves 4)

This brightly colored dish includes lots of gut-friendly ingredients. You can use the chicken left over from the Gut-soothing Bone Broth to make it (see page 25).

If cooking the chicken from scratch:

- 3 medium bone-in, skin-on chicken breasts
- 1 medium carrot, halved crosswise
- 1 medium bunch celery, halved crosswise
- 3 sprigs flat-leaf parsley
- 2 sprigs fresh thyme
- 2 fresh bay leaves
- ½ teaspoon whole black peppercorns
- 1 teaspoon coarse salt
- 4 medium carrots
- 1 small head white cabbage
- ½ small head red cabbage
- 1 mango, cut into slices
- Couple handfuls leftover cooked chicken
- Cilantro leaves
- 1 lime, quartered

For the dressing:

- 2 tablespoons tamari sauce
- 1 tablespoon honey
- 1 garlic clove, minced
- Thumb-size piece of root ginger, finely chopped
- 2 tablespoons rice vinegar
- 2 tablespoons sesame oil
- 2 tablespoons olive oil

If cooking the chicken from scratch, put the chicken breasts in a saucepan so that they fit snugly, and cover them with ¾ inch of water. Add the vegetables and herbs. Bring to a boil, then reduce the heat and simmer for 20 to 25 minutes, skimming foam from the surface as the chicken poaches. Remove the chicken from the pan and allow it to cool, then tear it into strips. Strain the stock and reserve it to use elsewhere.

To assemble the salad, cut the carrots into fine strips with a vegetable peeler or grate them quite thickly into a large bowl. Discard the outer leaves and the cores from the cabbages and shred the leaves as finely as you can. Add them to the carrots, then mix in the mango and the cooked chicken. Make the dressing by whisking all the ingredients in a bowl. Pour it over the salad and toss everything together. Serve it with fresh cilantro leaves and a squeeze of lime.

Tip: Put the dressing in a small screw-top jar if you are taking it to work so you can dress your salad at lunchtime.

Shrimp & Seaweed in Tomato Sauce with Zucchini Noodles

(serves 4)

Welcome to the wonderful world of seaweed. Rich in omega-3 and fiber, nori is easy to use and great with shrimp.

- 1 medium onion, finely chopped
- 2 garlic cloves, chopped
- 3 tablespoons olive oil
- 2 ounces salted anchovies in oil, chopped
- 1 teaspoon dried thyme, or 1 tablespoon chopped fresh if available
- 2 (14-ounce) cans chopped tomatoes
- 12 ounces frozen shrimp, thawed
- 4 large zucchini, spiral sliced (if you don't have a slicer, you can buy zucchini noodles)

½ ounce nori sushi sheets, cut into ¼-inch squares

Gently cook the onion and garlic in 2 tablespoons of the oil over low heat for 5 to 7 minutes. Add the anchovies and thyme and stir, so they form a paste with the onions. Then add the tomatoes and simmer for another 10 minutes. Stir in the shrimp and cook them for another 5 minutes.

Bring a large pot of water to a boil so that when the sauce is ready you can quickly steam the zucchini (it will only take 1 to 2 minutes, or 1 minute if you boil it). It should be all dente and not soggy! Drain it well and drizzle

the remaining oil over it. Mix the seaweed into the sauce and serve it over the zucchini noodles.

Veggie Burgers

(serves 4)

Legumes, such as chickpeas and butter beans, are an important part of the Mediterranean diet and here you can enjoy them in the form of a tasty veggie burger, bursting with fiber and goodness.

- 1 onion, finely chopped
- 2 carrots, grated
- 2 tablespoons olive oil
- 1 teaspoon ground coriander
- 1 teaspoon curry powder
- 1 teaspoon cumin seed
- 1 (14-ounce) can chickpeas or butter beans, rinsed and drained
- 1 large egg, whisked, or 3 tablespoons coconut milk

Handful of fresh cilantro, chopped

Grated zest and juice of 1 lime

1 heaping tablespoon mixed seeds (e.g., sunflower, sesame, and pumpkin)

Whole grain gluten-free flour (e.g., buckwheat) for dusting

Gently cook the onion and carrots in 1 tablespoon of the oil for 5 to 7 minutes and then stir in the coriander, curry

powder, and cumin seed and continue to cook gently for a few more minutes. Using a food processor or a hand blender, briefly pulse the onion mixture with the chickpeas and the egg so they are well combined but still have some texture.

Mix in the cilantro, zest, lime juice, and seeds. Season the mixture generously with salt and pepper. Shape it into 8 medium patties, dusting your hands with flour first so that they don't stick. If you have time, leave the patties in the fridge for about 20 minutes to firm up.

When you are ready to eat, heat the remaining 1 table-spoon oil in a pan and gently cook the burgers for 10 to 12 minutes, turning them occasionally, until they are golden brown.

These are delicious with a big salad of mixed leaves, cilantro, cucumber slices, and avocado served with Lemony Vinaignette (page 42).

