



PENDARVES

Premium Wines from the Wine Doctor

Chronology of Wine as a Medicine

First wine produced in Georgia ca. 7000 B.C.

MESOPOTAMIAN CULTURE

(ca. 5000-1400 B.C.)

Introduction of wine ca. 4000 B.C.

Invention of writing as pictograms ca. 3300 B.C.

First representation of wine drinking in Standard of Ur ca. 3000 B.C.

Use of wine as medicine as illustrated by a Sumerian Pharmacopoea inscribed on a clay tablet at Nippur in cuneiform script ca. 2100 B.C.

ANCIENT CHINA

(ca. 1800 B.C.-220 A.D.)

Wines were incorporated in the materia medica and appeared as menstrua in the ancient Chinese writings.

Wine was used in libational ritual in the Chang Dynasty ca. 1766-1122 B.C.

Wine was used in sacrificial rituals in the Chou Dynasty ca. 1122-222 B.C.

EGYPTIAN CIVILIZATION

(ca. 3000-332 B.C.)

Ancient Egyptian medical papyri forebearers to the current known medical papyri ca. 3000 B.C.

Earliest depiction of winemaking in the pictographs of the tomb of Ptah-hotep at Thebes ca. 2400 B.C.

International Sales Office
Pendarves REW Pty Ltd
The Resveratrol Enhanced Wine Company
The Barn, Corby Glen,
Grantham, Lincolnshire NG33 4NJ
Tel: 01476 55 29 55 **Fax:** 01476 55 07 77
E Mail: tony@pendarvesrew.com
Web: www.pendarvesrew.com



PENDARVES

Premium Wines from the Wine Doctor

Medical Papyri:

Kahun	ca. 1900 B.C.
Edwin Smith	ca. 1650 B.C.
Ebers	ca. 1500 B.C.
Hearst	ca. 1500 B.C.
London	ca. 1350 B.C.
Berlin	ca. 1350 B.C.
Brugsch	ca. 1350 B.C.

BIBLICAL TIMES

(ca. 1220 B.C.-70 A.D.)

Use of wines as sedatives, antiseptics, and vehicles for other medicines is illustrated in the Sacred Writings:

Talmud, written after	536 B.C.
Old Testament written before	400 B.C.
New Testament, first reorder	ca. 1st Cent. A.D.

ANCIENT INDIA

(ca. 2000 B.C.-1000 A.D.)

Vedic Period:	ca. 2000-200 B.C.
---------------	-------------------

Soma, the supreme deity of healing was conceived as a being in liquid form. In the Vedas the healing potential of wine was made equal to the power of Soma.

International Sales Office
Pendarves REW Pty Ltd
The Resveratrol Enhanced Wine Company
The Barn, Corby Glen,
Grantham, Lincolnshire NG33 4NJ
Tel: 01476 55 29 55 **Fax:** 01476 55 07 77
E Mail: tony@pendarvesrew.com
Web: www.pendarvesrew.com



PENDARVES

Premium Wines from the Wine Doctor

Brahmanic period: ca. 200 B.C.

Use of wine in medicine as illustrated in the Charaka Samhita 1000 A.D.

EARLY GREEK MEDICINE

(ca. 900-100 B.C.)

Homeric times: ca. 900-500 B.C.

In the Iliad and the Odyssey wine was described as antiseptic and sedative, and as a staple food ca. 850 B.C.

Hesiod described wine as nutrient and tonic 8th Century B.C.

Hippocratic times: ca. 450-300 B.C.

Hippocrates used wine as an antiseptic, diuretic, sedative and menstruum as described in his medical text "Regiment" ca. 460-370 B.C.

Diocles of Carystus wrote on the use of sweet wines in medicine 375 B.C.

Theophrastus of Eresus described plant embellished wines 372-287 B.C.

Mnesitheus wrote of wine in "Diet and Drink" 320-290 B.C.

The Alexandrians: (when the centre of medicine moved to Alexandria) ca. 300-50 B.C.

