



Nourish to Flourish

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

Whole grains

Recommendation: 1/4 plate per meal (1).

Examples

brown or red rice, millet, bajra, jowar, sorghum

Whole grains from around the world: freekeh, quinoa, spelt, wild rice

Evidenced-based research:

- Source of fiber (2)
- Lower glycemic load (2) & cholesterol(3)
- Prebiotic effect (3)
- Eubiosis & diversity (3, 4)

Plant-based or lean protein

Recommendation: 1/4 plate per meal (1).

Examples

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

Evidenced-based research:

- Source of fiber (2)
- Prebiotic effect & eubiosis - increase Bifidobacteria & Lactobacilli gut bacteria (5,6)
- Avoids heterocyclic amines and glycan derived from red meat- promotes inflammation & type 2 diabetes (5,6)

Fruit & Vegetables

Recommendation: 1/2 plate per meal (1).

Examples

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

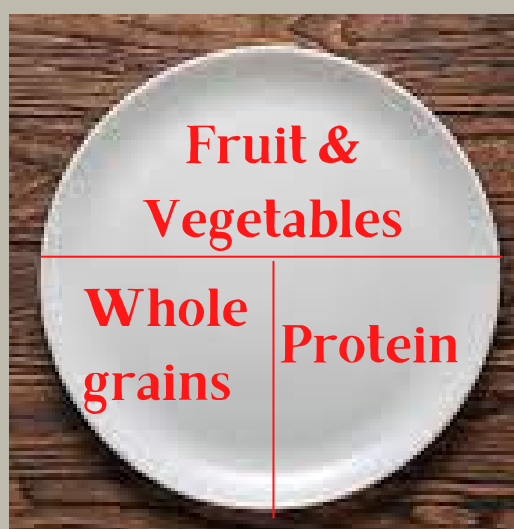
OR other similar plant based fresh foods from your culture!

Evidenced-based research:

- Source of fiber (7)
- Variety promotes diversity and prosperity of the microbiome (7)
- Depresses disease-promoting bacteria (7)
- Reduces blood glucose and lipids

Importance of Fiber

- From a VARIETY of sources (3, 8) (e.g., whole grain rotis, lentils, dhal, fruit & vegetables, nuts & seeds)
- Fuels the microbiome
- Prebiotic properties (3, 5, 8)
- Reduces the risk and incidence of Type 2 diabetes, CVD (8)



Limit intake of unhealthy fats

- Avoid fried foods and foods made with unhealthy fats such as shortening (e.g., samosas, pakoras, chevdo/chivda, cookies)
- Better glycemic control (9)
- Regulates blood pressure, weight & insulin sensitivity (9)
- Improves cardiovascular risk factors (9)

Reduce sugar intake

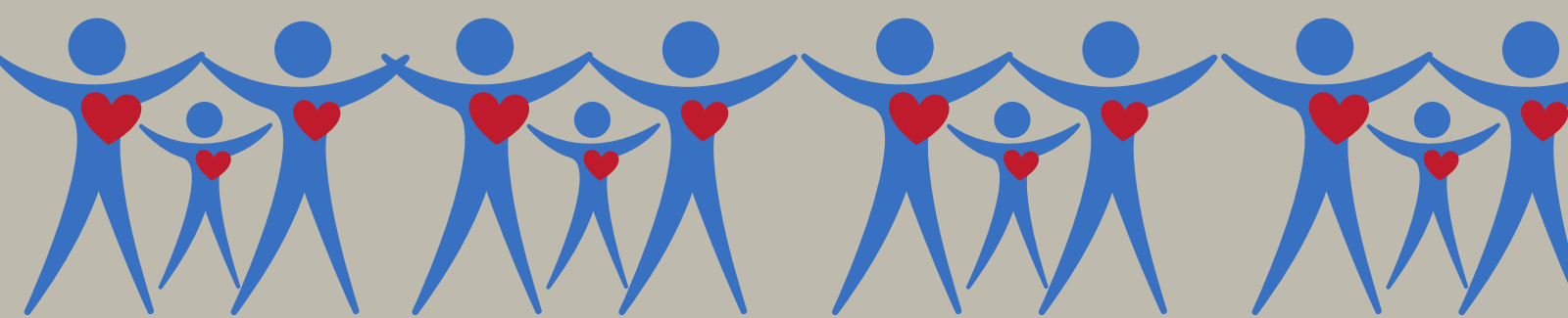
- Sugar promotes pathogenic bacteria growth, dysbiosis (10)
- Drink water before &/or with meals to increase satiety (11)
- Avoid sugar-sweetened beverages which increase glycemic load (11)
- Limit dessert intake or try sugar-free equivalent

Following a diet like this can decrease your diabetes risk by 30%...(12)



Nourish to Flourish

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



References

1. 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
2. HU FB. Globalization of Diabetes: The role of diet, lifestyle, and genes. *Diabetes care*. 2011;34(6):1249–57.
3. 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.
4. 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.
5. 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.
6. 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 : JGC*. 2017;14(5):342–54.
9. Esposito K, Maiorino MI, Bellastella G, Chiodini P, Panagiotakos D, Giugliano D. A journey into a Mediterranean diet and type 2 diabetes: a systematic review with meta-analyses. *BMJ open*. 2015;5(8):e008222–e008222.
10. Satokari R. High Intake of Sugar and the Balance between Pro- and Anti-Inflammatory Gut Bacteria. *Nutrients*. 2020;12(5):1348–.
11. Naumann J, Biehler D, Lüty T, Sadaghiani C. Prevention and Therapy of Type 2 Diabetes—What Is the Potential of Daily Water Intake and Its Mineral Nutrients? *Nutrients*. 2017;9(8):914–.
12. 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–.