# Short Communication AYURVEDA ENCYCLOPEDIA - A READY RECKONER ON AYURVEDA TO MODERN WORLD

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#### **ABSTRACT**

Encyclopedia is a compendium of reference work and includes comprehensive, brief account of information of a subject, from either all branches of knowledge or a particular branch of knowledge. Ayurveda encyclopedia is the work of compilation of references along with the notes for a given word by collating related information from all major Sanskrit works, pertaining to Ayurveda. Lexicographical works in Sanskrit language viz., Amarakōṣa, vācaspatyam, śabdakalpadruma do not deal with in details with technical aspects of Ayurvedic works. The currently available Ayurvedicencyclopedias lack in providing some or other important aspects of given word and are not focused on the information required by the scientists. Hence to cater the world wide demands of scientists of all related fields of Ayurvedic system of medicine, an attempt has been made to prepare a encyclopedia covering the fields viz., anta, linga, nispatti, vyutpatti, nirukti, vyākhya, paryāya, vividhārtha, nibandha (notes).

## Introduction:

The word encyclopedia is derived from the Greek language "Ýãéyêëéïò ðáéäåßá", pronounced as 'enkyklios paideia', which literally means 'a (well-) rounded education' and denotes the meaning of a 'general knowledge'.

The term 'Encyclopedia first used in 1541 in the title of a book entitled 'Lucubrationes vel potius absolutissima kyklopaideia', written by Joachimus Fortius Ringelbergius.

Encyclopedia (also spelled encyclopaedia or encyclopaedia) is a type of reference work, a compendium holding a summary of information from either all branches of knowledge or

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a particular branch of knowledge. Generally speaking, unlike dictionary entries, which focuses on linguistic information about words, encyclopedia articles focus on factual information to cover the thing or concept for which the article name stands.

Encyclopedias have existed for around 2,000 years; the oldest still in existence, Naturalis Historia, was written in ca. 77 BCE by Pliny the Elder. The modern encyclopedia evolved out of dictionaries around the 17<sup>th</sup> century. Historically, some encyclopedias were contained in one volume, but some, such as the Encyclopaedia Britannica, became huge multi-volume works.

The word encyclopaedia comes from the Koine Greek "Ýãêõêëïðáéäåßá", from Greek "Ýãêýêëéïò ðáéäåßá", transliterated "enkyklios paideia" meaning general education or ãenkyklios" (Ýãêýêëéïò) meaning "circular, recurrent, required regularly, general" and "paideia" (ðáéäåßá), meaning "education, rearing of a child". Together, the phrase literally translates as "common knowledge" or "general knowledge".

#### The first systematic work on linguistics in oriental language:

The first believed texts are Vedas in India and even in the world and they are the compilation of various to varied information on health to philosophy. *Veda* and their six ancillary texts on Śikṣā, Kalpa, Vyākaraṇa, Nirukta, Chandas, Jyōtiṣa, may not compiled in the form of encyclopedia in the modern sense of term, but their subject matter forms the basis for the compilation of Encyclopedia.

Attempts to provide a comprehensive knowledge about a particular language or a subject been started since the origin of language. First such recorded attempt can be seen from the *Aṣṭādhyāyī* of *Pāṇini*. It is the encyclopedia of Sanskrit words.

The Astadhyay is one of the earliest known grammar works of Sanskrit written by Panini. It is the earliest known work on descriptive linguistics and generative linguistics, and marks the beginning of the history of linguistics itself. His theory of morphological analysis was more advanced than any equivalent Western theory before the mid  $20^{th}$  century, and his analysis of noun compounds still forms the basis of modern linguistic theories of compounding. Panini's comprehensive and scientific theory of grammar is conventionally taken to mark the end of the period of Vedic Sanskrit.

The Aṣṭādhyāyi is the central part of *Pāṇini*'s grammar, and by far the most complex. It is the earliest complete grammar of Classical Sanskrit, and in fact is of a brevity and completeness unmatched in any ancient grammar of any language. It takes material from

the lexical lists (*Dhātupāṭha*, *Gaṇapāṭha*) as input and describes algorithms to be applied to them for the generation of well-formed words. It is highly systematized and technical.

