

PREFACE.

A knowledge of the fundamentals of human physiology is essential in the training of the dental student, because physiology constitutes, along with anatomy, the basic science upon which all medical and surgical knowledge is founded; and dentistry is a highly specialized department of surgical practice. To operate on the teeth without knowing something about the physiology of the body as a whole, would reduce the dentist to the level of a craftsman who, although perhaps very highly skilled in his technical work, was yet quite ignorant of the nature of the machine upon a part of which his work had to be done.

But there are also practical reasons why the dentist should be familiar with physiology, for good health, and not good looks alone, depends very largely on sound teeth. The neglect of this fact may cause disturbances in bodily functions to which, at first sight, the teeth may apparently bear very little relationship; thus, extreme emaciation, with its consequent lowering of the normal resistance of the body towards disease and infection, is well-known to be frequently due to no other cause than some abnormal or pathological condition affecting the teeth; and, on the other hand, this very condition itself may become intractable to the most skilled dental treatment and hygiene, if measures are not taken at the same time to improve the general health. Although it is obviously beyond the province of the dentist to undertake the treatment of these general conditions, yet it is most important that he should be sufficiently familiar with the normal functioning of the human body to be able to recognize what is really at fault. A knowledge of the laws of nutrition and dietetics must therefore form a most important part of every course in dentistry, and these have received particular attention in this book.

The physiology of the digestive system, of the circulation of the blood and of the nervous system is scarcely less important. The pain and shock produced by a dental operation may cause considerable disturbance in the action of the heart or in the distribution of blood in the body, and this disturbance, especially