Vegan Nutrition

Vegans can and do eat almost every type of food they ate before becoming vegan. Far from deprivation, a vegan diet is a culinary adventure that opens new worlds of eating pleasure. Food and its enjoyment become central. Besides a bounty of fruits, vegetables, beans, nuts, breads, and pastas, delicious plant-based substitutes exist for nearly every animal product—with no animals harmed in the process. As on any diet, it's important to ensure adequate intake of vital nutrients like Vitamin B12 and Omega-3 fatty acids.

Grocery Stores with Vegan Products

Albertsons, Kroger, Publix, Ralphs, Safeway, Sprouts, Trader Joes, Vons, Whole Foods, and many more. Look in the dairy, deli, or ask for the special veggie section.

Beware of Hidden Animal Products

- Albumin (egg whites)
- Casein [KAA-seen] (milk protein; a potent carcinogen)
- Gelatin (ground-up cow and pig hooves, bones, skin, tendons. Jello anyone?)
- Honey (regurgitated bee vomit intended for bee babies; can be toxic to human babies)
- Nonfat milk powder (added to items to boost protein level on food label; carcinogenic)
- Rennet (enzymes to make cheese; obtained from ground-up baby calf stomachs)
- Whey (watery milk plasma or dried powder; carcinogenic)

Vegan Nutrition Links

http://nutritionfacts.org

www.veganhealth.org

www.pcrm.org

Plant-Based Substitutes

Food = texture + flavorings. Once you pile on the condiments, you often can't tell the difference between animal products and plant-based substitutes. While your primary diet should be whole and unprocessed, vegan "comfort" foods can help you make the transition. Here are some sample companies and products. As demand increases, the list keeps growing.
http://bocaburger.com www.beyondmeat.com www.btmsoymilk.com www.daiyafoods.com www.earthbalancenatural.com
www.ener-g.com www.fantasticfoods.com www.fieldroast.com www.followyourheart.com www.gardein.com www.lightlife.com
www.panosbrands.com www.morningstarfarms.com www.thevegg.com www.tofurky.com www.yvesveggie.com

Meat Substitutes (mock meats)

- Soy-based: Tofu, Tempeh [TEM-paa], Texturized Vegetable Protein (TVP).
- Wheat-based: Seitan [SAA-tan], Vital Wheat Gluten.

Hamburger	Boca Burger, Gardenburger, Boca Ground Crumbles, Lightlife Gimme Lean...
Hot Dogs	Lightlife Smart Dogs, Yves Meatless Hot Dog...
Beef	Gardein BBQ Skewers, Morningstar BBQ Riblets...
Chicken	Gardein Chick'n Scallopini, Beyond Meat Chik'n Strips, Follow Your Heart Chicken...
Turkey	Tofurky Roast, Gardein Stuffed Turkey...
Sausage	Tofurky Italian Sausage, Field Roast Smoked Apple Sage...
Other	Substitutes exist for cold cuts, pepperoni, bacon, ham, jerky, fish, shrimp...

Egg Substitutes

For baking	EnerG Egg Replacer, banana, ground flax + water...
For breakfast	Fantastic Foods Tofu Scrambler, The Vegan Egg, The Vegg...

Dairy Substitutes

Cheese	Daiya [DAA-yuh], Follow Your Heart, Vegan Rella, Tofutti...
Ice Cream	Rice Dream, So Delicious, Sweet Nothings, most sorbets...
Mayonnaise	Vegenaise, Just Mayo (mayo flavor), Nayonaise (salad-dressing flavor)...
Margarine	Earth Balance, Smart Balance Vegan...
Milk	Soy ($$ saving tip: dilute with cold water to taste), Almond, Rice, Oat, Hemp...
Powdered Milk	Better Than Milk (soy or rice).

Breads

Whole-grain breads, buns, bagels, tortillas, etc. (that do *not* contain milk, whey, egg, honey...)

SOS
(Salt Oil Sugar)
Like most processed foods, many plant-based substitutes have been stripped of nutrients then loaded with SOS [sawss]. It's best to use them as garnish added to a main meal or as occasional treats.

WP-BF
[Whip Buff]
For maximum health, make Whole Plant-Based Foods (WP-BF) the mainstay of your diet. They'll help *whip* you into *buff* shape!

Maximize

Vitamin B12

B12 is made by bacteria that live in the soil and also reside in human and animal intestines.

