Traditional Chinese Medicine, Western Science, and the Fight Against Allergic Disease

中医与西医：对抗过敏性疾病

原著 ◎ 李秀敏　亨利·欧利希
翻译 ◎ 朱文晓

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Xiu-Min Li, MD, is a Professor of Pediatrics in the Division of Pediatric Allergy and Immunology, at the Icahn School of Medicine at Mount Sinai. Dr. Li obtained her MD degree at the Henan College of Chinese Medicine (Zhengzhou) in 1983 and a Master's degree in Clinical Pediatric Immunology from the Graduate School of the China Academy of Chinese Medical Sciences (Beijing). She was a Visiting Scientist at Stanford and postdoctoral fellow in Clinical Immunology at Johns Hopkins where she was appointed Instructor in 1997. Dr. Li joined the Division of Pediatric Allergy and Immunology at Mount Sinai when it was established in 1997. She has chaired prominent committees about the use of alternative medicines for allergic diseases in the US and internationally and was recently named Director for the new Center for Integrative Medicine for Allergies and Wellness at Mount Sinai, to bring together research and treatment on a larger scale.

Henry Ehrlich is the editor of asthmaallergieschildren.com, co-author of *Asthma Allergies Children: A Parent's Guide*, and other works of nonfiction. His most recent book was *Food Allergies: Traditional Chinese Medicine, Western Science, and the Search for a Cure* — the first book about the work of Dr. Xiu-Min Li, lauded as "A masterful job of distilling a lot of complex material into verbiage that can be understood by the non-scientist, albeit a sharp non-scientist, and accomplished in an entertaining style," by Dr. Arnold I. Levinson,

作者简介

李秀敏,医学博士,儿科学教授,工作于西奈山伊坎医学院儿科过敏和免疫科。李秀敏医生于1983年获得河南中医学院(郑州)医学学位,之后获得中国中医科学院(北京)儿科临床免疫学硕士学位。她是斯坦福大学的访问学者和约翰斯霍普金斯大学临床免疫学博士后,1997年受聘为该校讲师。1997年,西奈山伊坎医学院成立,李秀敏医生加入该院儿科过敏和免疫科。曾在美国和国际上担任关于使用替代药物治疗过敏性疾病组织的常务委员会主席,最近被任命为西奈山新的过敏和健康整合医学中心主任,以便更大规模地开展研究和治疗。

亨利·欧利希(Henry Ehrlich)是儿童过敏性哮喘网站(asthmaallergieschildren.com)的编辑,《儿童过敏性哮喘:家长必读》及其他非小说作品的合著者。他最新的一本书是《食物过敏:中医,西方科学和疗法研究》——这是讲述李秀敏医生工作的第一本书,被宾夕法尼亚大学佩雷尔曼医学院名誉教授阿诺德·莱文森博士称赞为"一部杰出

Emeritus Professor of Medicine, Perelman School of Medicine at The University of Pennsylvania. It was published by Third Avenue Books.

作品,它将大量复杂的材料提炼成非科学家(即使是一个敏锐的非科学家)能够理解的语言,并以娱乐有趣的方式完成了这一工作"。该书由第三大道图书公司出版。

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NOTES ON THE TEXT

Except for those sections signed by Dr. Xiu-Min Li and Dr. Renata Engler and the appendix, all chapters were written by me and narrated where appropriate in the first person for coherence (I hope). The crux of these chapters is to introduce Dr. Li's published papers and put the work in context. These are all footnoted. For detailed citation of certain facts, please look up the original papers referenced.

One chapter consists of a lengthy account of a single patient's experience with a "new" disease that defied mainstream treatment, but which was controlled by Dr. Li by applying the tools and principles of traditional Chinese medicine to an individual case.

