

## Plant food as medicine in Mediterranean Spain

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### RÉSUMÉ

Dans l'article suivant est présentée une sélection d'exemples concernant les rapports entre les aliments d'origine végétale, les

The ordinary diet of peasants in Mediterranean Spain, during centuries and until recent times, depended extremely on the foods locally available and, very often, was composed by bread, potatoes, or corn flour, with, less frequently, cod, sardines or bacon. Vegetables were scarce, available only from the irrigated fields which were restricted to the valleys. In some places were added to the diet pulses, and some scarce fruits (SÁENZ-GUALLAR, 1982a, MATEOS, 1990). Commonly the diet was poor in proteins of animal origin. Connections between this diet and epidemics of diseases have been discussed by several authors. The high frequency of human neurolathyrism among peasants of Central Spain immediately after the World War II, a disease of the nervous system, was explained as being produced by a diet extremely dependent on "guijas" or "almortas" (seeds of *Lathyrus sativus* L.).

The use of plant foods as medicines in Mediterranean Spain

### Plants which are chiefly used as medicinal, and only occasionally are eaten

Many wild species, which are only gathered in cases of starvation, when other foods become unavailable, belong to the *Urticaceae* (*Urtica* sp. pl.), *Polygonaceae* (*Rumex* sp. pl.) or *Chenopodiaceae* (*Atriplex*, *Beta*, *Chenopodium*, sp. pl.). These species are disregarded in the diet, and are rarely found sold in the markets, but, if so, they are sold only for their medicinal properties. Reversely other wild plant products, like the rachis of tender leaves from *Scolymus hispanicus* and *Silybum marianum* or the bladder campion (*Silene vulgaris* L.) are taken as a delicacy. When available in the markets these are extremely expensive, but rarely used in medicine.

The stinging nettles (*Urtica urens* L.) were advised as a vegetable for winter season by ARNAU DE VILANOVA (XIIIth

preserving these parts, which are refused during the food processing at home, and prefer to buy them when necessary. Other organs, like roots or branches are unavailable in the markets and their uses are restricted to the local availability of the plant in the fields.

The roots of *Juglans regia* L. are used for toothache, the leaves (which can be found sold in some markets) for diabete, and for washing sores, for diseases of the urinary tract and for uterine troubles (OBÓN & RIVERA, 1991), roots of *Prunus dulcis* (Miller) D.A. Webb are used as a depurative and antidiabetic (Gonzalez-Tejero, 1989). Roots of *Cucumis melo* L. are used as antirheumatic (GONZALEZ-TEJERO, 1989).

The branches of the pinion pine (*Pinus pinea* L.), whose seeds are edible, have been applied in a magical way to the people suffering of measles. This use derived by a transference from a similar use of another plant (*Artemisia arborescens*), which is unedible, but which holds an strong magical reputation. This is grown about the country houses, being known as "doncel", the same common name used for the pinion pine (OBÓN & RIVERA, 1991). Decoctions of the branches and leaves of *Rubus ulmifolius* Schott have been applied for toothache and as antidiabetic (OBÓN & RIVERA, 1991).

Tomato leaves are used as diuretic in gall bladder diseases and as a depurative (PALACÍN *et al.*, 1984). The leaves and flowers of *Eryobotria japonica* (Thunb.) Lindley are used for whooping cough, sore throat, measles and colds (GONZALEZ-TEJERO, 1989). The leaves of *Corylus avellana* L. are used as a regulator of the urinary function (GONZALEZ-TEJERO, 1989). Actually these are widely used in commercial herbal mixtures. The olive (*Olea europaea* L.) leaves are used as antidiabetic, hypotensive, antirheumatic and externally applied for erysipela (OBÓN & RIVERA, 1991). The hypotensive use of olive leaves is extremely important in most of the area and can be related with its ancient fame as a depurative (PALACÍN *et al.*, 1984; SÁENZ-GUALLAR, 1984; VILLAR *et al.* 1992). The leaves and milky sap of the fig tree (*Ficus carica* L.) were mediaeval remedies for haemorrhoids, according to ARNAU DE VILANOVA, and are externally applied for warts (OBÓN & RIVERA, 1991). The medieval use has been detected recently among peasants of Central Spain (Manchuela, Albacete). The pomegranate leaves (*Punica granatum* L.) are externally applied for

from lemon and orange trees (*Citrus limon* L., *C. sinensis* Osbeck, *C. aurantium* L.), are used as a sedative and sometimes in remedies for colds (OBÓN & RIVERA, 1991).

