November 2023 PREMIUM

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Share with Your Clients:

- Butternut Squash Tart
- Orange Roasted Turkey
- Healthy Snack Ideas
- Protein 101
- What is Nutrient Dense?
- Rating Ultra Processed Foods for Nutritional Value **Research Corner:**

Prescription Produce Program

Photography

Editor's Note:

This issue has great year-end reviews for snacking, protein facts, rating ultra-processed foods especially plant foods, holiday recipes, and success with produce prescriptions. Look online for tons more holiday handouts and recipes.

-- Judy Doherty, MPS, PC II

Winter Squash Walnut Tart

Ingredients

Walnut Crust:

- 1 cup walnuts, ground
- 1 Tbsp flour

Squash Filling:

- 1 butternut squash, cut in half, peeled, seeded, sliced thin
- 1 acorn squash, cut in half, peeled, seeded, sliced thin
- 10 walnut halves for garnish



This savory tart makes a fancy vegetable side dish with a wow factor!

Instructions

- 1. Grind the walnuts in a food processor with the flour
- 2. Spray a nonstick tart pan with vegetable oil spray.
- 3. Press the walnut crust into the pan.
- 4. Place the sliced squash in the pan in a ring fashion as pictured.
- 5. Bake in a 350 degree oven for an hour or until the squash is tender.
- 6. Brush with butter or cover with foil half way through.
- 7. Garnish with the walnuts, slice and serve.

Serves 10. Each slice: 143 calories, 9 g fat, .8 g saturated fat, 0 mg cholesterol, 4 mg sodium, 15 g carbohydrate, 3 g fiber, 3 g protein.

Orange-Carmel Roasted Turkey



This delicious turkey has a nice caramel glaze, which holds in moisture and makes an excellent presentation.

Ingredients

- 10-pound turkey thawed
- 1 tablespoon olive oil
- 1 tsp kitchen bouquet
- 2 tsp apricot or orange marmelade
- 1 tsp Italian seasoning
- 1/2 tsp garlic
- 1 pinch salt and pepper

Instructions

- Mix the oil, Kitchen Bouquet, seasonings, and marmalade. Heat in a pan on the stove. Brush the turkey well with the glaze. Put in a 350-degree oven. We like to use a probestyle thermometer that inserts into the thigh and is set for 165 degrees F with an alarm. When the turkey reaches this temperature it is perfectly done and can be pulled from the oven. The time will vary according to the size of the bird.
- 2. Cover the bird when it is the color you desire. You can keep brushing with glaze in the beginning until the glaze is used up.
- 3. Put the bird on a big platter with fruits and rosemary. Carve at the table.
- 4. Serve with cranberries or gravy. For the gravy, we used the one that comes with the bird, and we added water to thin it down and reduce the sodium.

Serves 12. Each 4 ounce serving dark and white meat no skin: 120 calories, 2 g fat, .5 g saturated fat, 50 mg cholesterol, 120 mg sodium, 4 g carbohydrate, 0 g fiber, 20 g protein.

Healthy Snack Ideas

Healthy snacks are a great way to satisfy your hunger between meals while providing your body with essential nutrients. Here are some healthy snack ideas:



- **Fresh Fruit**: Fruits like apples, bananas, berries, and oranges contain vitamins, minerals, and fiber. They're easy to carry and require no preparation.
- Vegetable Sticks with Hummus: Slice up some cucumbers, carrots, bell peppers, or celery and dip them in a portion-controlled amount of hummus. This combo provides fiber, vitamins, and healthy fats.
- **Greek Yogurt**: Greek yogurt is rich in protein and probiotics. Add some fresh berries or a drizzle of honey for extra flavor.
- **Nuts and Seeds**: Almonds, walnuts, and sunflower seeds are high in healthy fats, protein, and fiber. A small handful can be quite satisfying. Feel free to mix them!
- **Nut Butter and Whole Grain Crackers**: Spread almond or peanut butter on wholegrain crackers for a balance of healthy fats and carbohydrates.
- **Trail Mix**: Make your own trail mix with a mix of nuts, seeds, dried fruits, and a few dark chocolate chips for a sweet touch.
- **Hard-Boiled Eggs**: Eggs are a good source of protein and can be boiled in advance for a quick and easy snack.
- **Avocado Toast**: Spread mashed avocado on whole-grain toast and sprinkle with a pinch of salt and pepper. You can also add tomato slices or a poached egg for extra flavor and nutrients.
- **Cottage Cheese with Fruit:** Low-fat cottage cheese with sliced peaches, pineapple, or strawberries makes a protein-packed, sweet snack.
- **Popcorn**: Air-popped popcorn is a whole grain and can be a healthy snack when not loaded with butter and excessive salt.
- **Homemade Smoothies**: Blend spinach, kale, or other leafy greens with fruits like banana, berries, and a scoop of protein powder for a nutritious snack.
- **Rice Cakes with Toppings**: Top rice cakes with almond butter, avocado, or cottage cheese, and add sliced fruits or veggies for extra flavor.
- **Chia Pudding:** Mix chia seeds with almond milk, a touch of honey, and some vanilla extract. Let it sit in the fridge until it thickens, and then top with berries or nuts.
- Sliced Turkey or Chicken: Roll up slices of lean turkey or chicken for a protein-rich snack.
- **Edamame**: Steamed edamame (young soybeans) sprinkled with sea salt is a proteinrich, satisfying snack.

