

Benefits of Plant-based Diets

Fred Hardinge, DrPH, RD
PositiveChoices.com

+PositiveChoices.com

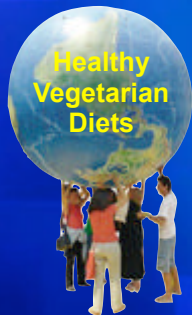
- A few Adventists are also strict vegetarian for various reasons or mostly vegetarian ;
- In the U.S. and Australia, Thirty percent of Adventists are Lacto-ovo-vegetarian. Twenty percent are mostly vegetarian (they eat meat from less than once a week to 1-2 times per week. And 3-5 percent eat no animal products
- This leaves about half the membership as omnivores – eating both plant and animal foods.



+PositiveChoices.com

Healthy Vegetarian Diets

- There are many individuals around the world who practice following a vegetarian diet. They choose to eat a preponderance of whole grains, vegetables, fruits, legumes, nuts, seeds with a moderate amount of dairy products and eggs.
- They do not eat fish, chicken, red meats, including pork.
- Defined as Lacto-ovo-vegetarian



+PositiveChoices.com

American Dietetic Association



- “It is the position of the ADA and Dietitians of Canada that appropriately planned vegetarian diets are healthful, nutritionally adequate, and provide health benefits on the prevention and treatment of certain diseases.” 2003

+PositiveChoices.com

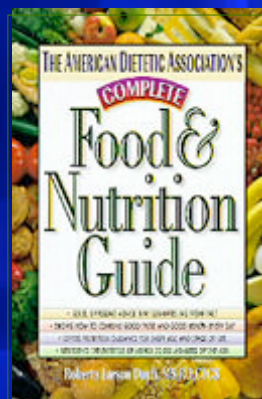
Strict Vegetarian Diets

- Others such as the strict Hindu's and some Buddhists are total vegetarian—no animal products of any type.
- Also defined as Vegan
- A few Christians and secular individuals follow the total vegetarian diet as well for health reasons while others believe humans should not kill or harm animals. In fact they believe eating eggs, drinking milk and using honey is immoral because it farms or places animal in a slave-master position.



+PositiveChoices.com

The American Dietetic Association



- The American Dietetic Association on vegetarian diets states that those who follow a totally plant diet should give special attention to reliable sources of Vitamin B 12, Vitamin D,

+PositiveChoices.com

2005 Dietary Guidelines for Americans

- **Vegetarian Choices**
- "Vegetarians of all types can achieve recommended nutrient intakes through careful selection of foods.
- If avoiding milk products, these individuals should give special attention to their intakes of protein, iron, vitamin B 12, as well as calcium and vitamin D"



+ PositiveChoices.com

SDA'S Believe

- "The diet God ordained in the Garden of Eden-the vegetarian diet-is the ideal, but sometimes we cannot have the ideal. In those circumstances, in any given situation or locale, those who wish to stay in optimum health, will eat the best food that they can obtain."



SDA Church Manual-2000

- "Christian behavior... means that because our bodies are the temples of the Holy Spirit, we are to care for them intelligently. Along with adequate exercise and rest, we are to adopt **the most healthful diet possible** and abstain from the unclean foods identified in the Scriptures.



GCNC Recommendations-2006

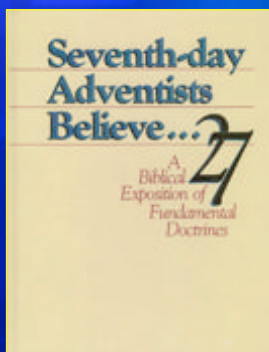
In their Position Statement titled, Vegetarian Dietary Guidelines, the General Conference Nutrition Council states: 2006

- "We recommend the generous use of whole grains, vegetables and fruits a moderate use of low-fat dairy products (or nutritional equivalent alternatives); legumes, nuts, and seeds, a very limited use of foods high in saturated fat, cholesterol, sugar, and salt..."
- "Dairy alternatives must be fortified with 25 percent or more of the RDA or DRI of calcium, vitamins B-2, B-12, D and A."