The pericarps and leaves of *Juglans regia* L. are used as blood depurative, in a similar manner are also used those of *Prunus dulcis* (PALACÍN *et al.*, 1984). The hair-like styles of *Zea mays* L. are used as a diuretic for diseases of the urinary tract, and in the preparation of eye drops (OBÓN & RIVERA, 1991, SÁENZ-GUALLAR, 1982b). Pedicels of *Prunus avium* (L.) L. fruits are reputed as a diuretic and a remedy for gall bladder diseases (GONZALEZ-TEJERO, 1989). The dried pods of *Phaseolus vulgaris* L. are used as antidiabetic in Murcia (ALCAZAR *et al.* 1990), or as antirheumatic in Albacete. The infusions of orange peels (*Citrus sinensis* Osbeck, *C. aurantium* L.) have been used for treating colds. Lemon peels were the base of a mixture named "diacitron", remedy for a wide range of diseases (VILANOVA, 1495). Rinds of pomegranate (*Punica granatum* L.) are used as anthelmintic (OBÓN & RIVERA, 1991).

#### Plant foods applied for medicine in a different way as the usual procedures for food preparation

The onions (*Allium cepa* L.) are externally applied for warts, roasted with salt and olive oil, whilst when boiled with sugar are used for colds (OBÓN & RIVERA, 1991). BONET (1993) recorded the use of an onion, put on the bedside table, to alleviate the nocturne cough of smokers.

Decoctions of celeri (*Apium graveolens* L.) are used in poultices for strokes (GONZALEZ-TEJERO, 1989). The raw leaves of *Borago officinalis* L., recommended in case of constipation by ARNAU DE VILANOVA, are chewed for liver diseases (GONZALEZ-TEJERO, 1989) or in antitussive or expectorant decoctions (BONET, 1993). Decoctions of *Cynara cardunculus* L. are used for dysentery and those of *Cynara scolymus* L. for liver diseases, high cholesterol levels, and as antidiabetic (GONZALEZ-TEJERO, 1989).

Teguments of the beans have been used as a diuretic in Albacete (LOZANO, 1989). The barley seeds (*Hordeum vulgare* L.) macerated in vinegar are used as a remedy for rheumatism. The decoction of red coloured corn varieties (*Zea mays* L.) is applied as a febrifuge (OBÓN & RIVERA, 1991), decoction of

these are also externally applied for warts (OBÓN & RIVERA, 1991). The dried fruit is used in solution for warts (OBÓN & RIVERA, 1991). Chestnuts (*Castanea sativa* L.) are reputed as a sedative (GONZALEZ TEJERO, 1999). Dried chestnut pods of

**Table 2**

Secular evolution in the percentage of the major causes for mortality in a town of Central Spain: Torremenga (province of Caceres) (After Mateos, 1990).

Diseases	1860-1879	1960-1979
Digestive	14.01	3.63
Children	13.08	2.63
Infective diseases	1.86	

ache, as hypotensive, for high levels of cholesterol, for dermatitis, as a hair restorer, for kidney troubles, antiinflammatory, febrifuge, for coughs and sore throat (OBÓN & RIVERA, 1991). Some healers of Southern Aragón (province of Teruel) recommend to their patients to take thyme as a purgative for expelling the drugs which could interfere with their cure, these healers also attributed diuretic and depurative properties to the thyme (SÁENZ-GUALLAR, 1984). The leaves of savory (*Satureia obovata* L.) are used for stomach

## DISCUSSION

recent studies in Mediterranean Spain. Most of these uses were adaptations of the ancient purgatives, which are actually