Henry Ehrlich

文本说明

除了李秀敏医生和雷纳塔·恩格尔博士(Renata Engler)撰写的章节和附录之外,所有章节均由我撰写,为了内容的条理性在一些地方酌情使用了第一人称(当然是我希望的那样)。核心章节是介绍李医生发表的论文内容,并放在上下文中,都附加了脚注。如果想了解引文的详细内容,请查阅参考的原始论文。

每一章的内容都讲述了一位患者在一种"新"疾病中的经历,这种疾病主流疗法无法治愈,而是由李医生通过将中医理论和治疗方法应用到个案中使疾病得以控制的。

亨利·欧利希(Henry Ehrlich)

FOREWORD

Dr. Renata J. M. Engler

On the journey through life, one's being touched by many people and blessed occasionally by the magic that resonates with and enhances one's own journey. Dr. Xiu-Min Li is such a gift for me. Her spirit, determination and commitment to healing in a world abundant with disease, pain and suffering reflect the best in the human family and inspire her patients, her colleagues and friends. We had the particular pleasure to collaborate on a chapter about Complementary and Alternative Medicine (CAM) for the textbook chapter in *Middleton Allergy Principles and Practice* (8th Edition, 2014). I am deeply grateful for Dr. Li's encouragement of my efforts to contribute guidelines for traditional medicine practitioners to incorporate CAM modalities into a patient-care plan, respecting patient perspectives and needs while ensuring optimization of safety as well as efficacy (*Complementary and alternative medicine for the allergist-immunologist: Where do I start? Journal of Allergy and Clinical Immunology* 2009; 123(2) *. 309—316, 316. e. 1—316. e. 3). It is with humble gratitude that I call Dr. Li both friend and colleague. So it is both an honor and a pleasure to write this foreword to a book about her life's work.

Like Dr. Xiu-Min Li, I am an immigrant to the

前　言

雷纳塔 J. M. 恩格尔（Renata J. M. Engler）博士

生命历程中，许多人让人感动，也偶尔因奇迹般的共鸣而受到祝福，并使自己的旅程精彩纷呈。李秀敏医生对我来说就是这样一个礼物。她精力充沛、意志坚定，致力于治愈一个充满疾病、痛苦和不幸的世界，反映了人类社会最美好的一面，同时激励着她的病人、同事和朋友。我们特别高兴在教科书《米德尔顿过敏原理和实践》（2014年第8版）中关于补充和替代医学（CAM）的章节进行合作。我非常感谢李医生，她鼓励我要努力为传统医学从业者提供准则，将补充和替代医学模式纳入患者护理计划，尊重患者的观点和需求，同时确保安全性和有效性的优化（《互补和替代医学对于过敏及免疫专科医生而言：我从何处开始?》《过敏和临床免疫学期刊》2009；123（2）*. 309—316，316. e. 1—316. e. 3）。把李医生当做我的同事和朋友，我心怀感激。因此，能为这本讲述她工作的书写序真是令我既高兴又荣幸。

和李秀敏医生一样，我也是移民，

shores of the United States of America, and like her, I was raised in a family that understood that healing and health maintenance often required the use of all resources and wisdom, crossing through traditional Western allopathic medicine into other traditions and fonts of knowledge. As a physician trained in internal medicine and pediatric and adult allergy-immunology as well as science-based approaches, I served as a military physician for 38 years (retiring in 2013) and now continue to work in clinical research relevant to gaps in cardiovascular disease risk assessment and reduction, incorporating cardio-immunology and the drivers of systemic inflammation into protocol development at Walter Reed Bethesda. As I move into the last quarter of my life, I am eager to be a part of medicine that is focusing on disease before it is overtly expressed with a catastrophic illness or death, and healing care that embraces Dr. Leroy Hood's four P's of holistic 21st century medicine: "predictive, preventive, personalized and participatory." (P4 Medicine Institute, http://www.p4mi.org/) Dr. Li's science and practice are the embodiment of these values.

生活在美国的沿海地区。和她一样，我成长的家庭明白治病和保健常常需要利用一切资源和智慧，通过传统的西方对抗疗法进入其他传统疗法和知识领域。作为一名受过内科、儿科和成人过敏与免疫学以及科学方法培训的医生，我当了38年军医(2013年退休)，现在继续从事与心血管疾病风险评估和减弱相关的临床研究，将心脏免疫学和全身炎症驱动因素的研究纳入马里兰州沃尔特·里德·贝塞斯达(Walter Reed Bethesda)的试验方案中。我希望在有生之年全身心投入医学，研究致死性疾病的预防和康复，它包含了勒罗伊·胡德(Leroy Hood)博士提出的21世纪综合医学4P模式："预测性、预防性、个体性、参与性。"(4P医学机构，http://www.p4mi.org/)李秀敏医生的科学研究和实践便是这些价值观的体现。

