

The 7 Habits of Happy, Healthy Vegans

Virginia Messina, MPH, RD



Vegetarian Food Festival
Portland, Maine
June 4, 2016

Veganism is...

A way of living that seeks to exclude, as far as possible and practical, all forms of exploitation of, and cruelty to, animals for food, clothing and any other purpose.



The Vegan Society, 1944

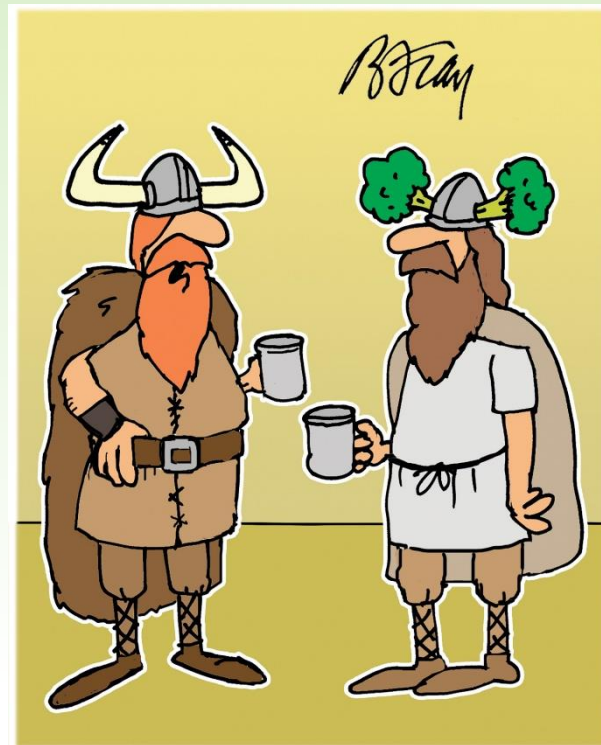








Vegan Diets: No Cultural or Historical Habits



"SO, BJORN, I HEAR YOU'VE GONE VEGAN!"



7 Habits of Happy, Healthy Vegans

- 1. Eat legumes**
- 2. Choose healthy fats**
- 3. Identify important supplements**
- 4. Eat a rainbow**
- 5. Get adequate calcium**
- 6. Enjoy vegan foods**
- 7. Celebrate veganism**

TheVeganRD.com

The screenshot displays the website's layout. At the top, the logo for 'theveganr.d.' is centered, featuring a green vine graphic and the tagline 'thoughts on being vegan a dietitian's perspective'. Below the logo, the page is divided into three main sections. On the left is a 'PAGES' sidebar with a list of links. The central content area features a blog post with a photo of a couple, a title, author information, and a short paragraph of text. On the right is a search bar and a social media sidebar with icons for Facebook, Twitter, email, RSS, and Pinterest. At the bottom right, there is a 'BUY "VEGAN FOR LIFE"' banner.

theveganr.d.
thoughts on being vegan *a dietitian's perspective*

PAGES

- 7 Habits of Happy, Healthy Vegans
- About
- Becoming a Vegan RD
- Media Schedule
- My Books
- Presentations
- The Plant Plate
- Nutrition Resources
- Contact

 **Vegan Diets, Sperm Concentrations and Fertility: Why There is No Need to Worry**

by [Ginny Messina](#) on OCTOBER 23, 2014 in [UNCATEGORIZED](#) [EDIT](#)

The internet loves a good story on alleged health hazards of vegan diets. This week, it's all about how vegan and vegetarian men have low sperm concentrations. The alarming research is from Loma Linda University, and it was presented at the annual meeting of the American Society for Reproductive Medicine(1). Should you be concerned about [...]

