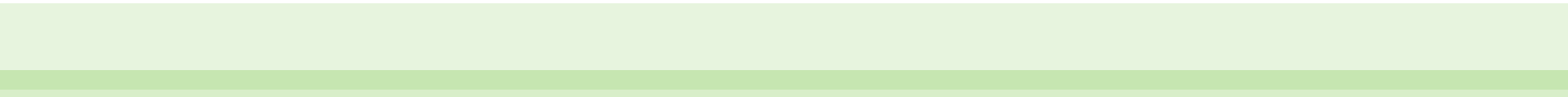


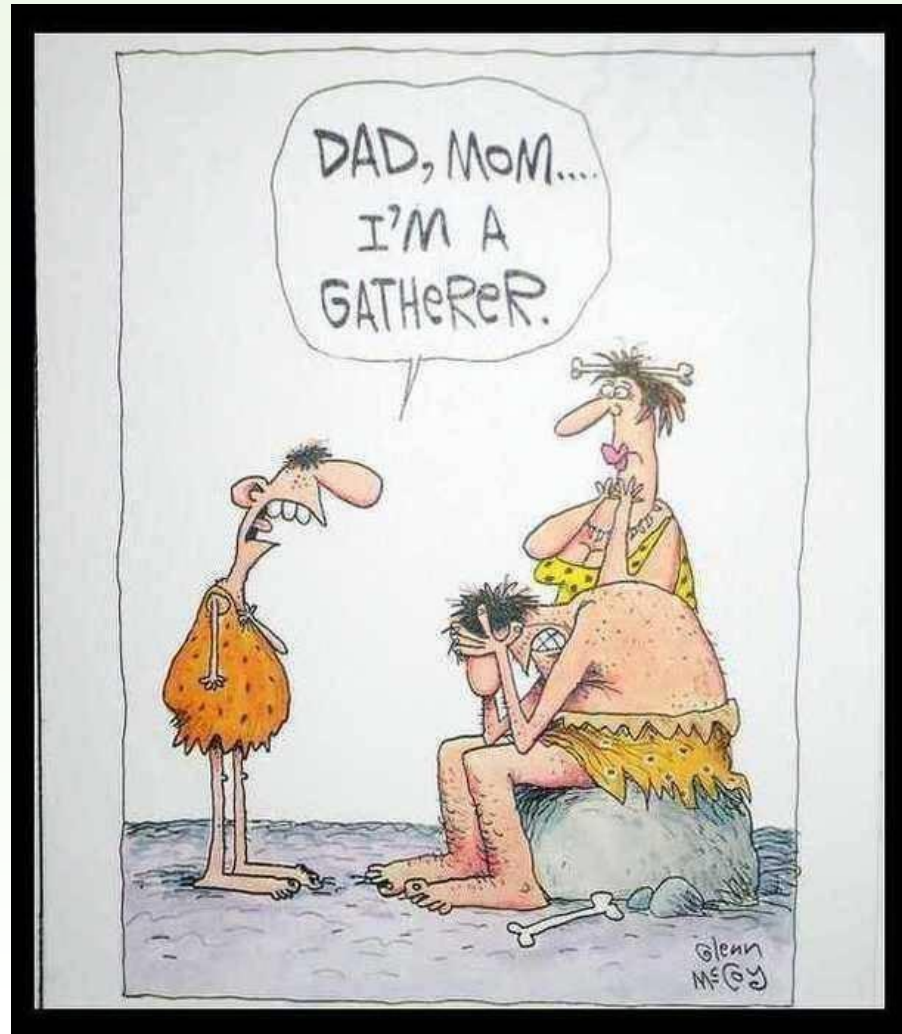
# 7 Habits of Happy, Healthy Vegans

A VegFest Presentation  
by  
GINNY MESSINA, MPH, RD  
TheVeganRD.com





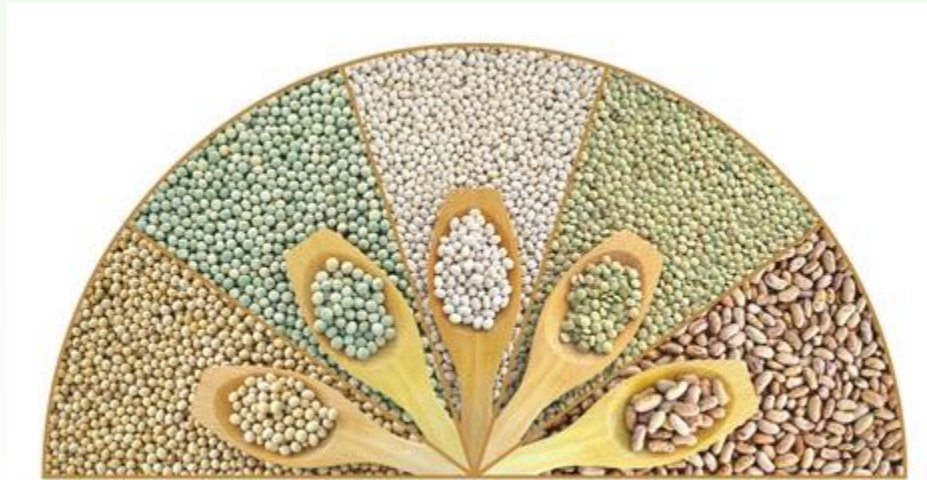
# Vegan Diets: No Cultural or Historical Habits