My personal journey includes extensive experience not only as a physician seeking to optimize the care of patients with complex symptoms and with no simple diagnosis or well-defined treatments but also the extreme challenges of a caregiver struggling with the many instances where a visit to an allopathic medicine provider leaves the patient (along with their loved ones) with no practical or effective help. For me personally, the experiences as a life-long caregiver of aging, war-traumatized, dying parents and in-laws, a

我个人经历丰富。作为一名内科医生，我尽最大努力通过详细诊断及精准疗法优化复杂病症患者的治疗，以及护理人员在处理诸多病例时面临的挑战，如拜访一位采用对抗疗法却收效不明显的医生。对我个人来说，作为一名终生护理者，照顾上了年纪、饱受战争创伤、奄奄一息的父母和公婆，一个病重的丈夫以及疾病缠身而无药可医的至亲好友，所有

very sick husband, and dear friends facing hopelessness in their disease journey, have taught me as much as my long medical training. I remain continually inspired and in humble admiration of the courage, sheer labor intensity and driving force behind quality caregiving largely performed by an army of unpaid family members and friends. Listening to the caregiver perspectives and needs, as they represent patients often unable to advocate for themselves, is a critical factor in the future evolution of optimized health care. Dr. Li recognized this critical value input early in her work and as a result she is so appreciated by her patients and their families, a medal of achievement and honor that is not traditionally recognized adequately.

这些经历和常年的医疗训练一样带给了我太多感悟。我不断受到激励，并对这一群家庭成员和朋友在无偿提供高质量护理的背后所付出的勇气、高强度劳动和不竭的动力表示由衷的钦佩。倾听那些护理人员的观点和需求，因为他们代表着往往不能为自己辩护的病人，这也是未来优化卫生保健的关键因素。李秀敏医生在她工作早期就认识到了这种核心价值，所以她深受其病患和家人的爱戴，但其取得的成就和荣誉在传统意义上尚未得到充分肯定。

Like Dr. Li, I have struggled with the many gaps in our knowledge and the reality that so much of what we think we know or understand today will be significantly changed or even discarded within the next 5 – 7 years. A position of humility and openness to new ideas, new paradigms and multi-disciplinary team efforts to improve the precision and effectiveness of our care for patients is needed. As the science of health and healing rapidly evolves to recognize the medicinal value of nutritional content and the critical microbiome (the types of bacteria living in our gut), mindfulness and stress management rather than stress-reduction alone, exercise tailored to biodiversity, sleep and the complexities of psychoneuroimmunology, the need for bridge-builders that connect the silos of knowledge and understanding, enhancing all sides of the rivers of ignorance, is ever increasing.

像李秀敏医生一样，我一直在努力填补我们的知识和现实之间的许多差距。诸多我们认为今天自己知道或者理解的东西，在未来5—7年内都会发生巨大变化甚至被丢弃。而以一种谦虚和开放的姿态来面对新观点、新范例，并通过多领域团队合作来提高我们对患者护理的准确性和有效性是很有必要的。因为保健和医疗科学很快会发展成对营养成分和微生物体（各种寄生在我们肠道内的细菌）的药用价值的认知，并认识到要学会利用专注力和压力管理（而不是仅仅减轻压力），或者针对生物多样性、睡眠及心理神经免疫学的复杂性而进行的专门训炼，需要建立连接知识与理解之间的桥梁，连接所有知识匮乏的领域。这一需求与日俱增。

Dr. Li has built these bridges. As she describes so well, our challenge for the future of global health is to develop platforms that can critically evaluate best practices for the integration of great medical traditions and to ensure that no patient is given the message of abandonment or hopelessness by those with a mission to heal.

Respectfully and with deep admiration,
Renata J. M. Engler, MD FAAAAI, FACAAI, FACP Professor, Medicine and Pediatrics Uniformed Services University of the Health Sciences
Bethesda, MD

李医生已经建成了这些桥梁。正如她的精彩描述,对于未来的全球健康,我们的挑战是要建立平台,能够批判性地评估整合传统医学的实践效果,并且确保医生在救死扶伤时不会向任何患者发出放弃或绝望的信息。

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INTRODUCTION

Dr. Xiu-Min Li

简　介

李秀敏医生

When I was a teenager thinking about what to do with my life, I was fortunate to have relatives who were able to counsel me wisely about my future. One uncle had taught himself Chinese medicine from a textbook and his knowledge had served him well for years. He presented me with his prized volume and said, "There is gold in this book." He also said, you must study medicine because "if you are a doctor you will always be able to find a job". His final piece of advice was to study both traditional Chinese medicine (TCM) and Western medicine. It was as if he could look far into the future and envision our present moment in which many Westerners have medical conditions that their own doctors cannot cure, and a majority of Americans have either considered consulting alternative practitioners and attempting alternative treatments, or have actually done so.