Remember that portion control is important, even with healthy snacks, to maintain a balanced diet. Also, try to choose snacks that provide a mix of macronutrients (carbohydrates, protein, and healthy fats) to keep you feeling full and energized throughout the day. Drinking water alongside your snacks can also help with satiety.

Protein 101: Needs

Protein is one of the three macronutrients found in food, alongside carbohydrates and fats. While fat provides 9 calories per gram, carbohydrates and protein provides 4 calories per gram. This means that for every gram of protein consumed, it contributes approximately 4 calories to the total energy content of the food.

To calculate the calorie content of a food item that contains protein, you need to know the amount of protein it contains. This information is typically found on nutrition labels or in nutritional databases.

Here's an example: If a food item contains 20 grams of protein, you can calculate the calorie content from protein by multiplying the protein amount by 4:

Calories from protein = 20 grams * 4 calories/gram = 80 calories

Therefore, in this example, the food item would contribute 80 calories to your overall energy intake from protein.

The Dietary Reference Intake (DRI) for protein is the amount of protein intake recommended by health authorities to meet the nutritional needs of most healthy individuals. The DRI for protein varies depending on age, sex, weight, activity level, and other factors. Here are the general DRI recommendations for protein:

- 1. Infants:
 - 0-6 months: 9 grams per day
 - 7-12 months: 11 grams per day
- 1. Children:
 - 1-3 years: 13 grams per day
 - 4-8 years: 19 grams per day
 - 9-13 years: 34 grams per day
- 1. Adolescents:
 - Boys 14-18 years: 52 grams per day
 - Girls 14-18 years: 46 grams per day
- 1. Adults:
 - Men 19 years and older: 56 grams per day
 - Women 19 years and older: 46 grams per day

According to the NHANES data from 2015-2016, the average protein intake for Americans aged two years and older was approximately 98 grams daily. It's important to note that this value represents an average and may vary based on individual factors such as age, sex, activity level, and dietary preferences.

The USDA's recommended daily protein intake for adults is around 46 grams for women and 56 grams for men. Therefore, based on the NHANES data, the average protein consumption of the American population appears to meet or exceed the recommended levels.



Protein 101: Quality & Variety

Recommended Daily Amount: The guidelines recommend a range for protein intake, expressed as a percentage of daily calorie intake. The range is 10% to 35% of total daily calories. The specific protein needs within this range can vary depending on factors such as age, sex, and activity level.

- 1. **Variety of Protein Sources**: The guidelines emphasize the importance of consuming a variety of protein foods, including seafood, lean meats, poultry, eggs, legumes, nuts, seeds, and soy products. This variety helps to ensure intake of essential nutrients and different types of protein.
- 2. **Nutrient-Dense Choices:** The guidelines encourage choosing protein foods that are nutrient-dense and lower in saturated fats, added sugars, and sodium. This includes lean meats, poultry without skin, seafood, eggs, nuts, seeds, legumes, and low-fat or fat-free dairy products.
- 3. **Consider Sustainability**: The dietary guidelines also acknowledge the importance of considering the environmental impact of food choices. They suggest choosing protein sources that are produced sustainably, such as seafood, plant-based proteins, and lean meats from animals raised using sustainable practices.