# 7 Habits of Happy, Healthy Vegans

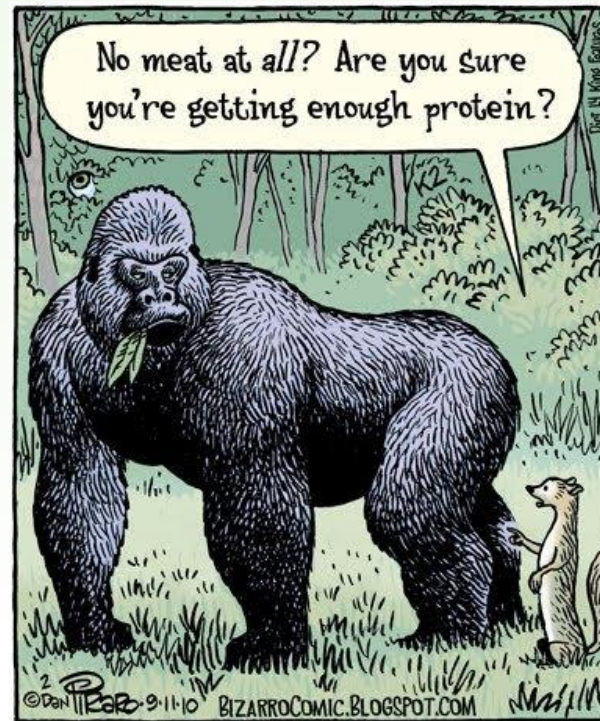
1. **Eat legumes**
2. **Choose healthy fats**
3. **Identify important supplements**
4. **Eat a rainbow**
5. **Get adequate calcium**
6. **Enjoy vegan foods**
7. **Celebrate veganism**

# 1. Eat Legumes



# Where do you get your protein?

Grains  
Vegetables  
Nuts  
Seeds  
Legumes



# Amino Acids

- Building blocks of protein
- 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**



## 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**
- **1 oz veggie meat**

# Pistachios and Quinoa

(honorary legumes)



## 3 Daily Servings of Legumes

- ½ cup cooked beans, tofu, tempeh
- ¼ cup soy nuts, peanuts
- 2 tbsp peanut butter
- 1 cup soymilk
- 1 oz veggie meat
- ¼ 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: Omega-3 Fats

**Found in fatty fish**

**May lower risk for heart  
disease, dementia, depression**





# DHA & EPA can be synthesized from ALA

Conversion is poor

Vegans typically  
have low blood and  
tissue levels



# 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 in controlling diabetes
- Replacing carbs with plant fats improves cholesterol profiles

# Vegan Diet with Healthy Fats

## Breakfast

Miso soup w/  $\frac{1}{2}$  C tofu,  
1 C vegetables

$\frac{1}{2}$  C brown rice

1 C honey dew melon

## Lunch

Raw vegetable salad

Vinaigrette (1 tsp oil)