我很幸运，当我年少还在思考人生该做些什么的时候，就有亲戚能够给我的未来提出明智的建议。一位舅舅从教科书上自学中医，多年来受益于此。他把他珍藏的书拿给我看，说："书中有黄金。"他还叮嘱我一定要学医，"因为如果当医生，总能找到一份工作"。他最后建议我中医和西医都要学。好像他可以预见未来，预知现状。目前，不少西方人经常遇到他们自己的医生无法医治的病症，大多数美国人要么已在考虑向替代疗法的从业者咨询并尝试替代疗法，要么就已经这样做了。

My uncle's wisdom was confirmed when I was working at the China-Japan Friendship Hospital in Beijing after completing my studies. The son of a close friend was brought in with terrible stomach problems. My colleagues said he had an infection and put him on IV antibiotics and refined amino acids for days. He continued to suffer. We really thought he would die. So I contacted my TCM mentor who was in his 70s. He listened to my description of the patient. He thought

我舅舅的睿智建议在我毕业后进入北京中日友好医院工作时得到了印证。我的一个好朋友的儿子因胃病严重住院。同事说是因为感染，给他注射了几天的抗生素和精制氨基酸，可他还是一直疼痛难忍。我们真的以为他会死。于是，我联系了我70多岁的中医导师。他听了我对病人的描述，想了想，说："不要再用抗

about it and said, "No more antibiotics. No more amino acids. Give him ginseng and stir-fried wheat flour paste."

生素和氨基酸，给他服用人参和炒过的小麦面糊。"

We did it, and within days this little boy was normal. From then on, I promised myself that though my greatest love was for research, I would always try to reserve some of my time for helping people using the tools of TCM. I kept that promise when I arrived at the Jaffe Food Allergy Institute at the Icahn School of Medicine at Mount Sinai in New York, after time as a Visiting Scientist at Stanford and as a Fellow at Johns Hopkins in Baltimore. Dr. Hugh Sampson brought me from Hopkins to New York as part of his team.

我们照他说的做了。才几天工夫，这个小男孩就恢复正常了。从那时起，我发誓既然自己对研究如此热爱，我将努力留出一些时间，利用中医去帮助人们。从我来到纽约西奈山伊坎医学院杰夫食物过敏研究所工作，到之后作为斯坦福大学访问学者，以及成为巴尔的摩约翰·霍普金斯大学的职员，我一直信守着这样的承诺。休·桑普森（Hugh Sampson）博士之后把我从霍普金斯带到纽约，成为他团队中的一员。

With the agreement of my employers, I opened an independent clinic to treat recalcitrant eczema using medicines from the ancient formulary of Chinese medicine. Eczema was a good place to start because severe itching is a disruptive threat to everyday quality of life, and when there is also compulsive scratching, the skin loses its capacity to protect us against the outside world. Oozing and bleeding allow microbes that normally sit harmlessly on the skin to penetrate where they do not belong and infect the tissue. The skin loses its capacity to help regulate body temperature. As we now know, damaged infant skin can also become an induction point for exposure to food allergens that sensitize children even in homes where parents swear the child has never ingested them.

经工作单位同意，我开了一家独立诊所，运用中医古方中的药物来治疗顽固性湿疹。治疗湿疹是很好的起点，因为极端的瘙痒对日常生活质量构成毁灭性的威胁，而且当强迫性抓挠时，皮肤就会失去保护我们免受外界伤害的能力，渗出和渗血将会使原本正常存在皮肤表面的微生物侵入不属于它们的人体并感染体内组织，皮肤就会失去调节体温的能力。正如我们现在所知道的，如果婴儿的皮肤受到损害，也会成为食物过敏原的诱发因素，而且这种现象甚至会发生在家里面，即使婴儿的父母发誓他们的孩子从未摄入过敏原。

At the time, the late 1990s, managing eczema relied on a strategy of keeping the skin moist, carefully avoiding exposures to dietary and environmental triggers,

在20世纪90年代末，当时，湿疹的治疗依赖于皮肤保湿，小心避免接触到引发湿疹的食物和环境诱因，

and large doses of steroids. Unfortunately, this combination of avoiding triggers and steroid usage is still the rule in much of allergic medicine.