Salmon & Tomato Burgers

(serves 4)

6 cherry tomatoes or grape tomatoes ½ red chile, seeded and chopped 1¾ inch fresh ginger, chopped Bunch of fresh cilantro 2 teaspoons capers, rinsed Zest and juice of 1 lemon 4 organic salmon fillets, skin removed

1 tablespoon whole grain gluten-free flour (e.g., buckwheat), plus more for dusting 2 tablespoons olive oil

Using the lowest setting on your hand blender or food processor so that you keep some texture, briefly mix the tomatoes with the chile, ginger, cilantro, capers, lemon zest, and half the lemon juice.

Dice the salmon and stir it into the mixture, then pulse again, but only very briefly so that the salmon is just flaked, not mushy. Add 1 tablespoon flour to bind the mixture. Shape it into 8 smallish patties, dusting your hands with flour first so that they don't stick. Place the patties on a plate, cover them with plastic wrap, and leave them in the fridge to firm up for 20 minutes.

Heat the oil in a large, flat-based pan. Brown the patties on both sides, then reduce the heat and fry them gently for 8 to 10 minutes, or until they're cooked through.

You might serve them with a large salad or greens, and a couple of spoonfuls of cooked quinoa.

Kashmiri Chicken Curry

(serves 4)

The dark chicken thigh meat is higher in both vitamins A and D (essential for your gut health and immune function) than the white meat.

- 1 tablespoon coconut oil
- 1 pound skinless, bone-in chicken thighs
- 1 large onion, sliced
- 2 garlic cloves, finely chopped
- 1 green chile, thinly sliced
- 34 inch fresh ginger, grated
- 1 teaspoon ground coriander, or 6 to 7 seed pods
- 1 teaspoon ground cardamom
- 1 teaspoon ground turmeric
- 4 ounces flaked almonds
- ½ cup chicken stock or bouillon
- 1 cup full-fat Greek yogurt
- Bunch of fresh cilantro, chopped
- Sea salt and freshly ground black pepper

Heat the oil in a large saucepan and brown the chicken pieces. Transfer them to a plate and set them aside. Gently cook the onion, garlic, chile, and ginger in the same pan for 5 to 7 minutes, or until they start to soften. Add the spices and cook for another 5 minutes, then add the almonds and the chicken. Pour in the stock and the yogurt and stir well. Season with salt and black pepper to taste.

Cover the pan with a lid and simmer for 40 minutes over a gentle heat, stirring occasionally and adding more water if needed. Alternatively, cook the curry in a casserole in an oven preheated to 300°F. Stir in the cilantro before serving.

This curry goes well with brown basmati rice or Cauliflower "Rice" (page 65) and steamed greens.

Goan Fish Curry with Seaweed

(serves 4)

This aromatic curry is packed with health-boosting nutrients, including seaweed. Cod is rich in selenium, iodine, and choline, while turmeric, garlic, and ginger are known for their antimicrobial properties—Indians have been using them for centuries to reduce the risk of gut infections.

- 2 tablespoons coconut oil
- 1 teaspoon mustard seeds
- 2 teaspoons ground coriander
- 1 teaspoon ground cumin
- ½ teaspoon turmeric
- ½ teaspoon garam masala
- 1 medium onion, coarsely chopped
- 34 inch fresh ginger, coarsely chopped
- 6 garlic cloves, coarsely chopped
- 1 mild or medium red chile, seeded and chopped
- 1 tablespoon raw apple cider vinegar
- 1½ cups full-fat coconut milk
- 1 large tomato, finely diced
- 1 pound firm white fish (e.g., cod, pollock, haddock, or hake), cut into large chunks
- ½ ounce nori sushi sheets
- Handful of fresh cilantro, plus more for garnish

For a vegetarian option:

10 ounces sweet potato or butternut squash, peeled, cut into chunks, and cooked

10 ounces canned chickpeas, rinsed and drained

Heat the oil in a large saucepan and fry the spices for 1 to 2 minutes. Blend the onion, ginger, garlic, and chile with the vinegar to make a paste. Add the paste to the pan and cook for 2 minutes, until you see the oil separate. Add the coconut milk and the tomato and bring to a boil.

Add the fish and simmer until it is cooked through, 10 to 12 minutes. If doing the veggie option, add the sweet potato and chickpeas and gently heat them through for a few minutes. Chop a 1½-inch strip off the pack of nori seaweed, then cut the strip into ½-inch-wide (very thin) pieces and stir them into the curry.

For a fuller seaweed taste, add another, larger strip, 1 to 1½ inches wide. Check the seasoning—it may be salty enough with the seaweed.

Finally, stir in the cilantro, saving a few leaves for garnish.

Serve with Cauliflower "Rice" (page 65) or a couple of spoonfuls of brown basmati rice and a green vegetable.

Chicken Goujons

(serves 4)

You will be glad to hear that these taste nothing like the sad little nuggets you buy at takeout restaurants. The browner meat of the chicken thighs is juicier and more flavorsome than the breast. It also contains more nutrients.