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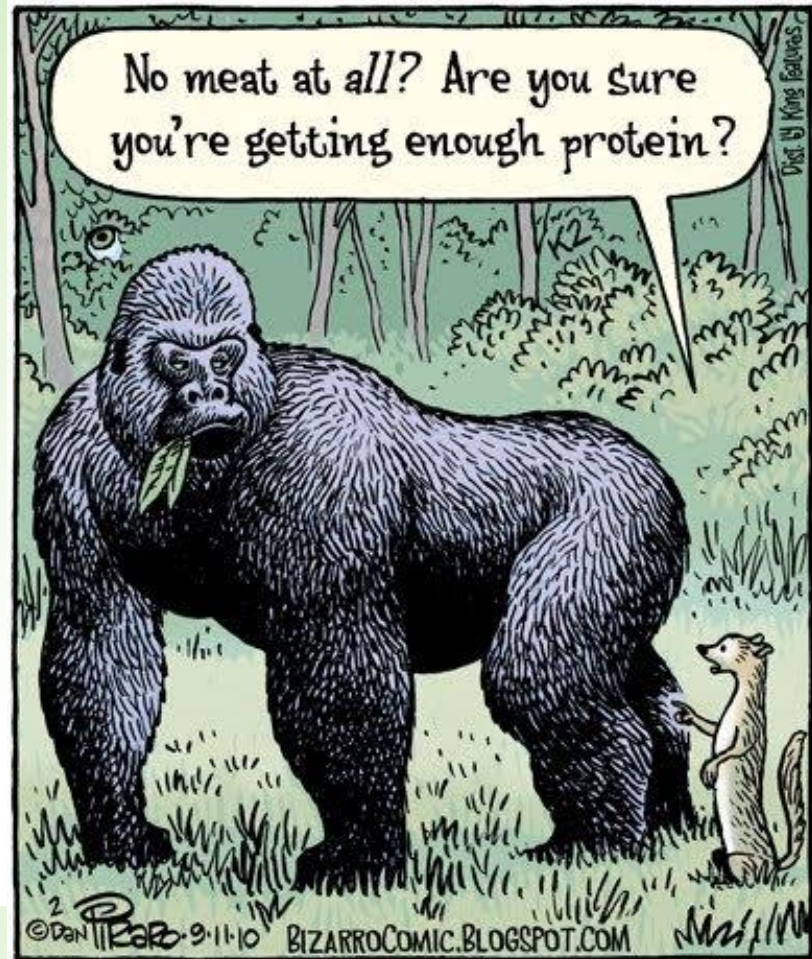
BUY "VEGAN FOR LIFE"

1. Eat Legumes



Where do you get your protein?

Grains
Vegetables
Nuts
Seeds
Legumes



Amino Acids

- **Building blocks of protein**
- **Used to build new proteins in the body**
- **9 are “essential” & must come from food**
- **Grains, legumes, vegetables, nuts, and seeds provide all 9 essential amino acids, but are low in one or more**

Vegan Protein: Importance of Legumes

Legumes are the only good
plant sources of the essential
amino acid **lysine**

Peanuts



Soyfoods



*Beans,
Peas, Lentils*

3 Daily Servings of Legumes

- **1/2 cup cooked beans, tofu, tempeh**
- **1/4 cup soy nuts, peanuts**
- **2 tbsp peanut butter**
- **1 cup soymilk**
- **3 oz veggie meat**



**Pistachios
and
Quinoa**
(honorary legumes)



Legume Serving Sizes

- **1/2 cup cooked beans, tofu, tempeh**
- **1/4 cup soy nuts, peanuts**
- **2 tbsp peanut butter**
- **1 cup soymilk**
- **oz veggie meat**
- **1/4 cup pistachios**
- **1 cup quinoa**