1  $\frac{1}{2}$  C lentil soup + tomatoes

2 slices whole grain bread

Banana

## Dinner

1 C quinoa

1 C black beans

1  $\frac{1}{2}$  C greens in 2 tsp oil

## Snacks:

1 C fruit topped w/  $\frac{1}{4}$  C walnuts

Air popped popcorn

**Total calories: 1800**

**Saturated fat: <3%**

**0 grams cholesterol**

# 3. Take the Right Supplements

- **Vitamin D**
- **Vitamin B12**



# Sub-optimal vitamins D and B12



**Poor  
concentration**

**Vague aches**

**Fatigue**



# Food sources of vitamin D

- ❖ Fish
- ❖ Fortified foods



# Factors that reduce vitamin D synthesis

- Smog, clouds
- Sunscreen
- Darker skin
- Age
- Weak sunlight

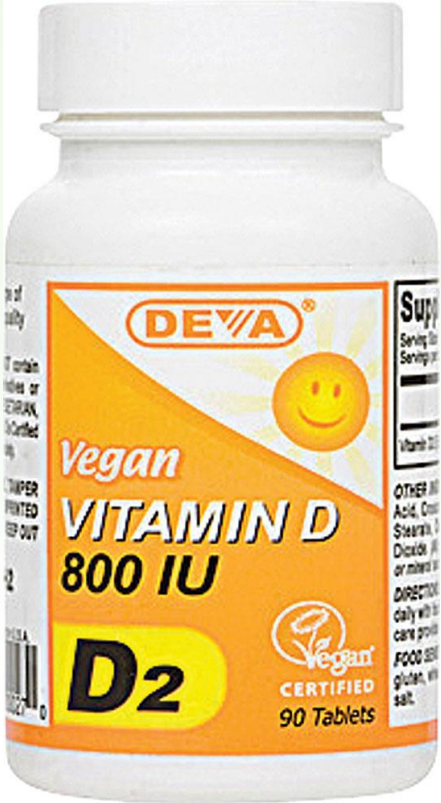


(northern latitudes in winter)

## Two Forms of Vitamin D

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

600 IU per day



# 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?**



# Endogenous B12 Production





# 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

## 4. Eat a Rainbow



## Iron Content of Selected Foods

Food	mg
Milk, 1 C	0.07
Salmon, 3 oz	0.6
Chicken, 1/2 breast	0.6
<b>Beef, 3 oz</b>	<b>1.3</b>
Soymilk, 1 C	1.6
Black-eyed peas, 1/2 C	2.2
Tofu, 3 oz	3.0
<b>Lentils, 1/2 C cooked</b>	<b>3.3</b>
Dark chocolate, 1 oz	3.9

# Phytates, Iron and Vitamin C

**Phytates** bind iron in whole grains and legumes

**Vitamin C** breaks bond between phytate and iron if it's present at the same time as the iron

# Iron and Vitamin C

## IRON SOURCES

- Legumes
- Whole and enriched grains

## VITAMIN C SOURCES

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

# Iron + Vitamin C

- Oatmeal with orange juice
- Brown rice topped with steamed broccoli
- Stir-fried tofu with red peppers



# Fruits and Vegetables for Vitamin A



# Fruits and Vegetables for Calcium





# 5. Get Adequate Calcium



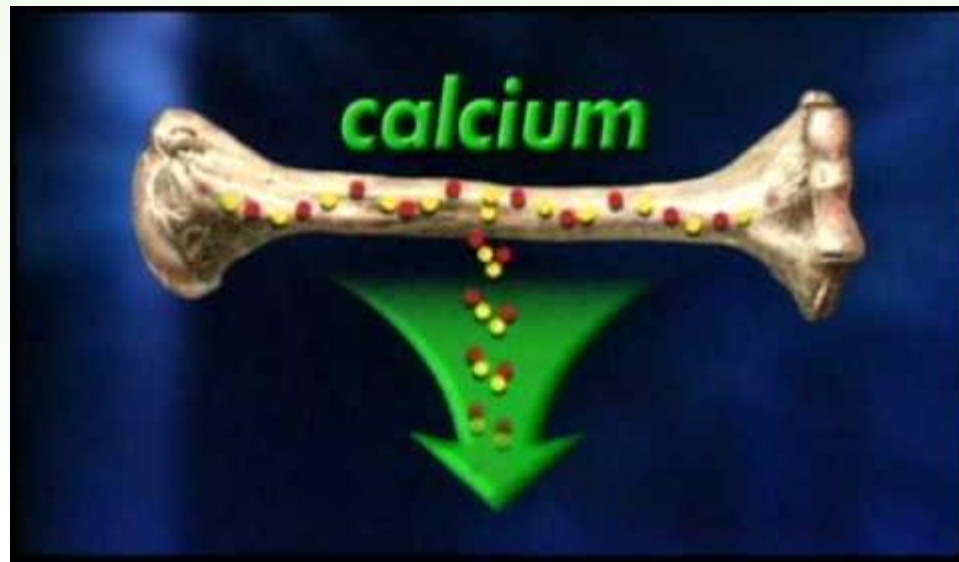
```
graph LR; A[Excess protein] --> B[Calcium loss from bones]; B --> C[Poor bone health];
```

Excess protein

Calcium loss from bones

Poor bone health

Vegan diets are more moderate in protein...so do vegans need less calcium?



