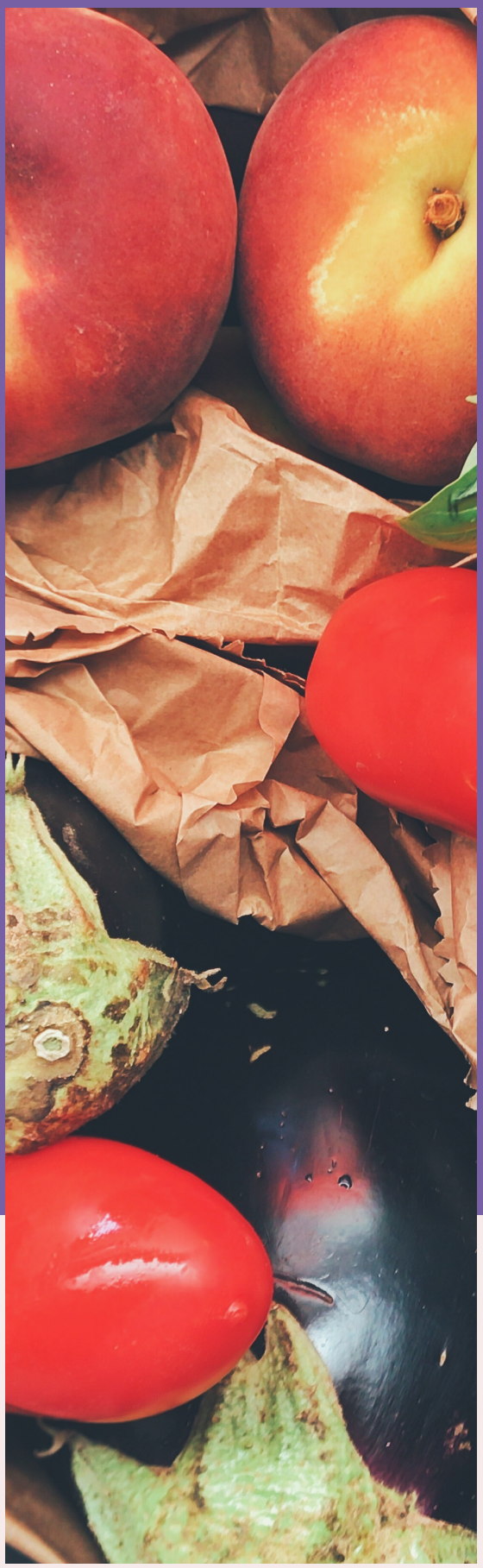
KEEPING SENIORS HEALTHY AT HOME



Nutrient Dense Food

the Community Training and Development centre

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Nutrient Dense Food

Working as a Caregiver is rewarding and important work!
You have a direct impact on someone's life every day, helping them maintain their health, independence, and dignity in the comfort of their own homes.

The role of a Caregiver is not only to help with errands and cleaning, but also to provide companionship and subtle information on how they can live a healthier and more purposeful life as they age.

There are many ways to approach healthy aging and the tools will vary depending on each client's unique interests, personality and health conditions. Get to know your client, and the people around them. Engage them in conversation, learn about their interests and hobbies. Investing time in getting to know them as individuals will build trust, rapport and create a mutually beneficial and respectful relationship.

What factors influence healthy aging? Research has identified everything from eating a nutrient-dense and balanced diet, regular physical activity, routine health screenings, staying socially active in a community, a good sleep routine, continuously learning (challenging the brain) and engaging in activities/hobbies that bring you joy and a sense of purpose.

What is Nutrient-dense Food?

