

Lingzhi

From Mystery to Science



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Zhi-Bin Lin



Peking University Medical Press



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Preface

Lingzhi (*Ganoderma lucidum*) is historically a treasured herbal material in China. It is becoming well-known all over the world in recent years. The Chinese traditional medicine's classic, *Shennong Materia Medica*, regards Lingzhi as being of a "supremely exquisite" quality with tonic and longevity effects. Over the years, fables and legends adored Lingzhi with a patina of mystery as a "heavenly herb" that connotes auspiciousness, blissfulness and happiness.

Professor Zhi-Bin Lin, a distinguished pharmacologist, has devoted a life-long study on Lingzhi. With his extraordinary insights on the culture, pharmacology, physiology, chemistry and clinical applications associated with Lingzhi, Prof. Lin presents in this book the scientific understanding of the herb's beneficial functions on human immune, nervous, endocrine and cardiovascular systems. Thus, Lingzhi has been applied as an adjuvant treatment for cancer patients, and also a food supplement to improve general health and wellness.

Lingzhi from Mystery to Science is written based on actual research and clinical findings. Prof. Lin explains the complex theories in commonly understandable language. In addition, this

book gives an overview of the classic literature and legends to allow the readers an appreciation of the "Lingzhi culture". At the same time, references on key scientific studies relevant to the various functions as explained in separate headings are listed for those who need further information. The readers can become familiar with Lingzhi's efficacy and the basic aspects concerning the diseases, such as chronic bronchitis, hyperlipidemia, hypertension, diabetes, hepatitis, tumors, dermal and urological diseases, sub-health and aging, as well as its nutraceutical applications. Peeling off the mystical patina, *Lingshi from Mystery to Science* unveils the truth of Lingzhi that may help in the public's better understanding of such a wonderful material and usher in the author's ultimate purpose of promoting the health and well-being of mankind.

Professor Chen Keji, M.D.

Academician, Chinese Academy of Sciences

Honorary Chairman, Chinese Association of Integrative Medicines

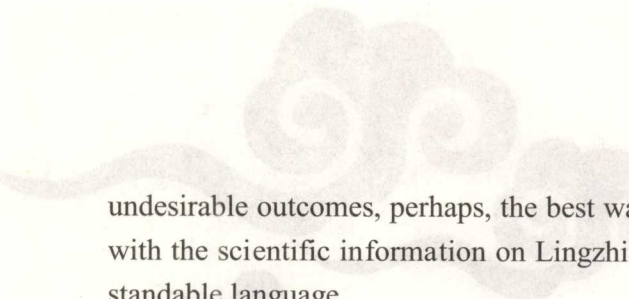
Beijing, May 2009



Foreword

A Chinese herb medicine, the fruiting body of Lingzhi, *Ganoderma lucidum*, has been used as a folk remedy in China for thousands of years, as reported in *Shenong Materia Medica*. Increasing research in the modern times elucidates numerous pharmacological effects of Lingzhi, including immunomodulating and anti-tumor, anti-atherosclerosis, lipid-lowering, hypoglycemic, liver-protective, anti-oxidative, free radical scavenging and anti-aging activities. Recent clinical studies in China also prove that Lingzhi can be used to treat bronchitis, arteriosclerosis, neurasthenia and insomnia, hepatitis, diabetes, cancers and aging.

Nowadays, both in China and abroad, extensive research and industrial development has lead Lingzhi and a vast variety of its products to be widely applied for the prevention and cure of diseases, as well as for the improvement of health and general well-being. However, along with the commercialization, quality of and advertisement for the products has become a concern. The product quality varies greatly, and the claims on the efficacy and functions are frequently untrue, or exaggerated to say the least. To confront such



undesirable outcomes, perhaps, the best way is to provide consumers with the scientific information on Lingzhi in plain and easily understandable language.

With that, the idea of writing a popular science book on Lingzhi was born. In preparation, I reviewed volumes of available promotional materials on Lingzhi. Indeed, I discovered that while the commercial literature full of misleading descriptions, the popular science publications were largely lacking rigorous scientific evidence. A year ago, the book, *Lingzhi: From Mystery to Science*, in Chinese was published. To reach a wider readership, this English version has been translated from the Chinese edition. In particular, some of the clinical trials were conducted in the past under very different circumstances from today. The in vitro tests can hardly be duplicated nowadays. Consequently, the existing information is invaluable for anyone who is interested in the study of Lingzhi. Most of the clinical reports were written in Chinese when they first appeared. Through this publication, it is hoped that researchers and consumers worldwide may benefit.

In the book, original reports on the systematic clinical studies, rather than individual cases, relating to Lingzhi's medicinal efficacy are presented for the discussion. In Chapters 3, 14 and 15 comprehensive information is presented on Lingzhi product's quality, usage and processing technologies. During my decades of research on Lingzhi, I have become deeply interested in the ancient Chinese literature, traditional culture and the philosophy associated with Lingzhi. Lingzhi's spiritual and mystical image is ingrained and permeated in the people, culture and tradition. It comes with its graceful appearance and magic efficacy. Thus, in Chapter 1 and 2, the historical legends

and evidence, which has evolved into Lingzhi's symbolic meaning of happiness and longevity, are briefed to reflect my earnest hope for the health and well-being of all.

This book refers much of its scientific research results from what is in *Modern Research of Ganoderma lucidum*, 3rd Edition (by Zhi-Bin Lin, Peking University Medical Press, Beijing, 2007). For the detailed information, therefore, readers are advised to refer to that publication. Other references that are directly cited are listed immediately following the text in this book.