- 4 boneless chicken thighs
- 1 teaspoon dried oregano
- 1 teaspoon garlic powder
- 1 teaspoon onion powder
- ½ teaspoon sea salt
- ½ cup ground almonds
- 1 large egg, beaten
- 2 tablespoons olive oil or coconut oil

Cut the chicken into 3/4-inch-wide strips. In a small bowl, combine the oregano, garlic powder, onion powder, salt, and almonds. Dip the chicken pieces in the egg, then coat them evenly with the spice mixture.

Heat the oil in a large pan and fry the chicken pieces, turning them occasionally until they're golden and cooked through. Serve them with some homemade hummus (page 39), sliced avocado, and a large green salad.

Harissa & Beet Salmon

(serves 2)

Beets and salmon work surprisingly well together. You will find za'atar and harissa paste in most big supermarkets.

2 organic salmon fillets

1 tablespoon za'atar

Sea salt and freshly ground black pepper

8 ounces beets

2 medium sweet potatoes

1 fennel bulb

1 teaspoon ground cumin

4 tablespoons olive oil

1 carrot

Juice of 1 lime

2 tablespoons harissa paste

1 tablespoon sliced or chopped almonds, toasted

Preheat the oven to 325°F. Rub the salmon with the za'atar, a pinch of salt, and a grind of pepper and put it aside.

Peel the beets, halve or quarter them if large, and cut them into very thin slices. Peel the sweet potatoes, quarter them lengthwise, and dice them into ¾-inch chunks. Trim and quarter the fennel bulb and put it in a medium to large baking dish, along with the beets and sweet potatoes. Scatter the cumin over it, season with salt and pepper, and drizzle 1 tablespoon of the oil over the surface. Place the dish

on the middle rack of the oven for around 25 minutes, or until everything is soft, stirring once or twice.

Meanwhile, grate the carrot into a bowl and mix it with half the lime juice. In another bowl, whisk 2 tablespoons of the oil, the harissa, the rest of the lime juice, and a pinch of salt. When the vegetables are ready, remove them from the oven, pour the dressing over them, add the carrot and toss everything together. Place a frying pan over medium heat and fry the salmon in the remaining 1 tablespoon oil for 3 minutes, skin side down. Then flip them over and cook them on the other 3 sides for a minute each.

Serve the salmon on top of the baked vegetables, with the almonds scattered over it.

Mackerel or Cod in Salsa Verde

(serves 2)

Oily mackerel is the perfect foil for this feisty-flavored sauce—and a favorite of Michael's. It's also a great source of omega-3 and vitamins B_{12} and D.

2 mackerel or cod fillets Green Vinaigrette (page 42)

Preheat the oven to 350°F. Place the fish in a baking dish lined with parchment paper, rub a good tablespoonful of the vinaigrette over it, and bake for 20 minutes.

Serve with more of the vinaigrette, some roasted veggies, and seasonal greens.

Turkey Burgers

(serves 4)

Turkey is a high-quality protein, which helps you feel full for longer. Frozen spinach is just as nutritious as fresh.

- 1 onion, chopped
- 2 garlic cloves, crushed
- 2 teaspoons dried oregano
- 8 large basil leaves
- 3 handfuls of baby spinach
- Zest of 1 lemon
- ½ teaspoon sea salt
- Freshly ground black pepper
- 3 tablespoons extra-virgin olive oil
- 1 pound ground turkey

Mix the onion, garlic, oregano, basil, spinach, lemon zest, salt, and pepper in a food processor with 1 tablespoon of the oil, just briefly to retain some texture. Place the mixture in a large bowl and combine it with the ground turkey, using either your hands or a rubber spatula. Shape the mixture into 8 patties and pop them in the fridge for at least 20 minutes to firm up. Place a griddle or a frying pan

over medium-high heat and fry the patties in the remaining 2 tablespoons oil until they've browned—they'll need approximately 5 minutes on each side. Serve them with a large salad, some hummus (page 39), and grilled zucchini.

Beef Goulash

(serves 4)

Like all red meats, beef is loaded with iron, in which many people, particularly women, are chronically deficient. It's a high-quality protein and contains all eight essential amino acids. Do buy good-quality grass-fed if you can.

- 4 tablespoons olive oil
- 1 large white onion, chopped
- 2 large carrots, cut into small sticks
- 1 large green bell pepper, seeded and sliced
- 3 garlic cloves, crushed
- 1 pound braising beef (such as top round or chuck), diced
- 1 tablespoon paprika
- 3 tablespoons tomato purée
- 3 bay leaves
- 1½ cups Gut-soothing Bone Broth (page 25) or organic beef stock
- 1 (14-ounce) can diced tomatoes
- 1 tablespoon raw apple cider vinegar

Preheat the oven to 325°F. Heat 2 tablespoons of the oil in a large casserole with a tight-fitting lid and fry the onions gently for 5 to 7 minutes. Add the carrots, bell pepper, and garlic and cook for few more minutes.

Place the remaining 2 tablespoons oil in another pan over high heat and brown the meat on all sides. Season it and add it to the vegetables in the casserole, along with the paprika, tomato puree, and bay leaves. Pour the broth into the pan you used for the meat and stir for a minute or so, scraping the bottom, to incorporate all the juices from the meat, then add it to the casserole, along with the tomatoes and vinegar. Bring the goulash to a simmer, then cover it and place it in the middle of the oven for $2\frac{1}{2}$ to 3 hours, taking it out occasionally to give it a stir, and adding more water if it is drying out. Remove and discard the bay leaves.