SDA Believe-27

- **21th Fundamental Beliefs**
- "The original diet. The Bible does not condemn the eating of clean animals. But God's original diet for man did not include flesh foods because He did not envision the taking of any animals life and because **a balanced vegetarian diet is the best for health-a fact for which science offers mounting evidence"**



+ PositiveChoices.com

The Vegetarian Food Guide and Pyramid

- " Based on extensive scientific research, we recommend that all meat, fish, and poultry be progressively eliminated from the diet.
- The Adventist Health Study clearly reveals a significant advantage for those who choose a meat-free diet over those who select a meat-based diet."
- General Conference Nutrition Council
- Position Statement



+ PositiveChoices.com

Vegetarian or Plant-Based Diets



Total Vegetarian Not Vegan



- I prefer Total Vegetarian because the word Vegan brings with it a lot of Hindu, Far Eastern and New Age beliefs.
1. The rights of animals are equal to those of humans.
 2. Many are against using animals in Scientific research.
 3. Many play down the importance of health as a reason to practice
 4. Animals are sentient being having souls.
 - Sentient- having sense of perception and having senses, reason and judgment
 5. They endeavor not to use any animal product or by-product-leather, gelatin, wool, or silk material or honey
 6. Most are pantheistic-a believe in oneness of life,
 7. Veganism is more than an ethic it is a religion without God

Definition of Plant-based Diets

- Plant-based diets come primarily from whole grains, legumes, nuts, seed's vegetables, fruits and a small amount from dairy and eggs and or a small amount from fish, chicken or beef.
- Plant-based is not Vegetarian or Vegan



+PositiveChoices.com

National Guidelines

- The 2000 U.S, National Guidelines , The USDA Food Guide, The American Dietetic Association and a host of other Professional and Government committees recommends 2-4 serving of low fat milk daily or if allergic or sensitive to milk use comparable amounts of fortified plant alternatives. In addition there are various other alternatives such as lactose free milks, cheeses, and Lactaid tablets .
- It is very difficult but not impossible to get ADEQUATE CALCIUM WITHOUT**

+PositiveChoices.com

Definition of Meat-based Diets

- A Meat-Based Diet
- Comes predominately from animal foods
- The AICR report allows for a wide range of dietary choices.



+PositiveChoices.com

B 12 Impossible

- Without dairy products, egg yolks or meats or fish it is impossible to obtain adequate blood levels of B 12 with a diet of natural foods.
- You must rely on a pharmaceutical solution.
- For the long term and in many countries where supplements are not available this does not seem to be a practical approach to dining.

+PositiveChoices.com

Summary of Findings

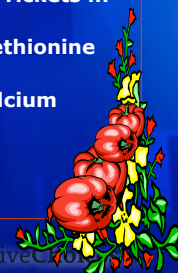
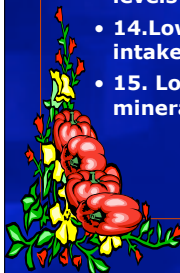


Approximately 15 of the studies indicated a Vegan advantage.

However, before any of you get too excited realize the great majority of these studies are flawed or at least not well-done. They did not follow the best of Scientific Investigation Principles.

Serious Concerns for Vegan Diet

- 11. Higher homocysteine levels
- 12. Not suitable for babies and children
- 13. Higher diastolic levels
- 14. Lower Vitamin D intakes
- 15. Lower trace minerals like zinc
- 16. Increased heart disease for women
- 17. Low calories in children due to bulk
- 18. Under weight
- 19. Increased rickets in children
- 20. Lower methionine levels
- 21. Lower Calcium intake



Problems with the Studies



- Almost all the studies involve only a few subjects -> Only a few had respectable numbers.
- Many of them did not have a control group.
- Most did not factor in other variables.
- Most did not do a cross-over study.
- Most are of a short duration.
- Few employed the double-blind
- Many are very subjective in their assessment of the data.
- Some compare vegans with omnivores . They should have also compared with lacto-ovo-vegetarians.

