

Get Nourished with Krystal Merrells



Let's Get Nourished

Nutrition Challenge: 1

Thank you for joining the Get Nourished journey!

Maybe you are here because you have personal experience with dementia, with a friend, family, or community member. You may also be here because you want to do everything you can to boost your brain health and stay cognitively well as you age.

It doesn't matter whether you consider yourself a food & nutrition enthusiast, or simply lucky to cook something without burning it! No matter where you are on your nutrition journey, I will guide you with simple changes that will support your brain's physical and mental health.

Here's how this is going to work:

During September, you will receive a total of **six emails** from me, released roughly every three days. Every email will have one fun fact about brain health and nutrition, along with a nutrition challenge, plus a recipe I've personally selected from the [Dietitians of Canada Cookspiration website](#).

We're going to start at the root of your eating habits. Then we'll continue with small changes toward a way of eating shown by research to help lower your risk of dementia.

****Super important:** the information I am offering you here does NOT focus on cutting out a bunch of foods or weight loss. This is NOT a restrictive diet.*

In my over a decade of experience as a registered dietitian, I have learned that [focusing on WHAT to eat](#) (instead of what to cut out) is far more successful and far less stressful.

Because changing how you eat is hard! And it's best done with [kindness](#), towards yourself and food :)

So are you game for this? If your answer is **yes**, then let's get started!

Nutrition Challenge #1: Understand why you choose the foods you do

If you're interested in changing how you eat, you first need to appreciate all the things that influence your food choices. **Because what you eat is not simply the result of [willpower](#).** Instead, what you eat largely depends on many factors:

- Where you live
- What food is accessible to you

- What food you grew up with
- The food from your culture
- Cooking skills you have or would like to learn
- The cost of food
- Health issues like allergies or digestive disorders
- Etc...

Fun Fact: It is known that fruits (particularly berries), vegetables (particularly leafy greens), whole grains, fish, and nuts help preserve cognitive function as you age. As we talk about food, I need to recognize that these brain health-promoting foods aren't always accessible to everyone or every population. [Socioeconomic inequities are contributors to brain health](#) as well. So we'll move forward knowing that some of what I offer here, as well as what might work for you, might not work for everyone.

Your nutrition challenge:

This is a cognitive exercise to set you up for success! Listed below are different “food factors.” These factors are reasons why a person may choose the food they eat. Go through the list and **pick out the top three factors that most influence your food choices.**

There are no right or wrong answers! All of these reasons are valid as they reflect different circumstances.

Food Factors

- Taste, smell, texture
- Cost of food
- Simple to prepare with easy steps (not necessarily quick)
- Quick to prepare
- Foods you can share with others (including family, partner, kids, etc.)
- Creativity with food, making up new recipes
- Familiar food you've had many times before
- Easy to find food
- Grab and go to eat on the way
- Food that feels satisfying
- Foods that nourish your brain and body
- Medical conditions that affect how you eat
- Novelty, trying a new food for the fun of it
- Food for comfort
- Foods that align with your morals & ethics
- Other?

If you're like *“this is a weird nutrition challenge...”* then let me explain why **this is so important!** For success, nutrition goals need to consider your individual situation. **When goals go against your food factors** – when goals are in direct contrast with the most important factors that influence your food choices – it's a recipe for disaster!

It's one thing for someone to tell you to "eat more avocados." It's another when you live in Canada, where it's winter half the year, and avocados may not be found in a grocery store near you, or at a price that works with your budget. Food decisions can be tough, especially if you're already dealing with a lot of stress, fatigue, or brain fog.

But food decisions are much easier when you root them in the factors that actually support your choices.

Recipe: [Almond Butter Spiced Apple](#)

You can modify this recipe to fit your food factors. Here are some examples:

- **Medical due to nut allergies:** Instead of almond butter, go for seed butter.
- **Cost or easy to find:** Swap out the almond butter for peanut butter.
- **Foods that nourish or novelty:** Try sprinkling on top some hemp or flax seeds.
- **Creativity:** Tell me what you'd make instead!



If you've made it to the end here, you're a rockstar!

Nutrition Challenge: 2

Do you eat enough? And at the right time?

In the last email, we started at your roots: understanding why you choose the foods you do. Today, we come to the surface and start working on your **foundation**.