The judicious use of wines in therapeutics was stressed in the teachings of the medical school founded by Erasistratus 300-260 B.C.

Nicander used wine as a menstruum for his theriacs and 190-130 B.C.

International Sales Office
Pendarves REW Pty Ltd
The Resveratrol Enhanced Wine Company
The Barn, Corby Glen,
Grantham, Lincolnshire NG33 4NJ
Tel: 01476 55 29 55 **Fax:** 01476 55 07 77
E Mail: tony@pendarvesrew.com
Web: www.pendarvesrew.com



PENDARVES

Premium Wines from the Wine Doctor

Alexipharmics

Mithradates, King of Pontus, used wine as the menstruum for his antidote Mithradatum	132-63 B.C.
Hikesios wrote a treatise and commentary on wine "De Conditura Vini"	ca. 1st Cent. B.C.
Apollonius of Citium wrote on the medicinal value of European wines in a letter to Ptolemies	ca. 81-85 B.C.

GREEK MEDICINE IN ROME

(ca. 100 B.C.-100 A.D.)

With the establishment of the Greek physicians in Rome, the therapeutic use of wine became a vital question. Physicians who adopted the medical use of wine were known as Physikos oinodotes:

Cato the elder described wine as a medicine	234-149 B.C.
Asclepiades, leader of the wine-prescribing physicians	124-40 B.C.
Zopyrus used wine as the menstruum for a mithradatum called "Ambrosia"	ca. 80 B.C.
Menecrates of Tralles used wine clinically	ca. 1st Cent. B.C.
Celsus wrote on wine as a medicine in "De re Medicina"	25 B.C.-37 A.D.
Pliny the Elder described therapeutic uses of wine in "Naturalis Historia"	23-79 A.D.
Columella emphasised wine as a medicine	4 B.C.-65 A.D.
Sexitus Niger advocated the use of natural wine in medicine	ca. 40 A.D.

International Sales Office
Pendarves REW Pty Ltd
The Resveratrol Enhanced Wine Company
The Barn, Corby Glen,
Grantham, Lincolnshire NG33 4NJ
Tel: 01476 55 29 55 **Fax:** 01476 55 07 77
E Mail: tony@pendarvesrew.com
Web: www.pendarvesrew.com



PENDARVES

Premium Wines from the Wine Doctor

Dioscorides recommended wine as Materia Medica for many disease in "De Universa Medicina" 40-90 A.D.

ca. 77 A.D.

THE ERA OF GALEN

(ca. 100-400 A.D.)

After the death of Asclepiades, independent medical schools were established.

The School of Eclecticicism:

Athenaeus of Attalia taught that wine in small doses rouses the "pneuma" and restores vitality ca. 41-54 A.D.

Galen used wine based mixtures called Galenicals and wrote about wine as a medicine in "De Sanitate Tuenda" (Galen's Hygiene) ca. 131-201

Aretaeus of Cappadocia recommended Italian wines 2nd-3rd Cent.

Athenaeus of Naucratis, the encyclopedist, recorded valuable information on the medicinal use of wine in "The Deipnosophists" 3rd Cent.

Oribasius recommended wine as a medicine 325-403

Roman generals such as Julius Caesar recommended wine for their soldiers to increase their strength, preserve good health and prevent dysentery.

BYZANTINE ERA

(ca. 400-700)

Following the transfer of the Roman capital to Byzantium the centre of learning became displaced but the teachings of Galen prevailed 330

Aetius of Amida detailed the medical uses of wine in the "Tetrabiblion" 502-575

International Sales Office
Pendarves REW Pty Ltd
The Resveratrol Enhanced Wine Company
The Barn, Corby Glen,
Grantham, Lincolnshire NG33 4NJ
Tel: 01476 55 29 55 **Fax:** 01476 55 07 77
E Mail: tony@pendarvesrew.com
Web: www.pendarvesrew.com



PENDARVES

Premium Wines from the Wine Doctor

Alexander of Tralles followed the tradition of the wine-prescribing physicians 525-605

Paul of Aegina recognized as the link between Greek and Arabic medicine 625-690

ARABIC PERIOD

(ca. 600-1300)

Arabic culture influenced western thought for many centuries after the death of Mohammed in 632

And the conquest of Alexandria in 641

The first apothecary shop established in Bagdad 745

The Precepts of Galen prevailed and the use of wine in medicine continued:

Rhazes wrote on the washing of wounds with wine 860-932

Haly ben Abbas discussed wine as a medicine in "Almaleki" ca. 10th Cent.