Serious Concerns for Vegan Diet

- 22. Higher risk of hematological abnormalities
- 23. Impaired cognitive function
- 24. More pernicious anemia.
- 25. Higher Heart disease
- Most all of these problems could be alleviated with 2-3 glasses of cows milk or adequately fortified plant milks

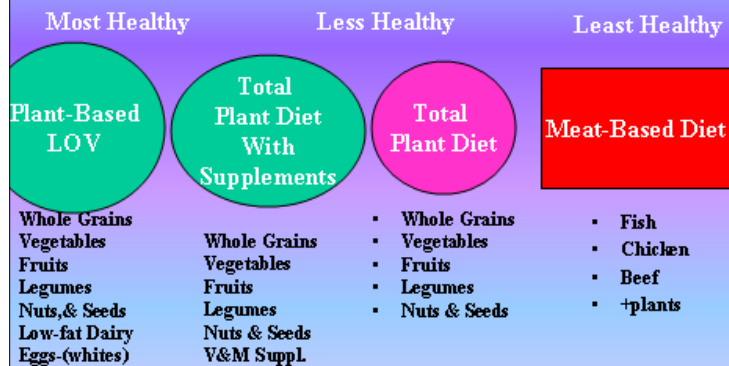


Possible Total Vegetarian Advantages



- 1. Less Heart Disease- Men
- 2. Higher fiber intake
- 3. Lower saturated fat intake
- 4. Maybe helpful for asthmatics
- 5. Lower blood pressure
- 6. Lower total cholesterol and LDL
- 7. May ease rheumatoid arthritis pain
- 8. Lower serum glucose concentration
- 9. Lower serum lipids
- 10. Lower levels of dioxin
- 11. Vegan diet more alkaline
- 12. Alleviation of fibromyalgia symptoms

Healthy Balance of Foods



Scientific Support for the LOV



- The Adventists Health Study is the largest single cohort of 34192 California Adventists ever conducted.
 - Cohort-a group of individuals having similar statistical demographics.
 - Three general categories of diets
 - Vegetarian 29.5 %
 - Simi-vegetarian (fish & Poultry <1xwk.) 22.2 %
 - Non-vegetarians (fish, poultry, beef) 49.2 %
 - Vegans 2 -3 %
- Am. J. Clin. Nutr. 1999; 70S, 532S-538S PositiveChoices.com

Colon Cancer Protective Foods

- Whole grain cereals
- Legumes
- Vegetables
- Green vegetables
- Cruciferous vegetables
- Fruits



- Review of the literature AJCN1994S
- (1143-1170S)

PositiveChoices.com

Health Reasons



- The majority of the vegetarian Adventists eat a plant-based diet for health reasons.
- This is their primary reason for the practice. For others primarily Non-Adventists health is only one of many reasons. Believing animals have souls and are on a par or equal with humans or the rights of animal is their primary focus.

PositiveChoices.com

Cancer Related Foods



1. Barbecued foods
2. Pickled foods
3. Highly salted Foods
4. Smoked meats
5. Processed meats
6. Sat Fat Meats
7. Red meats
8. Cooked meats
9. Full fat dairy products



Am. Int. Cancer Research-Food Nutrition and Cancer, A Global Perspective, 1997 PositiveChoices.com

Proven Health Benefits



- A plant-based diet has been proven to lower the risks of heart disease, several types of cancers, hypertension, diabetes, dementia, osteoporosis, as well increasing life expectancy.
- The reason the Adventist Health Study is so relevant is that it compares two groups of people within the same church with similar demographics and lifestyles except one follows a lacto-ovo-vegetarian diet and the others are omnivores. (eating plant and animal foods)-including red meats and white meats).