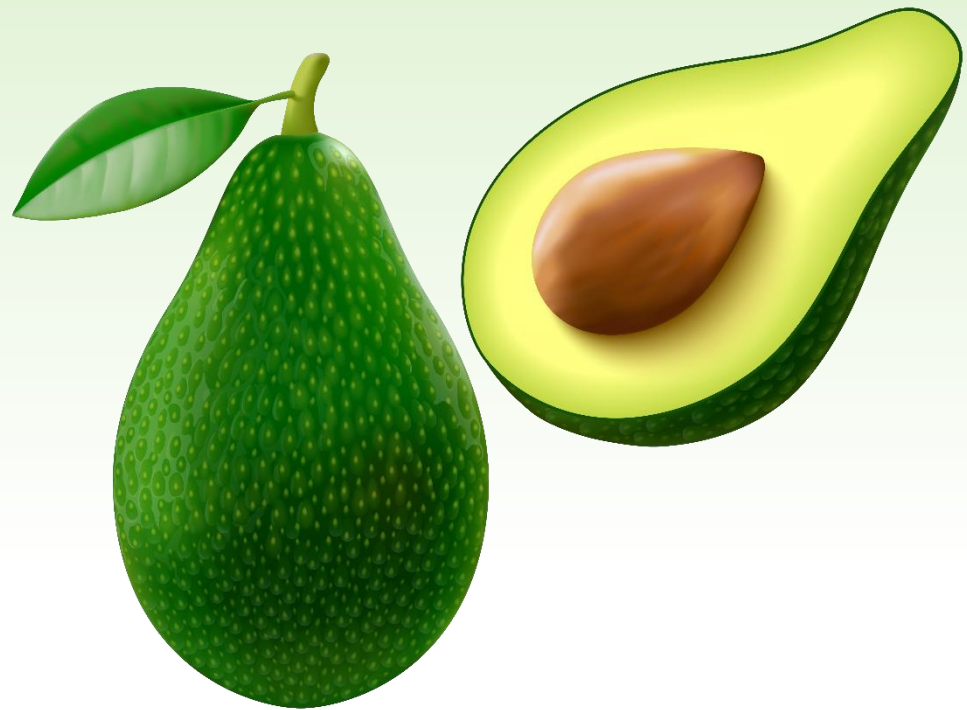


A Serving of Legumes

- PB& J sandwich
- Scrambled tofu
- Veggie burger
- Barbecued tempeh
- Hummus wrap
- Lentil soup
- Quinoa pilaf
- Trail mix with pistachios
- Vegetables with peanut sauce
- Salad with soynuts
- Bean burrito
- Taco with veggie “ground beef”



2. Choose Healthy Fats



Essential Omega-3 Fatty Acid

Alpha-linolenic acid (ALA)

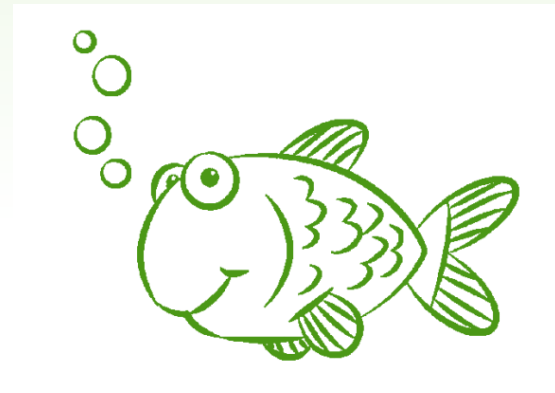
- Ground flaxseed (1 tbsp)
- Flaxseed oil (1 tsp)
- Walnuts (4 halves)
- Walnut, hempseed, soy or canola oil (1 tbsp)
- Chia seeds (2 tsp)


DHA & EPA: Long-chain Omega-3 Fats



DHA and EPA

- **Found in fatty fish**
- **May reduce risk for heart disease, dementia, depression**



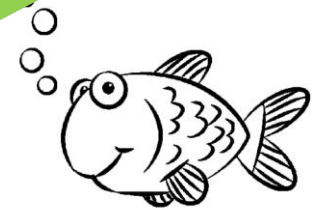


**Alpha-
linolenic acid
(essential fatty
acid)**

**Conversion is
relatively poor**

**DHA and EPA
(long chain
omega-3 fats)**

**Vegans typically
have low blood
and tissue levels of
DHA and EPA**



Fish Get DHA and EPA from Algae...We Can, Too



Vegan Omega-3 Fats from Algae

200-300 mg DHA + EPA

2-3 times per week



Healthy Sources of Fats

- Nuts

- Seeds

- Avocado

- Olives

- Vegetable oils



Benefits of High-Fat Plant Foods



- Nuts and seeds provide zinc
- Nuts reduce risk for heart disease
- Nuts/monounsaturated fats helpful for controlling diabetes
- Replacing saturated fat with plant fats improves cholesterol levels



3. Take the right supplements

All Vegans

Vitamin B12

Some Vegans

Vitamin D

Iodine



Vitamin B12

Made by bacteria

**Does not occur
naturally in plants**



Vitamin B12 Analogues

Similar structure to
B12, but **no vitamin
activity**



- ❖ Fermented soyfoods
- ❖ Sourdough bread
- ❖ Sea vegetables
- ❖ Chlorella, spirulina
- ❖ Shiitake mushrooms

Can we get adequate B12 from unwashed organic produce?



