Veggie Power or 'What is a vegetable?'

Bruno doesn't like capsicum, Lisa doesn't care for asparagus. And Anton doesn't like any vegetables at all. 'I don't eat anything that's green', he says and pushes some red beets to the side of his plate. Why should any of us eat vegetables? Is it just because our parents say so? Well, vegetables may not look all that exciting, but there's a lot more to carrots, pumpkins and potatoes than meets the eye!

What are vegetables, really? The word comes from an older term, vegetabilis, which means 'capable of life and growth'. In former times, cooks considered anything that originated from plants and needed to be cooked and seasoned to be 'vegetables'. Other plant foods, such as apples or pears, had enough flavor of their own due to a high sugar content. They were given a different name: 'fruits'. This way of dividing the two food types, however, is a bit old-fashioned because tastes have changed over time. People no longer cook everything to a pulp, and some even eat peeled kohlrabi as they would an apple. Some fruits, moreover, are rarely eaten raw. You'd probably try raw quince only once before spitting it out! However, this doesn't mean that kohlrabi should become a fruit and quince a vegetable.

Scientists prefer to be a little more precise about naming plant groups. Botanists are scientists who specialize in plants, and they set completely different guidelines for distinguishing a fruit from a vegetable. Scientifically, the 'fruit' of a plant is the part that forms from the blossom of its flower and contains one or more seeds. Think of a peach, a pear and some red currants. All of them have seeds hidden within. In fact, it's very rare for seeds to stick out of a fruit, as

you'd find with a strawberry. Botanical fruits, moreover, are often sold with part of the plant's stalk (or stem base) still attached – which shows how the fruit has grown out of its stem.

Now that you know what a botanical fruit is, how might you figure out whether someone had put a fruit or a vegetable on your plate? The easiest way is to discover what part of the plant it is. Are you looking at a thick root, a gnarled tuber, a pale shoot, a flat leaf or an elongated stem?

If it's any of these plant parts, then you've definitely been given a vegetable. Such foods include beets, potatoes, asparagus, spinach or even rhubarb. That's correct! You haven't misread anything – rhubarb is also a vegetable. Chefs, of course, have always known this to be true, and they cook rhubarb with lots of sugar in the pot.

But what if you've been served the part of a plant that botanists call a fruit? Is this a food you'd always recognize as a fruit? That's when things get a little more complicated. In cooking, we regard botanical fruits that come from 'annuals' (or plants that die off every year after ripening) as vegetables. These foods include zucchini, peppers and pumpkins. They also include melons, which taste so sweet and are popular in fruit salads. In order to harvest them, such vegetables need to be sown anew in spring each year. On the other hand, when a botanical fruit grows from a 'perennial' — a plant that is several or even many, many years old, with flowers that produce new fruit year after year — then it is certainly a food fruit as well. Orange trees, apple trees and raspberry bushes are all perennials, and they often become woody with age.

There's one botanical fruit, however, that has a special place in the world of fruits and vegetables. Little princess tomato is mainly cultivated as an 'annual' in Europe, but it actually grows on plant branches for years on end in its warm homelands of South and Central America. Therefore, many Europeans consider it a vegetable and many Latin Americans consider it a fruit. Other people see the tomato as a kind of double-agent – taking its place in both the fruit and vegetable communities! It's probably best, however, to let garden experts quarrel among themselves about the tomato. At least now you can tell the difference, more or less, between fruits and vegetables. And that means you already know more than many people do ... even if you sometimes forget the exceptions.

What's most exciting about vegetables and fruits are the many things you can do with them. Veggies can be used for purposes other than soup. They can appear in clothes and concerts, energy and great art! You don't believe it? Then let's begin an exploration. Olaf Hajek, the famous illustrator, has painted his favorite vegetables for you. And in every one of his pictures, he tells you a fairy tale as well. Take your time and appreciate how much fun Olaf's marvelous stories are. And if you want to find out more about each vegetable, you can read the texts accompanying each picture. I've also included some interesting, funny and practically unbelievable facts. Maybe your grandpa's vegetable soup will not taste as bland when you've read all this!

Have lots of fun exploring this book... and here's wishing you 'Bon Appetit'!

Annette Roeder

Sweet Potato

Although they both have nearly the same name, look equally stumpy and make for delicious French fries, potatoes and sweet potatoes are very different. The potato is a real nightshade plant that should only be eaten when cooked, while the sweet potato is fully non-toxic when raw. Even the leaves of this pretty, pink-flowered bindweed can be cooked just like spinach. In many countries, the plant's orange or purple-colored tubers are baked before eating. These tubers grow at the roots underground and can weigh up to two pounds (0.9 kg).