Entire knowledge of Ayurveda is described in six major lexicons and divided into great trio and small trio. Great trio (Bṛhattrayī) are Carakasaṃhitā, Suśrutasaṃhitā and Vāgbhaṭasaṃhitaā and small trio (Laghutrayi) such as Mādhavanidāna, Bhāvaprakāśa, Śāraṅgadharasaṃhitā.

Similarly Ayurvedic classics also dealt elaborately about everything that is necessary to maintain health of an individual and management of a diseased person. This was the native Indian traditional system of health, on which the entire subcontinent was banking upon till the invasion of foreign rulers. With the entry of Arabic rulers some new measures were incorporated in health system and after the invasion of east India Company, entire scenario of health was changed into modern. Likewise the language also changed to English. Since then readability of Ayurvedic and other scientific works has gone down.

#### **Knowledge of life sciences:**

**Veda:** The Sanskrit word *Veda* 'knowledge, wisdom' is derived from the root vid- 'to know'. The *Veda* are a large body of texts originating in ancient India. Composed in Vedic Sanskrit, the texts constitute the oldest layer of Sanskrit literature and the oldest scriptures of culture and heritage of Hinduism.

This term *Veda* in Sanskrit denotes 'knowledge'. The Vedas contain hymns, incantations, and rituals from ancient India and are among the most ancient religious texts still in existence. Besides their spiritual value, they also give a unique view of everyday life in India. These are the knowledge of treasure of life and living and also management of individual and universe. These books also throw much light on the disease formation and management.

The *vēdānga* are limbs of Veda, six auxiliary disciplines traditionally associated with the study and understanding of the Veda. *Śikṣā* deals with the phonetics, phonology and morphophonology, Kalpa with rituals, *Vyākaraṇa* part with grammar, Nirukta with etymology, Chandas with meter and *Jyōtiṣa* delas with astronomy. Traditionally, *Vyākaraṇa* and nirukta are common to all four Vedas, while each Veda has its own *Śikṣā* Candas, Kalpa and *Jyōtiṣa* texts.

Nirukta is one of the six *vēdāṅga* disciplines, generally means explanation, etymological interpretation. It treats etymology, particularly of obscure words, especially those occurring in the Vedas. Nirukta formed from 'nir' denotes forth, out along with the verbal root '*vāc*' means to speak, utter. Uttered, pronounced, expressed, defined; as a noun, the etymological

interpretation of a word, also the name of such works. The Sanskrit noun nirukti means 'derivation', or an 'artificial explanation of a word.' *Nirukta* is basically an extension of *Vyākaraṇa* seeks to bring out the hidden meaning of Veda which apparently do not express the total intent and implication.

## Sanskrit Koşa Nighanţu:

In Āyurveda to provide the information on the terminology of Ayurveda, different lexicons like Amarakōṣa, Vācaspatyam, Śabdakalpadruma, Bhāvaprakāśa, RājaNighaṇṭu etc are compiled. Amarakōṣa, Vācaspatyam, Śabdakalpadruma, Śadbasthomamahānidhi etc., are focused mainly on the grammatetical part like liṅga, (gender), niṣpatti (derivation) and vyutpatti (root meaning) of the word.

Nāmaliṅgānuśāsana (Amarakōṣa): Amarakōṣa is a Sanskrit thesaurus written by Amarasiṁha in verse format. He was a distinguished scholar, one among the nine gems (navaratna) during Vikramādityaâs court (in about 380 A. D.). The text is important enough for Sanskrit students and scholars to be presented in a separate category. The text is given in three parts according to kāṇḍās. It is also known as Nāmaliṅgānuśāsana, conveys the meaning of instruction concerning nouns and gender. The first, Svargādi-kāṇḍa (heaven and others) has words pertaining to gods and heavens. The second, Bhūvargādi-kāṇḍa (earth and others) deals with words about earth, towns, animals and humans. The third, Sāmānyādi-kāṇḍa (common) has words related to grammar and other miscellaneous words.

