Of special importance is the issue of dark matter detection: what are the principles of earth-based, satellite and balloon borne experiments? The author takes us on a grand tour of on-going experiments and does not shy away from discussing controversial findings of experiments. Besides, there are the two schools of detection, the so called 'direct' and 'indirect' detection methods. The author presents a detailed analysis of all these experiments. While there is no final call yet on any of the experiments, there are continuous improvements and one obtains better and better bounds on the masses and couplings of such dark matter to normal matter. The subject is a dynamic one and it is no mean feat to convey the flavour of this enterprise.

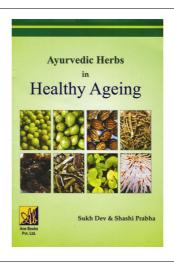
Another field of active research experimentally and otherwise is whether dark matter particles could be produced at collider experiments. Indeed, this would be the 'inverse' of particles that are already present in the universe interacting weakly with known matter, but rather that known matter could be converted into fireballs that get converted into dark matter particles, which would be highly suppressed rates due to the intrinsic weak nature of the interactions of dark matter particles. A discussion of such a topic appears to be beyond the scope of the present book. It may also be noted that the subject of dark matter detection has a future both internationally and in the country. While there is the possibility of the deep underground facility in USA, India is also contemplating dark matter search facilities. Thus the subject is an important one from many points of view.

The author, a colleague and a friend, has done an admirable job of having taken on this challenge. The book will not disappoint anyone. It is my firm belief that students who take the trouble of working through this book will find more advanced treatments of the subject to be much easier.

ACKNOWLEDGEMENT. It is a pleasure to thank Biplob Bhattacherjee (IISc) for a careful reading and suggestions on this review.

B. ANANTHANARAYAN

Centre for High Energy Physics, Indian Institute of Science, Bangalore 560 012, India e-mail: anant@cts.iisc.ernet.in



Ayurvedic Herbs in Healthy Ageing. Sukh Dev and Sashi Prabha. Ane Books Pvt Ltd, 4821, Parwana Bhawan, 1st Floor, 24 Ansari Road, Darya Ganj, New Delhi 110 002. 2014. xiv + 138 pp. Price: Rs 295.

In the perennial quest for longevity, there are no miracle cures. As our population ages many more people are realizing that in order to stay healthy into old age we need to become proactive, improving our diets and lifestyle choices, reducing stress, and becoming more knowledgeable about our health and medicine through safe and rational use of herbs.

With this book, Sukh Dev has touched upon all aspects of ageing with practical ways for integrating this information into the daily lives of readers as to how they can live longer, better and healthier. He offers the reader safe, effective and relevant treatments for many of the ills that come with increasing age. Preventing senior moments, menopausal symptoms, prostatic enlargement and circulatory problems, and some of such answers we seek today can be found on these pages. This book offers a clear understanding of the biological processes involved in ageing, the culprits largely responsible for tipping the clock: vitamin and mineral deficiencies and diminishing hormone levels.

Herbal medicine can be as simple as brewing a pot of tea. However, knowing which herbs to use and how to use them requires experience. Through this book, Sukh Dev and his wife Shashi Prabha have given the readers a thorough blend of their scientific knowledge and some tried-and-true remedies from their own experiences. Sukh Dev is an acclaimed scientist, but formulations generated from eight plants, namely Amlalaki, Bibhitaka, Haritaki, Ashwagandha, Guduchi, Guggulu, Mandookparni and Shatavari as a part of the culinary diet by his wife and tested over decades on themselves speak volumes about their ingenuity and practical experience in this science of Ayurveda. The book is an essential resource for anyone who wants to learn how their bodies work, how they age and what they can do about it. Readers will learn how to naturally maintain their vitality with ripening age, strengthen their immune system, nourish their body, burn fat and build lean muscle, and maintain a youthful mind and spirit. The authors provide herbal treatments to restore and protect each of the body's major systems - from the muscles, bones and digestive system to the pulmonary, cardiovascular and reproductive organs – as well as herbal remedies for specific ailments such as prostate enlargement, hot flashes, hypertension, insomnia, bronchitis, varicose veins and arthritis

The book also offers preparation methods and recommended dosages. This authoritative guide to herbal preventive medicine offers holistic treatments designed not only to promote vibrant health, but also to provide a way to age with grace. One can grow old, but stay healthy both physically and mentally like Sukh Dev (in his early nineties) and Shashi Prabha (in her eighties) by following their way of life.

Ayurvedic Herbs in Healthy Ageing is an invaluable resource written in simple and easy style and must be read by all interested in maintaining their health with growing age.

K. K. BHUTANI

National Institute of Pharmaceutical Education and Research, Sector 67, S.A.S. Nagar 160 062, India e-mail: director@niper.ac.in