Vitamin B12 Storage

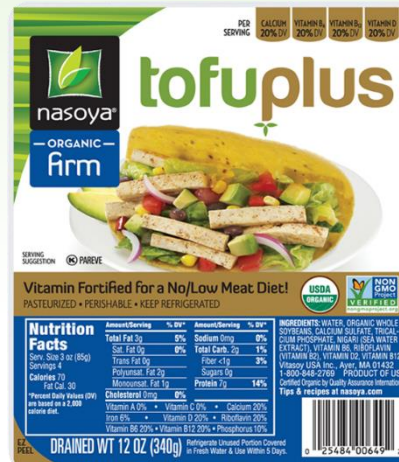
- **In liver and muscle**
- **Size of B12 stores determined by your pre-vegan diet**

Vitamin B12 Deficiency

- **Anemia**
- **Neurological Symptoms**
 - **Tingling**
 - **Weakness**
 - **Paralysis**
 - **Dementia, Depression**



Vitamin B12-Fortified Foods





Nutritional Yeast

Red Star Vegetarian Support Formula (VSF)

Recommendations for B12 Supplements (Cyanocobalamin)

- **2 fortified foods per day; at least 1.5 micrograms each *or***
- **25-100 micrograms daily *or***
- **1,000 micrograms 2-3x per week**

Supplemental Vitamin B12: Not Just for Vegans



**Health
conscious
omnivores**



**Everyone
over the
age of 50**

Food sources of vitamin D

- ❖ **Fish**
- ❖ **Fortified foods**



Factors that reduce vitamin D synthesis

- Smog, clouds
- Sunscreen
- Darker skin
- Age
- Weak sunlight
(northern latitudes in winter)



Two Forms of Vitamin D

- **D3: Cholecalciferol is animal-derived (fish, sheep's wool)**
- **D2: Ergocalciferol is plant-derived (yeast)**





60 VITAMIN D3 2500IU

Vitashine
VITAMIN D3 TABLETS 2500IU

- ✓ Helps maintain normal bones & teeth
- ✓ Supports a normal immune system
- ✓ Supports normal muscle function

Dietary Supplement



www.vitashine-d3.com

Vitamin D RDA 600 IU per day



**Iodine in vegetables
depends on iodine in soil**



Iodine Sources

- **Iodized salt**
- **Dairy**
- **Fish**
- **Vegetables**



Iodine from Sea Vegetables?



Iodine Sources for Vegans

- Iodized salt
($\frac{1}{4}$ teaspoon per day)



- 90-150 micrograms iodine from supplement 3-4 times per week

Supplements

- ❖ **Vitamin B12**
- ❖ **Vitamin D**
- ❖ **Iodine**
- ❖ **DHA/EPA (omega-3 fats)**

Supplements for Vegans and Omnivores

	Vegans	Omnivores
Vitamin B12	Supplements Fortified foods	Animal foods Supplements Fortified foods

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	Vegans	Omnivores
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Vitamin D	Supplements Fortified foods Sunshine	Supplements Fortified foods Sunshine

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Vitamin B12	Supplements Fortified foods	Animal foods Supplements Fortified foods
Vitamin D	Supplements Fortified foods Sunshine	Supplements Fortified foods Sunshine
Iodine	Supplements Iodized salt	Milk contaminated with cleaning solution Iodized salt

Supplements for Vegans and Omnivores

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Iodine	Supplements Iodized salt	Milk contaminated with cleaning solution Iodized salt
DHA/EPA	Supplements	Fish Supplements

4. Eat a Rainbow



Fruits and Vegetables



Calcium



Phytochemicals



Potassium

Folate



Vitamin C



Vitamin A



Vitamin C and Iron



Dietary Iron

	Mg of iron
Salmon, 3 oz	0.6
Chicken, ½ breast	0.6
Beef, 3 oz	1.3
Soymilk, 1 C	1.6
Black-eyed peas, ½ C	2.2
Tofu, 3 oz	3.0
Lentils, ½ C cooked	3.3