Have you heard of [Maslow's hierarchy of needs](#)? It's a theory that says for humans to grow, we all have universal needs. Based on this theory, a person can't seek out things like safety, relationships, or creativity until the base needs are met. At the foundation are things like shelter, clothes, sleep, and yes, **food**.

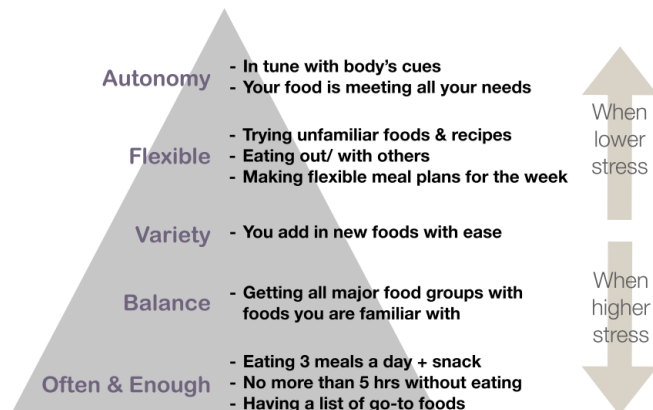
Why is this important?

When it comes to your food choices and the nutrition goals you make for yourself, **there is also a hierarchy of needs!** (adaptations of such hierarchies are found [here](#) and [here](#)). Many people who come to work with me think I'm going to put them on some [complicated diet](#) and give them a calculated meal plan...

...But this isn't useful if a person is struggling to eat three meals a day.

Here is my take on the food hierarchy of needs:

- **Enough food**
- **Balance**
- **Variety**
- **Flexibility**
- **Autonomy**



Several people I work with struggle to eat three meals routinely. This may be because of [challenges imposed by brain injury](#). This may also be a result of a demanding job, difficult work hours, low accessibility to food, disordered eating, etc.

From my experience, it's hard to get [all the nutrients your brain and body need](#) to work well if you aren't able to eat at least three times a day, especially if you skip breakfast.

Fun fact:

I know, it sounds cliché, but **breakfast is important for your cognitive function!**

One study showed that [eating breakfast helped with memory and concentration in nurses](#). In the same study, eating breakfast daily was also associated with fewer accidents and injuries, plus lower stress. **But what to eat for breakfast?** [Another study](#) showed that having some good sources of protein and fat at breakfast was associated with better cognitive function in older adults.

One of the objections I hear from breakfast skippers is that they cut this meal of the day to do intermittent fasting...

I know that intermittent fasting has become all the rage. And there may be a time and place for that. But fasting is a dietary intervention higher up on the hierarchy – fasting won't work for everyone and it won't work well if you haven't met your base needs. Plus, [another study shows](#) that fasting only had cognitive benefits in those whose fasting window allowed for eating breakfast!

Your nutrition challenge:

If you're not eating three meals a day, what would it take to make that happen? What's one thing you can do to move toward this? If you're not a breakfast eater, what would it be like to try?

You don't have to start with a full meal in the morning. I often recommend my clients start with just one simple food item – like one blueberry, some nuts, or a glass of milk or alternative.

Recipe: [Breakfast Dumplings](#)

If you're bored with breakfast, try something not usually associated with "*breakfast*." There's nothing to say you can't have a sandwich, a stir fry, or some dumplings!

Yay! Today was all about giving you a sturdy foundation on which to build your plan.



Nutrition Challenge: 3

Foods to add to your dementia prevention nutrition plan

Nutrition is one tool to help you prevent dementia. You've already started to work on this with the last two emails! We have figured out what drives your food choices. We have also established a foundation for eating enough, including breakfast.

Now you want to know “*what foods prevent dementia?*”

Today, we're going to move up the food hierarchy to give you some balance and variety in your diet. This will help you introduce foods and nutrients that are thought to be key for brain health and dementia prevention.

What is “balanced eating” anyways?

I want to be clear that [there isn't just one way to eat balanced](#). Eating balanced just means eating foods from different food groups throughout your day or week. This supports health because it means you're getting a variety of nutrients your brain & body need to work well.

And when it comes to dementia prevention, certain foods and nutrients may be extra important.

Fun fact:

Green leafy vegetables, berries, fish, nuts, olive oil, and vitamin E (from food) are all associated with better cognitive function and dementia prevention. **Spinach, kale, collards, and lettuce** are examples of green leafy vegetables. Having one of these roughly once a day has been [associated with slower cognitive decline with aging](#).

