Solution, Isotonic Encyclopedia Article

Solution, Isotonic

The following sections of this BookRags Literature Study Guide is offprint from Gale's For Students Series: Presenting Analysis, Context, and Criticism on Commonly Studied Works: Introduction, Author Biography, Plot Summary, Characters, Themes, Style, Historical Context, Critical Overview, Criticism and Critical Essays, Media Adaptations, Topics for Further Study, Compare & Contrast, What Do I Read Next?, For Further Study, and Sources.

(c)1998-2002; (c)2002 by Gale. Gale is an imprint of The Gale Group, Inc., a division of Thomson Learning, Inc. Gale and Design and Thomson Learning are trademarks used herein under license.

The following sections, if they exist, are offprint from Beacham's Encyclopedia of Popular Fiction: "Social Concerns", "Thematic Overview", "Techniques", "Literary Precedents", "Key Questions", "Related Titles", "Adaptations", "Related Web Sites". (c)1994-2005, by Walton Beacham.

The following sections, if they exist, are offprint from Beacham's Guide to Literature for Young Adults: "About the Author", "Overview", "Setting", "Literary Qualities", "Social Sensitivity", "Topics for Discussion", "Ideas for Reports and Papers". (c)1994-2005, by Walton Beacham.

All other sections in this Literature Study Guide are owned and copyrighted by BookRags, Inc.

Contents

Solution, Isotonic Encyclopedia Article.....1

Contents.....2

Solution, Isotonic.....3

Solution, Isotonic

A solution is isotonic with another solution if it neither to gains water from, nor loses water to, the second solution when separated from it by a semipermeable membrane. This is the case when the solution has the same osmotic concentration as the second solution, For that reason such solutions are sometimes called isosmotic. The membrane is assumed to be freely permeable to the solute (usually water) but impermeable, or nearly so, to substances in solution or suspension in the two fluids. Growth medium used to culture animal cells must be isotonic with the protoplasm of the cells to avoid damage. A solution of 0.9% sodium chloride, sometimes called "physiological saline," is isotonic to human cells.