服用大剂量的类固醇化合物。不幸的是,这种避免诱发及服用类固醇化合物相结合的疗法,至今仍在过敏性药物治疗中居主导地位。

Our food allergy research at Mount Sinai was sophisticated. My team set out in an attempt to "fool the immune system" by combining gene therapy and immunotherapy. The general idea was that we could prevent allergies to peanut protein in non-allergic mice if we could coax the mouse's own cells to produce peanut protein. For the "gene therapy" part, we injected non-allergic mice with a DNA vector containing the "gene"—or DNA instruction set—to build the highly allergenic peanut protein, Ara h2. If it worked, then the Ara h2 instructions would be incorporated into the mouse's own cells and these cells in turn would begin producing the Ara h2 peanut protein. We hoped that if the mouse's own cells were manufacturing and releasing the Ara h2 peanut protein, the immune system would deem it harmless, and later fail to become allergic—the immunotherapy part. After all, why would the immune system attack a substance made by the mouse's very own cells? As a comparison in our experiment, a control set of mice received a DNA vector without the Ara h2 gene—i.e., they were treated the same as the other mice except their cells would not produce peanut protein. We expected that these mice would later become allergic to peanut protein.

我们在西奈山所做的食物过敏研究是很复杂的。我们小组尝试将基因疗法与免疫疗法结合去"愚弄免疫系统"。基本想法是,如果我们能诱导小鼠自身的细胞产生花生蛋白,我们就可以防止非过敏小鼠的花生蛋白过敏反应。在"基因疗法"方面,我们用含有"基因"的 DNA 载体或 DNA 导入组注入非过敏小鼠,以构建高过敏性花生蛋白 Ara h2。如果它能发挥作用,那么 Ara h2 的导入将被吸收进小鼠自身的细胞中,这些细胞反过来又开始产生 Ara h2 花生蛋白。我们希望如果小鼠自身的细胞能制造并释放 Ara h2 花生蛋白,免疫系统就会认为它是无害的,之后就不会产生过敏反应——这就是免疫治疗的一部分。到底为什么免疫系统会攻击小鼠自身细胞产生的物质呢?作为我们实验的一个对比,一组对照组小鼠被注射了无 Ara h2 基因的 DNA 载体,除了其细胞不能产生花生蛋白外,它们和其他小鼠处理的方式都相同。我们预期这些小鼠之后会变得对花生蛋白过敏。

Three weeks following the DNA injection, we attempted to make both sets of mice allergic to peanut protein using an established protocol that is known to make naive mice "allergic." At this point, we did not

在 DNA 注射三周后,我们尝试通过已知的使单纯小鼠"过敏"的方案,使两组小鼠都对花生蛋白过敏。在这一点上,我们没有想到所有小鼠

expect either set of mice to be allergic to peanut protein. To our surprise, when we were getting ready to sensitize the mice to peanut protein, we discovered that the mice receiving the Ara h2-containing DNA vector were already highly allergic (control mice were not allergic). That was the end of a "simple" solution to food allergy. The immune system was definitely not "fooled".

I still think this is a good idea, and we are going to try it again using a modified non-toxic form of the cholera toxin adjuvant that has been shown to be safe for pregnant women and infants. We are adapting to allergies for the first time, a novel form of delivery.

At about the time we did the gene therapy experiment I attended a fundraiser for the Jaffe Institute where I sat with a number of food allergy mothers who one-by-one recounted their sad stories about raising a child with food allergies. My co-author tells this story in his previous book: I told the mothers about my work with TCM in my clinic and they expressed a wish that I would be able to achieve similar results with food allergies to those I had with eczema. Their stories convinced me as a physician scientist that I needed to do what I could for patients now, not just work on ideas that may help over ten years from now. With great courage and wisdom and above all with compassion for patients, Dr. Sampson agreed to support my work on using TCM to treat food allergies.