PositiveChoices.com

Disease Risks



Disease

- CHD
- CHD
- Stroke
- Diabetes
- Ovarian
- Prostate
- Colon-rectal
- Breast

- Meat
- Eggs, milk, cheese
- All four
- Meat
- Eggs
- Full-fat milk
- Eggs
- All four

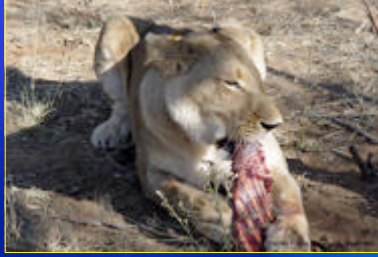
Risks-Association

- Moderately-strong
- Not clear Association
- No clear Association
- Clear Association
- Strong Association
- Moderate Association
- Moderate Association
- No association

- AJCN1988;Sep.48;(3)739-748 (all four means meat, eggs, cheese and milk)

PositiveChoices.com

Low on the Food Chain



- Most all animals eat plants or eat animals that eat plants.
- Big fish eat little fish or plants.
- Carnivores eat other animals that eat plants.
- It is said you eat low on the food chain when you eat mostly plants and high on the food chain when you eat animal foods.

+PositiveChoices.com

Economics of Plant-based Diets

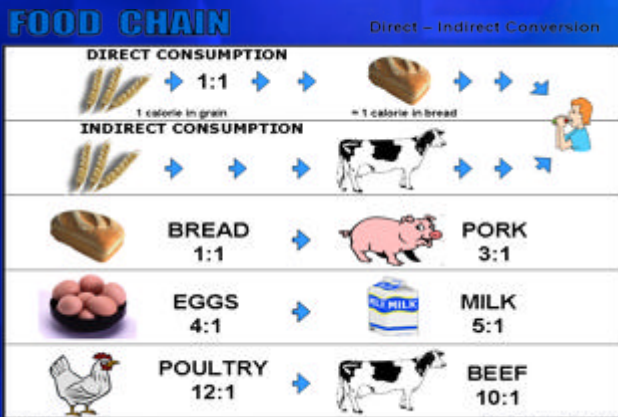
Many years ago the U.S. Department of Agriculture studied how a person could get the most nutrients for each dollar spent. Since that time we have had a devaluation of the dollar or inflation but the ratio is still similar. Best economical sources of nutrients

Vitamin C 800 mg. from citrus and tomatoes 600 mg. from potatoes, deep-green vegetables

Vitamin B 2- 5.5 mg from milk 3.0 from grains and eggs 2.0+ from potatoes, beans, nuts green-yellow vegetables



Food Chain-Conversion Ratio



+PositiveChoices.com

Economics of Plant-based Diets

- **Vitamin B 1** -- 4.8 mg. from potatoes and Grains
- 1.5 mg. from citrus, tomatoes, green-yellow vegetables
- **Vitamin B -Niacin-equivalents**
- 75 mg. from Beans, Nuts
- 65 mg. from Potatoes
- 45 from Grains
- 20 from Meat and fish



Best Buys for Your Money

- The poorest buy for the dollar is
- Sugar
- Next is
- Meat and Fish
- In India Meat is very inexpensive
- For the same number of Rupies you can buy
- 3.5 times more calories
- 3.5 times more protein
- 19 times more calcium
- 6.5 times more iron
- 7 times more potassium
- 12.5 times more Thiamine
- 3.6 times more riboflavin

+PositiveChoices.com

Economics of Plant-based Diets

- **Vitamin A** 160 IU from Green and yellow vegetables
- **Calcium** 400 mg. from Milk
- 150 from Green and yellow vegetables
- 1.50 from Grains, beans, nuts



+PositiveChoices.com

Economics of Plant-based Diets



•Iron

- 60 mg. from Beans and Nuts
- 40 mg. from Potatoes
- 38 mg. from Grains
- 25 mg. from Green and yellow vegetables
- 10 mg. from Meat and fish

+PositiveChoices.com

Applying the These Four Food Groups

WHOLE GRAINS (11 Servings)

- 1 cup Cooked Rolled Oats
- 2 cup Cooked Br.Rice
- 7 slices Whole Wheat Bread



VEGETABLES (5 Servings)