# **Protein protects bone health**

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



# EPIC-Oxford 2007 Findings

**Vegans were 30% more likely to fracture a bone than meat-eaters or lacto-ovo vegetarians**



# Calcium Intake in the EPIC-Oxford

	<b>Intake (mg/d)</b>
<b>Omnivores</b>	<b>1,057</b>
<b>Lacto-ovo</b>	<b>1,087</b>
<b>Vegan</b>	<b>610</b>

**Calcium  
without  
cows**



**Wild greens supplied  
abundant calcium to early  
humans**



# Calcium-Rich Foods for Vegans

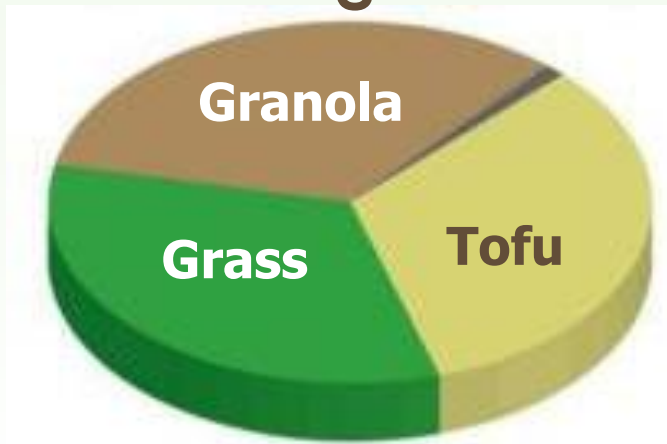
- Collards, kale, turnip greens (**not spinach or chard**)
- Fortified plant milks, tofu made with calcium sulfate, soybeans
- Almonds, tahini, figs, naval oranges

## 6. Enjoy Vegan Foods



# What vegans really eat

## What people think vegans eat

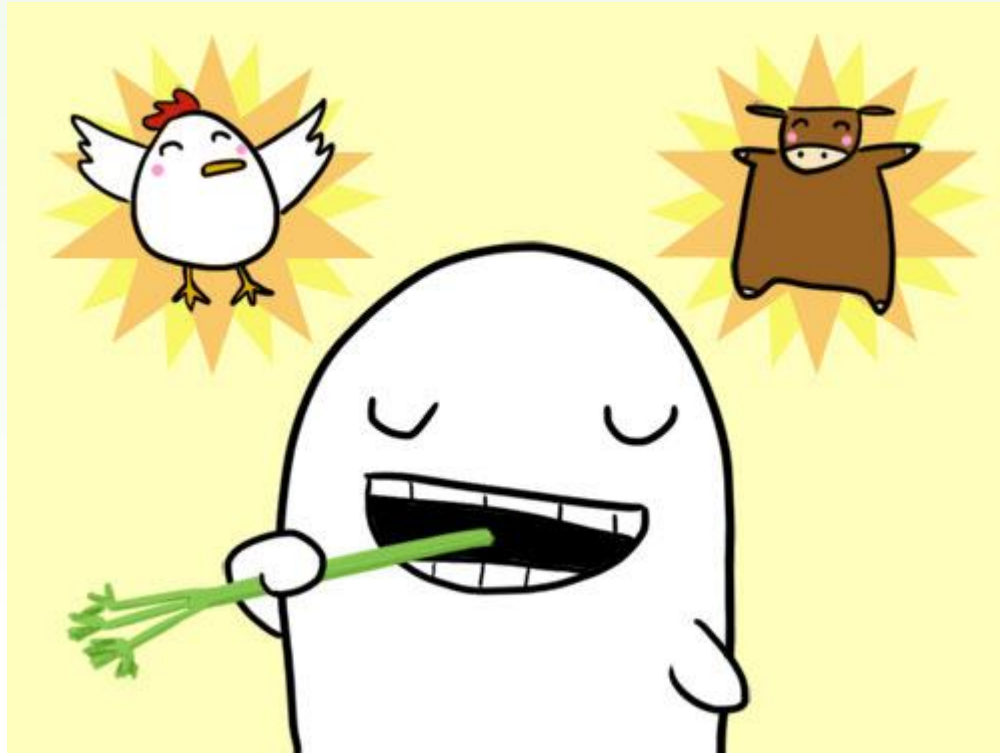


- |                       |                  |                    |                  |
|-----------------------|------------------|--------------------|------------------|
| artichokes            | cookies*         | kele               | coconut          |
| asparagus             | kiwi             |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





# 7. Celebrate Veganism



## Findings from EPIC/Oxford

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





**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. Take Appropriate Supplements

- 600 to 1,000 IUs of **vitamin D**  
(if sun exposure isn't adequate)
- 25-100 micrograms of **vitamin B12**



# 4. Eat a Rainbow

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



# 5. Choose Calcium-Rich Foods

**Kale, collards, turnip greens**

**Fortified plant milks and tofu**

**Figs, almond butter, tahini,  
navel oranges**



# 6. Enjoy Vegan Foods

**Emphasize whole plant  
foods but no 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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