### Contents

#### Part I Overview

1. **Mediterranean Diet and Skin Health**
   - Laura Primavesi, Marta Piantanida, and Valerio Pravettoni
   - Page 3

2. **Immune-Mediated Disorders of Skin: Role of Dietary Factors and Plant Extracts?**
   - Yashwant Kumar and Alka Bhatia
   - Page 15

3. **UV Irradiations, Micronutrient Supplementation, and Cutaneous Health: Overview**
   - Saeed Hosseini and S. Ali Mostafavi
   - Page 27

4. **Skin Health and Metabolic Complications**
   - Vijaya Juturu
   - Page 39

5. **Probiotics and Skin Health**
   - Audrey Guéniche, J. Benyacoub, S. Blum, L. Breton, and I. Castiel
   - Page 49

#### 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
   - Page 61

7. **Omega 3 Fatty Acids in Psoriasis**
   - Aman B. Upaganlawar and Sachin L. Badole
   - Page 67

8. **Arginine Derived Nitric Oxide: Key to Healthy Skin**
   - Rashmi Saini, Sachin L. Badole, and Anand A. Zanwar
   - Page 73

9. **Taurine (2-Aminoethanesulfonic Acid): Useful in Skin Diseases**
   - Sachin L. Badole and Swapnil M. Chaudhari
   - Page 83

#### 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
    - Page 93
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
   Geevarughese, 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 Geevarughese,
   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
   C. Santa-María, E. Revilla, E. Miramontes, J. Bautista, A. García-Martínez,
   E. Romero, M. Carballo, and J. Parrado

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 ................................................................. 277
Chelsea Lynn Carey and Ronald Ross Watson

26 Promising Plant Extracts with In Vivo Anti-melanoma Potential ................................................................. 283
Farid Menaa, Sachin L. Badole, Bouzid Menaa, and Abder Menaa

27 Molecular Sensors and Mediators of Skin Cancer Preventative Phytochemicals ................................................................. 291
Andrea Aquilato, Barbara B. Doonan, Tze-chen Hsieh, and Joseph M. Wu

28 Soybean: Key Role in Skin Cancer ................................................................. 315
Sachin L. Badole and Sagar P. Mahamuni

29 Bioactive Polyacetylenes of Carrots in Cancer Prevention ................................................................. 321
Lars Porskjær Christensen

30 Chocolate: A Role in Skin Care and Cancer ................................................................. 337
Ronald Ross Watson and Amanda Berg

31 N-Acetylcysteine for Reduction of Oxidative Stress/Damage and Prevention of Melanoma ................................................................. 341
Pamela B. Cassidy, Sancy A. Leachman, and Douglas Grossman

32 An Indian Spice: Turmeric, in Relation to Skin Health and Cancer ................................................................. 357
Shree Acharya and Ronald Ross Watson

33 Green Tea (Camellia sinensis): Key Role in Skin Cancer ................................................................. 361
Mahavir Ghante and Sachin L. Badole

34 Camellia sinensis (Tea) in the Prevention of UV-Induced Carcinogenesis: A Mechanistic Overview ................................................................. 367
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 ................................................................. 385
Arash Sabetisoofyani

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

36 Curcuma longa: Use for Skin Disease Care ................................................................. 391
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 ................................................................. 397
Bodo C. Melnik

38 Legumes and Preventive Dermatology ................................................................. 421
Jesus M. Porres and Wen-Hsing Cheng

39 Licorice: Glycyrrhiza glabra Linn. Used for Dermatitis ................................................................. 433
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 |
| 49 | Index | 531 |
Bioactive Dietary Factors and Plant Extracts in Dermatology
Watson, R.R.; Zibadi, S. (Eds.)
2013, XXV, 544 p. 89 illus., 38 illus. in color., Hardcover
ISBN: 978-1-62703-166-0
A product of Humana Press