- 1 cup Cooked Kale
- 1 cup Carrots ck.
- 1 Baked Potato



FRUITS (4 Servings)

- 1 cup Fr. Strawberries
- 1 Banana
- 1 Mango

NUTS & SEEDS (3 Servings)

- 1/4 Cup Almonds
- 1/4 Cup Sunflower Seeds
- 2 T Peanut Butter



Vegetarian Diets are Healthier



- Is it possible to meet the U.S. Dietary recommendations on a vegetarian diet? Yes, quite easily. However it is not possible on a total vegetarian diet unless food supplements are added.

+PositiveChoices.com

Testing the Four Food Groups Against the RDAs



- Nutrients met or exceeded the RDA except for the Food Group left out- The Milk Group: IF JUST 3 CUPS OF MILK WERE ADDED TO THIS DIET IT WOULD BE A GREAT DIET

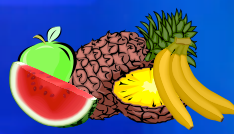
Nutrient	“PP	2C.F.SOY	RDA	LOV
Calcium	554 mg.	1154	1200 mg.	1407
Vitamin D	7 mg.	10	10 mg.	8.3
Iodine	8 mcg.	0.0	150 mcg.	200
Vit. B-12	0.00	2.5	2.5 mcg.	2.5
Calories	2749			2105

+PositiveChoices.com

Total Vegetarian Diet without Animal Products



11 servings of whole grains



4 servings of fruits



5 servings of vegetables



3 servings of nuts

+PositiveChoices.com

Potential Disease Risks Increase From a Vegan - Four Food Groups Diet

Without supplementation or fortified foods, this Four Food Groups Diet increases the risk of developing the following diseases:

Nutrient Deficiency

Iodine
Calcium
Vitamin D
Vitamin B-12

Disease

Hypothyroidism
Osteoporosis
Ricketts and other
Anemia



Three Cups of Milk Provided



Nutrients	From Milk	Total Calories
353	2391	
Vitamin A	450 mcg	1217
Riboflavin	1.42 mg	2.58
Calcium	1047 mg.	1325
Zinc	2.32 mg	12.5
Iodine	177 mcg	204
Phosphorus	819 mg.	2031
Vitamin B 12	3.7 mcg.	3.71
Vitamin D	38 mcg.	38 (75%)

+PositiveChoices.com

Home-made Soy Milk –

Home-made Milk 1 % Silk

• B 1 (mg.)	.024	0.11	-
• B 2 (mg.)	.008	0.47	.51-
• B 3 (mg.)	0.11	0.25	-
• B 6 (mg.)	0 .06	0.12	-
• Biotin (mcg)	-	49	-
• Vitamin C (mg,)	4	2.9	-
• Folate (mcg,)	15.4	14.7	16
• PA (mg.)	0.05	0.92	-
• Fiber (g)	5 ?	0.0	-



+PositiveChoices.com

Home-made Soy Milk – 1 cup

Home-made Milk 1 % Silk

• Calories	49	118	100
• Fat (g)	2.3	2.8	4.0
• Pro. (g)	4.7	9.6	6-7
• CHO (g)	2.8	13.5	4-13
• Chol, (mg)	0.0	98	0.0
• Vit. A (mcg)	0	150	500
• Vit. D (mcg)	100	120	0
• Vit. B 12 (mcg.)	0	1.06	3.0

- Recipe ½ c. soybeans plus 3 c. water From
- \Weimar's New Start Cookbook 2000 -
- \Nutritional data from Food Processor 2006

+PositiveChoices.com

Home-made Soy Milk – 1 cup

Home-made Milk 1 % Silk

• Calcium (mg.)	30	349	300
• Iodine (mcg.)	0	59	0
• Iron (mg.)	.015	1.4	.05
• Phosphorus (mg.)	70	273	-
• Potassium (mg.)	147	442	-
• Selenium (mcg,)	2.0	6.1	-
• Sodium (mg.)	142	95	-
• Zinc (mg)	0.33	1.11	0.6