Serve it by itself with a dollop of full-fat organic Greek yogurt or a nondairy equivalent, or with a generous serving of green vegetables and a few reheated new potatoes (as these contain some resistant starch).

Caribbean Coconut & Vegetable Curry (serves 6)

A colorful and filling vegetarian dish bursting with flavor. It looks like a lot of ingredients, but they are easy to put together and you just stick it in the oven. Adding black pepper significantly enhances the benefits of turmeric.

- 4 tablespoons coconut oil
- 1 large onion, diced
- 1 teaspoon each of ground coriander, cumin, and turmeric
- ½ teaspoon ground cinnamon, or 1 cinnamon stick
- 2 garlic cloves, chopped
- 1¾ to 2 inch fresh ginger, finely chopped
- 1 chile, seeded and finely chopped
- 1¾ cups canned full-fat coconut milk
- ²/₃ cup vegetable stock
- 2 limes: 1 for juice and 1 cut in wedges
- 4 to 5 large pitted dates, chopped (or 2 teaspoons maple syrup)
- 14 ounces butternut squash, seeded and diced into 1-inch pieces
- 2 red bell peppers, seeded and cut into strips
- 1 (14-ounce) can black-eyed peas, rinsed and drained (optional)
- 10 ounces cherry tomatoes
- 7 ounces kale, chopped and thick stalks removed
- Sea salt and freshly ground black pepper
- Bunch of fresh cilantro, chopped
- 4 ounces cashews

Preheat the oven to 350°F. In a large casserole with a tight-fitting lid, heat the oil and fry the onion over medium heat for 5 to 7 minutes, or until it's golden. Then add the coriander, cumin, turmeric, cinnamon, garlic, ginger, and chile and fry them for 2 to 3 minutes. Next pour in the coconut milk, stock, and lime juice, along with the dates, butternut

squash, bell peppers, black-eyed peas, and tomatoes. Cover the casserole and put it in the oven.

After 20 to 25 minutes, remove the casserole from the oven and stir in the kale. Return it to the oven for a few more minutes until the kale is cooked. Season with salt and plenty of black pepper. Stir in some of the cilantro and scatter the rest on top along with a sprinkling of cashews, and serve with the lime wedges.

Tip: For extra flavor, use whole spice seeds and grind them in a mortar and pestle before cooking. For convenience, you can buy chopped butternut squash in the market. Skip the black-eyed peas if you're avoiding legumes.

Lamb & Sweet Potato Stew

(serves 5 to 6)

Lamb is a succulent outdoor-reared meat, and makes a great stew. Slow-cooked food tends to be easier to digest.

1¾ pounds stewing lamb, cubed

½ teaspoon each of ground cinnamon, nutmeg, cloves, and ginger, or 2 teaspoons mixed spice

- 3 tablespoons olive oil
- 2 large red onions, sliced
- 4 bacon strips
- 3 bay leaves

2 cups Gut-soothing Bone Broth (page 25) or organic beef stock

6 celery stalks, diced into \(\frac{1}{4} \)- to \(\frac{3}{4} \)-inch pieces

4 medium sweet potatoes, diced

Preheat the oven to 325°F. Place the lamb in a bowl and toss it with the spices and some seasoning. Marinate overnight or at least for a couple of hours.

Put the oil in a large casserole with a tight-fitting lid and sauté the onions for 5 to 7 minutes, or until they start to turn golden. In a nonstick saucepan, sear the meat over high heat, then pour it into the casserole with any juices.

Add the bacon, bay leaves, and broth. Bring the stew to a simmer, then place it in the oven for 2 to 3 hours, check occasionally and add more water if it starts to dry out.

Halfway through the cooking time, add the celery and sweet potatoes. Remove and discard the bay leaves. Serve the stew with quinoa and an enzyme-stimulating green salad (see page 21).

Creamy Cashew Mushrooms

(serves 2)

Mushrooms are an underrated food source. They are high in fiber, rich in B vitamins, selenium, and copper, and also very low in calories. Leaving them out in the sun for an hour or two will significantly boost their vitamin D levels. 1 tablespoon coconut oil or butter

1 large onion, diced

1 large garlic clove, crushed

12 ounces chestnut or mixed exotic mushrooms, sliced

½ teaspoon each of red pepper flakes, dried thyme, crushed pink peppercorns, and paprika

1 to 1½ ounces cashews

½ mushroom stock cube, or 1 vegetable stock cube

²/₃ cup coconut cream

Juice of ½ lemon

Sea salt and freshly ground black pepper

Small bunch of fresh parsley, chopped, for garnish

In a medium skillet, heat the oil over medium heat and gently cook the onion for 5 to 7 minutes, then add the garlic, mushrooms, red pepper flakes, thyme, peppercorns, and paprika.

