

Vitamin B-6 (Pyridoxal Phosphate): Chemical, Biochemical and Medical Aspects

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After a summer which has seen two international congresses on vitamin B-6, each of which resulted in a fat volume of Proceedings, as well as a number of critical reviews on specific areas of interest, it is difficult to be very enthusiastic about a 1300 page work on the subject. The book is some 2–3 years out of date – an inevitable consequence of a multi-author volume of this type – with few citations of papers more recent than 1982.

The major part of this book covers the chemistry and biochemistry of vitamin B-6, with some 400 pages on the enzymology and crystallography of pyridoxal phosphate-dependent enzymes, including a chapter on suicide substrates and 120 pages on analytical methodology. This section is largely descriptive, rather than providing what might be regarded as 'recommended methods', although there is a reasonably detailed description of several HPLC methods. Methods for determining vitamin B-6 nutritional status are only briefly mentioned, and the criticisms of the interpretation of the tryptophan load test are not discussed.

Clinical, nutritional and metabolic aspects of vitamin B-6 are covered in less than 200 pages. Much of what there is on these 'applied' topics is at a rather superficial level, cataloguing published papers rather than examining data critically to determine whether or not vitamin B-6 deficiency is a widespread problem. The interactions of oestrogens and vitamin B-6, and the role of pyridoxal phosphate as a cofactor in steroid hor-

mone action, are covered in a very cursory manner; perhaps here more than in many other areas the book shows its age.

There is some overlap between different chapters, perhaps reflecting the large number of contributors. More seriously, Snell, in an introductory chapter, lays out clearly the (IUPAC-IUB) rules of nomenclature for vitamin B-6, yet at least one author uses the old term 'pyridoxine' interchangeably with 'vitamin B-6' as a generic descriptor, ignoring the fact that this is the specific name for the alcohol form of the vitamin. Similarly confusingly, some authors use the recommended 'B-6', while others use 'B₆'. Surely such discrepancies could and should have been sorted out in the editorial process.

The book is well indexed, and includes an index of the authors of papers cited, which at least enables egotists to see how many (or few) of their papers have been quoted.

The editors are to be congratulated on bringing together a large number of contributing authors, apparently within a reasonable time-scale, but I remain to be convinced of the real usefulness of such a massive work, which will frighten off the post-graduate student, and will not excite the experienced worker in the field. Critical essays on limited topics, with a shorter publication time, are surely more useful.

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