Vācaspatyam: It is also called as *Bhṛhatsāṁskṛtābhidānam* written by *Tarkavācaspati Tārānātha*, 1812-1885, in two volumes. It contains the subject pertaining to the lexicon part of Sanskrit words in Sanskrit language. It contains terms along with their derivations and explanations drawn from almost all the branches of Sanskrit literature, such as *Vēda*, *Vēdāṅga*, *Purāṇa*, *Arthaśāstra* etc.

## Ayurvedic Classics:

Ayurveda is the rich traditional Indian Medical heritage, serving the humanity since the Vedic times. Ayurvedic system of medicine is one of the worldas oldest medical systems. It originated in India and has evolved there over thousands of years. Ayurvedic literature is vast and containing details of all the branches of medicine. Among them studying Bṛhatrayi forms the basis to attain proficiency in Ayurvedicsystem. Bṛhatrayi encompass the voluminous texts namely Carakasamhitā, Suśrutasamhitā and Vāgbhaṭasamhitā. Carakasamhitā is the most ancient, comprehensive and authoritative textbook of Ayurveda among the three. Carakasamhitā originally named as Agnivēśatantra. This compendium is compiled based on

the teachings of the expounder  $\bar{A}c\bar{a}rya$   $\bar{A}tr\bar{e}ya$ , by the Sage  $Agniv\bar{e}sa$  and is Redacted by Sage Caraka. Later on Dṛḍhabala complimented it further by adding some parts of  $Cikits\bar{a}sth\bar{a}na$ , Kalpasthāna and  $Siddhisth\bar{a}na$ . This is the first comprehensive manuscript on philosophy and fundamentals of  $\bar{A}yurvedic$  medicine.

Suśrutasamhitā is the most Ancient, Comprehensive and authoritative textbook of surgery among the two early manuscripts, which form the corner stones of Indian medical system Āyurveda. Suśrutasamhitā is compiled by Sage Suśruta based on the teachings of the expounder Divodāsa Dhanvantharī is redacted by Nāgārjuna by adding Uttaratantra to the compendium. Later on Pāṭaśuddhi is done by Candraṭ. This is the first comprehensive manuscript thrown light on fundamentals of practice of Surgery on human beings. Acharya Susruta is considered as the father of Surgery. Every scholar of Āyurvedic medicine needs to study this compendium along with Carakasamhita to attain comprehensive knowledge in Ayurvedic medical science.

Vāgbhaṭasaṃhitā is the third among the Bṛhatrayi. Vāgbhaṭasaṃhitā comprises two compendiums, Aṣṭāṅgasaṅgraha and Aṣṭāṅgahṛdaya. Aṣṭāṅgasaṅgraha and Aṣṭāṅgahṛdaya are the work of a person named Vāgbhaṭa. There are two works by a person or persons with this name. Aṣṭāṅgasaṅgraha is a major treatise on Ayurveda, compiled by Vāgbhaṭa. This text is composed of verse and prose and is an abridged form of Carakasaṃhita and Suśrutasaṃhita and has 150 chapters. It is greater in size because of the verse format and is primarily poetry with prose. The Aṣṭāṅgahṛdaya is written in prose and is slightly different organization of material than the saṅgraha. Both works have been dated about the same time and are thought to date after the Caraka and Suśruta saṃhitās (400 CE).

Ayurveda lexicons: Bhāvaprakāśa, Rājanighaṇṭu, Dhanvantarīnighaṇṭu etc books are written exclusively on the lexicon lines of providing systemic information on herbs. But these books explain about the drug particulars only.

Bhāvaprakāśa: It is written by Bhāvamiśra in the 16th century. It is a well-organized and compact presentation in three parts, *Prathamakhaṇḍa* including *Nighaṇṭu*bhāga, and *Madhya* and *Uttarakhaṇḍa*, deals with *Kayacikitsa* generally. Large section is dedicated to *Nighaṇṭu* part, which gives the characteristics of many medicinal plants, minerals and foods. This lexicon of drugs (*Nighaṇṭubhāga*) is the specialty of this text since it incorporates many new drugs unknown in the ancient period. *Nighaṇṭu* part is comprised on the lines of name, synonyms, types and description of the properties and actions of drugs.

**Rājanghaṇṭu:** It is written by Narahari Paṇḍita and is also known by the name *Nighaṇṭurāja* or *Abhidhāna Cūdāmaṇi*. His date may be placed in 17<sup>th</sup> century A.D. i.e. after *Bhāvamiśra*.