Add the cashews and cook for a few more minutes. Crumble in the stock cube, then stir in the coconut cream and lemon juice. Season with salt and a generous amount of black pepper. Simmer for a couple of minutes until everything melds together into a delicious, aromatic stew. Garnish with parsley.

Serve with sliced spring greens or zucchini. If you're hungry, add 1 to 2 tablespoons cooked brown basmati rice per person. Ideally the rice should be cooked, cooled for 12 hours, and reheated to boost resistant starch.

Baked Rainbow Ratatouille

(serves 4)

This rainbow-colored ratatouille is bursting with a whole range of phytonutrients.

For the tomato sauce:

- 2 tablespoons olive oil
- 1 medium onion, sliced
- 2 garlic cloves, chopped

Bunch of fresh basil leaves, chopped

- 1 tablespoon chopped fresh oregano leaves, or 1 teaspoon dried
- 6 medium tomatoes, chopped
- 1 (14-ounce) can chopped organic tomatoes
- 1 tablespoon balsamic vinegar

Sea salt and freshly ground black pepper

- 1 cup tomato sauce
- 4 beets
- 4 sweet potatoes
- 3 red onions
- 2 zucchini
- 1 fennel bulb
- 1 small pumpkin, or ½ butternut squash, seeded and quartered
- 2 yellow bell peppers
- 1 teaspoon sea salt

Freshly ground black pepper 2 tablespoons olive oil

To make the tomato sauce, heat the oil in a saucepan over medium heat and fry the onion gently for 6 to 7 minutes until it's soft and golden. Stir in the garlic, basil, and oregano, followed by the fresh and canned tomatoes and vinegar. Season the sauce with a pinch of salt and black pepper and let it simmer for 15 to 20 minutes. Blend it briefly and set it aside (it will keep in the fridge for about 5 days).

Preheat the oven to 375°F. Liberally cover the bottom of a large baking dish with the homemade tomato sauce (you only need about half of it for this recipe). Cut all the vegetables into ¼-inch slices, except the zucchini and bell peppers, which need to be thicker (more like ¾ inch). Starting from the outer edge of the dish, arrange the vegetables by color: slices of beet, then sweet potato, onion, zucchini, and so on until you fill it. Season with the salt and black pepper and drizzle the oil over the surface. Bake for 30 to 40 minutes.

This works well with some steamed kale or a large green salad and avocado, dressed with Green Vinaigrette (page 42).

Cauliflower "Rice"

(serves 2)

This is a low-carb alternative to rice, with far more nutrients. It's a great way of getting more cauliflower into your diet.

½ head cauliflower
2 tablespoons pine nuts
½ teaspoon sea salt
Freshly ground black pepper
Juice of ½ lemon
2 teaspoons tahini
½ teaspoon cumin seed
½ teaspoon ground turmeric
1½ teaspoons olive oil

Preheat the oven to 400°F. Either grate the cauliflower or cut it into florets and pulse it in a food processor until it resembles grains of rice. Toss it in a bowl with the rest of the ingredients and then spread it out in a thin, even layer in a baking pan. Roast for 10 to 12 minutes, turning it halfway through—this dries the "rice" out, giving it a fluffy texture.

Purple Sauerkraut

(makes about 2 cups)

Sauerkraut is one of the easiest fermented foods to make and is packed full of probiotic bacteria.

7 ounces beets, grated (use carrots if you don't like beets)

12 ounces red cabbage, very finely sliced

½ small apple, peeled, cored, and finely diced

½ teaspoon caraway seeds

1 teaspoon fennel seeds

1 teaspoon coriander seeds

2 teaspoons sea salt

Wear rubber gloves to avoid staining your hands red. Put the beets in a large bowl along with the cabbage and apple. Add the seeds and salt and massage them well into the vegetables until they start to exude water. Firmly crush the vegetables with your hands or a blunt object like a pestle or the end of a rolling pin.

Pack the mixture into a sterilized resealable 2-cup glass jar, leaving about ³/₄-inch headspace to allow the mixture to bubble and fizz—remember it's alive!

You need to push the vegetables down hard so that they are totally submerged in their juices. You could insert a weight to hold them down (a boiled beach pebble works well, or a chunk of cabbage stalk).

Leave the sauerkraut at room temperature for up to

3 weeks, but for at least 3 days. The longer you leave it to ferment, the more sour and distinctive its flavor.

Check and taste it regularly. Open the jar daily for the first 2 to 3 days to release the carbon dioxide, and keep checking that the vegetables are fully submerged in the brine. Continue to check your ferment regularly and push the contents below the surface of the brine if needed. If you find it's drying out, add ½ teaspoon salt to ½ cup filtered water, and use this to top it off.

Don't be alarmed if yeasts form on the surface of the sauerkraut; you can scrape these off. When you are ready to eat it, remove any discolored vegetables from the top. You can keep it in the fridge for several months.

Tip: It is important to use filtered water because most of the chlorine will have been removed—chlorine kills the bacteria needed for fermentation.

Treats

Chocolate Eggplant Brownies

(makes 12 small squares)

Strange as it may sound, the eggplant works brilliantly with the dark, flavonoid-rich chocolate. Truly yummy.

