## Contents

### Part I Overview

1. **Mediterranean Diet and Skin Health**
   Laura Primavesi, Marta Piantanida, and Valerio Pravettoni
   
2. **Immune-Mediated Disorders of Skin: Role of Dietary Factors and Plant Extracts?**
   Yashwant Kumar and Alka Bhatia
   
3. **UV Irradiations, Micronutrient Supplementation, and Cutaneous Health: Overview**
   Saeed Hosseini and S. Ali Mostafavi
   
4. **Skin Health and Metabolic Complications**
   Vijaya Juturu
   
5. **Probiotics and Skin Health**
   Audrey Guéniche, J. Benyacoub, S. Blum, L. Breton, and I. Castiel

### Part II Dietary Nutrients and Skin

6. **Vitamin C (l-Ascorbic Acid): Antioxidant Involved in Skin Care**
   Rashmi Saini, Sachin L. Badole, and Anand A. Zanwar
   
7. **Omega 3 Fatty Acids in Psoriasis**
   Aman B. Upaganlawar and Sachin L. Badole
   
8. **Arginine Derived Nitric Oxide: Key to Healthy Skin**
   Rashmi Saini, Sachin L. Badole, and Anand A. Zanwar
   
9. **Taurine (2-Aminoethanesulfonic Acid): Useful in Skin Diseases**
   Sachin L. Badole and Swapnil M. Chaudhari

### Part III Plant and Plant Components and Skin Care

10. **Turmeric (*Curcuma longa* L.) the Indian Golden Curry Spice as a Skin Care Agent: Validation of the Traditional Uses**
    Manjeshwar Shrinath Baliga, Sunitha Venkatesh, Shilpa Mrinal, Nandakishore Bala, and Princy Louis Palatty
11 Ginger (Zingiber officinale Roscoe) the Dietary Agent in Skin Care: A Review ........... 103
Rajesh Wilson, Raghavendra Haniadka, Popuri Sandhya, Princy Louis Palatty, and Manjeshwar Shrinath Baliga

12 Amla (Emblica officinalis Gaertn.) the Indian Indigenous Berry in Skin Care .......... 113
Nandhini Joseph, Manjeshwar Poonam Baliga Rao, Nikku Mathew Geeverughese, Princy Louis Pallaty, and Manjeshwar Shrinath Baliga

13 Review on the Use of Aloe vera (Aloe) in Dermatology ........................................ 125
Raghavendra Haniadka, Pratibha S. Kamble, Ayesha Azmidha, Prajwal Prabhudev Mane, Nikku Mathew Geeverughese, Princy Louis Palatty, and Manjeshwar Shrinath Baliga

Part IV Dietary Components and Skin Health

14 Chocolate and Skin Health................................................................................................. 137
Leena Patel and Ronald Ross Watson

15 Natural Dietary Factors (Products), Antioxidants, and Skin Health............................. 143
Howard A. Epstein

16 Nutrient-Rich Botanicals in Skin Health: Focus on Avena sativa.................................. 153
Khalid Mahmood, Claude Saliou, and Warren Wallo

17 The Role of Polyphenols in Skin Health ......................................................................... 169
Grace Emily McClain and Ronald Ross Watson

18 Resveratrol in Dermal Health.......................................................................................... 177
Dipak K. Das and Hannah Vasanthi

19 Skin Care Properties of Grape Seed Polyphenols, a By-Product of the Winery Industry .......................................................................................................................... 189
Manjeshwar Poonam Baliga Rao, Raghavendra Haniadka, Karadka Ramdas Thilakchand, Princy Louis Palatty, and Manjeshwar Shrinath Baliga

20 Skin Health Benefits of Coenzyme Q10 ......................................................................... 197
Jarmila Hojerova

21 Protection Against Free Radicals (UVB Irradiation) of a Water-Soluble Enzymatic Extract from Rice Bran. Study Using Human Keratinocyte Monolayer and Reconstructed Human Epidermis ....................................................... 215

Part V Essential Nutrients and Skin Cancer

22 Folate Nutrition in Skin Health and Skin Cancer Prevention ...................................... 229
Yira Bermudez, Katharine Cordova, and Joshua D. Williams

23 Vitamin D and Skin Cancer: Meet Sunshine Halfway ................................................. 257
Tirang R. Neyestani

24 Vitamin E in Skin Cancer and Aging Skin ...................................................................... 269
A. Chloe Meltzer and Ronald Ross Watson
Part VI Dietary Components and Skin Cancer

