

Mathieu Torck, *Avoiding the Dire Straits: An Inquiry into Food Provisions and Scurvy in the Maritime and Military History of China and Wider East Asia*. Wiesbaden: Harrasowitz (East Asian Economic and Sociocultural Studies: East Asian Maritime History; 5), 2009, 268 pp.

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In spite of a clear need, there are not many studies devoted to specific syndromes recognized in Chinese medicine. This is in large part due to the generality of much of the relevant Chinese terminology that makes the identification of syndromes difficult at best, and a poor fit between Western and Chinese categories that makes comparison almost impossible. It is also due to the fact that research on a given Chinese syndrome can be protracted and complex, a result of the at times highly confusing ways in which the source materials is organized (try reading through one of the more complicated monographs from a text such as the *Bencao gangmu* 本草綱目 to gain a taste), and the sheer amount of important documentation (included printed medical texts becoming a flood in Song times (960-1279) that must be sifted through to validate a study. Secondary scholarship is also highly limited, if existent at all, for most focuses. Such studies are, as a consequence, not easy and Mathieu Torck is to be congratulated that he has not only put together a superb and extremely well documented study on scurvy in East Asia, meeting any and all requirements that could possibly be placed on such a study, but that he has done so in the wider context, a not illogical one, of the world of maritime history (yielding one more study that Angela Schottenhammer has been godmother to). He has created a work that can profitably be read by specialists in this area, as well as by researchers in Chinese medicine.

Torck's book is in six chapters beginning with a discussion of scurvy in Western history, including its biology, and introducing the subject of

the non-Western experience with the disease, one that he shows is little documented. Chapter 2 then looks at scurvy in the Chinese medical literature including treatment (the surprise is the use of horse milk and horse brain), establishing along the way that the Chinese syndrome *qing-tui yagan* 青腿牙疳 is, without question, scurvy. Chapters 3 and 4 then focus on what is to this reviewer the real kernel of the book, the key issue of Chinese maritime activity and food (and water) supplies, providing a capsule history of China (and Japan and Korea) and activity in the seas off the Chinese and other East Asian coasts. What is particularly interesting about these two chapters is how Torck takes what is essentially a minimal amount of evidence to draw major conclusions thanks to careful attention to a comparative approach and an excellent use of what evidence there is (some of it is decisive, even when mentioned in passing). Next, chapter 5 deals with the introduction of Western knowledge about scurvy to China and the implications of this introduction, including a new Chinese terminology for scurvy itself. Finally, chapter 6 brings it all together with a well based presentation of what Torck thinks the sailors' diet must have been in imperial China before the full impact of the West, and the implications of this for an understanding of why the Chinese, in spite of a genetically enhanced susceptibility to scurvy, were able to deal with the problem more or less successfully during a period when scurvy was, in many ways, the scourge of Western sailors. And, here again, the author offers some surprises, the potential importance of tea, when you cook it hot enough, as a factor in reducing the incidence of scurvy, for example, and the fact that while pickled vegetables may lose much or all of their vitamin C, particularly when dried rather than pickled, the water that they are pickled in may retain it and if used in food would provide a good source of vitamin C. But such nuggets of information only scratch the surface of what is a very rich study, one that is extremely well done and extremely well documented.

In short, Torck has provided us with a most useful and interesting book, one that belongs in any library worth its salt and in private collections, and that at \$72 a copy on Amazon.com (€ 46,70 from the German Amazon) at present his is a book that will not bankrupt us. To be sure, this will not be the final word on the subject, but it is unlikely that future studies will do much more than build on the fine foundation that Torck has laid down. Of particular importance for the present reviewer would be expanding his results to cover scurvy in still other contexts such as the key Mongol one, where fermented horse's milk was also a good source of Vitamin C and many traditional foods may have been selected as Vitamin C sources, even if the basis was empirical rather than scientific. Much to do here, but Torck has made a wonderful beginning.