There is no reliable plant-based source of B12, but you don't need much, and it can be easily obtained from:

- Nutritional yeast
  (cheese-flavored flakes available in jars or bulk bins of natural food stores. Sprinkle it daily on salads, popcorn, soups, pasta...)
- B12-fortified non-dairy milks
  (almond, soy, rice, hemp, oat...)
- B12-fortified meat substitutes
  (burgers, dogs, crumbles...)

Omega 3

This essential fatty acid has many benefits, including promoting heart health and fighting inflammation caused by exercise or arthritis. Fish are touted as a good source, but they are loaded with contaminants (mercury, PCBs...). Ironically, fish get Omega-3 from plants—marine algae to be specific. You can get it safely from:

- Ground flax seed
  (Buy preground or get seeds in bulk and grind with blender. Sprinkle 1-4 Tbsp/day on cereal, salads, soups, etc. Refrigerate.)
- Walnuts
  (small handful daily)
- Microalgae capsules
  (produced in sterile labs)

Vitamin D

Most people, regardless of diet, are deficient in Vitamin D, which is a hormone made when your skin is exposed to sunshine. But too much sun can lead to skin cancer. So getting enough Vitamin D is a balancing act. You can get yours from:

- 10-30 minutes of daily sun on your arms and face (without sunscreen) depending on skin color and latitude.
- Vegan D3 supplements
  (avoid standard D3 from irradiated sheep's wool or fish oils.)
- Vegan D2 fortified foods
  (non-dairy milks, cereals...)

D3 (cholecalciferol) is more readily absorbed than D2 (ergocalciferol), but D2 is just as effective if taken at appropriate doses & frequency.

80-10-10

The optimum diet

- 80% carbs
  (complex, unrefined)
- 10% fat
  (mostly unsaturated)
- 10% protein
  (Fact: Human breast milk that fuels infant growth is only about 7% protein!)

COMPLEX CARBS

Refined products, like white sugar or white flour, have been stripped of fiber and vital nutrients. They spike your blood sugar level which reaches a peak then crashes causing you to want more empty calories.

Complex carbohydrates, in products like date sugar or whole grains, contain all of a plant's nutrients and fiber. They are more slowly digested so have less effect on blood sugar.

PA: Phytochemicals & Antioxidants

"Phyto" is Greek for plant. *Phytochemicals* "fight" off pests, disease, and sun damage in plants, which when eaten can do the same for you.

Natural chemical reactions in our bodies produce free radicals, which are unstable atoms that can lead to cancer and inflammation. *Antioxidants* are phytochemicals that bind to and eliminate free radicals.

Vitamins like A, C, and E are antioxidants. The highest antioxidant foods include spices, beans, & berries. Eating a variety of colorful plants loaded with PA can help stave off diseases.

B12: Nutritional Yeast

Omega 3: *Ground* flax seeds
(You can't digest whole seeds)

Vitamin D: Non-dairy milks

Organic = Non-GMO

Non-GMO

Unlike traditional methods of plant breeding, Genetically Engineered (GE) plants become Genetically Modified Organisms (GMO) which may contain genes of other species, including animal and bacterial genes. Look for Organic or Non-GMO on food packaging.

BITTER IS BETTER!

Bitterness is a plant's way of warding off insects and predators. It's also a measure of the phytochemicals and antioxidants in a particular plant.

So embrace the bitterness of healthy foods like kale. Your tastes will adapt.

To minimize bitter greens, add savory low-fat dressings or lightly sauté with garlic, onion, and a splash of soy sauce.

RAW or COOKED

Raw fruits and veggies are great, because they are naturally whole and unprocessed. On the other hand, cooking some foods (tomatoes, carrots...) releases even *more* nutrients by breaking down cell walls. And some foods *must* be cooked (kidney beans).

Cooking can degrade some nutrients, but it's easy to just eat a bit more.

Raw or cooked, the healthiest plant foods are *the ones you'll eat!*

ORGANIC

Organic produce may cost a bit more, but do you really want to eat food sprayed with herbicides and pesticides designed to kill living things? Worse, systemic and GMO poisons reside *in* plant cells and can't be washed off.

Pesticides also kill beneficial insects, like bees, pollute the environment, and create health issues for workers who must apply them or work in the fields.