Nutrient-dense foods are low in sugar, sodium, starches, and bad fats. They're whole foods that have a lot of nutrients but relatively few calories, are packed with vitamins and minerals. These foods include complex carbohydrates, lean protein, healthy fats, whole grains, meat, fish, seafood, colourful fruits and vegetables ("rainbow foods"), potatoes, beans, nuts, and seeds.[1]

The basic concept of nutrient density is the amount of nutrients you get for the calories consumed.[2] "Empty calories" refers to foods that are high in calories and do not contain much nutritional value (fast food, highly processed foods, baked goods, cookies, breads, sugary drinks etc)

Most nutrient-rich foods can be found in the perimeter of the grocery store (fresh foods, vegetables, meats, fish, dairy) and "empty calorie" foods are often in the middle isles (highly processed foods, snacks and products that have a long shelf life such as cereals and canned food)

Examples of nutrient dense foods:

- Whole foods (not processed)
- Nutrient dense carbohydrates: sweet potatoes, quinoa and brown rice
- Protein-rich foods like salmon (especially wild caught) and beans
- Eating a variety of "Rainbow Food" fruits and vegetables (five portions a day)
- Foods High In Omega-3 Fatty Acids:
- Oysters
- Cod-liver oil
- Liver (especially grass-fed animals)
- Eggs (especially grass-fed animals)
- Bone broth

Sometimes it only takes a small shift to make a more nutrient-dense choice:[3]

- Switch from white rice to brown rice or quinoa
- Replace sugary drinks with water, unsweetened tea, or fresh fruit smoothies
- Swap sour cream for plain Greek yogurt
- Switch from processed deli meat to sliced roasted chicken on sandwiches
- Snack on crunchy vegetables or nuts instead of chips.
- Satisfy a sweet tooth with naturally sweet fruit

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[1] https://familydoctor.org/changing-your-diet-choosing-nutrient-rich-foods/

[2] www.eatrightpro.org/practice/position-and-practice-papers/practice-papers/practice-paper-nutrient-density

[3] www.heart.org/en/healthy-living/healthy-eating/eat-smart/nutrition-basics/how-can-i-eat-more-nutrient-dense-foods

Why Seniors Need Nutrient-dense Food

A healthy diet is essential to optimal aging. Proper diet and a healthy life go hand in hand, especially for older adults over the age of 65. According to reports by the World Health Organization, a majority of the diseases that older people suffer are a result of unhealthy food choices. To maintain good nutritional health, seniors should focus on nutrient-dense foods.

Micronutrient deficiency is shared among the elderly due to factors such as reduced food intake and lack of variety in their diet. This often results in malnutrition, affecting the immune and sensory functions and aggravating the symptoms of many common chronic diseases such as cancer, cardiovascular disease, diabetes and osteoporosis. Unhealthy eating can also result in fatigue, digestive problems and anemia.[4]

Many common chronic conditions are caused by a lack of nutrients. According to the Kresser Institute, many of the elderly's problems could be linked to these nutrient deficiencies:[5]

- Vitamin C deficiency can lead to increased waist circumference and blood pressure
- Vitamin D deficiency hurts your immune system and raises the chances of metabolic syndrome and cardiovascular disease.
- Magnesium deficiency can cause depression, metabolic syndrome, and cardiovascular disease in both younger and older adults.
- Choline deficiency hurts liver function
- Vitamin B12 deficiency leads to cognitive dysfunction (Alzheimer's/Dementia) and Parkinson's-like symptoms
- Folate deficiency promotes the production of a compound called homocysteine that damages blood vessels when present in large amounts. It can also cause altered gene expression and an increased risk of cancer.

With aging, the body may need fewer calories, but it still requires just as high or higher levels of certain nutrients such as vitamins or minerals.

