

Chapter 7

Green Foods for the Prevention of Diseases

“There is absolutely no substitute for greens in the diet! If you refuse to eat these ‘sunlight energy’ foods you are depriving yourself, to a large degree, of the very essence of life.”

—H. E. Kirschner, M.D.⁶³

We have discussed the basic and essential functions of the individual nutrients contained in cereal grass and the other dark green vegetables. No one seriously believes, though, that the value of any food can be explained solely in terms of the individual nutrients contained in that food.

Nutrition studies tend to focus on the effects of isolated factors (vitamins, fatty acids, amino acids, etc.) on the growth or health state of test subjects or laboratory animals. Epidemiological nutrition studies, however, look for relationships between patterns of food consumption and the health status of entire populations. In the last decade, a large number of these types of studies have looked at health differences between people who eat green vegetables and those who don't. These studies have focused primarily on the relationships between cancer rates and the consumption of green vegetables.

Greens for the Intestines

As high fiber foods, dehydrated wheat and barley grasses are frequently taken for their positive effects on intestinal regularity. But the benefits provided by green vegetables to the digestive tract may extend to acute and chronic bowel diseases. The relationship of green food factors to the risk of colon cancer is discussed in Chapter 5.

A 1986 British medical study demonstrated that the consumption of all vegetables—particularly green vegetables—is significantly correlated with a reduction in the risk of appendicitis.⁴

Before World War II, Dr. Garnet Cheney at Stanford Medical School identified what he termed an anti-peptic ulcer factor in green vegetables and several other food materials.²⁰ Feeding five to ten grams of fresh greens or green vegetable juice daily to guinea pigs consistently protected them from the development of histamine-induced ulcers. No known nutrients could be substituted for this factor to produce comparable results.

Radiation Protection With Green Vegetables

Scientists have looked at the ability of green vegetables to protect animals from radiation damage since the 1930s (see Chapter 4). This type of research flourished in the 1950s and early 1960s, with the growing awareness of the dangers to humans posed by radiation.

In 1962, Doris Calloway and her colleagues gave lethal doses of X-radiation to healthy guinea pigs whose standard diet had been supplemented with a carefully controlled variety of foods and nutrients.¹⁷ Ninety-seven per cent of the animals given no vegetable supplements died within twenty days. All of the vegetables containing beta-carotene provided some protection for the test animals. For example, only forty-four percent of the carrot-supplemented group died within twenty days. The dark green leafy vegetables provided, by far, the most protection from radiation. Only 12% of the animals fed mustard greens, and NONE of the animals fed alfalfa succumbed in 20 days.

It first appeared that beta-carotene could have been the protective factor in those experiments. However, when the stock diets of guinea pigs were supplemented with beta-carotene or vitamin A, little protection was provided. It seemed, then, that the radiation protection provided by the green vegetables was supplied by something other than the known nutrients. In their report, the investigators speculated that this radioprotective factor may parallel the water-soluble grass juice factor described earlier.

Green Vegetables and Cholesterol

Today, the use of several types of plant fiber (oat bran, apple pectin, psyllium seeds) is popular for the reduction of cholesterol. This practice is becoming widespread, though some authorities still question its benefits. A study of the impact of various whole vegetable foods on serum cholesterol was reported by Dr. Gary Fraser in the *American Journal of Clinical Nutrition*. In this study, all food supplements used had a positive effect, but

“calorie for calorie, the leafy vegetables seem to be most effective in lowering serum cholesterol.”³⁸

Animal experiments conducted in Japan indicate that the green juice of the cereal grass leaf has a cholesterol-lowering effect when given to rats with high cholesterol.¹⁰¹

Green Vegetables Against Cancer

Many studies have shown a higher than normal incidence of several kinds of cancer among populations consuming small quantities of green vegetables. These cancers are generally associated with the epithelial tissues that form the lining of many of our organs.

Lung cancer is the most lethal of all cancers for American men, and is rapidly becoming the leading killer of women as well. Many factors contribute to one's risk of getting lung cancer. The most potent risk factor is, of course, smoking. Anyone wishing to reduce the risk of getting this devastating disease should stop smoking now! Although no other single measure can improve one's prospects for a healthy future more directly, consumption of certain foods appears to affect one's risk of getting this disease. A large body of research indicates that eating dark green vegetables and foods high in beta-carotene may offer some protection from the development of lung cancer.¹⁵²

One Italian study demonstrates that smokers who seldom eat green vegetables or carrots have several times the risk of getting lung cancer as smokers who consume green vegetables and carrots frequently. The investigators conclude that: “Our data support a protective effect of vegetables. While it is possible that the nutrient responsible is carotene, the contribution of other substances present in the foods must be considered.”¹¹⁰

Green vegetables may also be associated with a reduction in the risk of developing other types of cancer. A report in the *Journal of the National Cancer Institute*⁴⁶ indicates that hospital patients being treated for colon cancer have a history of eating fewer vegetables, especially green vegetables, than do other patients. Consumption of green vegetables has been shown to correlate with reduced risk of cancers of the ovary,⁷⁷ cervix,¹³⁹ and stomach.⁷⁸

We have seen that green vegetables may offer some protection from the risk of epithelial cancers—those which affect the cells lining such organs as the lungs, colon, and ovaries. An interesting report in the *American Journal of Clinical Nutrition*²⁴ indicates that elderly people who eat the largest amount

of green and yellow vegetables are the least likely to die of cancer of all types, whether or not they were smokers. The researchers state:

“Our dietary data do indicate that, even in old age, higher intake of green and yellow vegetables is still associated with lowered risks of cancer deaths. It is still not known whether the protective relationship of such vegetables is truly one of cause and effect, and still less is known concerning which components of such vegetables are chiefly involved.”

We can only echo the assertions made by these researchers. The information they provide suggests that eating green vegetables may indeed offer some protection from cancer.

It is unusual that so much research attention has focused on a specific type of food as a preventive agent for diseases. It is even more unique that these foods are distinguished by their color (dark green). We don't believe that this information would come as any surprise to our grandmothers.