FOREWORD
前言

This exciting volume provides the long-awaited sequel to the massive report on diet, lifestyle, and mortality in rural China that Chen, Campbell, Li and Peto published in 1990. That first report opened up a rich mine of information for epidemiological investigation into the causes of many chronic diseases. For China not only had an enormous population living under conditions very different from those that had been intensively investigated in the West, but also the diet, habits, lifestyle, anthropometry and blood biochemistry were themselves highly variable between one part of rural China and another, and so were the mortality rates from many of the world's most common diseases of middle and old age. Now, in this report (which, as it happens, includes the first major epidemiological collaboration across the Taiwan Straits), the authors have provided new data that amplify the earlier findings in mainland China, have added data for Taiwan, have confirmed the geographic variation in mortality from each major disease, and have shown the extent to which, in China as a whole, mortality changed over a period of 13 years of rapid evolution of the rural lifestyle. China in the 1980s, which is the subject of this monograph, was in many respects very different from China in previous decades (and even more so, perhaps, from China in future decades), and it is important to understand the lessons that this large part of human experience can offer.

这本令人激动的专著是期盼已久的陈、Campbell、黎和 Peto 在 1990 年出版的巨著《中国膳食、生活方式与死亡率—六十五个县的调查研究》的姊妹篇。那第一份报告为世人通过流行病学调查来揭示许多慢性疾病的病因打开了一个资料“金矿”。因为在中国，不但数以亿计人的生活环境截然不同于西方所详细调查过的环境，而且中国本身不同农村地区人们的膳食、习惯、生活方式、体格测量结果、以及血液生化指标均有很大差异； 此外，世界上许多中老年人中常见疾病的死亡率在中国不同农村地区亦不相同。在这本专著中（恰好是台湾海峡两岸在流行病学研究方面的第一次合作），作者们提供了新的研究资料支持他们第一次研究的发现，并增加了台湾的资料；研究还进一步证实了各种主要疾病死亡率的地区性差别，并充分反映了 13 年中整个中国农村人群生活方式的快速变化所带来的疾病死亡率变化。1980 年代的中国，与数十年相比，许多方面都有很大的不同（与未来几十年，也许会有更大的不同）。从中国这么大一个人群的经历中吸取一些有益的经验是十分重要的。

The collection, compilation, and analysis of the findings, including the calculation of many thousands of correlation coefficients between mortality rates and local characteristics, has been a Herculean task and could not have been achieved without the perseverance of many hundreds of dedicated local health workers. The results are clearly presented, but the many different patterns that emerge may well take years to assimilate properly into epidemiological understanding. Some patterns are of obvious significance, such as those suggested by the age-standardised mortality rates newly calculated for some 75 causes of death in the 69 rural counties. These mortality rates are set out for each county, and are contrasted with the corresponding rates for urban China, Japan, the UK, and the USA, and with the rates in rural China 13 years previously. The changes in the rural mortality rates provide evidence of notable progress in the conquest of infectious diseases, most markedly in childhood, but not in the control of the chronic diseases of middle age. Both for infectious diseases and for chronic diseases, however, the mortality rates continue to show striking contrasts between different parts of rural China, and between rural China and other populations, that should provide important leads to causation, many aspects of which are still unclear.

本研究中数据的收集、整理和分析，包括计算数以万计的死亡率与各地区特征之间的相关系数，是一项极为艰巨的工程；如果没有数百名现场医务工作者坚定不移的献身精神，是不可能实现的。本书清楚地描述了研究结果，但要从流行病学的角度彻底地解释本书所展示的许多不同的变化模式，还需要相当长的时间。有些变化模式具有明显的重要性，比如那些由最新计算的 69 个县的 75 种死因的年龄别标化死亡率所揭示的变化模式。本书列出了各县的死亡率并比较了相应的中国城市、日本、英国和美国的死亡率，也比较了 13 年前中国农村的死亡率。中国农村死亡率的变化为证明中国在控制传染病方面（特别是儿童）所取得的突出成绩提供了证据；但是，在中年人的慢性病方面却未得到控制。然而，在中国不同农村地区之间和中国农村人群与其他人群之间，无论是传染性疾病或慢性病的死亡率均有巨大的差异，这些差异可为病因学研究提供重要线索，因为其中不少造成差异的原因，尚不清楚。

The multiple geographic correlations that accompany these mortality rates, and that relate them to a wide range of biochemical, dietary, and behavioural factors, will be even more of a challenge to the reader and are another feature that make this volume an essential component of any worthwhile epidemiological library (and electronic

伴随这些死亡率并且将其与变化范围极广的生化指标、膳食和行为因素相连的众多地区间相关性研究结果，对读者而言将是更多的挑战。这一特色也使本书成为任何真正好的流行病学图书馆（和电子信息库）的一个重要组成部分。当然，

database). All, of course, is not gold that glitters statistically, and while the fresh eyes of young epidemiologists may be inspired by some highly significant geographic correlation that their relatively jaded seniors may dismiss as an artefact, it has to be remembered that even real geographic correlations are difficult to interpret reliably; moreover (though perhaps less importantly), even some "p-values" of less than one in a thousand will inevitably have occurred just by chance, when so many correlations have been calculated. Conversely, some expected correlations may not have been seen because of chance, or because of geographic differences in diagnostic accuracy, changes over time, incomplete information, or because the real geographic variation in some important causes (for example, blood pressure or smoking) may be much less than that in other, as yet unidentified, causes. This is no criticism; only a reminder of the danger of superficial examination and the need for thoughtful scientific judgement. In other words, the information provided here, like all "ecological" data, has to be interpreted in the light of other knowledge. With this proviso in mind, the content of the work will provide for the discerning reader some of the most stimulating and potentially productive observations on patterns of geographic variation ever to have been brought together in a single medical text.

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未必所有的统计学的显著性结果均有实际意义。当年轻的流行病学学者可能从某些高度显著的地区性相关中获得启示时，这些相关可能被老一代学者看作是不屑一顾的假象。必须牢记即使是真的地区性相关也很难作可信的解释；进一步说（尽管也许不很重要），在计算了如此之多的相关系数后，即使 “p 值”小于千分之一也不可避免有由于偶然性而造成的可能。相反，有些预期的相关关系可能发现不了，也可能是由于偶然性，或由于地区间诊断准确性的不同、时间的变化、信息收集不全，或某些重要致病因素（如，血压或吸烟）的真正地区性差异大大小于其它未知因素的地区性差异。这并不是批评，而是提醒读者对结果作肤浅的解释是危险的，需要经过深思熟虑才能作出科学判断。换而言之，本书所提供的信息，和所有的“生态学”资料一样，必须结合其它方面的知识来进行解释。如果记住这一点，则本书将为那些有洞悉力的读者提供一些最富有启发性的和潜在价值的，任何单一主题医学文献所不能涵盖的关于地区性差异模式的观察资料。

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