Some of the new and more interesting plants added are, *bhrahmadaṇḍī*, *dhūmrapatra*, *ēkavīra*, *ḥastiśunḍi*, *jambu*, *jhaṇḍu*, *samudraphala*, *śvēta*, *vṛścika* etc. It is also written on the patterns of name, synonyms, types and description of the properties and actions of drugs.

**Dhanvantarīnighaṇṭu:** *Dhanvantarīnighaṇṭu* is principle text of *Ayurveda* as far as description of medicinal plants is concerned. It is the earliest compiled herbal encyclopedia and belongs to 10-13<sup>th</sup> century, written by Mahenrdabhogika. The plants are described under seven groups.

Medicinal plants mentioned in seven groups have been discussed with respect to synonyms, *Ayurvedic* pharmacology and action on three biological humors, actions and therapeutics. A complete chapter has been devoted to study of metals.

## Need of Encyclopedia on Ayurveda:

The knowledge of Life, Life style, anatomy of human body, pathology of diseases and their management are elaborately dealt in *Vedaand Ayurveda*. But these are in textual format and are in Sanskrit language, the oldest critical language. The lexicon books compiled so far are particularly mentioned about the lexicon part of the terminology of *Ayurveda* and herbal encyclopedias are meant for herbal descriptions.

Hence understanding of the subject matter of Ayurvedic system is difficult for the western scholars who involved in the propagation of Ayurvedic system of medicine. Not only western scientists, even the eastern scientists, who belong to other disciplines and working on the Ayurvedic principles, drugs and diseases, are also in quest of the true meanings of Ayurvedic doctrines. Even for Ayurvedic scholars it is difficult to search hundreds of books for single word. Hence the need arises to prepare an encyclopedia focusing on the doctrines of Ayurveda to give a comprehension about the Ayurvedic concepts, diseases and their management.

Prior to this there are two texts are prepared in encyclopedia format. The *Ayurveda Vishvakosha* and *Vaidyakaśabdasindhu* are two known published encyclopediae related to *Ayurveda*. The encyclopedia entitled *Ayurvedaiśvakosha* is compiled in two volumes in Sanskrit language (Venimadhava Shastri Joshi & N.H. Joshi 1968) and *Vaidyakaśabdasindhu* one volume, in Sanskrit along with Bengali and Hindi (Nagendranath Sen, 1894). But these books are given information on the linga (gender), along with brief notes of each word. Since these books do not focus on the detailed and complete information of each word, the need arise for the preparation of *Ayurvedic* Encyclopedia, on the lines of Encyclopedia Britannica.

The practice of *Ayurveda* is prevalent in almost all parts of the India and its neighboring countries like Nepal, Srilanka, Bangladesh, Pakistan, USA, UK, and Germany. Many *Ayurvedic* colleges/Hospitals are established in USA, UK, Germany, Japan, Russia etc to provide education and health care through *Ayurvedic* system of medicine.

In the wake of globalization, the scientific fraternity is attracting towards Ayurveda and started research in Ayurveda. But they are facing hardships in understanding Ayurveda since most of these classics have been written in native oriental languages. Hence, it is felt that the preparation of encyclopedia to present the Ayurvedic health system in compatible language. This work is very relevant to propagate correct information on the Ayurvedic system, globally to cater the demands of scientific fraternity towards learning the fundamentals of ayurveda. In fact, the scientists/academicians, all over the world, those who are seriously pursuing scientific enquiry and trying to harmonize the education, training and practice of Ayurveda, are facing hardships due to confusion in using the terminology.

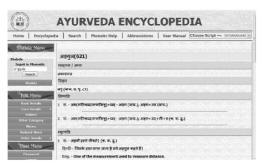
The Ayurveda Encyclopedia work is taken up to help to avoid the misinterpretation of words and ambiguity and harmonizing the usage of Ayurvedic terminology globally and it will be a tool to explore Ayurveda for finding out solutions for dreaded/chronic/communicable/lifestyle disorders, for which Ayurveda is considered to be the best system of medicine to follow.

