How the world fell in love with heat

LITTLE BOOK OF CHILLIES
varieties, history, growing, preserving, cooking, enjoying

A brief introduction to the fascinating world of chillies

Sarah Hunt
INTRODUCTION TO CHILLIES

A brief introduction to The Little Book of Chillies and the chillies of the world.

HISTORY OF CHILLIES

How chillies travelled the planet and came to dominate world cuisine.

CHILLI FACTS

Hot chilli trivia; thirteen facts you never knew about chillies.

HOW TO GROW CHILLIES

A beginner’s guide to planting and growing chilli plants to flower & fruiting stages.

REGIONAL CHILLIES

Extreme, world’s hottest, ornamentals and regional favourites of the world.

STORY OF WORLD’S HOTTEST CHILLIES

All about the Hot Competition; the crowning of the World’s Hottest Chilli.

PLANT DISEASES, PESTS & PROBLEMS

A guide to avoiding, diagnosing & solving chilli plant problems.

DRIED CHILLIES

Discover their unique flavours, they’re not just a poor substitution for fresh.

PRESEVING CHILLIES

Drying, freezing, pickling or smoking; preserve your excess harvest.

CHILLIES & HEALTH

Looking for a way to fight infections, burn extra calories or lower your blood sugar?

CHILLI & CHOCOLATE

The winning combination of flavours that goes back to the Aztecs.

RECIPES & SCOVILLE HEAT CHART

A small selection of great chilli recipes and a chilli heat chart.
Chillies have been a fascination to people for millennia. First domesticated around 7,000 years ago in Ecuador, they have since spread across the globe and today there is no more ubiquitous a flavouring, with the exception of salt.

Chillies are used around the world for cooking, ornamentally and even made into pest controls and military products, such as pepper spray. There are some 4,000 varieties around the world. They range in heat from the mildest of bell peppers to the superhots of the world that measure in excess of 2 million Scoville units. That means one part chilli is still detectable in 2 million parts water!

Colours range from lime or racing green to yellow, gold, orange, white, purple and red, bi-colour and tri-colour, sometimes all on the same plant. Chillies appear in a wide array of shapes and sizes from the tiny round Chiltepin to elongated Pasilla pods that can reach 30cm; long and thin, fat and round, wedges, bullets, spirals, mushroom, heart or star-shaped. With new varieties bred every year, the world of chillies is a growing fascination to gardeners and chefs alike.

Chillies are integral to American, Asian, southern African and even European cuisine; it is difficult to conceive of global food culture without them. They are eaten raw, cooked into curries, stuffed, roasted, dried, smoked, pickled, sauced and processed for a huge range of uses and flavours.

We hope that you will enjoy this introduction to the captivating world of chillies!
Chillies are native to Central America and archaeologists have discovered that people were eating them as far back as 7,500BC. Amerindians began farming them from around 5,000BC making them one of the oldest domesticated plants in the world. The name ‘chilli’ comes from the Nahuatl language, spoken in the highlands of Mexico.

It is not surprising then, that the Mexicans have the most sophisticated chilli cultures, with a huge range of fresh, smoked, dried and pickled chillies as well as powders and blends of powders, known as Moles. Chillies are used as much for their range of flavours as they are for their heat.

By 1,000BC, Mayans were making the first chilli sauces, using them to flavour tortillas. By 100 BC, they were processing chillies in various ways including smoking them to make Chipotles, which are still popular today, with their rich, smoky flavour.

When the Spanish arrived in the late 1400s, South America’s chilli production was booming. According to a Spanish chronicler, there were “hot green chillies, smoked chillies, water chillies, tree chillies, flea chillies, sharp, pointed red chillies.”

Mayans and Aztecs categorized chillies not only by heat, but also the type of heat; a quick, sharp explosion that quickly subsides, or a broad building heat that lingers.

