Learning Objectives

1. Define the various diets under a vegetarian umbrella (vegan, raw, plant-based, semi-vegetarian, lacto-ovo vegetarian, flexitarian)
2. Identify three reasons one might choose these diet patterns
3. List three nutrients of concern in a plant-based diet
4. Discuss three ways to work with plant-based eating disorder clients

What is a Plant-Based Diet?

- Vegetarianism: a diet “that does not include meat (including fowl) or seafood, or products containing those foods”
- Lacto-ovo-vegetarianism: a diet “based on grains, vegetables, fruits, legumes, seeds, nuts, dairy products, and eggs”
- Lacto-vegetarianism: a diet which “excludes eggs as well as meat, fish, and fowl”
- Veganism (total vegetarianism): a diet which “excludes eggs, dairy, and other animal products” (ADA 2009)
What is a Plant-Based Diet?

- **Pescatarian:** does not include meat (including fowl) but does contain seafood
- **Flexitarian:** Eats all foods, but “wakes up with the intention of being vegetarian”
- **Meat Minimalist:** Conscious effort to reduce animal protein intake
- **Plant-Based:** diet based on foods derived from plants, including vegetables, whole grains, legumes and fruits, but with few or no animal products.
- **Raw:** uncooked, unprocessed, mostly organic foods. Some eat unpasteurized dairy foods, raw eggs, meat, and fish. Your food can be cold or even a little bit warm, as long as it doesn’t go above 118 degrees.
- **Raw Vegan:** does not include raw eggs, meat, fish or dairy products.

Why do People Choose These Diets?

- Ethical (non-violence)
- Ethical (food production)
- Environmental
- Religious
- Health
- Economic

Eating Disorder Overlap

- **Orthorexia Nervosa:** “an unhealthy obsession with otherwise healthy eating. Literally means ‘fixation on righteous eating’. Orthorexics can start out as an innocent attempt to eat more healthfully, but orthorexics become fixated on food quality and purity” (Kratina 2016).
- **Anorexia Nervosa:** “an eating disorder characterized by weight loss, difficulties maintaining appropriate body weight for height, age, and stature, and in many individuals, distorted body image. People with anorexia generally restrict the number of calories and the types of food they eat” (NEDA 2016)
Overview of the Current Research

- Can you follow a plant-based diet and recover from an eating disorder?
- Traditional dogma says no
- A study by Bardone-Cone et. al (2012) “found that nearly half of their participants with a history of disordered eating reported following a vegetarian diet at some point and cited weight control as a primary reason for this choice” (Barnett et. al. 2016).
- “Food rules”, restrictive eating behaviors, and special diets may mask eating disorders by making social acceptable exclusions (pescatarian, vegan, paleo, gluten-free, etc.) (Barnett et. al. 2016)
- A study by Timko, Hormes & Chubski (2012) “found that semi-vegetarians, as opposed to ‘true’ vegetarians, were more likely to report a disordered relationship with food” (Barnett et. al. 2016).
- The study done by Barnett et. al (2016) “suggests that even if highly engaged alternative food network (AFN) consumers are ‘obsessed’ with healthy and pure foods, this preoccupation may not manifest in disordered eating behaviors” (Barnett et. al. 2016).
- Environmental and animal welfare concerns are prominent motivating factors for adopting a vegetarian diet (Bardone-Cone et. al. 2012; Fox & Ward 2008; Barnett et. al. 2016)

On the Other Hand...

- College-age women filled out questionnaires about their eating behavior and their attitudes toward food.
- The women were classified as vegetarian (including vegan), pescovegetarian, semi-vegetarian (no red meat), flexitarian (limited red meat), and omnivore.
- Semi-vegetarians and flexitarians showed more restrained eating behavior compared to both the omnivores and the vegetarians.
- The more restricted their diets -- the fewer animal products they ate -- the less likely they were to show signs of disordered eating.

Restraint Eating & Vegetarianism in College Females (Appetite 2011)

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Weight Control and Vegetarian Diets

- August 2012 issue of the Journal of the Academy of Nutrition and Dietetics on weight control and vegetarian diets.
- Women with a history of disordered eating are more likely to have been vegetarian for weight control reasons than women who had never had an eating disorder.
- Those who use vegetarianism as a way of reducing calories are more likely to experience disordered eating patterns compared to those who adopt vegetarian diets for other reasons.
- Vegetarian, especially vegan diets, are often promoted as a way to lose weight.

How Do We Counsel These Clients?