Minimize

SALT

Consuming excess sodium can damage the walls of your arteries and increase your chances of heart disease and stroke.

Processed foods are generally loaded with salt, which is added as a preservative or binder. When examining a nutritional label, strive for a 1:1 ratio of sodium milligrams (mg) to calories. For example, if a food has 100 mg of sodium per serving, the serving should have no more than 100 calories.

The 1:1 ratio is derived from the USDA recommendation of about 2000 mg sodium/day (~1 tsp salt) on a 2000 calorie/day diet. The American Heart Association sets the limit at 1500 mg/day, and for optimum health, we need perhaps only about 500 mg/day.

It's nearly impossible to taste salt in processed foods, so eat primarily whole foods. If you crave salt, add it *on top* of the finished food. You'll always use less than in a processed product.

Some tout the superiority of sea and other salts that contain additional minerals. But salt is salt, so use it sparingly. Better yet, use flavorful spice combinations in place of salt. Your taste buds will adjust.

The prime source of **iodine** in most diets is *iodized* salt. As an alternative, you can buy kelp flakes and occasionally sprinkle them on soup, salads, or other dishes. But you only need a little iodine, so don't overdo it.

OIL

Oil is 100% processed fat with little nutritional value. As a highly condensed source of calories (~100 per tablespoon), oil consumption makes it harder to maintain your ideal weight.

Olive oil is touted as healthy, but only because studies have compared it to even worse dietary fats like butter.

All oils, monounsaturated, polyunsaturated, or saturated, damage endothelial cells that line arteries, which leads to restricted dilation and more plaque blockages.

It's best to get needed fat (in moderation) from whole foods like nuts, seeds, or avocados, because they also bestow protective nutrients.

Instead of oil, sauté veggies in low-sodium broth or water (adding more as evaporation occurs) or dry roast or them with desired seasonings.

SUGAR

Ideally, fewer than 5% of daily calories should come from added sugar—essentially empty calories which provide fuel but little if any nutrition.

5% of a 2000 calorie/day diet is 100 calories, which would be about *two* tablespoons of added sugar.
(1 Tbsp sugar = ~50 calories.)

Sucrose (table sugar) is 50% fructose & 50% glucose. Glucose tends to suppress appetite. Fructose (when stripped out of its beneficial fruit), does not. High Fructose Corn Syrup is 55% fructose / 45% glucose.

Three sugars have nutritional value:

- Date sugar
  Dehydrated, ground-up dates. Not as sweet as cane or beet sugar. Doesn't dissolve in hot liquids. Use in baked goods & desserts.
- Molasses
  Syrupy byproduct of sugar refining. Blackstrap variety is a good food source of iron, calcium, and other minerals.
- Erythritol
  Sugar alcohol crystallized from corn or sugar cane. Contains antioxidants. ~Zero calories. Doesn't cause tooth decay. 70% as sweet as sugar. Can use in most recipes & hot drinks.

Some vegans avoid *white* sugar as it may have been filtered through cow-bone char. Brown sugar is white sugar with molasses added back. Powdered sugar is pulverized white sugar with added cornstarch.

Raw or turbinado sugar has not been filtered and retains some of the natural molasses, so it's a better choice.

Most artificial sweeteners (aspartame, saccharin, sucralose, xylitol...) are low in calories but may have side effects (e.g., gas) and be unhealthy.

Isolated Soy Proteins

Isolated soy proteins, derived from soybeans, have been stripped of nutrients and are used in some popular mock meats. Feel free to indulge sparingly in such treats on occasion, but lean towards tofu or tempeh-based meat substitutes, which are less processed and retain more nutrients.

Despite some opinions to the contrary, moderate amounts of *whole* soy products are beneficial as evidenced by the general overall health of societies that consume them.

Saturated Fats

Although plants contain *zero* cholesterol, consuming excess *saturated* fat, even from plants, primes your body to create more internal cholesterol.

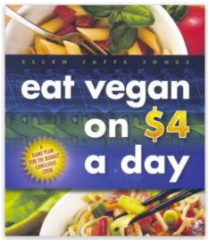
Limit your daily consumption of plants that are higher in saturated fats, like nuts (15% saturated) & avocados (17%). Minimize or avoid palm oil (49%) & coconut oil (60%).