Avicenna promulgated rules for the proper use of wine in the Canon of Medicine 980-1032

Mansur the Great discussed wine as pharmacologic menstruum ca. 10th Cent.

Avenzoar adhered to the emphasised hippocratic teaching ca.1162

Maimonides elaborated on the medicinal value of wine in "De Regimine Sanitatis" 1135-1204

Averroes applied Aristotelian teaching to medicine ca. 1198

International Sales Office
Pendarves REW Pty Ltd
The Resveratrol Enhanced Wine Company
The Barn, Corby Glen,
Grantham, Lincolnshire NG33 4NJ
Tel: 01476 55 29 55 **Fax:** 01476 55 07 77
E Mail: tony@pendarvesrew.com
Web: www.pendarvesrew.com



PENDARVES

Premium Wines from the Wine Doctor

Albucasis recommended wine as an antiseptic in his treatise on surgery 936-1013

THE SCHOOL OF SALERNO

(ca. 1050-1300)

The first lay medical school in Europe established at Salerno 10th Cent.

Arabic medical manuscripts brought to Salerno by Constantine the African 1027-1087

The "regimen Sanitatis Salernitanum" illustrated the therapeutic uses of wine ca. 11th Cent.

Ugo Borgognoni used wine as an antiseptic died ca. 1258

Teodorico Borgogoni advocated the use of wine as an antiseptic 1205-1296

Salicet used strong wine as an antiseptic in surgery ca. 1210-1277

Bruno da Longoburgo achieved wound antisepsis with wine ca. 1300

Lanfranc lapsed back into the practice of suppuration (Laudable Pus) ca. 1306

LATE MIDDLE AGES

(ca. 1300-1543)

The physicians of the period began to realise the importance of the treatment of disease based on clinical experience.

Arnald of Villanova established the therapeutic use of wine in "Liber de Vinis" and popularised Aqua vitae ca. 1235-1311

Henri de Mondeville advocated the use of wine as a "wound drink" 1260-1320

International Sales Office
Pendarves REW Pty Ltd
The Resveratrol Enhanced Wine Company
The Barn, Corby Glen,
Grantham, Lincolnshire NG33 4NJ
Tel: 01476 55 29 55 **Fax:** 01476 55 07 77
E Mail: tony@pendarvesrew.com
Web: www.pendarvesrew.com



PENDARVES

Premium Wines from the Wine Doctor

Guy de Chauliac used wine in the treatment of wounds and as a mouth wash	1300-1368
John of Arderne employed wine as a menstruum	1307-1377
Hieronymus Brunschwig ascribed miraculous healing powers to "Aqua vitae composita"	ca. 1450-1533
The "Antidotarium Nicolai" printed	1471
Paracelsus known as the father of modern pharmacology stressed the tonic value of wine and invented the word alcohol	1493-1541

BEGINNINGS OF MODERN MEDICINE

(1543- ca. 1850)

The publication of "De corporis humani fabrica" by Andreas Vesalius marked the beginning of an important era in medicine, an era which witnessed many departures from tradition and in which the foundations for the scientific age were laid	1543
Ambroise Pare used wine as a tonic and to dress wounds	1510-1590
Richard Wiseman wrote on the medicinal uses of wine in his textbook of surgery	1622-1676
Sir John Haryngton published the first English translation of the "Regimen Sanitatis Salernitanum"	1607
Era of dispensatories and pharmacopoeias established by Valerius Cordus	1546
Wine as official therapeutic agents depicted in:	
The Pharmacopoeia of London	1618

