

= Juniper berry =

A juniper berry is the female seed cone produced by the various species of junipers . It is not a true berry but a cone with unusually fleshy and merged scales , which give it a berry @-@ like appearance . The cones from a handful of species , especially *Juniperus communis* , are used as a spice , particularly in European cuisine , and also give gin its distinctive flavour . Juniper berries have been called the only spice derived from conifers , although tar and inner bark (used as a sweetener in Apache cuisines) from pine trees is sometimes considered a spice as well .

= = Species = =

All juniper species grow berries , but some are considered too bitter to eat . In addition to *J. communis* , other edible species include *Juniperus drupacea* , *Juniperus phoenicea* , *Juniperus deppeana* , and *Juniperus californica* . Some species , for example *Juniperus sabina* , are toxic and consumption is inadvisable .

= = Characteristics = =

Juniperus communis berries vary from four to twelve millimeters in diameter ; other species are mostly similar in size , though some are larger , notably *J. drupacea* (20 ? 28 mm) . Unlike the separated and woody scales of a typical pine cone , those in a juniper berry remain fleshy and merge into a unified covering surrounding the seeds . The berries are green when young , and mature to a purple @-@ black colour over about 18 months in most species , including *J. communis* (shorter , 8 ? 10 months in a few species , and about 24 months in *J. drupacea*) . The mature , dark berries are usually but not exclusively used in cuisine , while gin is flavoured with fully grown but immature green berries .

= = Uses = =

The flavor profile of young , green berries is dominated by pinene ; as they mature this piney , resinous backdrop is joined by what Harold McGee describes as " green @-@ fresh " and citrus notes . The outer scales of the berries are relatively flavourless , so the berries are almost always at least lightly crushed before being used as a spice . They are used both fresh and dried , but their flavour and odour are at their strongest immediately after harvest and decline during drying and storage .

Juniper berries are used in northern European and particularly Scandinavian cuisine to " impart a sharp , clear flavor " to meat dishes , especially wild birds (including thrush , blackbird , and woodcock) and game meats (including boar and venison) . They also season pork , cabbage , and sauerkraut dishes . Traditional recipes for choucroute garnie , an Alsatian dish of sauerkraut and meats , universally include juniper berries . Besides Norwegian and Swedish dishes , juniper berries are also sometimes used in German , Austrian , Czech , Polish and Hungarian cuisine , often with roasts (such as German sauerbraten) . Northern Italian cuisine , especially that of the South Tyrol , also incorporates juniper berries .

Juniper , typically *Juniperus communis* , is used to flavor gin , a liquor developed in the 17th century in the Netherlands . The name gin itself is derived from either the French genièvre or the Dutch jenever , which both mean " juniper " . Other juniper @-@ flavoured beverages include the Finnish rye @-@ and @-@ juniper beer known as sahti , which is flavored with both juniper berries and branches . The brand Dry Soda produces a juniper @-@ berry soda as part of its lineup . Recently , some American distilleries have begun using ' New World ' varieties of juniper such as *Juniperus occidentalis* .

Juniper berry was first intended as a medication since juniper berries are a diuretic and were also thought to be an appetite stimulant and a remedy for rheumatism and arthritis . Native Americans are reported to have used the juniper berry as an appetite suppressant in times of hunger . Juniper

berry is being researched as a treatment for diet @-@ controlled diabetes , as it releases insulin from the pancreas , hence alleviating hunger . It is also said to have been used by some tribes as a female contraceptive .

A few North American juniper species produce a seed cone with a sweeter , less resinous flavor than those typically used as a spice . For example , one field guide describes the flesh of the berries of *Juniperus californica* as " dry , mealy , and fibrous but sweet and without resin cells " . Such species have been used not just as a seasoning but as a nutritive food by some Native Americans . In addition to medical and culinary purposes , Native Americans have also used the seeds inside juniper berries as beads for jewellery and decoration .

An essential oil extracted from juniper berries is used in aromatherapy and perfumery . The essential oil can be distilled out of berries which have already been used to flavour gin .

= = History = =

Juniper berries , including *Juniperus phoenicea* and *Juniperus oxycedrus* have been found in ancient Egyptian tombs at multiple sites . *J. oxycedrus* is not known to grow in Egypt , and neither is *Juniperus excelsa* , which was found along with *J. oxycedrus* in the tomb of Tutankhamun . The berries imported into Egypt may have come from Greece ; the Greeks record using juniper berries as a medicine long before mentioning their use in food . The Greeks used the berries in many of their Olympics events because of their belief that the berries increased physical stamina in athletes . The Romans used juniper berries as a cheap domestically produced substitute for the expensive black pepper and long pepper imported from India . It was also used as an adulterant , as reported in Pliny the Elder 's *Natural History* : " Pepper is adulterated with juniper berries , which have the property , to a marvellous degree , of assuming the pungency of pepper . " Pliny also incorrectly asserted that black pepper grew on trees that were " very similar in appearance to our junipers " .