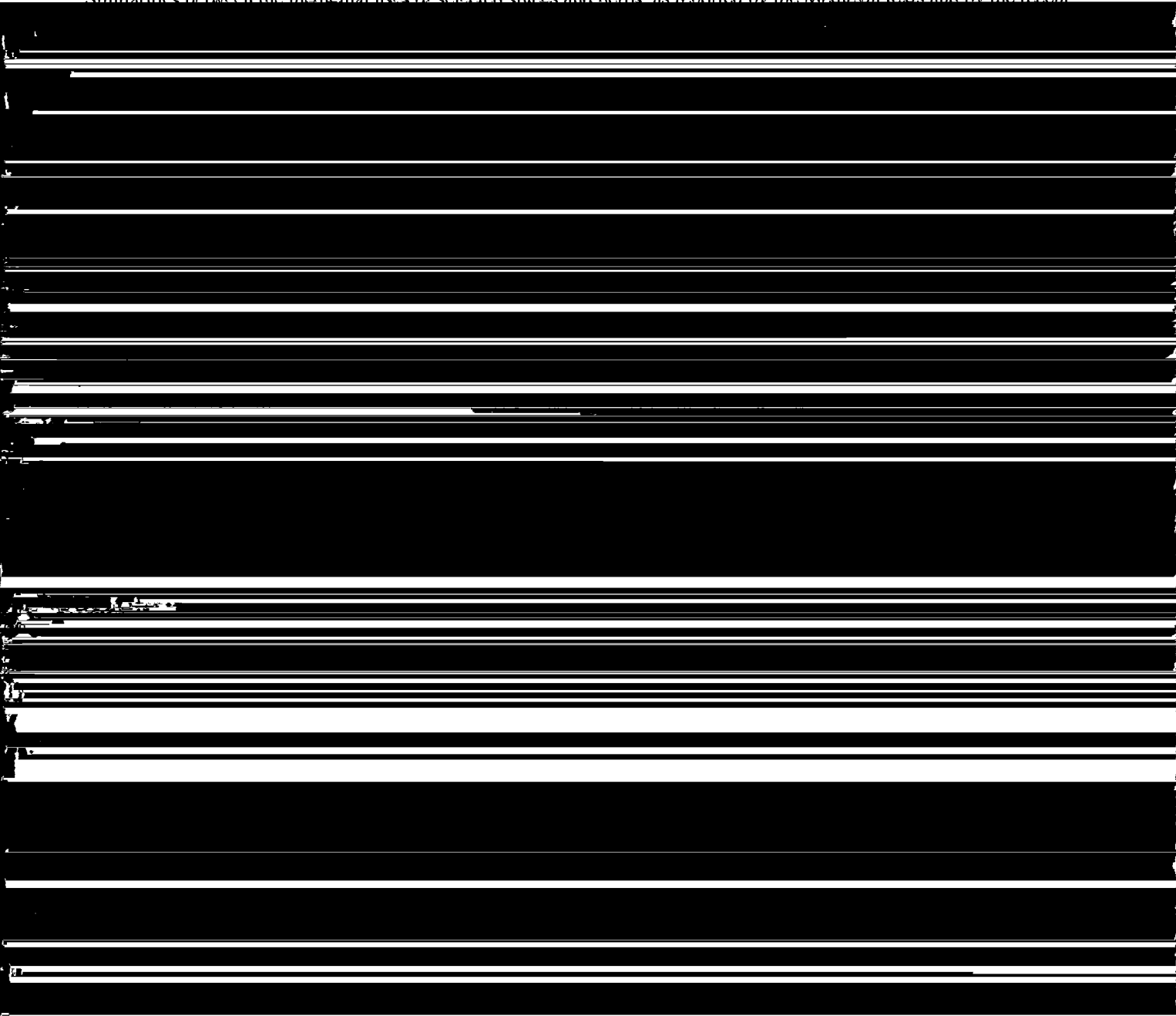
## CONCLUSIONS

Food plants play a major role between the preventive remedies through nutritional habits known as healthful (rightly or not) but are also a significant part in the curative repertory.

Olive oil, garlic and lemon are the local products most widely known as healthful and whose medicinal uses are extremely frequent.

**Table 5**

Similarities between the medicinal uses of selected spices and herbs as reported by the Medieval texts and by the recent



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