Recently, a 57-million-year-old fossil of a bindweed, an ancestor of the sweet potato, was discovered in India. What a sensation! Up until then, everyone thought that sweet potatoes originated in the Americas. But no matter where they first evolved, sweet potatoes have been cultivated by humans for a long time. People in the Rio Grande area of Peru, for example, were already growing them 5,800 years ago. George Washington, who was both a farmer and the first President of the United States, grew sweet potatoes at Muddy Hole farm, which was part of his huge Mount Vernon estate in Virginia.

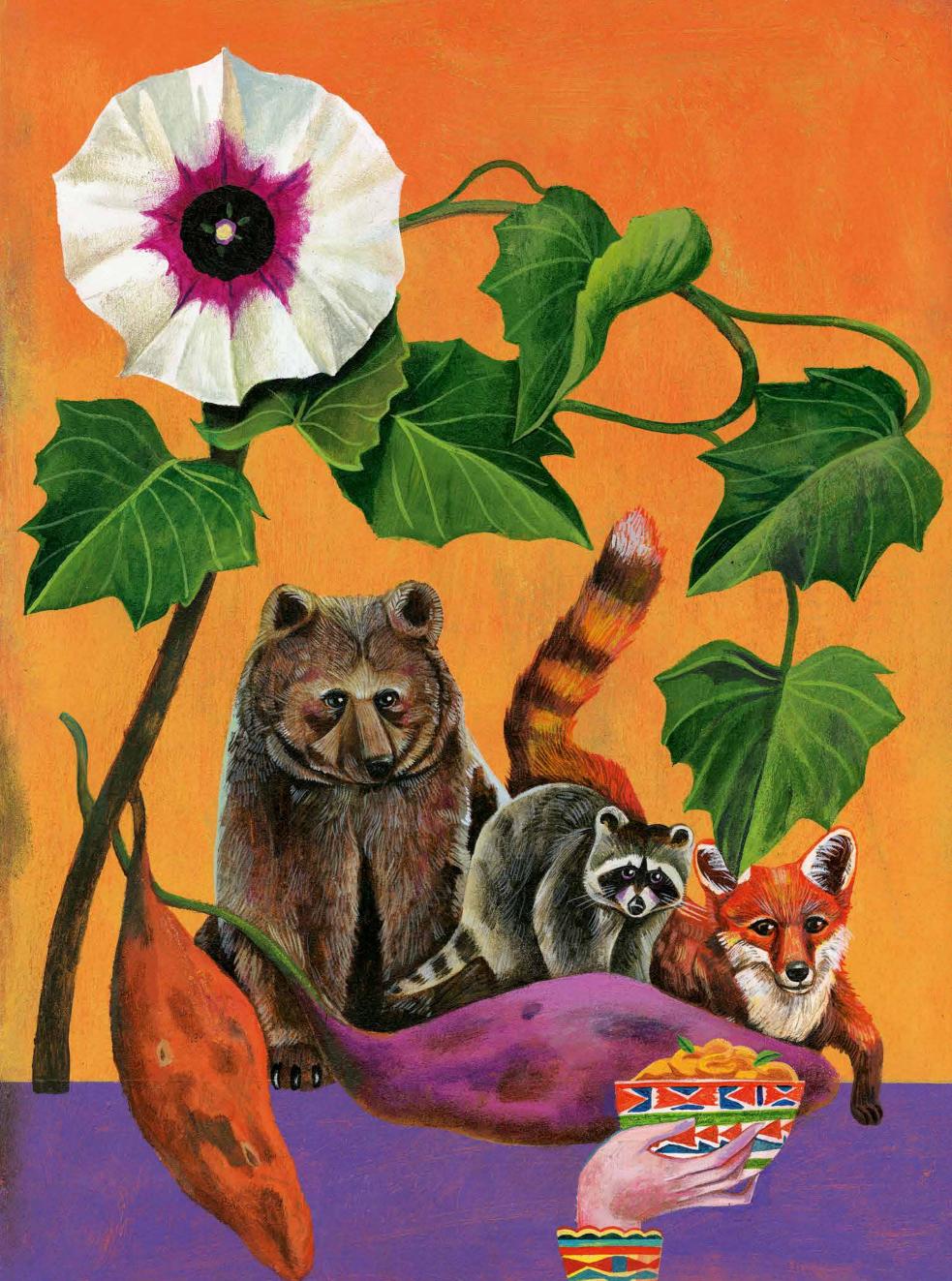
Washington's namesake, George Washington Carver, was an African-American inventor who did much more with the sweet potato than offer it as a side dish at Thanksgiving. He came up with dozens of inventions for using the plant. Among these were glues for postage stamps, ink, shoe polish, a type of rayon, as well as ropes and dyes!

