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## **Streets and streams : health conditions and city planning in the Graeco-Roman world**

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# Streets and Streams

Health Conditions and City Planning  
in the Graeco-Roman World

Cornelis van Tilburg

Parentibus

Streets and Streams  
Health Conditions and City Planning in the Graeco-Roman World

PROEFSCHRIFT

ter verkrijging van  
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**A ‘Healthy Mistake’: The Excrement Problem from Ancient Greece to Nineteenth Century Holland**

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Cover illustration: Decumanus, model of Forum Hadriani in Swaensteyn Museum, Voorburg. Photo: Cornelis van Tilburg / edited by Daydream Productions



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1. 'Traffic Policy and Circulation in Roman Cities', was originally published in *Acta Classica* 54 (2011) 149-171.

2. 'Gates, Suburbs and Traffic in the Roman Empire', was published in *BABesch* 83 (2008) 133-147. I am grateful to the late Dr Arie van Heck for his help and for his translation of the Italian sources.

3. 'Greek and Roman Ideas about Healthy Drinking-water in Theory and Practice' is reprinted here from *Eä Journal of Medical Humanities & Social Studies of Science and Technology/Revista de Humanidades Médicas & Estudios Sociales de la Ciencia y la Tecnología* 5 (Junio 2014) 1: 1-30.

4. 'Opinions concerning Faeces and Urine in the Graeco-Roman World' is under review for an international journal. I am grateful to Marilyn Hedges MA (Universiteit Leiden) for correcting the English and to Dr Cisca Hoogendijk (Universiteit Leiden) for her help with the papyrological sources.

5. 'A "Healthy Mistake": The Excrement Problem from Ancient Greece to Nineteenth Century Holland' is published in A. Karenberg, D. Groß and M. Schmidt (eds), *Forschungen zur Medizingeschichte. Beiträge des Rheinischen Kreises der Medizinhistoriker*. Kassel 2013, 103-117 [Schriften des Rheinischen Kreises der Medizinhistoriker 3].

A Dutch version of this article 'Een heilzame vergissing: Het urine- en fecaliën-

probleem van Grieken tot Gouwenaars’, appeared in *Studium* 5 (2012) 1: 34–52. I am grateful to Prof. Eddy Houwaart and the staff members of the MA course Medical History vU University Amsterdam/Leiden University for their role in the publication of the latter version.

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## Aids to the Reader

The abbreviations used in the Index Locorum are those of the following dictionaries and bibliographies:

Greek authors and their works:

Liddell, H.G., Scott, R. & Jones, H.S. (LSJ). 1996. *A Greek-English Lexicon*. Oxford.

E.g. Ar. *Lys.* 88 → Aristophanes, *Lysistrata* 88.

If abbreviations are lacking, I have written the author and/or title in full:

E.g. Eusebius, *Commentarius in Isaiam* 1.99.

I have added the abbreviation *Med. Coll.* referring to Oribasius' *Collectiones Medicinae*. This abbreviation is lacking in LSJ.

E.g. Ruf. apud Orib. *Med. Coll.* 5.3.12-16.

Latin authors and their works:

Glare, P.G.W. 1982. *Oxford Latin Dictionary*. Oxford.

E.g. Pl. *Cur.* 123 → Plautus, *Curculio* 123.

Hippocratic Corpus:

<http://cmg.bbaw.de/online-publikationen/hippokrates-und-galenbibliographie-fichtner>

Between brackets, the pages of the Loeb editions are mentioned, followed by a L. quotation, referring to the edition of Littré, É. 1961-1982. *Oeuvres complètes d'Hippocrate etc.* Amsterdam.

E.g. Hipp. *Aph.* 3.22 (130 Jones = 4.496 L.) → Hippocratic Corpus, *Aphorismi* 3.22 (p. 130 of the Loeb series edited by W.H.S. Jones = vol. 4, p. 496 of the edition of É. Littré).

Galen and Galenic Corpus:

Singer, P.N. (ed.). 2014. *Psychological Writings: Avoiding Distress, Character Traits,*

*The Diagnosis and Treatment of the Affections and Errors Peculiar to Each Person's Soul, The Capacities of the Soul Depend on the Mixtures of the Body.* Cambridge.

Between brackets, the pages of the Kühn edition (K.) are mentioned, referring to the edition of Kühn, C.G. 1821-1833. *Claudii Galeni Opera omnia.* Hildesheim.

E.g. Gal. Nat. Fac. 1.6 (2.14 K.) → Galen, *De Naturalibus Facultatibus* 1.6 (vol. 2, p. 14 of the edition of C.G. Kühn).

I have harmonised, corrected and completed the references in the chapters in this volume in accordance with these rules.

In this volume, the page numbers of the original publications are mentioned in bold, between square bold brackets.

E.g. [37] refers to page 37 in the original publication.