Non-food Minerals

Growing evidence suggests that excess metals in the body (copper, zinc, iron, aluminum) are linked to Alzheimer's disease. Avoid mineral supplements, cookware, cosmetics, and medicines that may contribute to metal absorption.

Vegan Meals

Vegan meal preparation is simpler than you might think!



See at Amazon.com

The easiest way to transition to vegan eating is to make the *same* meals you've always made by replacing animal products with plant-based substitutes (like those listed on page 1). For example, you can replace burger crumbles in chili with veggie crumbles. Or omit them altogether and make a hearty bean chili. Substitutes can be pricey and less nutritious than whole foods, but vegan eating can be quite inexpensive if you're willing to buy in bulk and prepare items from scratch.

Typical Vegan Meals

* Breakfast: Raw oatmeal with raisins, sliced fruit, walnuts, ground flax, non-dairy milk.

* Lunch: Huge salad with dark leafy greens and lots of colorful veggies, beans, low/no-fat dressing/vinegar.

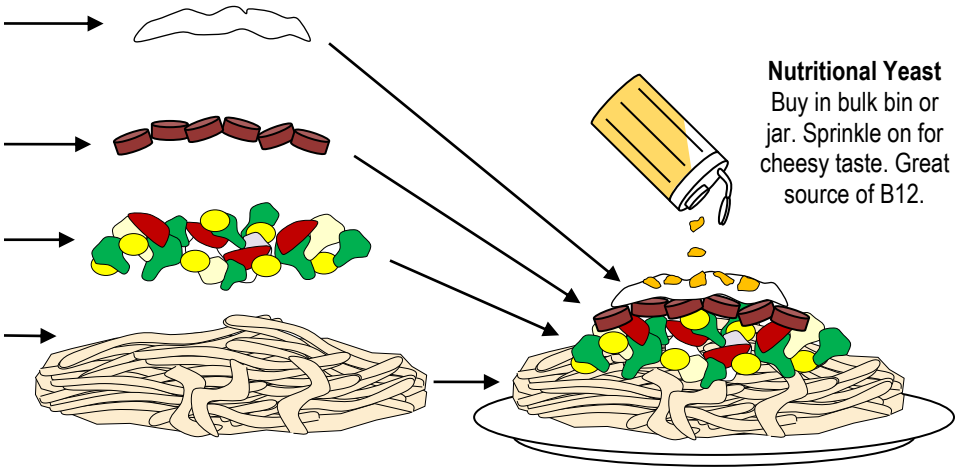
* Dinner: Mix & match the following basic ingredients to create dozens of combinations.

Topping
Low/no-fat sauce, salsa, gravy, vegan mayo/sour cream…

Protein
Beans, marinated tofu, tempeh, mock meat…

Veggies
Tomato, corn kernels, peas, carrots, broccoli, cauliflower…

Starch
Pasta (spaghetti, macaroni, noodles...), potatoes, quinoa, couscous, rice…



Nutritional Yeast
Buy in bulk bin or jar. Sprinkle on for cheesy taste. Great source of B12.

Weight Loss

If one of your goals is to lose weight, any diet that restricts calories will work—temporarily. But if the diet emphasizes animal foods over plants, you may jeopardize your health in the process.

- **Animal Foods:** No fiber, high fat, high cholesterol
- **Plant Foods:** High fiber, low fat, no cholesterol

For long-term, sustainable weight loss, plant-based eating wins the marathon. Of course, until you reach your desired weight, you're wise to eliminate or reduce intake of high-fat nuts, seeds, & plants.

High vs. Low-Carb Diets

A vegan diet is a high-carb diet, since plants are mostly carbohydrates (and water). According to the Academy of Nutrition and Dietetics, well-planned vegan diets are healthful, nutritionally adequate, and may provide benefits in the prevention and treatment of certain diseases. Furthermore, vegan diets are appropriate for individuals during all stages of the life cycle, including pregnancy, lactation, infancy, childhood, and adolescence, and for athletes.
www.eatrightpro.org/resource/practice/position-and-practice-papers/position-papers/vegetarian-diets

In contrast, low-carb diets based on increased consumption of animal products are discouraged by the very same Academy of Nutrition and Dietetics, as well as the American Medical Association, the American Heart Association, and the American Cancer Society. Risks include increased heart disease, cancer, and diabetes.
www.pcrm.org/health/diets/ffl/newsletter/low-carb-low-point