1 medium eggplant (about 7 ounces), peeled and diced

5 ounces dark chocolate (minimum 70% cocoa solids), broken into pieces

1/4 cup coconut oil

2 ounces soft pitted dates, diced

½ teaspoon salt

3 large eggs, beaten

1 teaspoon baking powder

3½ ounces ground almonds

Preheat the oven to 325°F. Line a medium baking pan with parchment paper. Steam the eggplant for 15 minutes until it's soft (or microwave it in less time). Put it in a medium mixing bowl and stir in the chocolate and oil. The warm eggplant will melt the chocolate and oil. Add the dates and salt. Using a hand blender or a food processor, mix the batter until it's smooth. By now it should be cool enough

to add the eggs and baking powder. Mix again for another minute or so and then mix in the almonds. Spread the mixture in the pan and bake for about 20 minutes. It is cooked when a knife inserted into the center comes out clean.

Serve the brownies with Raspberry Chia Jam (page 18) and/or full-fat organic Greek yogurt.

Tip: Alternatively, to make cupcakes, divide the mixture among a 12-well muffin pan lined with cupcake liners and bake for 15 to 20 minutes.

Quick Baked Apple Slices

(serves 2)

A quick, nutritious go-to dessert which takes a few minutes to prepare—it goes in the oven just before you start your meal and is ready in 20 minutes.

- 3 large sweet eating apples
- 1 tablespoon coconut oil, melted, plus more for greasing
- 1 heaping teaspoon ground cinnamon
- 2 tablespoons pistachios

Preheat the oven to 325°F. Lightly grease the bottom of a baking dish with oil. Core the apples, quarter them, and cut each quarter into 2 to 3 wedges, leaving the skin on. Place the wedges in a slightly overlapping layer in the bak-

ing dish, drizzle the oil over them, and sprinkle the cinnamon on top.

Bake the apples for 10 minutes, then scatter the pistachios over them and bake for another 5 to 10 minutes. They are ready when they start to brown around the edges. Serve them as they are, or with a generous dollop of full-fat organic Greek yogurt.

PHASE 1—REMOVE & REPAIR MEAL PLANNER

This phase is glutenand dairy-free, very low in grains and legumes (except hummus), and two servings of fruit a day. Plants are center stage—think variety and color. Avoid snacking between meals and try to fast overnight for a good 12 hours.

	Breakfast	
SUN	2 eggs scrambled with wilted spinach and tomatoes. Slice of <i>Green Flaxseed Bread</i> spread with coconut oil	
MON	Leaky Gut Healing Smoothie	
TUE	Nutty Cinnamon Granola with Nut Milk* and a handful of berries	
WED	Pumpkin Porridge and a handful of blueberries	
THU	2 slices <i>Breakfast Bread</i> with <i>Rainbow Hummus</i> , smoked salmon, and red pepper flakes	
FRI	Chia Pot with 1 tablespoon each of blueberries and ground almonds	
SAT	Healthy Gut Green Smoothie with 1 slice Breakfast Bread and 1 tablespoon of almond or cashew nut butter	

Lunch	Dinner
Enzyme-stimulating Green Salad, followed by Carrot & Turmeric Soup with Flaxseed, Chia & Red Pepper Crackers with Rainbow Hummus	Turkey Burgers with sweet potato wedges, green leaf salad, and Anti-inflammatory Turmeric Dressing
Left-over Turkey Burgers with Carrot & Beet Salad	Creamy Cashew Mushrooms with steamed broccoli and kale with red pepper flakes
Enzyme-stimulating Green Salad followed by Happy Gut Chicken Soup	Salmon & Tomato Burgers with broccoli and Hummus Dressing
Phyto Salad Bowl with Flaxseed, Chia & Red Pepper Crackers	Kashmiri Chicken Curry with Cauliflower "Rice"
Enzyme-stimulating Green Salad followed by Shrimp & Seaweed in Tomato Sauce with Zucchini Noodles	Baked Rainbow Ratatouille with green leaf salad and Lemony Vinaigrette
Enzyme-stimulating Green Salad followed by leftover Rainbow Ratatouille with Rainbow Hummus and 1 slice Green Flaxseed Bread	Cod in Salsa Verde with steamed green beans and baby new potatoes
Phyto Salad Bowl with Flaxseed, Chia & Red Pepper Crackers	Enzyme-stimulating Green Salad followed by Beef Goulash with wilted greens or kale

^{*} Nut Milk—either homemade as per recipe (page 13) or store-bought coconut (carton not can), almond, hemp, or hazelnut

PHASE 2—REINTRODUCTION MEAL PLANNER

Include more prebiotic plants: asparagus, bananas, Jerusalem artichokes, leeks, onions, bok choy, and legumes. Add probiotic foods, including fermented foods: sauerkraut, yogurt, and kefir. Add a few more grains, but still do your best to avoid wheat-go for rye, spelt, or a good sourdough that has been fermented.