25 Dietary Plant Extracts and Foods in Prevention and Skin Cancer: An Overview
Chelsea Lynn Carey and Ronald Ross Watson

26 Promising Plant Extracts with In Vivo Anti-melanoma Potential
Farid Menaa, Sachin L. Badole, Bouzid Menaa, and Abder Menaa

27 Molecular Sensors and Mediators of Skin Cancer Preventative Phytochemicals
Andrea Aquilato, Barbara B. Doonan, Tze-chen Hsieh, and Joseph M. Wu

28 Soybean: Key Role in Skin Cancer
Sachin L. Badole and Sagar P. Mahamuni

29 Bioactive Polyacetylenes of Carrots in Cancer Prevention
Lars Porskjær Christensen

30 Chocolate: A Role in Skin Care and Cancer
Ronald Ross Watson and Amanda Berg

31 N-Acetylcysteine for Reduction of Oxidative Stress/Damage and Prevention of Melanoma
Pamela B. Cassidy, Sancy A. Leachman, and Douglas Grossman

32 An Indian Spice: Turmeric, in Relation to Skin Health and Cancer
Shree Acharya and Ronald Ross Watson

33 Green Tea (*Camellia sinensis*): Key Role in Skin Cancer
Mahavir Ghante and Sachin L. Badole

34 *Camellia sinensis* (Tea) in the Prevention of UV-Induced Carcinogenesis: A Mechanistic Overview
Princy Louis Palatty, Manjeshwar Shrinath Baliga, Anatappa Govindaraju Rajeev, Raghavendra Haniadka, Harshith P. Bhat, Karkala Shreedhara Ranganath Pai, Manoj P. Rai, Nikku Mathew Geevarughese, and Rajesh Arora

35 Melanoma and Leptin
Arash Sabetisoofyani

Part VII Plants and Plant Components and Non-cancerous Skin Diseases

36 *Curcuma longa*: Use for Skin Disease Care
Anand A. Zanwar, Sachin L. Badole, and Farid Menaa

37 Western Diet-Mediated mTORC1-Signaling in Acne, Psoriasis, Atopic Dermatitis, and Related Diseases of Civilization: Therapeutic Role of Plant-Derived Natural mTORC1 Inhibitors
Bodo C. Melnik

38 Legumes and Preventive Dermatology
Jesus M. Porres and Wen-Hsing Cheng

39 Licorice: *Glycyrrhiza glabra* Linn. Used for Dermatitis
Bhushan P. Pimple, Sachin L. Badole, Aman B. Upaganlwar, and Madanrao N. Mane
40 Role of Emblica officinalis in Prevention of Skin Disease ............................................... 439
  Anand A. Zanwar, Sachin L. Badole, and Rashmi Saini

41 Sphaeranthus indicus: Skin Disease Preventive Plant ..................................................... 445
  Madanrao N. Mane and Sachin L. Badole

42 Mangosteen (Garcinia mangostana Linn.): Role in Prevention of Skin Disorders .......................................................... 451
  Aman B. Upaganlawar and Sachin L. Badole

43 Exploring Neem (Azadirachta indica) for Antidermatophytic Activity ...................... 459
  Bhushan P. Pimple, Sachin L. Badole, and Farid Menaa

44 Pongamia pinnata (Linn.) Used in Skin Disease ............................................................... 471
  Sachin L. Badole and Bhushan P. Pimple

45 Aloe vera: Use for Skin Disease .......................................................................................... 475
  Sachin L. Badole, Pranita P. Bagul, and Farid Menaa

46 Tinospora cordifolia (Willd.) Miers. (Menispermaceae): Beneficial Effect on Skin Diseases ........................................................................... 481
  Sachin L. Badole, Swapnil M. Chaudhari, and Anand A. Zanwar

47 Withania somnifera: Use for Skin Disease ........................................................................ 487
  Anand A. Zanwar, Sachin L. Badole, and Rashmi Saini

48 The Role of Probiotics in Atopic Dermatitis (Eczema) and Skin Allergy Reactions: Prevention and Therapy ................................................... 493
  Öner Özdemir and Anand A. Zanwar

Index............................................................................................................................................. 531
Bioactive Dietary Factors and Plant Extracts in Dermatology
Watson, R.R.; Zibadi, S. (Eds.)
2013, XXV, 544 p., Hardcover
ISBN: 978-1-62703-166-0
A product of Humana Press