A [recent review](#) of all the research in older adults showed that berries, such as **strawberries and blueberries, berry juice, or concentrates**, seem to improve cognitive function, memory performance, executive functioning, processing speed and attention.

Fish, nuts and olive oil are all sources of unsaturated fats. [One study](#) showed older adults who ate more sources of unsaturated fats and **vitamin E** had less damage to white matter in the brain. This was associated with better cognitive function.

Your nutrition challenge:

To start working on balance and variety in your diet, aim to get each of the above food types (leafy greens, berries, sources of unsaturated fats) more often. Maybe you already have some of these foods in your diet – maybe not.

No matter what your baseline is, **what would it be like to add one more of these foods this week?** What would it be like to have one extra of these foods a day? If this seems like a difficult challenge, go back to your *Food Factors* from the first email. How can these foods work with your food factors?

Examples:

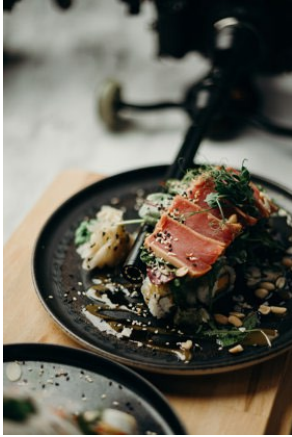
- **Simple to prepare:** Buy pre-chopped, pre-washed leafy greens
- **Food you can share with others:** Put out a bowl of berries while waiting for dinner to cook OR use berries to help teach young kids simple math skills.
- **Food that feels satisfying:** Add nuts to meals and snacks. Sprinkle these on top of salads, yogurt, fish or meats.
- **Familiar food:** Choose the food you know the most!

Recipe: [Broiled Rainbow Trout](#)

How do you feel about cooking fish?

People often tell me they don't make fish because it seems complicated. But that couldn't be further from the truth! **Fish is often much easier to prepare than most meats.**

Don't believe me? Try this easy recipe!



Nutrition Challenge: 4

How food can help make your brain more resilient

You cannot predict what your future life will be like as you age. But you can take steps now to make yourself more resilient for it. **Resiliency** is perhaps one of the most interesting findings of continued research into the MIND way of eating to prevent dementia.

Today, I'll show you what MIND is all about and how to take steps toward building brain resiliency with food.

What is MIND?

MIND is a pattern of eating, created by researchers, that is associated with a lower risk of dementia. MIND is an acronym (researchers love acronyms!) that stands for **M**editerranean-DASH Diet **I**ntervention for **N**eurodegenerative **D**elay. The name describes two other eating patterns MIND was modelled after.

MIND combines the so-called “Mediterranean Diet” with the DASH eating pattern (**D**ietary **A**pproaches to **S**top **H**ypertension) and then sprinkles in some foods other research has shown to be great for dementia prevention.

In short, the MIND pattern of eating encourages these foods:

- Green leafy vegetables, 6 or more times a week
- Other vegetables, 1 or more a day
- Berries, 2 or more times a week
- Nuts, 5 or more times a week
- Whole grains, 3 or more servings a day
- Fish, 1 or more times a week
- Beans, 4 or more times a week

- Poultry, 2 or more times a week
- Olive oil is the primary oil of choice

Fun fact:

[Researchers](#) looked at 10 years of data from nearly a thousand people. They had data on what people ate as well as their cognitive function.

The researchers found that the cognitive function of people who ate closer to the MIND pattern was significantly better than those who ate furthest from the MIND pattern. In fact, the cognitive difference was equivalent to being **7.5 years younger in age**.

And you don't have to follow the MIND recommendations perfectly.

It's important to note that the people whose brains were estimated to be 7.5 years younger, didn't follow the MIND pattern perfectly – their eating habits matched roughly 60% and up of MIND's recommendations. Although not as good as a 7.5-year difference, cognitive function was still better in people whose eating habits matched about half of what MIND encourages, compared to those whose eating habits matched less.

This shows that any small change you make helps reduce your risk of dementia!

[Another study](#) showed that people who ate closer to the MIND pattern had better cognitive function in later life, **even if the brain showed signs of amyloid plaques and tangles**, which are typically associated with Alzheimer's Disease. This means the more you work on adding in the foods encouraged by MIND, the more resilient your brain may be!

Your nutrition challenge:

Take a look at the MIND list of foods encouraged. Are your eating habits close? Or far away? No matter where you are right now, what would be the easiest food for you to add in the next couple of days?

