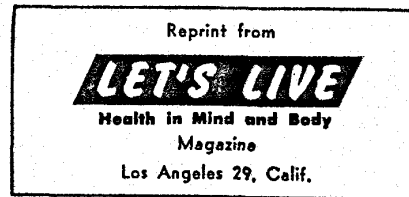


# Leafy Storehouses

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The broad, thick, chlorophyll-rich green leaves of the Goosefoot family—spinach, beets and chard—provide one of the richest sources of life-giving foods of all the readily available foods. However, dietitians who study ordinary food analysis charts formulated on the basis of the total content, may be led to false conclusions, as these usually show a relatively low two or three percent protein content. Actually, the solids run about 10 percent, and if we analyze this solid material, we now find that the protein content is high, averaging 24 to 46 percent of the ash. (P. 215, *Chemistry and Technology of Foods*). So if you want to increase the protein in your diet—vegetarian or not—eat plenty of fresh, green-leafy variety of vegetables.



## Iron and its synergists

Garden beets are one of the richest storehouses of assimilable iron. In one list of several hundred food sources of iron, beets stood in fourth place—exceeded only by dry beans, parsley (highest) and soybeans. When you consider the low-starch content of beets plus their palatability, however, you may evaluate beets on the highest level as a compatible everyday food source of iron. Also, recall that the juice of beets is acid due to the presence of organic acids (including citric, malic, tartaric, malonic, and others), and that iron is best absorbed in an acid medium, the natural environment afforded by beet juice. Copper, also necessary for the utilization of iron, is present in beets in significant amounts.

## Organic mineral source

Iodine (depending on soil), mangan-

ese, silica, chlorine, potassium and zinc are all present in these leafy green vegetables. Zinc is particularly important in carbohydrate metabolism, being necessary for the formation of enzymes which utilize sugars and starches as they go through changes in the body—called intermediate processes. It is zinc which seems to potentiate the action of insulin.

## Sugars and pectins

Beets are nature's sugar factory, producing dextrose, levulose and sucrose by the action of sunlight on chlorophyll in the juices of the leaves. Pectins and galacturonic acid groups are also present. These aid in the detoxification processes of the body and are able to produce bulk in the intestines which is both soothing and promotes the growth of favorable bacteria.

## Amino acid source

An analysis of beet leaf solids shows the following amino acids present: arginine, histidine, lysine, tyrosine, tryptophane, cystine and methionine. The figures indicate that they are a well-balanced protein of high biological value. It is interesting to note that the by-products from the processing of beet sugar are sold to cattle raisers as a high-quality protein food. How typical of man's dietary ignorance—taking for himself the devitalized calories and giving the protein-mineral-rich portions to his animals.

## Glutamine source

When beets are grown on ammonium-rich soils, they contain high amounts of glutamine, one of the most potent blood buffers known—otherwise found in significant amounts only in raw celery juice and raw meat juices (both of which must be freshly extracted and used). Glutamine is normally produced in the body by the kidneys through the action of enzymes of which arginase is important.

## Vitamins and pro-vitamins

In addition, these leafy storehouses are rich sources of vitamins B-1, B-2, niacin, and others. Carotene, pro-vitamin A, is also present in high amounts. Reports also show a variety of other useful nutrients such as glutamic acid, aspartic acid, and allantoin. (For more information about allantoin, see *An Ancient Remedy*, Lee Foundation Book, \$1.00.)

## Contains betaine

One of the most valuable nutrients present in beet leaf juice is betaine. Betaine, you will recall, is one of the B-complex factors of the methyl-donor groups which plays a valuable role in the intermediate processes of the body. Betaine has been widely reported as a lipotropic agent—fat metabolizing factor—and the contained betaine in beet leaf juice may be one of the main reasons why beet leaf juice has been useful in the relief of gall bladder congestion.

## Raw-fooders appeal

Beets, both roots and leaves, spinach and chard should be served frequently, making a par-excellent food for both young and old. Try to obtain the tender, young leaves and add these finely minced to your raw salads. The rich green from the leaves and the bright red from the root juice of the beets will add a pleasing color to many foods, as well as improve their nutritional value. Also "pickled" beets, seasoned with apple-cider vinegar, is another good way to include Dr. Jarvis's recommendations for cider vinegar in the diet.

## Emphasize the positive

So much has been said about the devitalization of foods by various methods of depletion, that we may forget to emphasize the more positive food elements in our diet. One good way of doing this is by eating more foods from the Goosefoot family. Of course, these should be organically grown and free from commercial fertilizers and poisonous sprays.

THE END