Dedicated to

My Grand Mother
Mrs. GANGA DEVI
&
My Grand Father
Mr. MANGAT RAM DHIMAN
Ayurveda is one of the great gifts of the sages of ancient India to mankind. It is the world’s most ancient medical discipline, one to which western medicine owes much in its earlier stages of development. It is not only a system of medicine in the conventional sense of curing disease but also a way of life that teaches us how to maintain and protect the health. It shows us both how to cure disease and how to promote longevity. It is a tradition with an antiquity comparable to that of life itself. Ayurveda treats man as a whole, which is a combination of body, mind and soul. Therefore, it is a truly holistic and integral medical system.

Most of the drugs in Ayurveda are herbal based and it is very interesting to note that many allopathic doctors also prescribe ayurvedic medicines. According to an estimate of World Health Organization (WHO), approximately 80 per cent of the people in developing countries rely chiefly on traditional medicines for primary health care needs and major portion of these involves the use of medicinal plants. The uses of herbal medicines and herbal treatment of diseases are on increase even in the developed countries, especially in Australia, Sweden, Switzerland and Canada. The survey made by Indian Drug Manufacturer Association (IDMA) during the last decade of 20th century revealed that more than 80 per cent of prescriptions issued by practitioners of allopathy include one or more preparations containing herbal drugs. It is also seen that during last two decades, the people’s attention of whole European countries and America sub-continents has increased many times and in USA alone, 25 per cent health prescriptions are found to contain natural plant products.

Besides, a majority of drugs have been discovered in the past fifty years in the western countries, many they are from such plants as had been used in primitive societies or in indigenous medicines. These include the antihypertensive reserpine from Rauwolfia serpentina, anticancer vinblastine and vincristine from Catharanthus roseus, antimalarial quinine form Cinchona ladaniera, antgliaucoma pilocarpine from Pilocarpus jaborandi, the topical anesthetic from Erythroxylon coca, anticough codeine from Papaver somniferum and antiasthmatic and cold medicine atropine from Atropa belladonna and Hyoscyamus niger etc. So many of the drugs investigated or developed in the past few years are mostly plant-based or herbal drugs. It is assumed that about 20-30,000 species of higher plants are used as medicines in various countries of the world. We are fortunate enough that our country India, has been a source of rich amount of the medicinal plant wealth. As many as 16,000 plant species of flowering plants are known to be found in India and 3000 of them are recognized as of medicinal importance.

In this book, more than 225 common plants are described, which are used frequently in ayurvedic system of medicine. These plants are arranged under their ayurvedic names or popular names. Each plant has been provided its common names in different languages to make their identification locally easier in various parts of the country. Sometimes, the ayurvedic practitioners or medicine makers make mistakes in identifying some of the plants; to avoid the confusion in identifying the plants, emphasis is given to describe each plant botanically well. The nomenclature of each plant species is updated after Bennet (1987) and Jain (1991) to provide correct name to each plant. Besides the description for each plant with its distribution notes, information on parts used and medicinal uses is given. Traditionally, various recipes are prepared for a long time in various parts of the country to overcome the diseases by the
inhabitants of particular area. For example, the latex, leaves and stem-bark of *Ficus racemosa* are used to cure diabetes and jaundice and the decoction of the seeds of *Butea monosperma* for urinary problems or the latex of *Ficus bengalensis* for healing the itching skin and crackles of the feet. These recipes are of great value and some new and powerful medicines could be developed from these formulations, which are being used by the inhabitants in their own way. Their experiences in the form of folk uses are discussed so that their authenticity could be checked clinically to pave a way in making these recipes available for the general public use. Chemical substances form the basis of drug action in the body so the chemical constituents found in the plants may be of great interests for scientists to carry out further researches. Hence, wherever available, the latest information on chemical constitutes of each plant species is also provided. Majority of the information about chemical constituents is based on Pandey’s Dravyaguna Vijnana or Materia Medica–Vegetable Drugs (2001). Besides, the important ayurvedic formulations prepared from the plants or their parts, are also cited under preparations. Our classical works like *Charak samhita*, *Susuruta samhita* or *Bhavprakash nighatus* etc., have a rich amount of information on medical prescriptions and various formulations of herbal drugs have been provided therein for the use of medical practitioners. Many of them are still in vogue, two appendices are provided on Classical Ayurvedic Formulas and Modern Ayurvedic Formulas, which are mostly used in ayurvedic system of medicine. One may be interested in knowing from where he could get the ayurvedic products, so an appendix on the addresses of various ayurvedic pharmacies is provided under the name Addresses of Ayurvedic Pharmaceutical Concerns. Besides, an appendix on Glossary of Medical Terms is also appended to enhance the knowledge of general people about the common medical terms.