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[4] https://www.mcmasteroptimalaging.org/browse/healthy-aging-practice/nutrition

[5] https://aparadiseforparents.com/nutrient-dense-foods/

Benefits of Nutrient-dense Foods for Seniors

Whole foods (vegetables, fruit, nuts/seeds, plant/animal protein) offer important vitamins and minerals to keep your body healthy. These foods are also a source of fiber and eating more fiber may help with digestion, constipation and could help regulate cholesterol and blood sugar. Additionally they give your body phytochemicals. Phytochemicals are natural compounds such as beta-carotene, lutein and lycopene. Like vitamins, minerals, and fiber, phytochemicals help promote good health and reduce the risk of heart disease, diabetes, and some cancers.[6]

Omega-3 fatty acids are also important for people of all ages, especially older adults and seniors. These fatty acids help prevent inflammation, which has been linked to all sorts of health conditions such as cancer, rheumatoid, arthritis, and heart disease. Omega-3 has been found to slow the progression of Macular Degeneration (AMD), a condition that leads to poor vision. Recent evidence has shown that these fatty acids may also reduce the risk of Alzheimer's disease and keep the brain alert. Omega-3 can be found mainly in sardines, tuna, mackerel, and salmon. However, they are also found in flaxseed, soybeans, canola oil, and walnuts.[7]

A few health benefits of eating a nutrient-dense diet:[8]

- Maintain a healthy weight
- Promote and protect health and well-being
- Provide essential energy and nutrients to maintain health
- Prevent, lower the risk or slow the progression of chronic illnesses such as, Heart disease and Type 2 diabetes
- Prevent muscle and bone loss to reduce the risk of falling or breaking bones
- Improved cognitive function and mood

Additional learning resources:
Ottawa Public Health video: Why are healthy eating patterns important for older adults?

Alliance for Aging Research Nutrition Videos: Healthy Aging with Nutrition
Food for Thought: The Role of Nutrition in Healthy Aging

Home Instead Senior Care (Caregiver Stress Videos):
Cooking and Nutrition for Older Adults and Healthy Nutrition for Older Patients — Professional Caregiver Webinar

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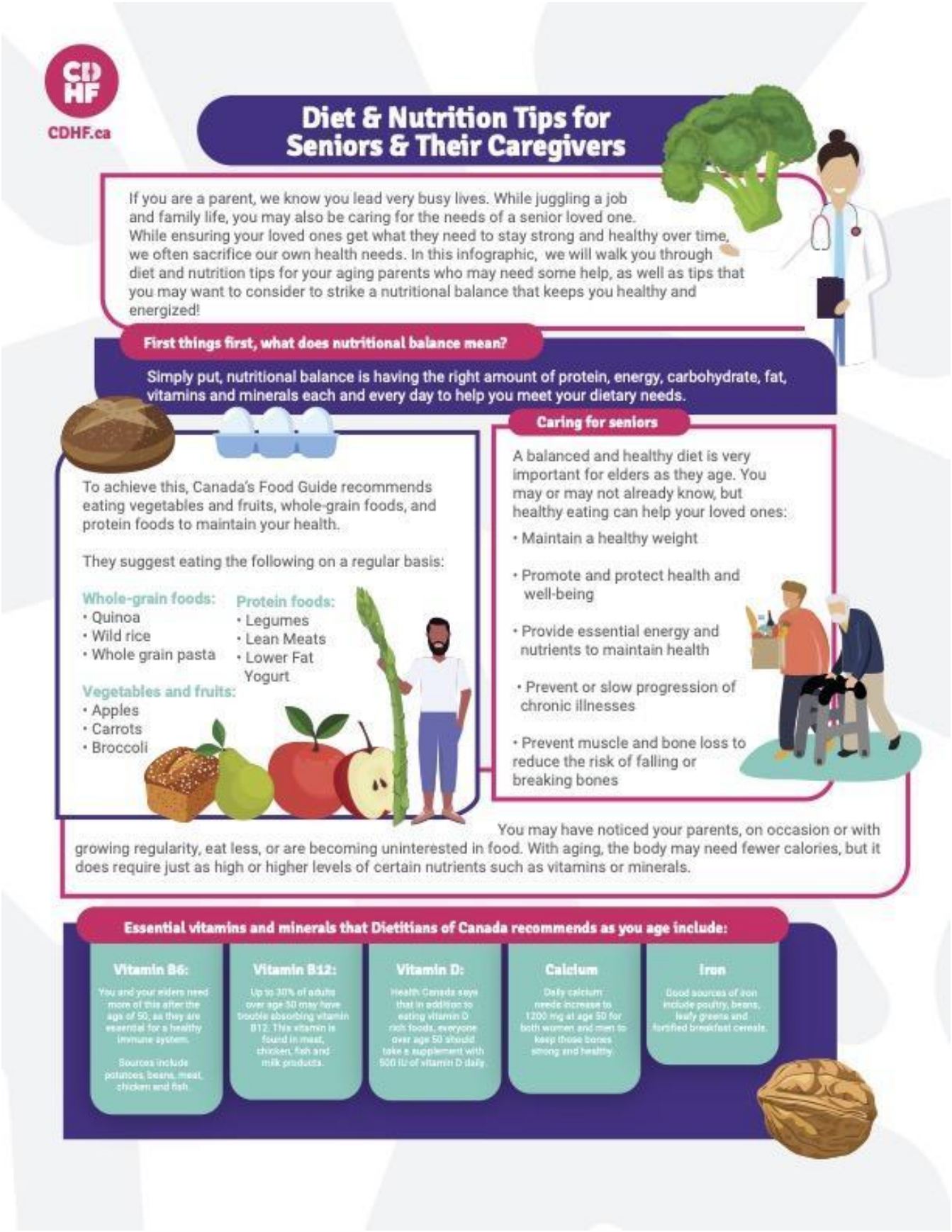
[6] https://healthysd.gov/link_choosing-nutrient-dense-foods/