+PositiveChoices.com

Home-made Soy Milk –

Home-made Milk 1 % Silk

• B 1 (mg.)	.024	0.11	-
• B 2 (mg.)	.008	0.47	.51-
• B 3 (mg.)	0.11	0.25	-
• B 6 (mg.)	0 .06	0.12	-
• Biotin (mcg)	-	49	-
• Vitamin C (mg,)	4	2.9	-
• Folate (mcg,)	15.4`	14.7	16
• PA (mg.)	0.05	0.92	-
• Fiber (g)	5 ?	0.0	-



+PositiveChoices.com

Sources of Calcium

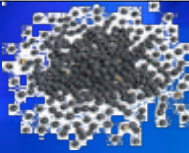


• Milk	8 oz.	300 mg.
• Yogurt	8 oz	425 mg.
• Tofu	½ cup	130 mg
• Beans	½ c.	100- 230 mg
• Soy beans	1 c. ck.	175 mg.
• Collard greens	½ c.	178 mg
• Dried figs	#5	258 mg.
• Almonds	2 T.	50 mg.
• Sardines w. bones	3 oz.	425 mg.

+PositiveChoices.com



Sources of Iron



• Beans	½ cup	2 mg.
• Sweet potatoes	½ c.	1.5 mg
• Potatoes	1 med.	1.80 mg.
• Soy beans	½ c.	4.4 mg
• Garbanzo		3.4 mg.
• Lentils		3.2 mg.
• Pumpkin seeds	2 T	2.5 mg.
• Oatmeal	½ c dry	1.86 mg.
• Blackstrap molasses	1 T	3.3 mg.

PositiveChoices.com



Sources of Linolenic Acid



• Flax seed	2 T.	4.3 grams
• Walnuts	1 oz.	1.9 g
• Walnut oil	1 T.	1.5 g.
• Canola oil	1 T.	1.6 g.
• Soy oil	1 T	0.9 g.
• Soybeans ck.	2 c.	0.5 g.
• Tofu	½ c.	0.4 g.
• Linseed oil	1 T.	7.6 g.

PositiveChoices.com



Sources of Zinc



• Sunflower seed	1 oz.	1.75 mg.
• Peanut butter	2 T	1 mg.
• Pinto beans	½ c.	1 mg.
• Milk	1 c.	.90 mg.
• Bran	½ c.	3.7 mg
• Oatmeal	1./2 c.	1.8 mg.
• Egg	1	.75 mg.
• Ground beef	3 oz.	4.0 mg.

PositiveChoices.com

Strictly Total Vegetarian Diet

- There may be some advantages to a strictly total vegetarian Diet.
- **Advantages**
- Lower weight
- Lower Blood Pressure
- **Maybe Disadvantages**
- More heart disease
- More cancer
- **Until more evidence is discovered these advantages and disadvantages may not be valid. So far the numbers of total vegetarians studied are too small to yield Convincing Evidence.**

PositiveChoices.com



Sources of Vitamin B 12

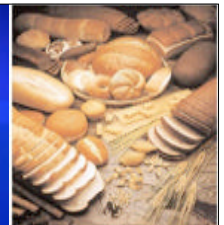


• Cows milk	1 cup	1 mcg.
• Yogurt	1 cup	1.8 mcg.
• Egg	1 yolk	.50 mcg.
• Plants		0.0 mcg.
• Chicken	3 oz.	.30 mcg.

PositiveChoices.com



Endurance High Carbs



- Bicycle Endurance Test
- Hi CARBS (3 days) 167 minutes
- Hi Pro (3 days) 57 minutes
- This study has not been duplicated
- Astrand P. Nutrition Today 1968 # 3 p. 9-11

PositiveChoices.com

High Carbohydrates



- However, a high complex carb diet is still recognized as best for sustained energy levels.
- "As the intensity of activity increases from rest to light to moderate to intense, the contribution of carbohydrate to energy increases." Energy production with carbs is more versatile in that it can function with a limited oxygen supply as with intensity exercise like running.