It is hoped this book will be useful for research workers interested in carrying out the researches in the field of ayurveda or medicinal uses of the plants, medical students, the students of botany and the persons engaged in pharmaceutical concerns. Besides, this book will be equally useful for the general laymen interested in knowing the mystery of plant world, particularly their uses in the field of medicine. Though, it is well known that the plant-based or herbal drugs rarely cause any side effect if taken in appropriate quantities, but many of the medicinal plants are poisonous in raw form and self-medication with wild plants is not at all advisable. The information on plant drugs furnished under folk uses, are yet to be proved clinically in many of the cases. So, these formulations should be administered under the strict prescription of a qualified doctor or a registered medical practitioner.

In preparing this book, the help of various sources have been taken. I would like to thank all the authorities whose works are consulted during the preparation of this monograph. My thanks are also due to the owners of M/S Daya Publishing House, New Delhi, for beautiful, nice and timely publication of the book with in a short span of time.

In person, the author is indebted to his parents Shri Ramlal Dhiman and Shrimati Kamla Devi for their blessings and moral encouragement and to his sister Ms. Alka Rani, for her help in writing of the manuscript. The author is also thankful to his son Aman, to whom like his other works, he could not pay much attention, which his son deserved while writing the book. In the last but not least, my sincere thanks are due to my wife Shrimati Yashoda Rani, the co-authoress of many books with me in Library Science, who has always been a source of inspiration to enable me to complete this work.

Dr. Anil Kumar Dhiman  
Information Scientist  
Gurukul Kangri University  
Haridwar–249 404 (U.A.) India
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Chapter 1
Basics of Ayurveda

I. Introduction

Ayurveda is one of the great gifts of the sages of ancient India to mankind. Etymologically, the Ayurveda comes from two Sanskrit words, Ayush, meaning life, and Veda, meaning wisdom or science. Though the references meet in all the Vedas, about the ayurveda, the main body of ayurveda is found in the fourth Veda—the Atharva Veda. However, even though Ayurveda is part of the Atharva Veda, it is also recognized as an Upaveda or supplementary Veda in its own right. Ayurveda can be defined as a medical science, which helps the human body to keep fit, while providing cures from indigenous plants, animal products and minerals for ailments. It is, essentially, the science of healthy living and is as much concerned with the normal as with the abnormal or pathological. Being essentially a science of healing, it concentrates on what is required to lead a healthy and normal life. It deals not only with what is to be done when one falls ill, but also with what should be done to maintain one’s health and vigour.

II. Origin and Development of Ayurveda

The roots of ayurveda can be traced back to the beginning of cosmic creation. Indian philosophers state that the first preaching of ayurveda came from Brahma, the creator of universe, who told for attainment of longevity, the ayurveda to his son Prajapati Daksha. Daksha, passed it on to the Ashwinikumara twins, who were the physicians to the Gods. Ashwinikumara then offered this knowledge to Lord Indra. For attainment of longevity and healthy life, encouraged by the other sages like, Sri Angira, Jamdagni, Vashishta, Kashyap, Brahainga, Atreya, Gautam, Sankhya, Paulestye, Narad and Chavayan, Rishi Bharadwaj went to Indra and asked, when there are disorders intervening in ascetism, fast celibacy and study, what should do? Indra with the feeling of beneficence, advised him about the ayurveda. Atreya, was chosen to learn the ayurveda from Indra. After Indra had convinced himself of Atreya’s brilliant intellectual capabilities, he taught Atreya about the ayurveda, which he himself had received from Ashwinikumara.

Atreya, the most outstanding among the sages and wise men, recorded what he learned. He passed the records on to his students: Agnivesha, Bhela, Jatukarna, Parasara, Kshirapani, and Harita. Each student added his own commentary. The writing of Agnivesha has survived, practically intact, while the books written by Bhela, and Harita exist only in fragments.

During the samhitas period, the basic concepts were established and the whole system of medicine including physiology, pathology and pharmacology was rationalized. It in fact, revolutionized the medicine of India by replacing the magical charms by rational therapeutic measures. These texts describe, for the first time, the eight different disciplines of ayurveda. These disciplines include Indian versions of general medicine, pediatrics, psychiatry, geriatrics, and sex studies. In addition to these eight disciplines, the ayurveda also includes extensive knowledge about the veterinary medicines.

