

## **EATING MORE PLANTS**

Plants include vegetables, fruits, legumes, whole grains, nuts and seeds. We know that these foods should be included in a healthy diet. This handout is meant to provide information about a variety of diets, and provide tips to those who are looking to add more plants to their diet.

### **Definitions**

*Diet:* Food and drink that is regularly consumed. However, many people use the word diet to describe a regimen of eating for a specific goal.

*Standard American Diet (SAD):* Diet that is high in refined carbohydrates, sugar, saturated and trans fats. Meals are often based on animal foods and are highly processed.

*Carnivore:* Eats only meat, fish and other animal food (ex. dairy, eggs)

*Omnivore:* Eats both plant and animal foods.

*Vegetarian:* Eats only plant / non-animal food. Can include subtypes of Lacto- (includes dairy) and/or Ovo- (includes eggs)

*Flexitarian:* Eats mostly vegetarian but still eats the occasional animal products in their diet

*Vegan:* Eats only plant based food. Some choose this as a way of living that attempts to avoid animal exploitation, reduce environmental impact, among other things

*Plant Based:* Eats only vegetables, fruits, whole grains, nuts & seeds, and excludes all animal foods including meat, fish, eggs and dairy. There is focus on Whole Foods that are minimally processed and refined.

There is no one diet that is perfect for everyone. But the more plants you can eat, the healthier you'll be. Diets that restrict healthy foods, including "fad" diets such as Keto and Paleo, are generally not recommended for children and teens.

### **FAQ about nutrition when eating more plants**

#### 1. Protein

- Most people think of meat as the main source of protein. But plants contain protein as well.
- The plants highest in protein include beans, lentils, green peas, chickpeas, soy (edamame, tofu, tempeh), quinoa, oats, chia seeds, hemp seeds. Even lettuce and broccoli have protein!
- If you eat a diverse variety of plants, you will be able to get all essential amino acids.

#### 2. Calcium

- Calcium is very important for bone health
- Dairy milk is a common source of calcium but there are also plants rich in calcium. You can get calcium from plants including leafy

greens, broccoli, sweet potatoes, sesame seeds, tahini, along with dried raisins, prunes, figs and apricots.

- Many plant based milks are naturally high or fortified with calcium

### 3. Iron

- Iron can be divided into heme-iron (found in animals) and non-heme iron (found in plants). It is true that non-heme / plant iron is harder for our digestive system to absorb.
- Plants high in iron include legumes, cashews, chia seed, hemp seeds, pumpkin seeds (pepitas), kale, quinoa, dried apricots & figs
- You can increase absorption of iron by avoid eating with food high in calcium and consuming high iron foods with those high vitamin C, such as oranges, tomatoes, bell peppers, broccoli, cauliflower and brussel sprouts.
- If you have iron deficiency, please our handout for more information on iron supplementation

### 4. Omega 3

- This includes 3 types: alpha-linolenic acid (ALA), eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). ALA is found many in plants and plant oils, while DHA & EPA are found in fish
- These are a polyunsaturated fat. They are important for many body functions, including decreasing inflammation
- High sources in animals include cold water fatty fish, such as salmon, mackerel, tuna, herring and sardines, and certain algae
- High sources in plants include flax seeds, chia seeds, hemp seeds, walnuts, soybean oil

### 5. Vitamin B12

- Deficiencies in vitamin B12 can result in anemia (low red blood cells), and problems with neurological system
- Vitamin B12 is made by micro-organisms in animals and not found in plants
- If you have no animal foods in your diet, you should look for vitamin B12 fortified cereals, use nutritional yeast, and/or consider supplementation if you don't eat these foods 2x/day

### 6. Vitamin D

- Helps up regulate calcium and phosphate for bones, but is also important for immune system and many other health conditions
- It is known as the "sunshine vitamin" since we are able to get some vitamin D from the sun – but only in certain parts of the world. Here in Calgary, we typically only get vitamin D for 2-3 months per year
- All Canadians regardless of diet should supplement with vitamin D. In kids we recommend 800 units/day, and in post-puberty 1000-2000 units/day

7. Zinc
  - This nutrient is an essential part of your immune system, is required for healthy hair and skin, and is important for growth
  - Plant based sources of zinc including legumes, walnuts, cashews, chia seeds, hemp seeds, pumpkin seeds (pepitas), and quinoa

This list is not exhaustive, but focuses on some of the common questions about nutrition if you are vegetarian or plant based. If you have specific questions about your child's diet, we encourage you consult with a dietitian or nutritionist.

### **Tips**

1. Gut Microbiome
  - This is the trillions of microorganisms (including bacteria and yeast) that coexist peacefully in your intestine.
  - They help you digest food, but also play a role in your overall health. You'll be hearing more and more about how your gut microbiome affects your heart and brain health, along with immune system.
  - The key to optimizing your gut microbiome is eating a diversity of plant based food. Try to count how many plants you eat at each meal or each week.
2. Dealing with bloating with legumes and FODMAPS
  - Many people are sensitive to legumes, which is one of the FODMAPS food, which are foods that commonly cause food sensitivities
  - If you don't tolerate foods with fibre, your gut microbiome may not be in balance. Rather than avoid long term, start low and go slow when adding these foods back into your diet.
3. Adding more plant based protein into meals
  - Rather than focusing on removing too many foods from your current diet, first focus on adding more plants!
  - Add a handful of legumes to your favourite meals
    - Red lentils can be added to ground meat dishes
    - Black beans or refried bean can be included with Mexican food
    - Chickpeas, cannellini beans or white beans can be added to your pasta
    - Add some edamame to your stirfry
    - Soups love any bean and quinoa
    - Snack on seasoned roasted chickpea. These can also be "croutons" on salad
  - Add seeds & nuts to your meals
    - Top cereal or oatmeal with variety of nuts & seeds
    - Add cashews, peanuts and sesame seeds to noodles and stirfries
    - Pinenuts are a go to for pasta dishes
    - Top salads with nuts & seeds



## **Nutrition Resources**

Infinity Pediatrics Website [www.infinitypediatrics.ca](http://www.infinitypediatrics.ca)

- Our Nutrition Handouts section also contains:
  - Mealtime Struggles, which is a picky eating handout made by dietitians, and includes link to free dietitian support at the bottom
  - Canada's Food Guide 2 page summary document

Government of Canada Dietary Reference Intakes

[www.canada.ca/en/health-canada/services/food-nutrition/healthy-eating/dietary-reference-intakes.html](http://www.canada.ca/en/health-canada/services/food-nutrition/healthy-eating/dietary-reference-intakes.html)

- Scroll down the bar on left side for more information nutrients  
[www.food-guide.canada.ca/en](http://www.food-guide.canada.ca/en)

Caring for Kids [www.caringforkids.cps.ca](http://www.caringforkids.cps.ca)

- Visit the Healthy Living page and scroll down to “Vegetarian diet for children and teens”

Healthy Children [www.healthychildren.org](http://www.healthychildren.org)

- Visit the Healthy Living page and select the “Nutrition” section and scroll to “Plant-Based Diets: Are They Good for Kids?”

Some of our other favourite websites with recipes and evidence based articles discussing plant based diets, which were referenced in above information include:

Forks over Knives [www.forksoverknives.com](http://www.forksoverknives.com)

Plant Proof [www.plantproof.com](http://www.plantproof.com)

The Gut Health MD [www.theplantfedgut.com](http://www.theplantfedgut.com)