Examples:

- **Green leafy vegetables:** You can get an extra green leafy vegetable by adding kale to a soup, lettuce or arugula to a sandwich, or bok choy to an omelette or stir fry.
- **Nuts:** It only takes ¼ cup. Have these as a snack, as peanut butter, or added to granola. If you're allergic, swap these out for seeds like pumpkin, sunflower, or hemp.

- **Whole grains:** There's a difference between whole grains and whole wheat! Mix up your whole grains by adding quinoa to salads, farro as a base for stir-fries or veggies bowls, or use buckwheat for porridge.
- **Beans:** You don't have to be vegetarian to enjoy legumes! Beans can be as easy as buying a can of 6-bean medley, adding some olive oil, pepper, salt, and lemon juice.

Recipe: Herbed Barley Bean “Risotto”



Nutrition Challenge: 5

Fruit juice might lower your risk of dementia, and other facts about foods you “should avoid.”

“Are there any foods I should avoid?”

Lists of “foods to avoid for dementia” may seem helpful as they tell you clearly what and what not to eat. But over time, this black-and-white thinking about food [will likely stress you out](#). [In my work](#), people tell me that lists of foods to avoid **make eating complicated**. This can lead to anxiety, cravings, and binge eating.

When food becomes a cognitive burden like this, it will no longer help you prevent dementia.

Today I will share with you some lesser-known facts about three common so-called “foods to avoid for dementia.” I will also show you how to include these foods in a low-stress way that supports your brain health.

Are there foods to avoid for dementia?

Looking at the MIND way of eating, **no foods are completely off-limits**. The MIND pattern encourages green leafy vegetables, berries, nuts, olive oil, whole grains, beans and poultry.

There are also foods the MIND pattern suggests limiting:

- Butter and margarine, less than 1 Tbsp per day
- Cheese, less than once a week
- Red meat, 3 or fewer times a week
- Fast fried foods, less than once a week
- Pastries and sweets, 4 or fewer times a week
- Wine, one glass a day, but not more

This list doesn't say to completely avoid these foods. Instead, **it describes a type of "moderation."**

Remember, cognitive function was still found to be better in those whose eating habits were moderately in line with MIND. Those who had the best cognitive function ate closer to the MIND pattern, but their eating habits still weren't a perfect match to all the MIND recommendations. Any dietary changes that move you toward the MIND suggestions, even though not perfect, help reduce your risk of dementia.

Fun facts:

"Is sugar bad for you?"

Sugar doesn't always increase your risk of dementia. Fruit juice is often labelled as a "bad food" because it contains sugar. However, [one large study](#) found that roughly one cup of real fruit juice a day **lowered** the risk of dementia. Sugar tends to be more of a problem when it comes from sugar-sweetened drinks like sodas – these are [associated with a higher risk of dementia](#). But take note that "diet" sodas might not be the best replacement. [Studies](#) show drinks with artificial sugars might also be associated with dementia risk.

What to do?

If you are craving a sugary drink, go for real fruit juice (not a "fruit drink") up to once a day, unless otherwise advised by your healthcare team. For other sweets and treats, MIND recommends having these four or fewer times a week. This means you can still have your cake and eat it too!

"Is milk bad for you?"

[Studies on milk](#) and cognitive function show no effect or even a **lower risk** of dementia with higher dairy intake. However, the [research](#) is still up for debate. [Fermented](#) dairy products, like

yogurt and fermented cheeses, contain nutrients and other active ingredients that might also help lower your risk of dementia.

[Higher fat](#) dairy products, such as whole milk, are thought to contribute to dementia risk because they are high in saturated fats. This is why the MIND pattern recommends limiting cheese – it's not the dairy, it's the saturated fat content.

What to do?

Unless you have an allergy or intolerance, [you don't need to avoid milk](#) or dairy products. Try including some lower fat and/or fermented options like cottage cheese and kefir.

“Is gluten bad for you?”

If you don't have celiac disease, or any wheat allergies or sensitivities, then there's currently no reason to worry about gluten. A [large long-term study](#) showed that gluten did not affect cognitive function in middle-aged women without celiac. [Research](#) does show there may be an increased risk for vascular dementia in people with celiac disease. There's also [a theory](#) that people with wheat sensitivity could have an increased vulnerability to Alzheimer's Disease, but no great evidence at this time.