	Breakfast
SUN	Chia Pot with 1 tablespoon raspberries and a small glass of Kefir
MON	Nutty Cinnamon Granola with Homemade Yogurt and a handful of blueberries
TUE	2 poached or scrambled eggs, a handful of washed spinach leaves, and 6 baby tomatoes. A slice of toasted rye bread and butter
WED	Creamy Cashew & Banana Breakfast Pot and a slice Breakfast Bread with Raspberry Chia Jam
THU	Kiwi & Chia Seed Smoothie and a slice Breakfast Bread with nut butter and a handful of blueberries
FRI	Homemade Yogurt with 2 tablespoons of ground flaxseed, a tablespoon of blueberries, and half a banana
SAT	2 boiled eggs with 4 to 6 steamed asparagus spears and a slice of toasted <i>Green</i> Flaxseed Bread or sourdough

Lunch	Dinner
Classic Greek Salad and Flaxseed, Chia & Red Pepper Crackers	Roast chicken and a variety of roasted vegetables. Quick Baked Apple Slices
Asian Coleslaw with Leftover Chicken (using previous night's roast)	Harissa & Beet Salmon with steamed asparagus and broccoli drizzled with olive oil
Enzyme-stimulating Green Salad followed by Creamy Cauliflower & Jerusalem Artichoke Soup with toasted Green Flaxseed Bread, half an avocado, and drizzled olive oil	Turkey Burgers with multicolored salad, Lemony Vinaigrette, and a tablespoon Purple Sauerkraut
Phyto Burst Lunchbox with some Purple Sauerkraut	Goan Fish Curry with Seaweed and brown basmati rice
Enzyme-stimulating Green Salad followed by 2 slices toasted Green Flaxseed Bread with canned sardines, tomato, and watercress	Veggie Burgers with sweet potato wedges and 3 to 4-color salad with Anti-inflammatory Turmeric Dressing
Enzyme-stimulating Green Salad followed by leftover Veggie Burgers with crudités* and Rainbow Hummus	Chicken Goujons with Walnut & Red Pepper Dip, brown rice, and Carrot & Beet Salad
Phyto Salad Bowl	Lamb & Sweet Potato Stew with steamed greens or kale

^{*}crudités = chopped pieces of cucumber, peppers, carrots, asparagus, zucchini, butter lettuce, radishes, steamed broccoli, or cauliflower florets

CLEVER GUT DAILY FOOD & SYMPTOMS DIARY

Meal	Time	Food & Drink (content & quantity)
Breakfast		
Snack?		
Lunch		
Snack?		
Dinner		
Snack?		

Symptoms e.g., bloating, abdominal pain, nausea, sickness, diarrhea, brain fog, irritability, headache	Symptom time & duration	Other factors including stress, poor sleep, exercise, illness, medicines, and remedies

Foods high in resistant starch

Resistant starch is a form of starch that is resistant to being broken down in your small intestine. Instead of causing your blood sugars to spike, it acts more like fiber, reaching the colon largely intact. It is a valuable source of nutrients for the "good" bacteria in your gut. A diet rich in resistant starch has been linked to reduced gut inflammation and reduced risk of type 2 diabetes and obesity.

Although it acts in a similar way to fiber, it is not always found in the same foods. Breakfast cereals like All-Bran, which have decent levels of fiber, do not contain any resistant starch.

A word of warning: if you are currently on a typical Western diet, low in fiber, you should not suddenly hit your gut with a massive dose of resistant starch. Otherwise you could find yourself becoming uncomfortably bloated and gassy. Ease into it. You can afford to go up to around 1 to 1½ ounces of resistant starch a day, but I wouldn't go much higher. Our menus contain foods with moderate levels of resistant starch.

Below is a list of foods with the highest to the lowest levels of resistant starch, given as grams per 100 grams (3.5 ounces) of food. You will see from this list that there is a striking difference between unripe and ripe bananas.

You will also notice something that appears to be very confusing about resistant starch: while some foods become *more* resistant when cooked and cooled, others become less so. Potatoes and rice, for example, more than double their levels of resistant starch when cooked and cooled. Oats, on the other hand, have very high levels when raw (11 grams) but these fall to almost nothing (0.3 grams) when cooked. I occasionally have raw oats with yogurt and berries for breakfast.

Potato starch behaves quite differently from fresh potatoes

in that it has far higher levels of resistant starch when raw. Levels drop to almost zero when it is cooked. You can buy it from health food stores or over the internet as a white powder. It is totally bland and incredibly cheap.

Potato starch is also the odd one out on this list because it is highly processed. I wouldn't normally recommend processed foods but I am interested in the potential link between potato starch and insomnia. I have started taking a teaspoon mixed with kefir, yogurt, or half a glass of milk before bed.

You can find a longer list of foods and their resistant starch levels at http://freetheanimal.com/wp-content/uploads/2013/08/Resistant-Starch-in-Foods.pdf.

The following are averages, in grams of resistant starch per 100g (4 ounces) of food, based on different studies. Because the research is new there are no figures for what happens to rice or potatoes that are cooked, cooled, and then reheated.