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Vitamin C

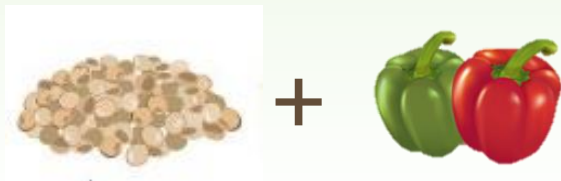
Phytate—Iron



Iron and Vitamin C

IRON

- Legumes
- Whole and enriched grains



VITAMIN C

- Citrus fruits
- Strawberries
- Green leafy vegetables
- Peppers
- Cauliflower
- Cabbage

Iron + Vitamin C

- **Oatmeal with orange juice**
- **Brown rice topped with steamed broccoli**
- **Bean soup with leafy greens**



Fruits and Vegetables for Vitamin A



Vitamin A Superstars

	Amount providing 100% of RDA for vitamin A
Carrot juice	1/4 cup
Sweet potatoes, pumpkin	1/2 cup cooked
Butternut squash, carrots	2/3-3/4 cup cooked
Spinach, collards, kale	1 cup cooked

Fruits and Vegetables for Calcium



5. Get Adequate Calcium



Vegans typically have lower calcium intakes than omnivores and lacto-ovo vegetarians.



EPIC-Oxford 2007 Findings

Vegans were 37% more likely to fracture a bone than meat-eaters or lacto-ovo vegetarians



Calcium Intake in the EPIC-Oxford

	Calcium
Omnivores	1,057
Pesco-vegetarian	1,081
Lacto-ovo	1,087
Vegan	610

Beans for Bones?



Protein protects bone health

- **Improves calcium absorption**
- **Contributes to bone structure**
- **Promotes muscle strength**



Adventist Health Study





We need **protein** and **calcium** for strong bones.
And both are in **plants**.

Calcium without cows



Wild greens supplied
abundant calcium to early
humans

The Plant Plate



On the side



Optional

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All vegan food groups provide calcium

The Plant Plate



On the side

All vegan food groups provide calcium

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Optional

The Plant Plate



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All vegan food groups provide calcium

Best Plant Sources of Calcium



Legumes

Tofu
Soybeans

Fruits

Figs
Fortified juices



Nuts/Seeds

Almonds
Almond butter
Tahini



Milks

Any fortified
plant milk



Vegetables

Leafy greens



Calcium from Leafy Greens

Good sources: Bok choy, collards,
kale, turnip greens

Poor sources: Spinach, Swiss chard,
beet greens



7 Habits of Happy, Healthy Vegans

1. **Eat legumes**
2. **Choose healthy fats**
3. **Identify important supplements**
4. **Eat a rainbow**
5. **Get adequate calcium**

Characteristics of the Optimal Vegan Diet

- **Meets nutrient needs**
- **Reduces risk for chronic disease**
- **Practical, easy, realistic**
- **Appealing**

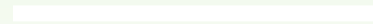
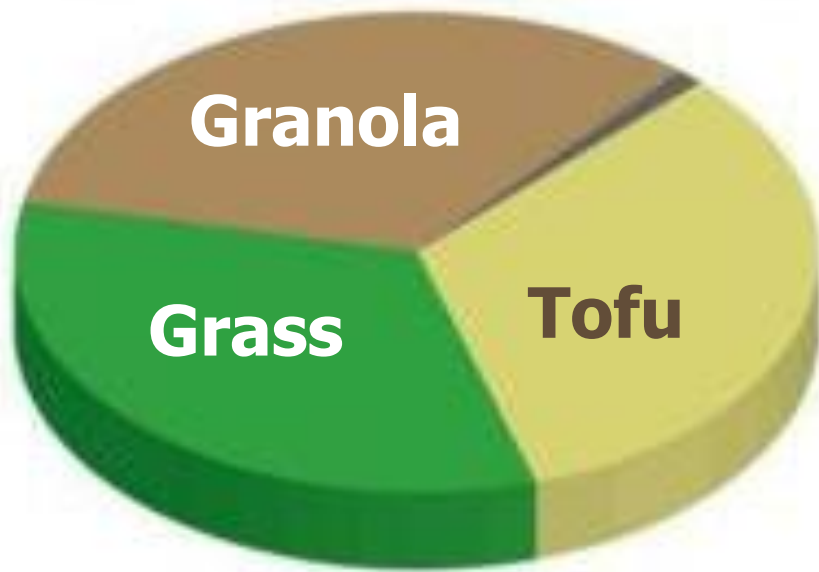
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6. Enjoy vegan foods