	Serving Size	Calories	Protein g	Fat g	Saturated Fat	Sodium mg	Fiber g	cost per ounce
Seitan	100 grams	370	75	2	0.3	29	0.5	0.81
Chicken, breast	1 each, 4 ounces	198	37	4	1	89	0	0.41
Turkey	4 ounces	214	32	8.4	2.4	1 17	0	0.51
Tuna	3 ounces	111	25	0.5	0.2	46	0	0.20
Beef, lean	3 ounces	196	24	10	4	74	0	0.68
Pork	3 ounces	202	22	12	4	48	0	0.43
Salmon	100 grams	210	20	13	3	53	0	0.8
Lentils	1 cup	230	18	0.8	0.1	4	16	0.20
Split peas cooked	1 cup	231	16	0.8	0.1	3	16	0.14
Kidney beans	1 cup	225	15	0.9	0.1	1.8	11	0.06
Black Beans	1 cup	241	15	0.7	0.2	5	15	0.06
Farro cooked	1 cup	337	15	2	0.2	5	11	0.31
Eggs	2 large	144	12	9.5	3.2	142	0	0.20
Tempeh	2 ounces	110	11	6	2	8	0	0.44
Tofu	3 ounces	76	9	4.8	0.8	3	0.9	0.11
Peanut butter	2 tablespoons	188	7	16	3	152	1.8	0.12
Jackfruit	1 can	70	4	0	0	900	7	0.25
Walnuts	1 ounce	182	4	18	1.7	0	2	0.37

Protein Comparison Chart

Notes: store brands were used for cost, cost on beans is canned while lentils and split peas are dried. Sources: manufacturer's data, USDA Handbook 8.

What Does Nutrient-Dense Mean?

Nutrient density refers to the amount of essential nutrients (such as vitamins, minerals, fiber, and protein) in a food or beverage relative to its calorie content. Foods that are nutrientdense provide a high concentration of these essential nutrients per calorie, making them a healthy choice for your diet.

In contrast, foods that are calorie-dense but lack significant nutritional value are often referred to as "empty-calorie" foods. These foods provide a lot of calories but very few essential nutrients. For example, sugary sodas, candies, and many fast foods are considered low in nutrient density because they are high in calories from added sugars and unhealthy fats but offer little in the way of vitamins, minerals, or other beneficial nutrients.



Nutrient-dense foods are typically whole, unprocessed, and minimally processed foods that provide a wide range of nutrients without excessive calories. Examples of nutrient-dense foods include:

- Fruits and Vegetables: These are packed with vitamins, minerals, fiber, and antioxidants while being relatively low in calories.
- Lean Proteins: Skinless poultry, lean cuts of beef or pork, fish, tofu, and legumes are good sources of protein without excessive fat.
- Whole Grains: Foods like quinoa, brown rice, whole wheat bread, and oats provide complex carbohydrates, fiber, vitamins, and minerals.
- Dairy: Low-fat or fat-free dairy products like yogurt and milk offer calcium, protein, and other essential nutrients.
- Nuts and Seeds: These provide healthy fats, protein, and various vitamins and minerals.
- Eggs: Eggs are a good source of protein, vitamins, and minerals.
- Beans and Legumes: These are rich in fiber, protein, and various nutrients.
- Leafy Greens: Vegetables like spinach, kale, and Swiss chard are particularly nutrient-dense due to their high vitamin and mineral content.
- Berries: Berries like blueberries, strawberries, and raspberries are rich in antioxidants and vitamins.

Choosing nutrient-dense foods is a key aspect of maintaining a balanced and healthy diet. They provide the essential nutrients your body needs to function properly while helping you manage your calorie intake. Incorporating a variety of nutrient-dense foods into your meals and snacks can promote overall health and well-being.

Rating Ultra Processed Foods for Nutritional Value

What are Ultra-Processed Foods?

No doubt you've seen ultra-processed foods in the news. "Ultra-Processed Foods are Linked to Early Death" and "Ultra-Processed Food is Killing Us but We're Too Selfish to Stop Eating It" are two of many frightening headlines. But what exactly are ultra-processed foods, and are they all equally damaging?

What are ultra-processed foods?

Candy, chips, cookies, and cheese from a spray can probably come to mind. But other foods may surprise you. The most widely accepted classification for identifying processed foods is the NOVA classification, in which foods are bucketed into four categories. Category 1 consists of unprocessed foods like fresh apples and minimally processed foods like chopped almonds in a resealable plastic bag. Culinary ingredients like olive oil and butter fall into category 2. Canned beans, bread, and other foods with added sugars, oils, or salt and smoked or canned foods are in category three processed foods. Considered the most processed and the most harmful are category 4 ultra-processed foods.

