



The humble Potato

The humble potato is probably the most widely cultivated vegetable and has had an impact on the diets of people all over the world. The plants are herbaceous perennials with thick, uneven-shaped stems (tubers) growing underground, which are what we harvest as potatoes. The tuber consists of about 80% water, 20% solid matter with starch making up about 85% of this solid mass and the rest is protein. Potato provides vitamins including niacin, riboflavin, thiamin, and vitamin C. It also contains minerals such as calcium, iron, magnesium, phosphorus, potassium, sodium, and sulfur.

Originally potatoes were cultivated in South America's Andean region. The Spanish introduced them to Europe in the second half of the 16th century, following their conquest of the Inca Empire. Subsequently potatoes were conveyed by European mariners to territories and ports throughout the world, soon becoming standard fare aboard ships, helping to prevent scurvy on long sea voyages. At first, potatoes were a reluctant introduction to the European garden, the farmers were suspicious, because the plant belongs to the 'deadly' nightshade family, along with eggplants and tomatoes - and parts of nightshade plants can be toxic. But soon enough, potatoes became an important food staple and field crop which played a major role in the population boom of 19th century Europe. Their use spread into Ireland, Scotland, and other countries. They quickly became the principal crop of Ireland and were known as the 'Irish potato' because the Irish population depended so heavily on the crop. However, the lack of genetic diversity, due to the very limited number of varieties initially introduced, left the crop vulnerable to disease. In 1845, a plant disease, known as 'late blight', spread rapidly through the poorer communities of western Ireland, resulting in the crop failures that led to the Great Irish Famine. An estimated million or more people lost their lives. Within a few years, Ireland's population dropped by half, mostly due to migration in an attempt to escape the famine. The immigrants turned potatoes into an important food crop in North America, even though the vegetable had been introduced there as early as the 1600s.

There are about five thousand potato varieties worldwide. Three thousand of them are found in the Andes alone. Apart from that, there are about 200 wild species and subspecies, many of which can be cross-bred with cultivated varieties. This has been done repeatedly to transfer resistances to certain pests and diseases from the gene pool of wild species to the gene pool of cultivated species. Today, despite the five thousand varieties known, only a fraction of this number is cultivated commercially. Potatoes are usually propagated from buds, called eyes, which form on the tubers if they are left in the soil instead of being harvested. They will also bud in cool dry storage conditions. Alternatively, they can also be cut into pieces and replanted. Some varieties can grow from seeds. The plants prefer full sun, light, loose soil and grow up to about 60 cm high. The flowers are white, pink, red, blue, or purple with yellow stamens. In general, the tubers of varieties with white flowers have white skins, while those of varieties with colored flowers tend to have pinkish skins. Once harvested, potatoes can be stored in a cool, dark and well ventilated place for an extended period of time.

Cut into pieces and replant



According to the United Nations FAO reports, the annual diet of an average global citizen in the first decade of the 21st century was estimated to include about 33kg of potato. However, the local importance of potato is variable and changing. Potato remains an essential crop in Europe (especially eastern and central Europe), where per capita production is still the highest in the world, but a rapid expansion over the past few decades has occurred in southern and eastern Asia. It is believed China is now the world's largest potato-producing country, and nearly a third of the world's potatoes are harvested in China and India.

Potatoes are delicious roasted, fried, baked, boiled, creamed, or added to soups and stews. Comforting winter warmers are whole potatoes baked in their jackets, served with butter or sour cream, garnished with chopped bacon and herbs such as chives or parsley; or chipped and made into french fries or wedges. Potato breads, dumplings, and croquettes are also popular food fare.

Green does not mean 'Go'!

Where the potato is concerned, green is the colour best avoided. The plant contains high levels of a toxic alkaloid called solanine in its green stems and leaves. Consuming these 'greens' may not be fatal, but it will cause serious illness. On the home front, many of us may notice that exposing our potatoes to sunlight and even strong artificial light can cause 'greening' - which indicates the presence of solanine. The level of solanine in a couple of green potatoes is probably not high enough to do a great deal of damage, but it could cause some digestive upset. Beware!