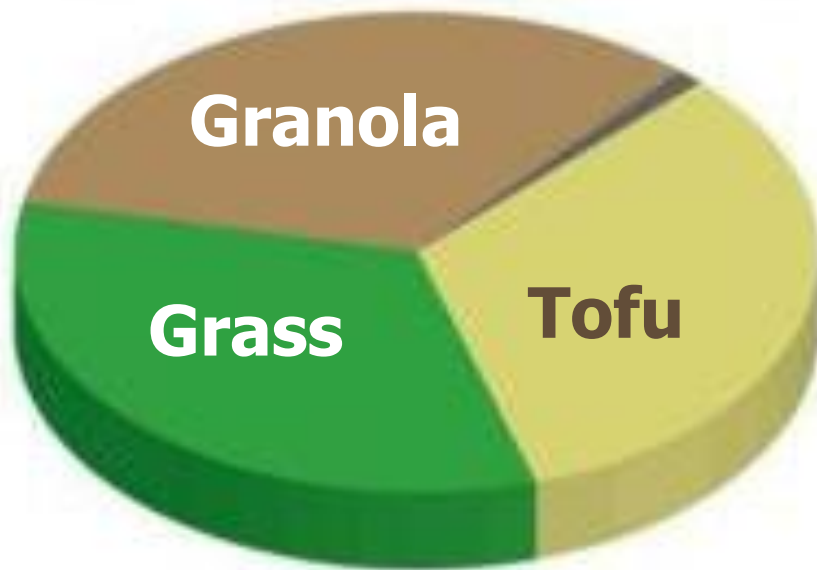


What people think vegans eat



What vegans really eat

What people think vegans eat



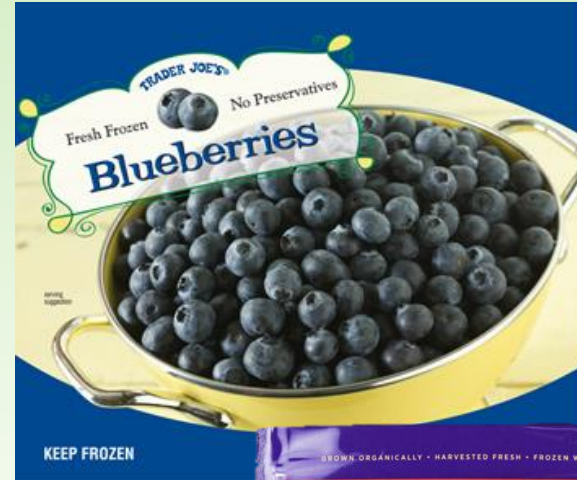
- | | | | |
|---|--|--|--|
| artichokes
asparagus
avocados
bacon*
bagels
bananas
beans
beef*
beets
biscuits*
bread
broccoli
brownies*
Brussels sprouts
buffalo wings*
burgers*
burritos*
cake*
carrots
celery
cheese steak sandwich*
cheese*
cheesecake*
cherries
chili cheese fries*
chili*
Chinese food* | cookies*
kiwi
lasagne*
lettuce wraps
mac 'n' cheese*
mandarin oranges
mangos
marshmallows*
mashed potatoes
melons
Mexican food*
nachos*
noodles
onion rings
oranges
paella*
pasta
peaches
peanut butter
peas
peppers
pies*
pineapple
pizza*
potato skins*
potatoes
pumpkin
quinoa | kale
raspberries
rice
salsa
samosas
sandwiches
seitan
soul food*
soup
soy milk
spring rolls*
stir-fry*
strawberries
sushi*
sweet potato fries
tabouli
tacos*
tempeh
Thai food*
Tofurky
tofu scramble
tomatoes
tortilla chips
veggie tempura
veggie wraps
everything else*
*vegan version | coconut
coconut curry
coconut milk
cookies*
kiwi
lasagne*
lettuce wraps
mac 'n' cheese*
mandarin oranges
mangos
marshmallows*
mashed potatoes
melons
Mexican food*
nachos*
noodles
onion rings
oranges
paella*
pasta
peaches
peanut butter
peas
peppers
pies*
pineapple
pizza*
potato skins*
potatoes
pumpkin |
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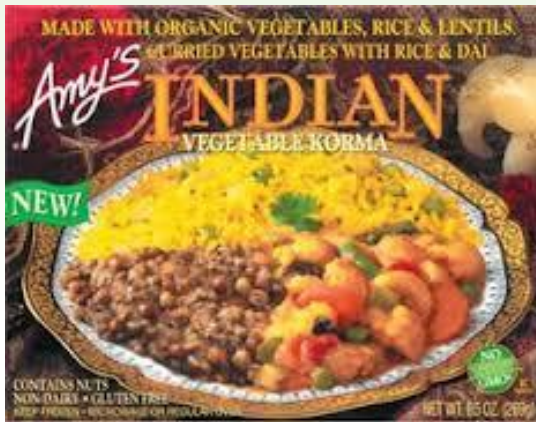


