



Vegetable Versatility

WHAT a variety of life-ways can be worked out by members of a single plant family!

Take the legumes, for example—that numerous and very widespread plant group that includes clovers, peas, beans and their relatives. They range in size from tiny plants, less than some of the mosses, to towering trees like the locusts and the Kentucky coffee bean. They range in wholesomeness from nutritious peas, lentils, innumerable appetizing kinds of beans, to the stock-poisoning loco weeds of the West. They range in habitat preferences from the mesquite and screw-beans of the arid Southwest to the hog-peanuts that grow in the waterlogged muck of swamps.

Whatever may be your requirement of a plant, there is pretty sure to be a legume of some sort to answer it. Food? So important is this family in our dietary that one member is almost the civic coat-of-arms of Boston, and in French "legume" has come to signify any kind of vegetable. Wood? Locust timber is of the best. Shade? Again the locust tribe can offer its services. Oil? There are soy beans and peanuts. Fodder for our beasts? Clover, alfalfa, lespedeza and soy bean hay. Flowers? Sweet peas, redbud, acacia, lupines, and a host of others besides. Flavoring? Well, there's licorice, at least, and honey from white clover and alfalfa. Even insect poisons: the potent new stuff called rotenone comes from derris and cubé of the tropics, and can at need be extracted from the Devil's-shoestring plant of our Southern coasts.

History and literature have been made by plants of the legume family. The pottage that Esau bought so expensively was made of either peas or lentils. So was that other mess of pottage which the prophet Habakkuk delivered in such a

hair-raising hurry to the prophet Daniel. The "husks that the swine did eat" in the parable of the Prodigal Son were in all likelihood the cloyingly sweet-flavored pods of a small locust-like tree common in the drier lands of the Near East.

Even modern science acknowledges a debt to the legumes every time it uses a lens, in telescope, microscope, camera or projection lantern. For the word "lens" is simply the Latin for the edible

seed of the lentil, which has a bulging discoid shape exactly like that of a double-convex magnifying glass.

Even greater, however, is the more direct debt of biology. For it was with a handful of common peas that Gregor Mendel, in the patient quietness of his monastery garden, laid the foundation for his famous generalization that is the beginning of modern genetics.

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MEDICINE

Fever Treatment Cures 80% With One Kind of Arthritis

Patients Hobbling About Painfully on Crutches One Day Are Able to Walk Briskly 48 Hours Later

A PATIENT suffering from one type of arthritis, that due to the gonococcus "germ," has an eighty per cent. chance of being promptly cured by a few sessions of fever treatment, Dr. Philip S. Hench of the Mayo Clinic reported to the American Association for the Study and Control of Rheumatic Diseases.

Fever treatment does not, however, offer nearly so much hope to patients suffering from other forms of arthritis, Dr. Hench emphasized.

At the rheumatism conference at Atlantic City Dr. Hench showed pictures of some patients afflicted with gonorrheal arthritis or rheumatism hobbling around painfully on crutches one day and walking briskly about twenty-four to forty-eight hours later. Early and efficient treatment is necessary to obtain the best results.

Even the patient who has had this type of arthritis for six weeks or more has still a 35 per cent. chance of being relieved of his painful symptoms, Dr. Hench said, summarizing results obtained at various clinics throughout the country. If he is not cured, this type of patient has an additional 30 per cent. chance of being markedly relieved with only some remaining stiffness.

"Unfortunately germs supposed by many to cause the common forms of rheumatism (chronic deforming arthritis) are usually resistant to heat and apparently are not killed by the amount of fever which it is safe to induce in human beings," Dr. Hench said.

"The development and poisonousness of these germs may be somewhat hindered, however, and circulation to the

joints may be improved; hence, some of these patients with rheumatism also get relief from fever treatments, although not nearly so often as those who have gonorrheal arthritis. It was reported that, of about 315 patients with rheumatism who were treated in various clinics, 5 per cent. had been relieved of their symptoms and 25 per cent. had quite definitely been benefitted."

The idea of fever treatment has become familiar to the public. What actually happens to the body during this treatment may be less familiar. Dr. Hench described it vividly as follows:

"A whirlpool of physical and chemical reactions occurs during the induction of such a 'friendly-fever' in human beings. Blood vessels change their size; the blood, kidney excretion and sweat are altered in their content, and it would seem that the immunity mechanism of the patient is enhanced. The most important discovery is that the germs of gonorrhea and syphilis can actually be killed if enough fever can be generated in the patient."

"While fever therapy in the hands of specially trained physicians and assistants is essentially a safe procedure," he continued, "the reactions must be carefully controlled at all times by attendants. Such treatments cannot therefore yet be said to be cheap, and the day when anyone can turn on his own electric apparatus and cook away his disease in the fires of fever has certainly not now, and probably never will, arrive."

Fever treatment seems quite new. Its present form and usefulness are indeed owing to modern inventions. Actually,