

Nourish to Flourish

A guide to support microbiome-friendly eating in South Asian foodways in Canada

<u>The Microbiome</u>: microorganisms (e.g., bacteria, fungi, viruses) existing in the human gut that are <u>essential</u> for human development, immunity, & nutrition.

Whole grains

Examples

brown or red rice, millet, bajra, jowar, sorghum Whole grains from around the world: freekeh, quinoa, spelt, wild rice



- Source of fiber (1, 2)
- Lowers blood sugar (2) & cholesterol (3)
- Stimulates growth & activity of the microbiome by promoting variety & stability of good bacteria (3, 4)



Lentils, chickpeas, moth beans, horse gram, black-eyed peas, kidney beans, other pulses

What do they do?

- Source of fiber (2)
- Promotes a stable diversity of good bacteria in the microbiome (e.g. Bifidobacteria) (5,6)
- Can help to prevent diabetes (5,6)





Fruit & Vegetables

Examples

Vegetables and Fruits: : cauliflower, cabbage, broccoli, amaranth, leaves, peas, long gourd, jackfruit, bitter melon, bottle gourd

OR other similar plant-based fresh foods from your culture!

What do they do?

- Source of <u>fiber</u> (7)
- Increases variety and stability of the microbiome that reduces growth of disease-promoting bacteria (7)
- Reduced blood sugar and fat: reduces risk of diabetes (8)

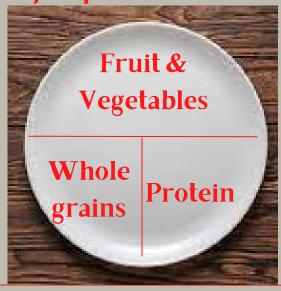
Importance of <u>Fiber</u>

- Nourishes the microbiome by eating from a VARIETY of sources



- Fuels the <u>GOOD</u> bacteria in the microbiome
- Lowers blood sugar, reduces Type 2 diabetes risk, and improves heart health (8)

What your plate should look like....



Extra! Extra!

- Explore **grains** that are indigenous to different regions of the Indian subcontinent, there is **so much variety to taste!**

(e.g., instead of rice, try a pulao made from foxtail millet

-Avoid <u>high fat</u>, fried foods & snacks (e.g. samosas, pakoras, chevro/chivda) and try cooking with oils lower in fat (e.g., olive oil).

Following a diet like this can decrease your diabetes risk by 30%...(9)

- **Drink** <u>water</u> instead of sugar-sweetened beverages (e.g., juice, pop) & reduce or eliminate sugar in your chai or coffee!
- <u>Limit dessert</u> intake or try sugar-free equivalent of them
 - *See resources provided for additional information and resources.

Created by Christine Del Rosso Additional sources and citations on back. christine.delrosso@mail.utoronto.ca All images sourced from Canva.



Nourish to Flourish

For more information & recipe ideas, scan the QR code to discover some links!





Citations

- Heart and Stroke Foundation [Internet]. Healthy Eating for South Asians. N.d. [cited 2022 Jan 23]. Available from https://www.heartandstroke.ca/-/media/pdf-files/canada/south-asian-resources/366 southasianheathyeating single.ashx
- HU FB. Globalization of Diabetes: The role of diet, lifestyle, and genes. *Diabetes care*. 2011;34(6):1249–57.
- Tosh SM, Bordenave N. Emerging science on benefits of whole grain oat and barley and their soluble dietary fibers for heart health, glycemic response, and gut microbiota. Nutrition reviews. 2020;78(Suppl 1):13–20.
- Nagpal R, Shively CA, Register TC, Craft S, Yadav H. Gut microbiome-Mediterranean diet interactions in improving host health [version 1; peer review: 3 approved]. F1000 research. 2019;8:699–699.
- Prokopidis K, Cervo MM, Gandham A, Scott D. Impact of Protein Intake in Older Adults with Sarcopenia and Obesity: A Gut Microbiota Perspective. Nutrients. 2020;12(8):2285–
- Tomova A, Bukovsky I, Rembert E, Yonas W, Alwarith J, Barnard ND, et al. The Effects of Vegetarian and Vegan Diets on Gut Microbiota. *Frontiers in nutrition* (Lausanne). 2019;6:47–47.
- 7. Canadian Digestive Health Foundation [Internet]. 10 Ways to Strengthen Your Microbiome. 2022. [cited 2022 Jan 23]. Available from https://cdhf.ca/health-lifestyle/10-ways-to-strengthen-your-microbiome/
- 8. McMacken M, Shah S. A plant-based diet for the prevention and treatment of type 2 diabetes. *Journal of geriatric cardiology*. 2017;14(5):342–54.
- Findings in Type 2 Diabetes Reported from Brigham and Women's Hospital (Association of the Mediterranean Diet with Onset of Diabetes in the Women's Health Study).
 Women's health weekly. 2021;113—.