[7] https://aging.com/elderly-nutrition-101-10-foods-to-keep-you-healthy/

[8] https://cdhf.ca/health-lifestyle/diet-and-nutrition-tips-for-seniors-and-their-caregivers/



B.C. Provincial Health Services Authority: [Healthy Eating For Seniors Handbook]

Image Source: [Canadian Digestive Health Foundation]

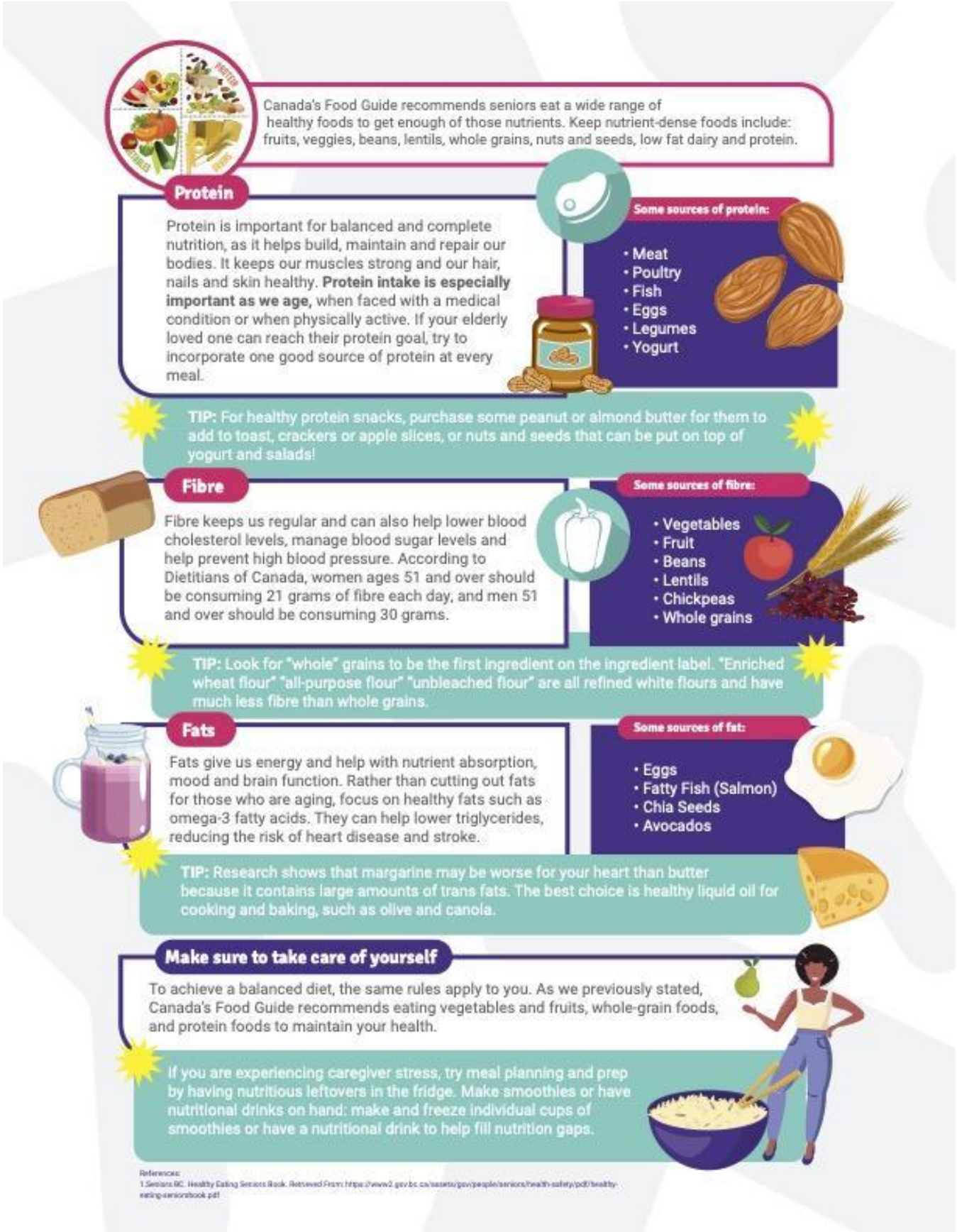


Image Source: [Canadian Digestive Health Foundation]

How to engage the senior in learning about the benefits of healthy food?

Make it personal - Ask them about their favourite foods and listen to what they like and dislike. Food isn't just food, it's our life story! Our sense of smell and taste can be emotional triggers, bringing up memories, both good and bad. A seniors food preferences and eating habits could be linked to childhood, world travels, pivotal events in their lives, their culture and/or religion. Telling stories is a powerful learning tool and will engage them in a conversation about what they eat, and why.

Make meal prep fun - Make them an active participant in the menu planning process. Getting them to help you create *their* favorite foods might open them up to helping you create *your* meal ideas down the road. Find an old cookbook they used to love and have them pick a recipe from it.

Make mealtimes social - Research has shown that seniors who regularly eat meals together with friends and family tend to eat more and make healthier choices. A PCA can step in to become their companion, helping them with shopping, cooking and even sitting down with them at mealtime. Another option is set up video calls with one of their friends or a family member. Even sharing a meal virtually has been shown to increase happiness.

Evaluate their food environment - Give the kitchen a makeover (clean and organize), play their favourite music while preparing meals, declutter the dinner table and set it with their favourite dishware/fine china. Where you eat and how you eat can directly affect your experience with food, and even your digestion! Make sure where they choose to eat their meals is clean, decluttered, comfortable and well-lit.

Watch cooking videos together - Incorporate entertainment into your educational toolbox. The Youtube channel called "Great Depression Cooking" is extremely popular and is a wonderful example of how seniors often connect food to stories and memories of their past. Netflix has cooking shows, nutrition documentaries and travel food programs that you can watch together.

List the benefits - sometimes making change is as simple as the expression, "when you know better, you do better". A PCA can be a wonderful source of information and encouragement, helping the senior to adopt new healthy habits, including eating a more nutritious diet. If seniors know *why* healthy eating is so important, they may be more motivated to follow their diet plans. Speak with their health care team for guidance.