- 2009 ADA position statement

  “It is the position of the American Dietetic Association that appropriately planned vegetarian diets, including total vegetarian or vegan diets, are healthy, nutritionally adequate, and may provide health benefits in the prevention and treatment of certain diseases. Well-planned vegetarian diets are appropriate for individuals during all stages of the life cycle, including pregnancy, lactation, infancy, childhood, and adolescence, and for athletes”

Focus on Nutrients, Not Foods

- Adequate in certain nutrients, but lower in others (ADA 2009)

  “Vegetarian diets tend to be lower in saturated fat and cholesterol, and have higher levels of dietary fiber, magnesium and potassium, vitamins C and E, folate, carotenoids, flavonoids, and other phytochemicals. These nutritional differences may explain some of the health advantages of those following a varied, balanced vegetarian diet. However, vegans and some other vegetarians may have lower intakes of vitamin B12, calcium, vitamin D, zinc, and long-chain n-3 fatty acids”
Nutrients To Be Conscious Of:

- Protein
- Vitamin B12
- Vitamin D
- Calcium
- Iodine
- Omega-3 fatty acids

Sources & Nutrients

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Source</th>
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<tbody>
<tr>
<td>Protein</td>
<td>Beans (lentils, lima beans, black-eyed peas, chickpeas), legumes (peas, edamame, kidney, navy &amp; red beans), seeds (sunflower, pumpkin, chia), high-protein whole grains (rice, quinoa), meat alternatives (tofu, tempeh, seitan), vegetable-based protein powders, milk, yogurt, cheese, eggs</td>
</tr>
<tr>
<td>Vitamin B12</td>
<td>Fortified products (cereals), nutritional yeast, cheese, yogurt, milk, eggs</td>
</tr>
<tr>
<td>Vitamin D</td>
<td>Sunshine, milk, yogurt, egg, fortified products (cereals, orange juice), cheese, supplemental D2 &amp; D3 (animal derived)</td>
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<tr>
<td>Calcium</td>
<td>Dark leafy greens, cabbage, broccoli, beans, nuts, seeds, tofu, milk, cheese, fortified foods (non-dairy milks, orange juice), cottage cheese, whole wheat bread</td>
</tr>
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</table>

Sources & Nutrients

<table>
<thead>
<tr>
<th>Nutrient</th>
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<tbody>
<tr>
<td>Iodine</td>
<td>Seaweed, grains, milk, yogurt, cheese, eggs, salt (iodine fortified), soy milk</td>
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<tr>
<td>Omega-3 Fatty Acids</td>
<td>Flax seed, chia seed, hemp, walnuts, green leafy vegetables, algae supplements, oils (canola, soybean, flaxseed) edamame</td>
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<tr>
<td>Iron</td>
<td>Beans, soybeans, nuts, seeds, winter squashes, dark leafy green vegetables, dried fruits, oatmeal, quinoa and pear/barley</td>
</tr>
</tbody>
</table>
**Standard 2000-2200 Calorie Exchange Plan**

**Breakfast**
- 1 fruit
- 1 protein
- 2 grains
- 1 milk
- 1 fat

**10:00 Snack:**
- 1 fruit
- 1 protein

**Lunch**
- 2 Proteins
- 2 Grains
- 1 fruit
- 1 veggie
- 1 fat

**2:00 Snack**
- 1 grain
- 1 protein

**Dinner:**
- 3 Proteins
- 2 Grains
- 1 Veggie
- 1 Fat
- 1 Milk

**8:00 Snack**
- fruit/juice

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**With Vegan Substitutions**

**Breakfast**
- 1 banana
- 2 tablespoons peanut butter
- 2 slices whole grain toast
- 1 cup calcium fortified soy milk

**10:00 Snack:**
- 1 apple
- ½ cup steamed edamame

**Lunch**
- 1 veggie burger patty
- 100% sandwich roll
- 1 cup blueberries
- lettuce, tomato, sliced cucumber
- ¼ avocado
- 1 cup baked sweet potato cubes

**2:00 Snack**
- 1 ounce whole grain crackers
- ½ cup hummus

**Dinner:** (Taco Bowl)
- 1 cup black beans
- 1 cup brown rice
- 1 cup steamed spinach leaves
- ½ cup pico de gallo salsa
- ¼ cup guacamole
- 1 cup calcium fortified soy milk

**8:00 Snack**
- fruit/juice sorbet bar

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**Vegan Meal Plan Totals:**

- 2227 calories
- 350g CHO
- 63g Fat (11g saturated, 27g monounsaturated, 19g polyunsaturated)
- 85g protein

- 1363mg calcium (136% RDA)
- 23mg iron (128% RDA)
- 14mg Zinc (171% RDA)
- 5.4 µg Vitamin B12 (224% RDA)
- 16g linoleic acid
- 1g linolenic acid
Removing Labels

- Focus more on nutrition, less on labels
- Just talk about food!
- Less likely to use labels themselves
- "Liberalizing" diet using vegan versions for challenge
- Consider supplements
- Be honest with over-hyped claims

In Conclusion:

- Consider personal bias
- Patients might be less likely to seek help if they feel you are working against them
- Cannot assume someone is vegetarian/vegan for an unhealthy reason
- "Meet patients where they are" in order to build trust, rapport, and compliance
- Giving them ACHIEVABLE, REALISTIC goals they can stick to will better help them recover
- "To realize full recovery and to prevent relapse, it is important to consider not only eating behavior and weight, but also psychological, emotional, and social criteria" (Noordenbos & Seubring 2006).

Questions?
Credit Claiming

You must complete a brief evaluation of the program in order to obtain your certificate. The evaluation will be available for one year; you do not need to complete it on August 23, 2017.

Credit Claiming Instructions:
1. Log in to www.CE.TodaysDietitian.com and go to “My Courses” and click on the webinar title.
2. Click “Take Course” on the webinar description page.
3. Select “Start/Resume Course” to complete and submit the evaluation.
4. Download and print your certificate.