The Aztecs didn’t confine chillies to their food, they used them in a number ways: to flavour chocolate drinks; inhaled as a punishment; mixed with urine and used as a face cream and paid to Aztec Emperors as an early form of tax.

After 9,000 years of use in Central America, chillies were suddenly discovered by European explorers and so began their dispersion around the world. When Christopher Columbus was introduced to the spicy pods, he assumed they were part of the Black Pepper family and named them Red Peppers; a mistake but a name that has stuck.

Even though Columbus brought chillies eastwards to Europe for the first time, few Europeans actually heard about them. It was to the Portuguese that the major spread of chillies around the world can be attributed.

Chillies travelled across the Atlantic to Africa with Portuguese ships and in 50 years, they had made it around the
Cape of Good Hope to India. They were quickly incorporated into Indian cuisine, perhaps because people were already used to pungent flavourings.

It is also interesting to note that around the world, the poorer the diet, the more popular chillies are. Chillies are a cheap and easy way to introduce intense flavour to food. They also cause endorphins to be released in the body, so producing a kind of “fake enjoyment” of the food.

Chillies travelled aboard trade ships to northern Africa and slave ships to Mozambique. Today, they are a major part of the cuisine of southern Africa and grow wild across the region. By the 1530s, ships were circumnavigating the globe in the opposite direction, sailing around Cape Horn, across the Pacific to Indonesia, taking chillies with them.

From these major locations, chillies spread along regional trade routes around Asia, China and back into Europe. Until the 19th century, Europeans thought that chillies originated in India because they had come from the east. It might be assumed that chillies reached North America directly from Mexico but in actual fact, they took a very convoluted route, being introduced by European slave traders in the early 17th century. Even then, they were not widely popular, being grown mainly as a cheap flavouring to support the diets of African slaves.

Today, chillies are the world’s most popular flavouring, with the possible exceptions of salt and pepper. There are now some 4,000 varieties grown worldwide and a continuous stream of new cultivars. The popularity of chillies continues to spread worldwide amongst horticulturists as well as chefs.

Chillies have even spawned their own fan-clubs with ‘chilli-heads’ getting together to find even more inventive ways of growing, eating and worshipping these culinary sticks of dynamite.
Bolivian Rainbow Chilli
There is evidence that chillies were being eaten in Central and South America as long ago as 7,500 BC, making them the world's oldest condiment as well as its most ubiquitous today.

Tiny, round chillies were used as one of the earliest tax payments, paid to Aztec Emperors. The little, round Chiltepin still grows wild around the region on large plants that can live for years.

Capsaicin

Capsaicin is the active irritant in chillies that causes the burning sensation in mammals. The sensation has no lasting effect and in actual fact does no direct harm to cells. It tricks our central nervous system into releasing endorphins which produces a pleasurable sensation in the body. That's why eating spicy food can be so pleasurable. Although causing no direct harm, seriously hot chillies give the system a bit of a shock! A number of people having been hospitalised from messing with the superhots and capsaicin extracts.

Scoville Heat Units

Wilbur Scoville developed a method for measuring the heat of chillies in 1902, which involved tasting diluted pods and giving them a value. Bell peppers with no heat rate at zero and the world's hottest chillies rate at around 1.5 million SHU. That means one part chilli is still detectable when diluted with 1.5 million parts water.

Today, Scoville ratings are measured by High Performance Liquid Chromatography (HPLC), which separates out compounds so that capsaicin can be measured accurately.
Chilli Queen

25 year old Anandita Tamuly of Assam holds the record for eating superhot chillies, consuming a mouth-blistering 60 Bhut Jolokia in two minutes!

At the time, Bhut Jolokia was on record as the world’s hottest chilli, nearly doubling the heat of its predecessor, the Red Savina. While the record for the hottest chilli gets broken again and again, Anandita’s record still holds. It will be hard to beat!

Superfood

It is said that chillies can help fight off winter colds and eating them certainly helps lift the spirits. They are packed with vitamins, containing more Vitamin C than oranges, more Vitamin A than carrots and such high levels of Vitamin D that some athletes eat them prior to training to reduce the risk of injury.