# AYURVEDA ENCYCLOPEDIA:

#### **Objective:**

Objective of this project is to prepare an authentic *Ayurvedic* encyclopedia by referring and collating words from all major Sanskrit works, pertaining to *Ayurveda*, which are frequently referred by the scholars. The available encyclopedias in the market as on date are lacking some or other and not focusing the information, which is required by the scientists. The present work will be presented in Hindi and English with the following fields on every word by referring almost 100 *Ayurvedic* classics and Sanskrit lexicons.

- 1. Anta (end alphabet of a word): This denotes the prātipadika (base of a noun) of the dhātu (grammatical or verbal root or stem) of the given word.
- Linga (gender): It denotes the gender of the word, whether it is masculine, feminine or neuter gender. In Sanskrit words of similar structure and pronunciation are present and meaning of these words can be known by knowing the gender.
- 3. *Niṣpatti* (*Dhātu* derivation): This gives the information on the derivation of the upasarga, mūla dhātu, pratyaya of the word.



- Vyutpatti (Derivation): This gives the root meaning of the words. It is explained in Monnier Williams, that Vyutpatti provides information on production, derivation and origin of the word.
- 5. *Nirukti* (Etymological derivation): It is the definition of the word. It gives information on etymological interpretation of a word.
- 6. Paribhāṣa (Definition): It is explained as áany explanatory rule or general definitionâ.
- 7. Vyākhya (Explanation): It gives the clear and confirmatory explanation of the word.
- 8. *Paryāya* (Synonyms): This field gives all the synonyms used in the classics for the said word. This part is very important in the context of names of herbal drugs.
- 9. *Vividhārtha* (Various meanings): Under this field Hindi and English meanings of the words are given.
- 10. Notes: Detailed description of the word with reference to the context mentioned in the classics.

# e-BOOKS ON AYURVEDIC CLASSICS:

The present mechanized world depends on information technology for smallest subject in fastest mode. Ayurvedic classics are very voluminous and it is very difficult to refer & identify the words and context to prepare encyclopedia. The Institute has designed & developed a software module, which is quite compatible to Indian oriental languages such as *Telugu, Malayalam, Tamil, Gujarati, Kannada, Bengali, Gurmukhi, Diacritical* (ISO 15919) and Phonetic English, which facilitated the Technology-enabled Learning. e-book preparation is an indigenous attempt towards transforming Ancient medical knowledge into various Indian languages conserving them digitally and disseminating the same, across the globe. This is first of its kind in providing Multilingual, Search ready Digital Versions of *Ayurvedic* 





Samhitas. The Institute has developed & released e-Books of Carakasamhitā, Suśrutasamhitā, Twenty five Nighantu and Mādhavanidāna for the benefit of national & international scientific community such as *Ayurvedic* scholars, researchers, and historians, pharmaceutical, nutraceutical, cosmoceutical scientists & industry. This formed a base to create a huge database of words from all the Ayurvedic classics.

- e-Carakasamhitā: It is prepared with Sanskrit mūlapātha and Cakrapānidattaâs Ayurvēdadīpika commentary.
- e- Suśrutasamhitā: It is prepared with Sanskrit mūlapātha and two popular commentaries viz; Nibandhasangraha commentary of Dalhana and Nyāyacandrika commentary of Gayadāsa.
- e-Nighantu. This e-book is a collection of Sanskrit mūlapātha and their commentaries of 25 Ayurvedic Lexicons
- e- Mādhavanidāna: This book consists of Madhavanidana mūlapātha along with Ātańkadarpaṇa and Madhukośa commentaries.





# Unique features of e-book:

- a. Available in different scripts: This e-book is also equipped with Devanagari as well as Telugu, Malayalam, Tamil, Gujarati, Kannada, Bengali, Gurmukhi, Diacritical (ISO 15919) and Phonetic English. Hence, the reader who is not familiar with Devanagari, can utilize this book in their traditional scripts.
- b. Portable: These are handy to carry and effective tools for reference and learning the ancient classics.
- c. Saving of time: The presence of multiple search tool option, enable the user to go to the reference instantly.
- d. User friendly: Do not consume extra resources from the system in which it is installed, and does not interfere with the programmes already installed.