Traditional Chinese medicine gives us a head start because it has developed over thousands of years in

都对花生蛋白过敏。出乎意料的是，当我们准备使小鼠对花生蛋白敏化时，我们发现那些注射了含有 Ara h2 的 DNA 载体的小鼠，已经对花生蛋白有了很高的过敏性反应（对照组小鼠却不过敏）。这就是一个简单的解决食物过敏的方法。免疫系统绝对不会被愚弄。

我仍然认为这是个好主意，我们将再次尝试使用改良后的无毒型霍乱毒素佐剂，这种佐剂已被证明对孕妇和婴儿是安全的。我们第一次将其改良后用于过敏，这是一种全新的治疗方式。

大约在我们进行基因疗法实验的时候，我加入了杰夫研究所的筹款活动，在那里我和许多妈妈们坐在一起，听她们一个一个讲述关于如何抚养有食物过敏症的孩子的悲惨故事。我的合作者在他的前一本书里讲了这样一个故事：我告诉妈妈们我在我的诊所里所做的关于中医药的工作，她们表示希望我能够在食物过敏方面的研究取得和湿疹方面相似的结果。她们的故事使我更坚信作为一名内科科学家，我现在就要尽我所能帮助病人，而不仅仅是思考可能十多年后对他们有所帮助。桑普森博士（Dr. Sampson）以其极大的勇气和智慧，尤其是对患者的同情，同意支持我利用中医药治疗食物过敏。

传统中医药为我们开创了先河，它在应对历史上的医学挑战中已经

response to the medical challenges of the age. It is very practical. The history gives us clues about how to treat specific symptoms. During the Tang Dynasty (618—907) there were many wars so they learned to treat open wounds. During the Qing Dynasty (1611—1911) there were many fevers. This was also the period when contact with Europe picked up and later America, which was the start of integrative medicine. White Tiger Decoction was used for fever and it had the wonder drug aspirin as well as herbs. Chinese doctors learned how to use injections and IVs. Today, Western science helps us understand how the medicines work and how to make them better. The treatments I use for eczema incorporate medications developed for damage from burns suffered in battle. Intestinal parasites have been a problem in China for thousands of years. I treated them with modern medicines when I was a barefoot doctor as a teenager, but we have herbal treatments for them, one of which became the basis for my herbal food allergy treatment.

发展了数千年。它非常有效。历史为我们提供了如何治疗特定病症的线索。唐朝(618—907)战事连绵,所以他们学会了治疗开放性伤口。清朝(1611—1911)时出现许多发烧病症,这也是和欧洲以及后来和美洲开始了交往的时期,整合医学也从此产生。白虎汤用于治疗发烧,它含有神奇的药物阿斯匹林和中草药。中国医生也学会了如何使用注射器和静脉注射。今天,西方医学帮助我们了解这些药物以及如何更好地使用它们。我用来治疗湿疹的药物就含有为治疗战争中烧伤而研制的药物。肠道寄生虫在中国已存在了几千年。当我年少还是一名赤脚医生的时候,就开始利用现代医学来治疗此症,但我们用的是中草药,其中一个药方成为我后来用草药治疗食物过敏的基础。

The Dynastic age of Chinese history is over. But the new global age presents medical challenges that are as much a part of our time as wounds and infectious diseases were in earlier times. I call these "good life" diseases, such as obesity, diabetes, and allergies, of course. All these conditions have long histories, but our current age has made them much more common. The epidemics of these conditions may have started in Westernized, affluent countries, but globalization brings with it pollution, dietary changes, new medical practices, and all the other things that seem to contribute to these diseases. Good life diseases, diseases of affluence, are increasing rapidly in countries where

中国历史上王朝时代已经结束。但是新的全球时代所带来的医学挑战,同早期的创伤和传染病一样,成为我们时代的一部分。我称之为富贵病,比如肥胖、糖尿病和过敏性疾病。这些疾病都存在已久,只是在当下更加普遍。这些疾病的流行应该源于西方比较富足的国家,但是全球化带来了污染、饮食变化、新的医学实践,以及似乎导致这些疾病的所有其他因素。这些富贵病在那些基本卫生条件得到保障的国家里迅速蔓延。