The active ingredient in chillies, capsaicin, can reduce the amount of insulin needed to lower blood sugar levels after a meal by up to about 60%, which could be of benefit to diabetics and the obese.

Chillies are natural antioxidants and it has long been noted that cultures that regularly consume them have lower rates of stomach cancer. Recent tests on rats with prostate cancer showed that large doses of capsaicin caused the death of a high percentage of cancer cells, making it a possible part of a future cure.
Be careful when trying new chillies. The burning sensation of some, like the Chiltepin, is quick, explosive and subsides very quickly but the heat of others, like the Habanero, builds slowly. Drinking water will not relieve the burning sensation of chillies. Some say drinking milk or eating yoghurt is the best method, others claim alcoholic drinks are the best way to dissipate capsaicin oil.

**Pest Control Savannah Style**

Capsaicin has long been used as a pest control by chilli plants themselves, deterring mammals from eating them but having no effect on the nervous system of birds.

In parts of Africa and India, farmers plant a barrier crop of chillies or smear fences with them to keep elephants from their crops. A handful of dried chilli mixed in with your birdseed will deter those pesky squirrels, leaving your garden birds to happily munch away.

**Hell's Brimstone**

19th Century priests in the USA condemned Chilli Con Carne, warning their flocks that the ‘Soup of the Devil’ was ‘Hot as Hell’s Brimstone’. It was widely held that chillies were an aphrodisiac. This declaration ironically probably contributed to the popularity of chilli as a dish.

Legend has it that the outlaw Jesse James was so fond of a bowl of chilli that he refused to hold up the bank in McKinney, Texas because it was the town of his favourite chilli bar! He wasn’t prepared to be run out of that town for any amount of money!

**World’s Biggest Chilli**

The Big Jim chilli from New Mexico is in the Guinness Book of Records for producing the largest pods, frequently over 30cm in length; quite impressive for a 60cm tall plant! The chillies are easy to grow, hot, tasty and great for stuffing.
World's Largest Curry

The world's largest curry was cooked up by 60 Indian chefs in Delhi in June 2008; a 13 tonne Biryani including 85kg of chillies and 3,000kg of rice that needed three cranes to help lift all the ingredients. The reason for making such a large curry was unclear, especially since there was no prior record, but it didn't go to waste, being distributed amongst all the orphanages in the city.

Hottest Part of a Chilli

Contrary to popular opinion, it is not the seeds that are the hottest part of a chilli, but the white placenta that surrounds them and runs in thick veins through the pod. Red chillies are 2-3 times hotter than green fruit, and dried pods are 2-10 times hotter than fresh.
**[FAMOUS FIVE]**

There are five separate species of chilli;

- **Capsicum chinense** is the hottest species, including Habaneros and the Superhots.

Most of the world’s chillies belong to this species.

- **Capsicum annum**, meaning annual, even though most are half-hardy perennials.

**Capsicum frutescens**, meaning ‘shrubby’, including Tabasco and Birdseyes.

**Capsicum baccatum**, meaning ‘berry-like’, including the Ajis, they tend to grow on large, vine-like plants.

**Capsicum pubescens**, meaning ‘hairy’, including South American Rocotos with their black seeds.

---

**Anatomy of a Chilli**

There are numerous distinct parts to a chilli pepper, each with their own proper name. Dissect any chilli and you will find each of these parts.

- **The Pedical**, or stalk holds the chilli pod onto the plant.

- **The Calyx** joins the pod and stem.

- **Capsaicin Glands** produce the chilli’s heat.

- **Placenta** holds the Capsaicin Glands.

- The **Exocarp, Mesocarp & Endocarp** are the outer, mid-pod and inner flesh.

- **The Apex** is the very tip of the pod.

- **The Seeds** are the raison d’etre of the whole plant.