Category 4 foods are those containing manufactured or extracted ingredients and include candy, chips, cookies, and spray-can cheese but also yogurt with added sugar, fiber-fortified bread, high-protein hot cereal, plant-based milk substitutes, and zero-calorie plain sparkling water.

Nutrition is nuanced

The NOVA classification does not indicate the healthfulness of a food, merely its degree or type of processing. In fact, researchers with the USDA created a healthful diet following the recommendations of the Dietary Guidelines for Americans, with 91% of calories coming from category four ultra-processed foods. The diet provided ample potassium, calcium, and fiber, which are largely under-consumed in the U.S.

The problem with the NOVA classification is the same problem other classification systems have. They are rigid and can be applied too strictly. Not all ultra-processed foods are harmful any more than all foods with carbohydrates are bad, all foods with salt are unhealthy, or all dogs are attack dogs.

The USDA research does not suggest that candy and chips are wholesome foods or that they don't contribute to health problems. However, the research does argue that the widely-used classification system for processed foods cannot determine the healthfulness of the diet.



Rating Ultra Processed Foods for Nutritional Value

What you can do

Take headlines with a grain of salt. Attention-grabbing headlines often misrepresent research conclusions. Ask yourself these five questions to determine the nutrient density of your diet:

- **Do you eat ample fruits and vegetables every day?** MyPlate calls for 3-5 cups of fruits and vegetables daily for adults. If you are eating them with most snacks and meals, you are probably in good shape.
- **Do the majority of your foods provide critical nutrients?** If you are making a healthy plate with MyPlate, you will be getting adequate carbohydrates, protein, vitamins, and minerals. The food groups in MyPlate include fruits, vegetables, whole grains, and heart-healthy proteins, along with 2-3 servings of calcium-rich dairy or nondairy foods.
- **Do you eat protein-rich foods with most meals, and foods with fiber at every meal?** Protein-rich foods include seafood, poultry, meat, nuts, nut butter, legumes, eggs, and seeds.
- Do you eat the right amount of food and calories for your body and energy level?

Bottom line:

Processed and ultra-processed foods of high nutrient density such as soy milk, tofu, whole grain tortillas, cottage cheese, and canned lentil soup fit well into wholesome meal patterns.

Enjoy!



Reference:

https://jn.nutrition.org/article/S0022-3166(23)72434-6/fulltext

"Dietary Guidelines Meet NOVA: Developing a Menu for A Healthy Dietary Pattern Using Ultra-Processed Foods" by Julie M. Hess, Madeline E. Comeau, Shanon Casperson, Joanne L. Slavin, Guy H. Johnson, Mark Messina, Susan Raatz, Angela J. Scheett, Anne Bodensteiner and Daniel G. Palmer, 24 June 2023, *The Journal of Nutrition*.

It's well known that individuals suffering from food insecurity often have higher risks for chronic diseases, including heart disease. Decreased fruit and vegetable intake can certainly impact blood pressure, weight, and lipids. 1

A recent study published in Circulation Cardiovascular Quality and Outcomes, a peer-reviewed American Heart Association journal found that individuals at higher risk for heart disease who joined produce prescription programs and increased their intake of fruits and vegetables had improved BMI, blood sugar, blood pressure levels, and reduced food insecurity. 2

Fruits and vegetables in produce prescription programs are allowed to be prescribed by doctors as they would medicine. Vouchers or electronic cards are provided to patients which allows access to their choice of free or reduced-priced produce. Produce may be purchased at grocery stores or farmer's markets, according to lead author Kurt Hager, Ph.D., M.S., an instructor at UMass Chan Medical School in Worcester, Massachusetts.

Their study pooled data from nine programs across the US to evaluate health outcomes after half a year. Prior research has evaluated the impact of small, individual, produce prescription programs.

"We know that food insecurity impacts health through several important pathways, including overall dietary quality, but also through stress and anxiety, mental health and tradeoffs between paying for food and other basic needs such as housing costs, utilities, and medications," said Hager, who completed these analyses while a doctoral student at the Friedman School of Nutrition Science and Policy at Tufts University in Boston. "These results indicate produce prescriptions may lay an important foundation for improved health and well-being."

Participants in the study received roughly \$63 each month to buy produce at farmer's markets and local groceries. Participants also attended nutrition classes. At the start and after finishing the program that was offered between 4 and 10 months, subjects answered questionnaires about produce intake, food insecurity, and health status.

