# Vegetarian Foods Powerful for Health 

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Avegetarian diet has been advocated by everyone from philosophers such as Plato and Nietzsche, to political leaderssuch asBenjamin Franklin and Gandhi, to modern pop iconssuch as Paul M cCartney and Bob M arley. Science is also on the side of vegetarianism. A multitude of studies have proven the health benefits of a vegetarian diet to be remarkable.
"V egetarian" isdefined as avoiding all animal flesh, including fish and poultry. Vegetarians who avoid flesh, but do eat animal productssuch ascheese, milk, and eggs, areovo-lacto-vegetarians (ovo = egg; lacto = milk, cheese, etc.). The ranks of those who eschew all animal productsarerapidly growing; thesepeople are referred to aspurevegetariansor vegans. Scientific research shows that ovo-lacto-vegetarians are healthier than meat-eaters, and vegans are the healthiest overall.

## Preventing Cancer

Avegetarian diet helps to prevent cancer. Numerous epidemiological and clinical studieshaveshown that vegetarians are nearly 50 percent less likely to die from cancer than nonvegetarians. ${ }^{1}$ Similarly, breast cancer rates are dramatically lower in nations, such asChina, that follow plant-based diets. Interestingly,Japanesewomen who follow W estern-style, meat-based diets areeighttimesmorelikelytodevelop breast cancer than women who follow a moretraditional plant-based diet. ${ }^{2}$ V egetarians also have lower rates of colon cancer than meat-eaters. ${ }^{1}$ Animal productsare usually high in fat and always devoid of fiber. Meat and dairy products contributeto many forms of cancer, including cancer of thecolon, breast, and prostate. Colon cancer hasbeen directlylinked to meat consumption. High-fat diets also encourage the body's production of estrogens, in particular, estradiol. Increased levelsof thissexhormonehavebeen linkedto breastcancer. Onerecentstudy linked dairy products to an increased risk of ovarian cancer. The process of breaking down the lactose (milk sugar) into galactose evidently damages the ovaries. ${ }^{3}$

Vegetarians avoid the animal fat linked to cancer and get abundantfiberandvitaminsthathelpto prevent cancer. In addition, blood analysis of vegetariansrevealsa higher level of N atural Killer Cells, specialized whiteblood cells that attack cancer cells. ${ }^{4}$

## Beating Heart D isease

Vegetarian diets also help prevent heart disease. Animal products are the main source of saturated fat and the only
source of cholesterol in the diet. Vegetarians avoid these risky products. Additionally, fiber helps reduce cholesterol levels, ${ }^{5}$ and animal products contain no fiber. Onestudy even demonstrated that a low-fat, high-fiber, vegetarian diet combined with stress reduction techniques, smoking cessation, and exercise could actually reverse atherosclerosis-hardening of the arteries. ${ }^{6}$ Heart diets that include animal products are much less effective, usually only slowing the process of atherosclerosis.

## LoweringBlood Pressure

Back in the early 1900s, nutritionists noted that people who ate no meat had lower blood pressure. ${ }^{7}$ It was also discovered that vegetarian diets could, within two weeks, significantly reduce a person's blood pressure. ${ }^{8}$ These results were evident regardless of the sodium levels in the vegetarian diets.

## Preventing and Reversing Diabetes

Non-insulin-dependent (adult-onset) diabetescan bebetter controlled and sometimes even eliminated through alowfat, vegetarian diet along with regular exercise. Becausesuch a diet is low in fat and high in fiber and complex carbohydrates, it allows insulintoworkmoreeffectively. Thediabetic person can moreeasily regulateglucoselevels. Whileavegetarian diet cannoteliminatethe need for insulin in people with insulin-dependent (childhoodonset) diabetes, it can often reduce the amounts of insulin used. Some scientists believe that insulin dependent diabetes may be caused by an auto-immune reaction to dairy proteins.

## Gallstones, Kidney Stones, and O steoporosis

Vegetarian dietshavebeen shown to reduceone'schances of forming kidney stones and gallstones. Diets that are high in protein, especially animal protein, tend to cause the body to excrete more calcium, oxalate, and uric acid. These three substances are the main components of urinary tract stones. British researchers haveadvised that personswith a tendency to form kidney stones should follow a vegetarian diet. ${ }^{9}$ Similarly, high-cholesterol, high-fat diets-thetypical meat-based dietare implicated in the formation of gallstones.