How Can a Caregiver Incorporate Nutrient-dense Foods?

It's often best to start with small steps, introducing new foods gradually. Find healthy substitutes for staple items and snacks without taking away their favourite foods. As a person incorporates healthy eating habits and begins to eat new foods, their taste buds will gradually change, and sometimes they begin to crave nutritious food naturally. Taking a slow approach to habit change works well because seniors generally consume fewer calories and have sometimes been eating the same foods for most of their lives. Change will be difficult and often unwanted. A gradual, informed and engaging approach to healthy food will decrease unhealthy eating habits without having to make drastic and often unsustainable changes.

- Keep it simple - too many choices and information can be distracting and overwhelming
- Create healthy finger foods (some seniors have problems using utensils)
- Replace common staple food items with healthier alternatives (salts, oils, breads, snack foods etc)
- Make healthy meals that can be frozen and easily reheated another day
- Be patient and don't force them
- Try not to hurry through mealtimes, focus on creating a regular routine
- For seniors with cognitive decline or changes to their senses, eliminating distractions and noise during meals has been shown to help them focus better on the food in front of them (turn off tv, radio and cell phones).
- Remove barriers to eating - serve one food at a time, don't confuse them with a big spread of food on the table. Cut food into small pieces if necessary, be sure it's soft enough to eat. Ensure the room is well lit so they can see what they're eating.
- May help to use bright, colorful tableware. One study found that Alzheimer's patients who were served food on red plates "consumed 25 percent more food than those eating from white plates." [9]

[9] https://www.bu.edu/cas/magazine/spring10/golomb/

Activities:

Create more colorful meals! Our eyes are attracted to colourful things and as a result, well-presented and colourful plates of food will be more enticing.

Add a splash of colour to breakfast: Sprinkle nuts, seeds and a handful of colourful berries to yogurt or oats, serve eggs on a bed of sauteed spinach or scramble them with various peppers and mushrooms. Replace the usual beverage with a colourful fruit and/or vegetable smoothie.

Get creative with salads: Small side salads, large dinner salads, warm or cold, the options with salads are endless! Easy to prepare and packed with nutrients and colourful food. Almost anything can be tossed in a salad - fruit, nuts, seeds, various greens, cabbage, sprouts, corn, seafood, steak or chicken. Try to have at least one per day.

Liven up lunch: Try a veggie sandwich! Replace white bread with whole grain bread. Try gluten-free wraps made from red beets, chickpea or sweet potato flour. Lettuce wraps are tastier than they sound, and soups, stews, and chili can can be filled with a variety of colourful vegetables.

Make vegetables the main dish: Try new recipes where vegetables can be the focus such as vegetable stir-fries, vegetable curries, and Buddha bowls.

Excursions: outings to places like a farm, food market, supermarket, bakery or butcher are fun and educational. Try to have a clear objective in mind, something that you would like the senior (and yourself) to gain from the experience. Follow up the excursion with related activities, games, discussions, stories, food tastings, or art projects such as drawing or painting.

Gardening: An excursion to a friend's garden or community garden is an excellent way to get fresh air, exercise and an opportunity to learn about food. Discover edible flowers, various herbs and their healing properties. Make tea with herbs picked fresh from their garden (mint is delicious!). Start a small indoor or outdoor garden at the senior's home with easy to grow foods such as tomatoes, peas, beans, snow peas and herbs). Use the opportunity to discuss where food comes from, how it grows and their unique nutritional benefits.

Celebrate different cultures through food and make meals from around the world! This is a delicious and fun way to learn about new foods, customs and cultures (e.g. make vegetable and lean meat dumplings for Chinese New Year)[10]

Eat the Rainbow!

Did you know the colour of whole foods indicates the specific nutrients that are contained in them?