• P. 77 Modern Nutrition in Health and Disease 2006

+ PositiveChoices.com

Health Habits and Life Expectancy in Adventists

	<u>Men</u>	<u>Women</u>
'Best'-Behaved ¹	87.0 years	88.5 years
'Worst'-Behaved ²	76.2 years	79.8 years
Difference	10.8 years	8.7 years

¹Vegetarians who exercise vigorously at least 3 times weekly, eat nuts ≥ 4 times each week. BMI < 25.90 (males), < 25.20 (females), never smokers.

²Converse of the above, including eating nuts < 1/week, BMI greater than limits shown above.

Longevity data DLECD p. 58

+ PositiveChoices.com

Longevity



+ PositiveChoices.com

Percentages Dying From the Named Causes and Average Ages at these Fatal Events: California Adventists and non-Adventists

Cause of Death (%)	All Californians		All Adventists	
	%	Age (Years)	%	Age (Years)
Disease of the Heart	39.0	75.7	40.4	82.9
Malignant Neoplasms (Cancer)	23.4	71.2	19.0	77.9
Cerebrovascular Disease (Stroke)	6.6	79.4	8.7	85.8
Unintentional Injuries	2.9	59.5	3.5	69.6
COPD and Allied Conditions	5.6	76.3	2.5	82.6
Pneumonia and Influenza	4.5	81.8	6.1	87.8
Diabetes	1.1	75.0	1.3	81.6

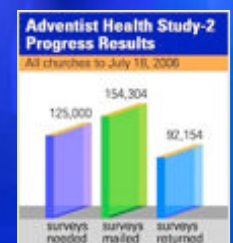
+ PositiveChoices.com

Effects of Individual Risk Factors To Increase Life Expectancy

Variable	Men	Women
Vegetarian diet	2.38 yrs	1.65 yrs
Vigorous Exercise	2.14 yrs	2.19 yrs
Frequent Nut Consumption	2.87 yrs	1.18 yrs
Avoid High BMI	1.51 yrs	1.90 yrs
Never Smoked	1.33 yrs	1.49 yrs

+ PositiveChoices.com

Conclusions from The Adventist Health Study



- The Adventist Health Study (AHS) was one of Dr. Gary Fraser's studies examined by the U.S.D.A. and The Institute of Medicine at the National Academy of Medicine as they prepared the Food Pyramid and the 2005 Dietary Guidelines.

+ PositiveChoices.com

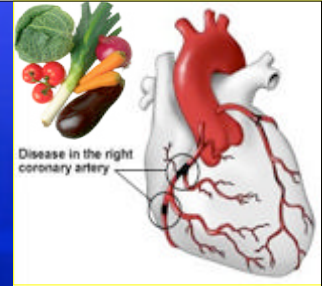
Less Meat- Less Cancer



- "Vegetarians experience markedly less over-all cancer mortality than other health-conscious individuals who eat a little meat. However, there is suggestive evidence for some increased risks when meat is eaten once per week." P. 201 DLECD
- "We have found evidence that meat consumption (both red and white meats) increases the risks of colon cancer and probably also pancreatic, colon, bladder, and ovarian cancers." p.108 IBID

+PositiveChoices.com

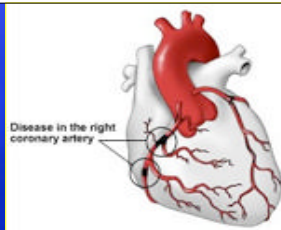
More Phyto-Nutrients Less CHD



- Current evidence suggests that dietary fiber, low cholesterol, linolenic acid, flavonoids, vitamin E, C, carotenoids, folate, flavonoids, phytoestrogens, reduce the risks of CHD evens. P. 83

+PositiveChoices.com

More Nuts Less CHD



- The AHS provide strong evidence that daily consumption of a small quantity of **nuts** provided protection against a heart attack. P. 82 IBID
- "Vegetarians clearly have a lower risk of fatal CHD, and data on California Adventists suggest that the **absence of red meat** accounts for at least a better profile of risk factors and with lower rates of CHD events." P. 82
- Adventists who preferred **whole grain bread** experienced significantly fewer heart attacks.

