

## Relationship of infantile colic to breath hydrogen and lactose malabsorption

**Author:**

Miller, John James

**Publication Date:**

1989

**DOI:**

<https://doi.org/10.26190/unsworks/12434>

**License:**

<https://creativecommons.org/licenses/by-nc-nd/3.0/au/>

Link to license to see what you are allowed to do with this resource.

Downloaded from <http://hdl.handle.net/1959.4/67697> in <https://unsworks.unsw.edu.au> on 2024-02-01

UNSW LIBRARY  
MBT618.9233/3



>008714690

J. J. MILLER

PHD 618.9233/3

PHD

1989

UNSW

THE UNIVERSITY OF NEW SOUTH WALES

DECLARATION RELATING TO DISPOSITION OF  
PROJECT REPORT/THESIS

This is to certify that I JOHN JAMES MILLER being a candidate for the degree of Doctor of Philosophy am fully aware of the policy of the University relating to the retention and use of higher degree project reports and theses, namely that the University retains the copies submitted for examination and is free to allow them to be consulted or borrowed. Subject to the provisions of the Copyright Act, 1968, the University may issue a project report or thesis in whole or in part, in photostat or microfilm or other copying medium.

In the light of these provisions I declare that I wish to retain my full privileges of copyright and request that neither the whole nor any portion of my project report/thesis be published by the University Librarian and that the Librarian may not authorize the publication of the whole or any part of it, and I further declare that this preservation of my copyright privileges shall lapse from the first day of January 1990 unless it shall previously have been extended or revoked in writing over my hand.

I also authorize the publication by University Microfilms of a 350 word abstract in *Dissertation Abstracts International* (applicable to doctorates only).

Signature.....

Witness.....

Date 16-3-89

**RELATIONSHIP OF INFANTILE COLIC TO BREATH  
HYDROGEN AND LACTOSE MALABSORPTION**

Presented as a thesis for the degree of

**Doctor of Philosophy**

of

**The University of New South Wales**

**Department of Food Science and Technology**

by

**John James Miller B.Sc.(Hons), M.Sc.**

**March ,1989**

UNIVERSITY OF N.S.W.

15 FEB 1990

LIBRARY

DECLARATION

I hereby declare that this thesis is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award of any other degree or diploma of a university or other institution of higher learning, except where due acknowledgement is made in the text of the thesis.

\_\_\_\_\_  
U John Miller

ACKNOWLEDGEMENTS

Many people made possible the research described in this thesis, not least the 250 mothers and babies who participated in the studies.

I gratefully acknowledge the support, guidance and editorial assistance of my supervisor, Dr. G. H. Fleet, and my co-supervisor, Dr. J. C. Brand, Human Nutrition Unit, University of Sydney. Professor R. A. Edwards provided the opportunity and encouragement to undertake a Ph.D. programme and Mr. M. V. Cass, Managing Director, CSL-NOVO Pty. Ltd., made it possible to continue the programme. Mr. M. S. Sharpe, Managing Director, Sharpe Laboratories Pty Ltd., provided the lactase enzyme and placebo, and the lactose-hydrolysed and lactose-containing formula feeds. The enthusiastic assistance of Dr. P. McVeagh, Consultant Paediatrician, Dr. H. Chilton, Director of Newborn Care, Royal Hospital for Women and Mr. R. Adams, Principal Research Scientist, CSIRO Division of Food Research was sincerely appreciated. Tresillian Family Care Centres granted the financial support to enable the second study in this thesis to be carried out.



I thank:-

- Mrs. Frances Duncan for typing the protocols, manuscripts and this thesis,
- Dr. J. MacDonald, Matron M. Newman, Matron P. Fikar and the staff of the Tresillian Willoughby Residential Unit,
- the nursing staff of the inner metropolitan Baby Health Centres,
- Mrs. J. Millar,
- Sister A. Mitchel of the Karitane Mothercraft Society,
- the nursing staff of the Newborn Care Unit of the Royal Hospital for Women,
- members of the Sydney group of the Nursing Mother's Association of Australia,
- Mr. T. Robb, Senior Scientist, Adelaide Children's Hospital, for the supply of a model of the valve system for the breath collection device,
- the consultant paediatricians to Tresillian for permission to study their patients,
- Dr. P. Petocz, University of Technology and Dr. D. Shaw, Siromath Pty. Ltd., for statistical advice,
- Professor A. S. Truswell for permission to use the facilities of the Human Nutrition Unit, University of Sydney,

- Associate Professor M. A. Messer, University of Sydney, for access to the facilities and techniques for measuring oligosaccharides,
- Associate Professor R. G. Barr for permission to use the parental diary of infant cry and fuss behaviour,
- Professor R. B. W. Elliott for the loan of equipment.

Lastly, I thank my wife, Jennie, for her advice and patience, my son, Ryan, who screamed for the first three months after birth and provided the idea for this research, and my daughter, Alexandra, for her 'participation' in the study described in Chapter 6.