International Sales Office
Pendarves REW Pty Ltd
The Resveratrol Enhanced Wine Company
The Barn, Corby Glen,
Grantham, Lincolnshire NG33 4NJ
Tel: 01476 55 29 55 **Fax:** 01476 55 07 77
E Mail: tony@pendarvesrew.com
Web: www.pendarvesrew.com



PENDARVES

Premium Wines from the Wine Doctor

The Pharmacopoeia of Amsterdam	1636
The Pharmacopoeia of Paris	1639
The Pharmacopoeia of Spain	1651
The Pharmacopoeia of Brussels	1671
The Complete English Dispensatory	1741
The Pharmacopoeia of Russia	1778
Codex Medicamentarius of France	1819
The Pharmacopoeia of the United States	1820

The inclusion of many of the theriacs in the dispensaries and pharmacopoeias led to a polemic which resulted in the final demise of the theriacs.

DeDiemerbroeck published his defense of the theriac	1646
-----------------------------------------------------	------

Dr. Hodges recommended sherry-sack as a preventative of the plague	1665
--------------------------------------------------------------------	------

Wine remains as an important therapeutic agent:

An anonymous author (a fellow of the Colleges) published an essay on the preference of wine to water	1724
------------------------------------------------------------------------------------------------------	------

Heberden gave the final blow to the theriacs in "Antitheriaka"	1745
----------------------------------------------------------------	------

Loebenstein-Lobel published a treatise on the uses and effects of wine	1817
------------------------------------------------------------------------	------

Henderson published "A History of Ancient and Modern Wines"	1824
-------------------------------------------------------------	------



PENDARVES

Premium Wines from the Wine Doctor

Charcot discussed the clinical uses of wine in "Traite de Medecine"	1825
The Pharmacopoeia Universalis of Heidelberg listed 175 wines	1835
The London Pharmacopoeia included a description of wines and their medicinal uses	1835
The Pharmacopoeia Universelle of Paris listed 164 wines	1840
The new edition of the U.S. Pharmacopoeia added port and sherry	1850
The British Pharmacopoeia, revised edition, included sherry and other medicated wines	1851
McMullen published a "Handbook of Wines"	1852
Mulder published a chemical analyses of the constituents of wine	1857

AUSTRALIAN ERA

1787-

Surgeon White uses wine as main medicine for convicts in First Fleet to Australia	1787
Dr. Redfern letter to Governor Macquarie about use of wine as medicine for convicts	1814
Wine used in convict ships and later migrant ships bound for Australia	1815
Redfern- first Australian medical vigneron or wine doctor with planting Campbellfields vineyard	1818

International Sales Office
Pendarves REW Pty Ltd
The Resveratrol Enhanced Wine Company
The Barn, Corby Glen,
Grantham, Lincolnshire NG33 4NJ
Tel: 01476 55 29 55 **Fax:** 01476 55 07 77
E Mail: tony@pendarvesrew.com
Web: www.pendarvesrew.com



PENDARVES

Premium Wines from the Wine Doctor

Dr. Lindeman - founded Lindeman Wines	1841
Dr. Penfold - founded Penfold Wines	1842
Dr. Kelly - founded Hardy's Wines	1843
Dr. Angove - founded Angoves	1889
Lunatic asylum vineyards in Australia began	1870
Dr. Lindeman letter to N.S.W. Medial Journal "Wine as a Therapeutic Agent and why it should become out national beverage"	1871
Dr. William Cleland speech "Some remarks upon wine as a food and its production"	1880
Dr. Thomas Fiaschi lecture "The various Wines used in Sickness and Convalescence"	1906

THE MODERN EPOCH

(ca. 1850-)

The experimental method in physiology introduced by Claude Bernard	1813-1878
Scientists became absorbed in the study of alcohol and alcoholic beverages, including detailed studies of wine:	
Claude Bernard studied the effect of pure alcohol on digestion	1857
Pasteur described fermentation	ca. 1857
Trousseau discussed the medical uses of wine in "Clinque Medicale"	1861