High

Potato starch Unripe bananas	72 19	Cashews Oats, rolled, uncooked	13 11
<u>Medium</u>			
Peas, cooked Lentils, cooked Potatoes, cooked & cooled Brown rice, cooked & cooled Chestnuts Rye bread Peanuts	6.7 6.6 5.8 5.5 4.9 4.3 4.2	Hummus Baked beans Plantain, cooked Ripe banana Kidney beans, canned Sourdough bread	4.1 3.6 3.5 3.2 2.1 2.1
Low			
Puffed rice crackers Baked potatoes	0.8 0.6	Croissant	0.4

Which probiotics work and for what

The following information is taken from Medline Plus, part of the US National Library of Medicine. It is a reliable source of the latest information.

Are probiotics safe?

In healthy people, yes. But you are advised not to take them if you are pregnant, have recently had surgery, or have a faulty immune system.

The two most studied strains are *Lactobacillus* and *Bifidobacteria*, which are found in fermented foods like yogurt, kefir, and cheese. But it is more complicated than that because there are so many different species of each. Just because one species of *Lactobacillus* might help prevent diarrhea, it doesn't mean that another will.

How effective are they?

The Natural Medicines Comprehensive Database rates treatments as: Effective, Likely Effective, Possibly Effective, Possibly Ineffective, Likely Ineffective, Ineffective, and Insufficient Evidence to Rate. None of the probiotics you can buy in capsule form has sufficient studies behind it to fall into the "Effective" category, while a number fall into the "Likely Ineffective" or "Ineffective" category.

The following list only includes those considered "Likely Effective" or "Possibly Effective."

Bifidobacteria

Constipation. *Bifidobacterium longum*, whether in the form of capsules or from fermented foods, can increase bowel

movements in constipated adults. This strain also seems to help prevent the flu in elderly people.

- Irritable bowel syndrome (IBS). Taking VSL#3, a product containing *Bifidobacterium*, *Lactobacillus*, and *Streptococcus* may decrease bloating in people with IBS. It is the probiotic that my experts favored.
- Lung infections. Taking HOWARU Protect, which contains Lactobacillus acidophilus and Bifidobacterium, may help reduce and shorten symptoms of fever, cough, and runny nose.
- Diarrhea in children caused by rotavirus. Taking *Bifidobacterium* bifidum seems to help prevent rotaviral diarrhea when used with other bacteria such as *Streptococcus thermophilus* or *Bifidobacterium* Bb12.
- Traveler's diarrhea. Taking *Bifidobacterium* may help prevent traveler's diarrhea when used with other bacteria such as *Lactobacillus acidophilus* or *Lactobacillus bulgaricus*.

Lactobacillus

- Diarrhea in children caused by rotavirus. This is most likely to be effective if you use at least ten billion colony-forming units (CFUs—see page 82) for the first forty-eight hours after diarrhea starts.
- Hay fever. Taking at least two billion CFUs of *Lactobacillus* paracasei daily for five weeks may improve quality of life for people with grass pollen allergy.

- Preventing diarrhea caused by antibiotics. *Lactobacillus* seems to reduce the risk of diarrhea caused by antibiotics. Giving children *Lactobacillus* GG (Culturelle) along with antibiotics is a good idea.
- Eczema (atopic dermatitis). Lactobacillus GG may reduce symptoms of eczema in infants who are allergic to cow's milk. Lactobacillus sakei, Lactobacillus plantarum, and a combination of freeze-dried Lactobacillus rhamnosus and Lactobacillus reuteri also seem to reduce eczema symptoms in children under thirteen. But Lactobacillus paracasei doesn't seem to help eczema.
- Preventing diarrhea due to cancer treatment (chemotherapy). There is some evidence that patients with cancer of the colon or rectum have less severe diarrhea and have shorter hospital stays if they take *Lactobacillus rhamnosus* and *Lactobacillus* GG (Culturelle).
- Irritable bowel syndrome (IBS). Lactobacillus acidophilus can improve symptoms of IBS such as bloating and stomach pain.
- Lung infections. Children under six who attend daycare centers seem to get fewer and less severe lung infections when given milk containing *Lactobacillus* GG or a specific combination product containing both *Lactobacillus acidophilus* and *Bifidobacterium* (HOWARU Protect).
- Rheumatoid arthritis (RA). Research shows that taking *Lacto-bacillus casei* for eight weeks reduces tender and swollen joints in women with RA.

What to look out for when buying a probiotic:

A high colony-forming units (CFU) count

Your microbiome contains around forty trillion microbes, so to make an impact you are going to need a probiotic containing lots of bacteria. In other words, a high CFU count. Ideally you should be looking for a product that contains at least twenty billion CFUs and preferably more. Many commercial products are not even close to this minimum standard. Fermented foods are likely to hugely exceed these figures, though it is hard to generalize.

Multiple strains

Just as you want diversity in your gut, so you want a diversity of strains of microbes in your probiotic. The joy of fermented foods is that you are guaranteed diversity. If you are buying a probiotic you should be looking for one with at least six different strains.

Substrains

Lactobacillus acidophilus is not the same as Lactobacillus casei. If the probiotic you are thinking of buying doesn't list substrains then it may well be ineffective.

• On our website cleverguts.com we list some of the better products.