For many of the same reasons, vegetarians are at alower risk for osteoporosis. Sinceanimal productsforcecalcium out of the body, eatingmeat can promoteboneloss. In nationswith mainly
vegetable diets (and without dairy product consumption), osteoporosis is less common than in the U.S.- even when calcium intakeisal so lessthan in theU.S. ${ }^{10} \mathrm{C}$ alcium isimportant, but thereisno need to get calcium from dairy products. For more information on protecting your bones, contact PCRM for additional reference materials and fact sheets.

## Asthma

A1985Swedish studydemonstrated thatasthmaticswho practice a vegan diet for a full year havea marked decreasein their need for medications, and in their frequency and severity of asthma attacks. Twenty-two of the 24 subjects reported improvement by the end of the year. ${ }^{11}$ Dairy allergies may be part of the reason.

## Common Concerns

5omepeoplestill worry about theeasewith which a vegetarian diet can provideall essential nutrients. Thefact is, it is very easy to haveawell-bal anced diet with vegetarian foods. V egetarian foods provideplenty of protein. Careful combining of foods is not necessary. Any normal variety of plant foods provides morethan enough protein for thebody'sneeds. Although there issomewhat less protein in a vegetarian diet than a meat-eater's diet, thisisactually an advantage. Excessprotein hasbeen linked to kidney stones, osteoporosis, and possibly heart disease and some cancers. A diet focused on beans, whole grains, and vegetables contains adequate amounts of protein without the "overdose" most meat-eaters get.

Calcium is easy to find in a vegetarian diet. M any dark green leafy vegetables and beans are loaded with calcium, and some orangejuices and cereals are calcium-fortified. Iron isplentiful in whole grains, beans, and fruits.

## Vitamin B $_{12}$

Vitamin $B_{12}$ is a genuineissuefor vegans, although very easy to deal with. Traditionally, gettingthisvitamin hasnotbeen difficult. In cultureswith plant-based diets, themicroorganisms that produce $\mathrm{B}_{12}$ grow in thesoil and clingto root vegetables, and traditional Asian miso and tempeh contain largeamounts of the vitamin. But with industrialized production and improved hygiene, this source of $B_{12}$ has been eliminated. $M$ eat-eaters get $\mathrm{B}_{12}$ through microorganisms living in the animals they eat.

Although cases of $B_{12}$ deficiency are very uncommon, it is important to make sure that one has a reliable source of the vitamin. Good sources include all common multiple vitamins (including vegetarian vitamins), fortified cereals, and fortified soymilk. It is especially important for pregnant women and breast-feeding mothers to get enough vitamin $\mathrm{B}_{12}$.

## Special Concerns: Pregnancy, Infants, and Children

During pregnancy, nutritional needs increase. The American Dietetic Association has found vegan diets adequate for fulfillingnutritional needsduringpregnancy, but pregnantwomen and nursing mothersshould supplement their diets with vitamins
$B_{12}$ and $D$. M ost doctors also recommend that pregnant women supplement their diet with iron and folic acid, although vegetarians normally consume more folic acid than meat-eaters.

V egetarian women have a lower incidence of pre-eclampsia in pregnancy, and significantly morepurebreast milk. Analyses of vegetarians' breast milk show that thelevel sof environmental contaminants in their milk aremuch lower than in non-vegetarians. ${ }^{12}$ Studies haveal so shown that in families with a history of food allergies, when women abstain from allergenic foods, including milk, meat, and fish, during pregnancy, they are less likely to passallergiesonto theinfant. ${ }^{13} \mathrm{M}$ otherswho drink milk passcow antibodies along to their nursinginfantsthrough their breast milk. These antibodies can cause colic.

V egetarian children also have high nutritional needs, but these, too, aremet within a vegetarian diet. A vegetarian menu islife-extending. Asyoungchildren, vegetariansmay grow more gradually, reach puberty somewhat later, and live substantially longer than do meat-eaters. Do be sure to include a reliable source of vitamin $\mathrm{B}_{12}$.

## Further Reading

Eor more information on vegetarian diets, PCRM recommends:

- Foods That Fight Pain, by Neal Barnard, M.D.
- Eat Right, Live Longer, by Neal Barnard, M.D.
- Food for Life, by N eal Barnard, M.D.
- TheM CD ougall Plan, by John M cD ougall, M.D.
- Dr. Dean Ornish's Program for Reversing Heart Disease, by Dean Ornish, M.D.


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