Acharya Charak, Acharya Susruta and Acharya Vagbhatta are known as ‘Vriddha trai,’ of Ayurveda and the period of their creativity i.e., the period from 800-1000 B.C. is considered as the golden era in the Indian system of medicine. Charak had written the Charak Samhita, Susruta wrote Susruta Samhita and Vagbhatta had written Astanga
Basics of Ayurveda

Hridaya. There are two main re-organizers of Ayurveda whose works still exist in tact today—Charak and Susruta.

Charak represented the Atreya school of physicians, discussing physiology, anatomy, etiology, pathogenesis, symptoms and signs of disease; methodology of diagnosis, treatment and prescription of patients; prevention and longevity. Included were internal and external causes of illness. Charak states that the first cause of illness is the loss of faith in the Divine. In other words, when a person does not have the experience that God is inside us, and, outside—in all things, this separation of vision creates a gap in which longing or suffering for oneness of vision occurs. This suffering is the beginning of spiritual, mental and physical disease. External causes of health include time of day, seasons, diet and lifestyle. There is a whole section discussing the medicinal aspects of herbs, diet, and reversing of the aging process. For the skeptical modern person, who wonders if this ancient wisdom can be believed, one only need to read Charak’s month-by-month description of the development of the fetus in the womb to see its exact parallels to what we know today from using modern technical machinery.

Susruta comes from the Dhavananti school of surgeons. In this text, there are detailed and sophisticated discussions of surgical equipments; the classification of abscesses, burns, fractures, wounds, amputation, plastic surgery, anal/rectal surgery, which are validated by modern medicines technical equipment and research. There is a complete discussion on the human anatomy; the bones, joints, nerves, heart, blood vessels, circulatory system etc., again, collaborated by today’s methods of mechanical investigation. From the Susruta Samhita, we learn the first science of massage, using marma points or vital body points, which parallel Chinese acupuncture. Even the popular Polarity Massage Therapy in America, was developed by a man after studying massage in India. The third major treatise is called the Ashtanga Hridaya, which is a concise version of the works of Charak and Susruta. Thus, the three main ancient ayurvedic texts that are still used today are, the Charak Samhita, Susruta Samhita and the Ashtangha Hridaya Samhita (Dhiman, 2003 a).

Another triad of ayurveda is known as ‘Laghu trai’, which are the compilations by Madhavakar (12th century), who wrote ‘Madhavanidana’, concerned mainly with diagnosis; Sharngadhar (14th century), who wrote ‘Sharngadhar Samhita’, a systematic ayurvedic materia medica; and Acharya Bhava Mishra (15th century), a native of Benaras who wrote ‘Bhavaprakasha’ which contains more than 600 drugs including some foreign drugs too.

Bangsen Samhita of Acharya Bangsen is another important work, which contains information on various ayurvedic formulations (Sharma and Sharma, 1981). Shiekhoresh of Shievatt Mishra, which was written in 1677 and had described about 4860 synonyms out of which 2860 are ayurveda related and includes information on medicinal plants. The other work of Sodhal from Gujarat is ‘Gadh Nighrav’ which contains information on more than 585 ayurvedic formulations.

Besides, a large number of Nighantus or pharmacy lexicons on medicinal herbs were also written in later times. The oldest ‘Nighantu’ seems to be written by Deodas Kashiraj, the king of Benaras, who is also believed to be the incarnation of Dhanvantri. He is also said to have written another book, known as ‘Raj Nighantu’ on drugs, but some writers believe it to have been written by another Vaidya, Dhanvantri by name, who lived during the reign of Vikramaditya. In this book, about 400 herbs are described and many later authors had drawn upon his source. Later, various nighantas were compiled, of which ‘Churamani’ written by Narhari Pandit, a native of Singhpur in Kashmir and ‘Madanpala Nighantu’ of Madanpala are important ones.

Hindu medicine flourished well during above periods, but after the period of the Tantras and Siddhas, the glories of the Hindu medicine rapidly declined and the golden age of ayurveda ended when waves of Muslim invaders attacked the country. They slaughtered the monks, destroyed the universities and burned the libraries. Those who could escape fled to Nepal and Tibet with their ayurvedic texts. During invasion on India by Mohammedan, no original work could be done and Hindu medicine gradually began to decay. Buddhist’s doctrine of Akinsla also influenced the work as no work could be done in the field of surgery as well. Consequently the thinking of “study and practice of the healing art led the pollution” and “to touch the body is sinful” etc. influenced the work. With the decline of Buddhism, degeneration set is all round, i.e., in knowledge, learning and practice of both, medicine and surgery. This decline was in full swing at the time of the Mohammedan invasion.