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Contents



Chapter 1

Mystery and Culture of Lingzhi1
Lingzhi in myths2
Lingzhi in ancient poems3
"Catholicon" according to Taoism	.....4
Auspicious symbol for Chinese	.....6
Guo Mo-Ruo's poem on Lingzhi	.....8



Chapter 2

Lingzhi as Described in <i>Shennong Materia Medica</i>	...10
<i>Shennong Materia Medica</i> on Lingzhi	.....11
Scientific understanding on Lingzhi by scholars	
in early years	.....13
Criticism on misinformation regarding Lingzhi	
in the old time	.....14
Current understanding of the six kinds of Lingzhi	.....16
Interpretation of <i>Shennong Materia Medica</i> using	
the traditional Chinese and Western medicine	
principles	.....18

Chapter 3



Understanding Lingzhi	.....20
Lingzhi fruiting body — a Chinese medicine	.....21
Life cycle of Lingzhi	.....22
Morphological characteristics of hyphae, fruiting body and spores	.....24
Cultivation of Lingzhi for its fruiting bodies	.....26
Submerged fermentation for Lingzhi mycelia	.....29
Lingzhi's "genealogy" revealed by DNA fingerprinting	...29
Organic cultivation of Lingzhi	.....30
Lingzhi's active components and pharmacological effects	31

Chapter 4



Prevention and Treatment of Chronic Bronchitis with Lingzhi	.....34
Chronic bronchitis	.....35
Therapeutic efficacy of Lingzhi on chronic bronchitis	...35
Immunoregulating nature of Lingzhi	.....38

Chapter 5



Prevention and Treatment of Hyperlipidemia with Lingzhi41
--	---------

Hyperlipidemia	.....42
Therapeutic efficacy of Lingzhi on hyperlipidemia	.....43
How does Lingzhi regulate blood lipid?	.....43



Chapter 6

Anti-Hypertensive Effects of Lingzhi	.....46
Hypertension	.....47
Clinical reports on Lingzhi's efficacy for hypertension treatment	.....47
Why can Lingzhi effectively treat hypertension?	.....52



Chapter 7

Preventive and Therapeutic Effect of Lingzhi on Diabetes Mellitus	.....53
Diabetes mellitus	.....54
Clinical reports on Lingzhi for adjuvant treatment on diabetes mellitus	.....55
Mechanism of adjuvant therapeutic effect of Lingzhi on diabetes mellitus	.....57



Chapter 8

Prevention and Treatment with Lingzhi for	
Neurasthenia	.....62
Neurasthenia	.....63
Rejuvenation of nerve-endocrine-immune system	
with Linzhi	.....63
Clinical reports on neurasthenia treatment with Lingzhi	64
Clinical reports on memory improvement by Lingzhi	...73

Chapter 9



Prevention and Treatment of Hepatitis with Lingzhi	...75
Therapeutic efficacy of Lingzhi on hepatitis	.....76
Clinical reports on Lingzhi's efficacy for hepatitis	
treatment	.....77
Mechanism of Lingzhi's liver-protective effect	.....80

Chapter 10



Adjuvant Therapy for Cancers with Lingzhi	.....84
Lingzhi as an adjuvant therapy for cancers	.....85
Clinical reports on Lingzhi's adjuvant treatments	
for cancers	.....85
Mechanism of anti-tumor activity of Lingzhi in	
adjuvant therapy	.....96

TCM therapeutical theory of "strengthening health to ward off invading pathogens" and Lingzhi's adjuvant therapy for tumors	98
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Chapter 11

Care for Health of the Sub-Healthy, Middle-Aged and Elderly	102
TCM emphasizes health and well-being	103
"Sub-health" and homeostasis regulation disorder	103
Health effect of Lingzhi on sub-healthy populations ..	106
Anti-aging effect of Lingzhi	106
Reports on the health effects of Lingzhi	110

Chapter 12

Lingzhi Minimizes Poisoning Effect of Poisonous Mushrooms	120
Mushroom poisoning	121
Clinical reports on Lingzhi for Amanita mushroom poisoning	122
Clinical reports on Lingzhi for <i>Russula subnigricans</i> poisoning	124
Mechanism of therapeutic efficacy of Lingzhi on mushroom poisoning	125

Chapter 13



Lingzhi for Treatment of Other Diseases	.....127
For nephrotic syndrome	.....128
For multiple sclerosis and myotonia atrophica	.....132
For scleroderma	.....132
For alopecia areata	.....134
For chloasma	.....135
For the acquired immune deficiency syndrome (AIDS)	.....137

Chapter 14



Recommendations in Choosing and Using Lingzhi

Products	.....139
Lingzhi products	.....140
Quality of Lingzhi products	.....141
Misconception on quality of wild Lingzhi	.....142
Ways to distinguish good from bad Lingzhi products	...143
Polysaccharide content in Lingzhi products	.....145
Side effects or "vertigo-like therapeutic"?	.....146
Misdiagnosis of Lingzhi spores as parasite eggs	.....147

Chapter 15



Processing Technology for Lingzhi Products	..... 149
Preparation of Lingzhi fluidum extractum	..... 150
Cultivation of Lingzhi for its fruiting bodies	..... 153
Making of Lingzhi capsule products	..... 153
Making of Lingzhi granular products	..... 153
Making of Lingzhi syrup products	..... 154
Making of Lingzhi tincture products	..... 154
Making of Lingzhi vinum	..... 155
Manufacturing of Lingzhi injection ampoules	..... 155
Processing technologies associated with Lingzhi spore products	..... 157

Appendix 159

Ganoderma (Lingzhi). Chinese Pharmacopeia Part I