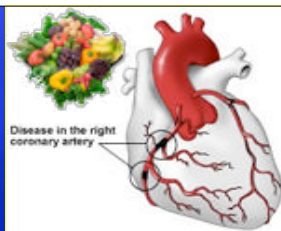
+PositiveChoices.com

More Legumes and Fruits- Less Cancer

- More frequent consumption of legumes was associated with lower risks of pancreatic cancer, colon (non-vegetarians only) and possible prostate cancer.
- Higher levels of fruit consumption produced much lower rates of lung cancer, and probably prostate, pancreatic and ovarian cancer.
- P. 108 DLECD



More Fruits and Vegetables Less CHD



- Fruits and Vegetables
- Consistent evidence from studies of non-Seventh-day Adventist suggest that broad dietary patterns favoring **fruits and vegetables** are associated with a better profile of risk factors and with lower rates of Coronary Heart Disease events.
- Adventist data suggest dietary magnesium is a protective factor for Heart disease which is found in **nuts**. P. 82,83 Diet, Life-expectancy, and Chronic Disease 2003

+PositiveChoices.com

More Soy Milk Less Prostate Cancer

- Men drinking soy milk more than once per day had a much reduced risks of prostate cancer. P.108



+PositiveChoices.com

More Vegetarian Diet Less Obesity

- "Vegetarian Adventists have a much lower weight for a given height than do non-vegetarian"



+PositiveChoices.com

American Dietetic Association The Health Benefits

- Vegetarians have lower body mass indices than non-vegetarians, as well as lower blood cholesterol, lower rates of blood pressure, ischemic heart disease, hypertension, type 2 diabetes, prostate and colon cancer.

- P. 748 JADA June 2003 Vol. 103, # 6



+PositiveChoices.com

Vegetarians and Other Diseases

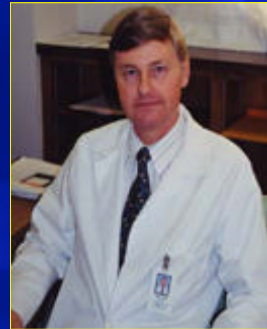


Disease	Vegetarian	Semi V.	Non-V
Diabetes	M. 1.00	1.35	1.97
	W. 1.00	1.08	1.93
Hypertension	M. 1.00	1.57	2.23
	W. 1.00	1.44	2.24
Rh. Arthritis	M. 1.00	1.14	1.50
	W. 1.00	1.16	1.57
Rheumatism	M. 1.00	1.20	1.48
	W. 1.00	1.28	1.41

Rh.=Rheumatoid AJCN1999;70S 532-538

+PositiveChoices.com

Dr. Fraser Evaluation



1. "Vegetarians have lower risk because of lower meat consumption and increased intake of fruits, vegetables, grains and nuts
2. The improved health has not required a low-fat diet, but rather the relative avoidance of animal fats
3. Very low fat diets of vegans do not clearly reduce total or cause specific mortality below rates seen in the more liberal

+PositiveChoices.com

More Vegetarian Diet Less Diabetes and Hypertension



- Vegetarian Adventists are less likely to develop diabetes. The slight advantage is probably due to less obesity among Adventist vegetarians. p. 147, 148 DLECD
- Adventist vegetarians are much less likely to develop new hypertension than Adventist non-vegetarians. 148 IBID
- This is beyond the decrease for lower levels of obesity. IBID 229

+PositiveChoices.com

Vegetarians Have Lower Disease Risks

5 Prospective studies-AJCN1999;70S;516S-524S

Vegetarians had lower risks of:

- Obesity
- Diabetes
- Arthritis
- Colon cancer
- AJCN1999;70S532S-538S

Prostate cancer

Fatal IHD

Rheumatism

Death-all causes