PENDARVES

Premium Wines from the Wine Doctor

Dr. Anstie published his comprehensive work on the therapeutic uses of wine	1870
Parkes and Wollowicz published the first study on the physiological effects of wine	1870-1871
Carles investigated the iron content of wines	1880
Buchner published the first comparative study detailing the effects of wine, beer, and alcohol on the stomach	1882
Alois Pick published his findings on the bactericidal effects of wines	1892
Krautwig and Vogel published a study on physiological effects of various alcoholic beverages on respiration	1893-1897
Chittenden and co-workers investigated the effect of wines and spirits on the alimentary tract	1898
Wendelstadt published his findings on the effect of wines on respiration	1899
Benedict and Torok investigated the role of wine in diabetic diets	1906
Neubauer published findings on the use of wine in diabetes	1906
Kast reported on gastric digestion and the effect of wine and alcohol on the diet	1906
Sabrazes and Marcandier published their results on the bactericidal properties of wine	1907
Pavlov demonstrated the appetite-stimulation effect of wine	1910



PENDARVES

Premium Wines from the Wine Doctor

Carles reported on the diuretic action of wines	1911
Carlson published his findings relative to the effects of wine on hunger	1916
Sir Edward Mellanby published findings on the physiological and dietetic effects of alcohol and alcoholic beverages	1919
Koutetaladze isolated an amine, a coronary stimulant, from wine	1919
Haneborg investigated the effect of alcoholic beverages on digestion	1921
Pearl first to prove in Alcohol and Longevity - that moderate drinkers live longer	1926
Lucille Randoin published findings on vitamin content of wines	1928
Loeper and co-workers reported on the effects of wine on the liver	1929
Winsor and Strongin reported on the effects of wine in salivary digestion	1933
Soula and Baisset investigated the effect of wine on the blood sugar level	1934
Fessler and Mrak reported on the effects of wine on urinary acidity	1936
U.S. Dispensatory deleted all wines	1937
Remlinger and Bailly reported on bactericidal effects of wines	1938



PENDARVES

Premium Wines from the Wine Doctor

Flavier demonstrated nutritionally important amounts of vitamin B in wines	1939
Morgan reported on vitamins in wine	1939
Newman published findings on the absorption of wine	1942
Ogden studied the influence of wine on gastric acidity	1946
Goetzl and co-workers reported on wine as an appetite stimulant	1950-53
Flanzy published a study of the comparative physiological effects of wine and alcohol	1953
Lolli and co-workers reported on the relation between wine in the diet and the carbohydrate intake	1952
Castor reported on B vitamins in wines	1952
Gardner presented findings on bactericidal property of wines	1953
Hall and co-workers reported on the effect of wine on cholesterol metabolism	1957
Engleman published findings on the relationship between wine and gout	1957
Macquelier and Jensen reported on the bactericidal activity of red wines	1960
Pratt and co-workers published findings on the grape anthocyanins	1960
Althausen and co-workers reported on the effect of wine on vitamin A absorption	1960



PENDARVES

Premium Wines from the Wine Doctor

French Codex listed 7 wines	1960
Balboni discussed the role of wine in obesity	1961
Carborne reported on the relation of wine to cirrhosis of the liver	1961
Masquelier published findings on the polyphenols of red wine as a cholesterol-reducing agent	1961
Henneckens and Stamfer - showed moderate alcohol consumption reduces coronary disease and stroke in women	1988
Rimm - showed inverse relationship between alcohol consumption and coronary disease	1991
Renaud published the French Paradox	1992
Doll published British doctor heart study	1994
Groenbaek published Copenhagen Study - first to compare health effects of beer, wine and spirits	1995
Orgogozo - showed moderate wine consumption reduced dementia	1997
Doll - one for the heart study showed society better off with alcohol in moderation than not due to lower total death rates i.e. beneficial effects outweigh harmful effects in moderation	1998
Bertelli showed resveratrol stimulates mapkinase thus preventing neurodegenerative disease	1999
Pezzuto and Renaud show wine reduces cancer	1999