Regular checks of blood pressure, BMI, and HbA1C, a 3-month measure of blood sugar were performed at the start and conclusion of the program. The study did not have a control group and evaluated outcomes among subjects before and after they completed the program.

The evaluation of all participants discovered:

- Intake of fruits and vegetables by adults was increased by .85 cups per day and .26 cups per day in children.
- Systolic blood pressure (pressure during heartbeats) dropped over 8 millimeters of mercury (mm Hg). Diastolic blood pressure (pressure between heartbeats) was reduced by almost 5 mm Hg in adults who had high blood pressure at the start of the study.



- In adults with diabetes, HbA1C levels were reduced by .29 to .58 percentage points.
- BMI was significantly lower with a drop of .52 kilograms per square meter (kg/m2) in adults with obesity. BMI in children was unchanged.
- By the end of the program, adults were 62% more likely to report improved health status Children were more than twice as likely to report better health status.
- Participants, overall, were one-third less likely to record issues with food insecurity after finishing the programs than before the programs.

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According to Mitchell Elkind, M.D., M.S., FAHA, chief clinical science officer of the American Heart Association and a tenured professor of neurology and epidemiology at Columbia University. "Poor nutrition and nutrition insecurity are major drivers of chronic disease globally, including cardiometabolic conditions like Type 2 diabetes and their cardiovascular consequences, including heart failure, heart attack, and stroke,"

"This analysis of produce prescription programs illustrates the potential of subsidized produce prescriptions to increase consumption of nutritious fruits and vegetables, reduce food insecurity, and, hopefully, improve subjective and objective health measures. Future research will need to include randomized controlled trials to offset any potential bias and prove more rigorously the benefits of produce prescription programs. The American Heart Association's new Food Is Medicine Initiative will be focused on supporting such trials."

The Food is Medicine Initiative was announced in September 2022 by the American Heart Association and The Rockefeller Foundation at a White House Conference on Hunger, Nutrition, and Health. It seeks to ensure patients obtain medical prescriptions for nutritious food to help prevent and manage chronic disease.

According to the American Heart Association, poor nutrition was attributed to almost 8 million deaths in 2019. Food insecurity impacts the access, availability, and affordability of nutritious foods and drinks that promote health and prevent or treat disease.

Study Details:

- This study included 2,064 adults and 1,817 children in one of nine produce prescription programs operated by the American Heart Association, Wholesome Wave, from 2014 to 2020. The programs were offered at 22 sites in low-income communities in 12 U.S. states.
- All program subjects had or were at risk for developing heart disease or Type 2 diabetes. They also either suffered food insecurity or were enrolled at a clinic serving a primarily low-income neighborhood.
- The average age of adult subjects was 54 years old; 71% were women, 30% were white adults, 45% were Black adults, 21 percent were Hispanic adults and 4% of adults' race/ ethnicity was classified as "other."
- The average age of children in the study was 9 years old. Half were girls, 9% were white children, 13% were Black children, 76% were Hispanic children and 2% of children's race/ ethnicity was classified as "other." Almost two-thirds of child participants were enrolled in the federal Supplemental Nutrition Assistance Program (SNAP).
- At the start of the study, over half of the households reported experiencing food insecurity.

Limitations of the study included the lack of a control group for comparison; large rates of missing survey data for food insecurity and fruit and vegetable intake data at the end of some programs; and the impact of the COVID-19 pandemic on programs that began during that period.

Below are tips to help your clients with food insecurity:

- Become familiar with SNAP benefits and how your clients can enroll.
- Partner with primary care offices that offer Prescription produce programs.
- Provide a list of community resources such as food pantries and farmer's markets for those dealing with food insecurity.
- Encourage the use of bruised or "not so perfect" produce that may be discounted at the grocery store.
- Offer classes to teach clients how to cook various fruits and vegetables.
- Provide simple recipes using canned, fresh, or frozen produce.
- Offer incentives such as grocery gift cards for class attendees.

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Executive Editor Judy Doherty, PC II

Copy Editor Stephanie Ronco

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James J. Kenney, PhD, FACN Jill Weisenberger, MS, RDN, CDE, FAND, CHWC Lisa Andrews, MS, RD Hollis Bass, MEd, RD Lynn Grieger RDN, CDE, CPT, CWC Beth Rosen, MS Cheryle Syracuse, MS

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