

Web report

Acid–base tutorial

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Website Acid–Base Tutorial

URL <http://www.acid-base.com>

Cost Free

Keywords acid–base imbalance, acidosis, alkalosis, blood gas analysis

The Acid–Base Tutorial is a comprehensive and interactive resource devoted to abolishing the stigma of complexity with which students associate acid–base imbalances. This is a learning site that provides interactive explanations of many aspects of acid–base physiology utilizing chemical, mathematical, and graphical representations.

The tutorial homepage offers a colourful, box-structured table of contents made up of 21 main links covering topics such as the physiology of acid–base disorders, the interpretation of blood gases, respiratory and metabolic treatments, and also includes a direct e-mail link to the author. There is a 'Terminology' link that provides detailed definitions and descriptions of 22 common terms, 'Index' and 'References' links, and a 'Plastic Cards' link that provides the option of ordering a pocket 'acid–base card'.

Most of the main links open a separate pop-up window containing numerous sublinks through which the user can navigate. Key terms are highlighted throughout the text and are linked to their definition or corresponding sections within the website, with references linked to their full citation. This may cause confusion for some, as it is easy to lose one's navigational path after more than a few links have been opened.

The interactive aspects of the site are innovative, and are very helpful. An interactive option called the 'pH Playground' allows the user to manipulate blood gas values, and provides explanation of the corresponding disorder that results. 'Test Yourself' is an interactive multiple choice test for sample blood gases, with automatic assessment and evaluation of the overall acid–base scenario.

The Acid–Base Tutorial is an innovative tool that students at all levels can use to build a better understanding of acid–base physiology and the clinical interpretation. The website provides a complete approach to learning with visually appealing graphics, and interactive illustrations of difficult concepts.

Best features

The visual graphics are well designed, and the interactive components allow for active learning.

Worst features

As a tutorial, it lacks a logical stepwise learning approach. The order of the main page links could be better organized to maximize ease of use/learning.

Wish list

A detailed index or 'checklist' would be helpful to allow the user to monitor their progression throughout the various stages of the tutorial and completion thereof.

Other links

The Anaesthesia Education Website – Acid–Base Physiology On-line Tutorial
<http://www.qldanaesthesia.com/AcidBaseBook/Abindex.htm>

The free Acid–Base Physiology On-line Tutorial website provides an online textbook approach to learning. It utilizes a chapter-based layout, with examples, but lacks interactive features. The website also provides references with abstracts.

Competing interests

The authors declare that they have no competing interests.