The colour of fruits and vegetables is a result of specific phytonutrients, which are natural chemicals that help protect plants from germs, bugs, the sun's harmful rays, and other threats. Getting phytonutrients from whole foods is best, and the colour of food says a lot about its nutrition. For example, Greens are one of healthiest foods we can eat; green fruits and vegetables are rich in lutein, isothiocyanates, isoflavones, and vitamin K, all of which are essential for blood and bone health. Green vegetables are also rich in folates, which are vital for a healthy nervous system. There is growing evidence showing the involvement of folates in the ageing brain, especially in mood and cognitive function.[11]

Consuming a variety of foods daily ("eating the rainbow") will ensure a range of nutrients that will help the body and brain function optimally.

Canada's Food Guide recommends eating a variety of healthy food each day - plenty of vegetables, protein, and water as your main souce of hydration. Their website is a valuable resource with printables, recipes, and specific guidance for seniors located here: Healthy Eating for Seniors

[10] https://heas.health.vic.gov.au/early-childhood-services/curriculum-activities/healthy-eating-games-and-activities

[11] https://foodrevolution.org/blog/eating-the-rainbow-health-benefits/

Activity:

Rainbow shopping challenge: Try to find fruit and vegetables that will complete the full colours of a rainbow. Below is a visual guide to help. Print it off, share it with the senior you're caring for, put it on the fridge as a reminder, and most importantly, remember to have fun and try something new!

Make a rainbow meal: Create a meal that uses every color of the rainbow — red, orange, yellow, green, blue, purple, white, and even brown (think mushrooms). Don't forget spices and herbs that have nutritional properties too such as garlic, ginger, turmeric, cinnamon, parsley, oregano etc. Try these colourful meals:

- ➔ Butternut Squash Breakfast Hash
- ➔ DIY Smoothie Bowls
- ➔ Banana Spinach Pancakes
- ➔ Mediterranean Quinoa Bowl with Garlic Roasted Chickpeas and Roasted Red Pepper Sauce
- ➔ Sizzlin' Sesame Greens
- ➔ Pink & Purple Detox Salad
- ➔ Simple Breakfast Soup
- ➔ Hearty Vegetarian Chili
- ➔ Lentil Nuggets
- ➔ Carrot Ginger Lentil Soup

Image source: https://www.swissotel.com/infographics/eat-a-rainbow/

Rainbow Foods List

RED	**ORANGE**	**YELLOW**
Red peppers Tomatoes Strawberries Raspberries Watermelon Apples Cranberries Cherries Grapes Red onions Pomegranate Beets Rhubarb Kidney beans Blood oranges	Orange peppers Oranges Grapefruit Mangoes Papayas Carrots Sweet potatoes Winter squash (butternut, kabocha, delicata, acorn) Golden beets Peaches Pumpkin Cantaloupe	Yellow peppers Lemons Yellow summer squash Corn Pineapple Golden kiwi Yellow apples Yellow figs Yellow pears Bananas Yellow beets Yellow tomatoes Yellow potatoes
GREEN Broccoli Kale Romaine lettuce Collard greens Brussels sprouts Green grapes Green apples Asparagus Spinach Swiss chard Arugula Green beans Peas Zucchini Kiwi fruit Avocado Edamame Raisins	**BLUE / Purple** Blueberries Blackberries Elderberries Black current Red (purple) grapes Red (purple) cabbage Eggplant Plums Prunes Purple Figs Purple potatoes Purple carrots Purple Belgium endive Purple kale Purple cauliflower Indigo Milk Cap mushroom Blue corn	**Other nutrient-dense foods:** Mushrooms (try various types: button, shiitake, reishi, portabella, oyster) Cauliflower Garlic Ginger Onions Shallots Potatoes Parsnips Daikon radish Jicama Kohlrabi White asparagus Olives Omega-3: sardines, tuna, mackerel, salmon, flaxseed, and walnuts

Source: www.foodrevolution.org/blog/eating-the-rainbow-health-benefits