Processed Foods in Traditional Healthy Plant-Based Diets



Healthy Foods Come in Jars, Cans and Freezer Packages





“meaty”

creamy

Familiar Flavor

juicy

and

smoky

Texture

savory

chewy

sweet

**Add creamy texture
with blended cashews,
vegan sour cream,
avocado**

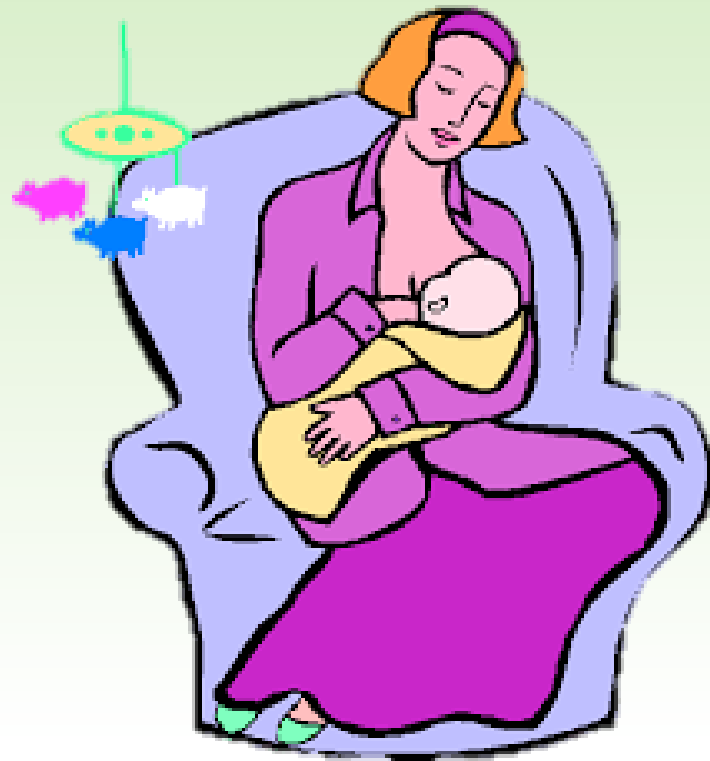


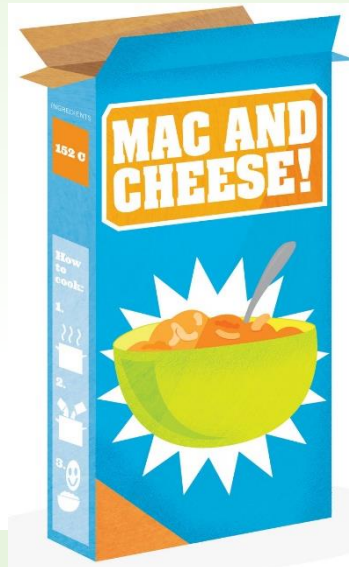
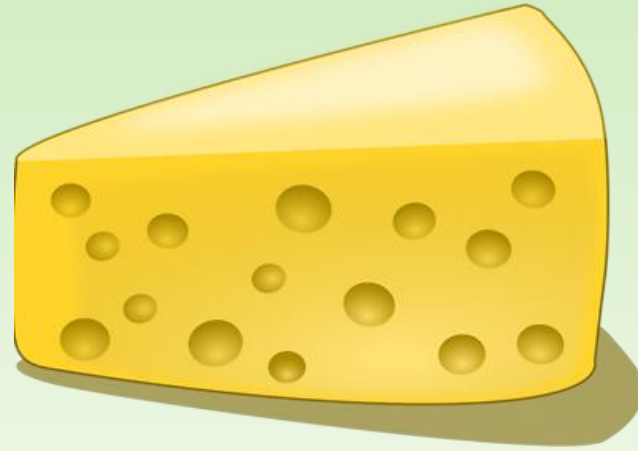
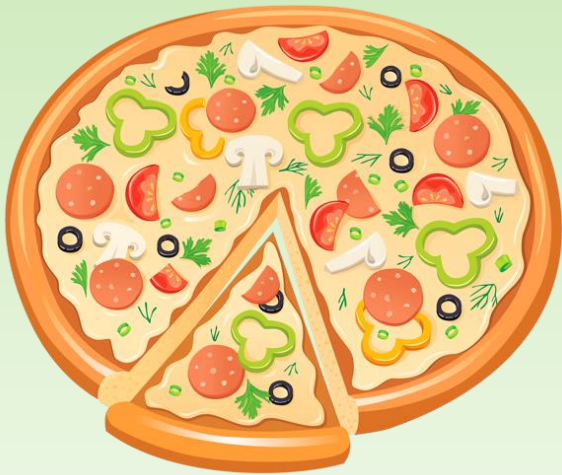
Add meaty texture with veggie meats, frozen defrosted tofu, seitan



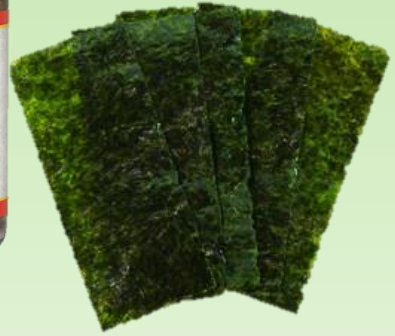
And What's Missing?

- **Salty**
- **Sweet**
- **Bitter**
- **Sour**
- **Umami**





Umami



**Roasting
and
Caramelizing
boost
Umami**



**Emphasize
Whole Plant Foods**



**Make Room for
Convenience
Flavors & Textures
Treats**



7. Celebrate Veganism



Findings from EPIC/Oxford

	Meat eaters	Vegan
Total fat intake	34%	30%
Saturated fat intake	12%	5%
Blood Cholesterol	191	158







Wowza! Stunning Christie Brinkley, 61, Credits Vegan Diet for Youthful Looks





Vegan = Compassion