The sweet potato plant is not only versatile, it's also quite durable and can even survive artificial light. It is hardly surprising, therefore, that scientists from the NASA space agency have long packed them into their suitcases. When we finally make our way to Mars, the sweet potato will likely come with us!

Edible parts of the plant:

The tuber can be eaten raw and cooked, and the leaves are edible, too.

Tasty varieties of sweet potato: Japanese, jewel, Ringley's Porto Rico



Onion, Garlic and Leek

In some countries, people insult others by calling them a 'leek'. Maybe this put-down has something to do with the leek vegetable's appearance, with its narrow-chested shape and funny, ragged-looking hairstyle. Leeks, however, have every reason to be proud of themselves! For thousands of years, they have been highly prized for their versatile qualities, as a staple foodstuff, and even more so for medicinal reasons.

In ancient Egypt, the workers building the pyramids were paid in onions and garlic, among other things. Greek athletes strengthened themselves for the Olympic Games using these vegetables. Later on, leeks arrived in northern Europe in the backpacks of Roman soldiers. Ancient healers and doctors once used them for inflammation, fever, skin rashes, heart problems, mosquito bites, snake bites and other sicknesses! Hair loss, too, was treated with garlic! Today, people still place their trust in the healing effects of sulfur compounds found in members of the leek family, and you can buy shampoo with garlic extract in it. These healthy vegetables can also serve other purposes. If you drop a bowl in the bathroom, you can clean the tiles with half an onion and glue the pieces together with the juice of a garlic clove. It's no joke, it works!

Many of us like the taste of leek, onion and garlic in spite of the lingering bad breath that usually occurs after eating them. We also may have to shed tears when chopping onions, though the sharpest possible knife will help counteract this effect. Sharp knives reduce the number of onion cells that are crushed when onion cutting, and it's these crushed cells that release vapors to irritate our eyes. Or, if you don't have sharp-enough cutlery, you could always try wearing diving goggles!

Edible parts of the plants:

The thickened bulb of the shoot above the onion root can be eaten raw, while the garlic clove is enjoyed raw, fried or boiled. With leeks, the entire shaft can be consumed, including the green leaves, though the darker green part at the end of the shaft is too hard to be eaten raw. But be sure to heed this warning – leeks are poisonous for dogs and cats whether raw or cooked!

Varieties:

Barletta, Cipollotto da Mazzi, red wing, Stuttgarter onions Bogatyr, Persian star, Blanco Piacenza, Killarney red, Shantung purple garlic Musselburgh, Gigante d'Inverno, Lincoln, Lancelot, imperial leeks







Tomato

Though classified as a fruit by scientists, the tomato is enjoyed as a vegetable by cooks and eaters alike – by far the most popular vegetable in the world. Tomatoes were actually considered poisonous in most countries up to the beginning of the last century! People in Latin America, however, had known better for a long time. They'd grown tomatoes for thousands of years in Mexico and Peru, using the plants for food and medicines. The Aztecs of Mexico called them 'Xitomatl', a name in which the modern word 'tomato' can be clearly recognized.

Around 1500, Spanish seafarers brought tomatoes back to Europe for the first time. The tomato berries of that period were yellow and cherry-sized; and although they were attractive to the eye, they were also highly untrustworthy. After all, tomatoes originate from the nightshade family and have many poisonous relatives. The tomato plant, however, only contains the toxin solanine in its green parts, and only to a small degree. Nevertheless, there were a number of deadly accidents with tomatoes. Noblemen had eaten them and died. Today, historians believe the tomato's acids, harmless in themselves, helped secrete life-threatening lead compounds from the pewter plates that once graced wealthy dinner tables. People at that time did not know about lead poisoning, so they labeled the tomato a poisonous plant and preferred to grow it only in ornamental gardens.

Not all Europeans, however, were afraid of tomatoes. In Italy, cooks experimented with the 'pomodori' – the golden apple. It often pops up as a rare ingredient in very old cookbooks. But the tomato only made its real breakthrough just over 200 years ago on the pizza. Since then, it has only become more and more popular. Well over 3,000 varieties are being grown today in all different colors, shapes and types. They can be white, yellow, green, red or even black in hue, some with freckles and some with zebra stripes, and they can have round, oval or fluted shapes. There are cocktail tomatoes as small as cherries and beefsteak tomatoes that can weigh up to two pounds (0.9 kg) or more.

At the Spanish city of Buñol, the crazy Tomatina festival takes place in August. More than 20,000 people have overripe tomatoes thrown at them for an hour! Other people use tomatoes in more sensible ways. Plastics made from tomato seeds, skins and stems may soon be used to build cars.

Edible parts of the plant:

The fruit, or in this case, the berry, can be enjoyed in any state.

Tasty varieties of tomato:

cherry Roma, Polish, Granadero, red cherry, black pearl, Fiaschetto di Manduria