Cutting gluten from your diet does have [consequences](#) if it's not needed! I always suggest clients go see their doctor and get assessed for celiac, wheat allergy and non-celiac wheat sensitivity if they want to try gluten-free.

What to do?

You don't have to cut out gluten unless you have a gluten-related disorder. Though you can get more variety in your diet by exploring different types of grains! Mix up your whole grains by adding quinoa to salads, making wraps with corn tortillas, or using buckwheat for porridge.

Your nutrition challenge:

There aren't any strict foods to avoid for dementia. The MIND pattern only suggests limiting some foods, not completely cutting them out.

If you'd like to try reducing some of these foods, you can still have them and alternate with these other options:

- **Butter or margarine:** Swap for olive oil, avocado, hummus, or nut/seed butters.
- **Cheese:** Try lower fat cheeses, like cottage cheese, or recipes with nutritional yeast.
- **Red meat:** Alternate red meats with fish, chicken, and vegetarian meals with beans or tofu.

- **Fast fried foods:** Air fryers have recently become quite popular. You can also try one-pot or one-pan meals for quicker prep.
- **Pastries and sweets:** Alternate with dessert tofu, a smoothie, avocado or chia pudding. Dark chocolate is also a good choice.

Recipe: [Sweet Chili Tofu Stir-Fry](#)



Nutrition Challenge: 6

Five steps to help prevent dementia with nutrition

You made it! Congratulations!

In the very first challenge, I said it didn't matter whether you consider yourself a food & nutrition enthusiast, or simply lucky to cook something without burning it! No matter where you are on your nutrition journey, I will guide you with simple changes...

The nutrition challenges I offered you may have been "simple," **but that doesn't always mean they are easy to do.** Whether you followed the challenges meticulously, tried some things

here and there, or saved these emails for another time, what's important is that **you showed up and took steps on this nutrition journey :)**

Thank you so much for letting me guide you! Today, I wanted to sum up all the challenges so that you can see the bigger picture of nutrition for dementia prevention.

Dementia prevention nutrition in 5 steps

Step 1: Understand why you choose the foods you do

- Remember your “food factors”
- Make nutrition goals that match what influences your food choices the most

Step 2: Eat enough to meet your needs

- Start with three meals a day
- Yes, breakfast is important!
- If you don't routinely eat breakfast, start with just one food

Step 3: Add in some foods that are great for cognitive function

- Green leafy vegetables such as spinach, kale, collards, and lettuce
- Berries such as strawberries, blueberries, berry juice or concentrates
- Unsaturated fats such as fish, olive oil, nuts and seeds

Step 4: Take one extra step toward the MIND pattern

Add in:

- Other vegetables
- Whole grains
- Beans (plant-based meals)
- Poultry

Step 5: If you choose to limit foods, alternate them with other enjoyable foods

Ideas for swaps:

- Soda and pop → real fruit juice or water
- High-fat dairy → lower fat dairy and/or fermented dairy products
- Butter or margarine → olive oil, avocado, hummus, nut butters
- Red meats → fish, beans, lentils, chickpeas, poultry, tofu
- Fried foods → air fryer or one-pot/ one-pan meals
- Sweets → avocado or chia puddings, smoothies, dark chocolate

Where to go from here

You never have to do this alone. If you want to continue on this nutrition path, here are some resources with more nutrition information and dietitian listings near you:

- [Health Connect Ontario](#): telehealth where you can call a dietitian
 - [Unlock Food](#): website with expert guidance by Dietitians of Canada
 - [Cookspiration](#): recipe and menu planning app
 - [Find a Dietitian](#): search engine to find a dietitian to work with
 - [My website](#): to feed your brain and nourish your mind with more brain food info!
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One Last Recipe: [Blueberry & Dark Chocolate Bread Pudding](#)



Thank you so so much for joining the Get Nourished category for the BrainyActive Challenge 2022! Don't hesitate to [reach out to me](#) should you ever have any questions or wish to pursue nutrition further.

Best in brain health,

Krystal Merrells, RD

About Krystal

Krystal Merrells is a registered dietitian who has an invested interest in brain health! Krystal has had multiple concussions and still lives with some persistent symptoms today. She uses her personal experience combined with her professional expertise to help people with brain injury find healing with food and nutrition. Krystal also has some personal experience with dementia, seeing how it affected her grandfather who lived with Krystal's family for many years.