Vegan = Compassion; Guaranteed



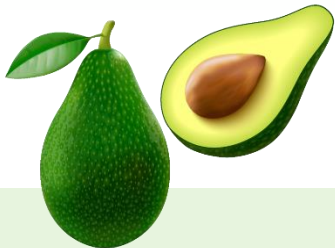
1. Eat legumes

**3 or more servings per day of
beans, peanuts/peanut butter,
soyfoods, quinoa, pistachios**



2. Choose Healthy Fats

- **Omega-3 fats from flaxseeds, walnuts, flax, walnut or canola oil, chia seeds.**
- **DHA/EPA? 200-300 milligrams**
- **Moderate use of higher fat foods like nuts, seeds, avocado and vegetable oils**



3. Supplement Appropriately

- 600 to 1,000 IUs of vitamin D (if sun exposure isn't adequate)
- 25-100 micrograms of vitamin B12
- 90 ug iodine or ¼ tsp iodized salt



4. Eat a Rainbow

- **Vitamin C**
- **Vitamin A**
- **Calcium**



5. Choose Calcium-Rich Foods

Kale, collards, fortified plant milks and juices, tofu, figs, almond butter, tahini.



6. Enjoy Vegan Foods

- **Emphasize whole plant foods**
- **No plant foods are off limits**



7. Celebrate Veganism



- **Vegan diets always deliver on their promise of compassion**
- **Health benefits vary among individuals and are a wonderful bonus**



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