

History of the mouthwash

This is one chapter of the Encyclopedia of the History of Dentistry.

Dr. Andrew I. Spielman, DMD, Ph.D.,

Professor of Molecular Pathobiology, Director of the Rare Book Library and Historical Archives,
New York University College of Dentistry, New York, NY, USA.

ais1@nyu.edu

Dr. Forrai Judith, D.Sc.,

Semmelweis University, Institute of Public Health, Department of History of Medicine, Budapest, Hungary

forrajjud@gmail.com

Initially submitted 28 March 2023; accepted for publication 15 April 2023

Please cite this article as: History of the mouthwash. In: Encyclopedia of the History of Dentistry. Forrai J, Spielman AI eds. 2023. Doi: [10.32558/encyclopedia.dentistry.13](https://doi.org/10.32558/encyclopedia.dentistry.13)

Abstract

Cleaning one's mouth either by mechanical or chemical means was advocated from ancient times.

Keywords: toothbrush, dental floss, dentifrice, halitosis, miswak, mouthwash, oral hygiene, toothpaste, toothpick

Cleaning one's mouth either by mechanical or chemical means was advocated from ancient times. The earliest evidence of using mouthwash was in Ancient China and India. It contained an extract of the Barringtonia tree mixed with "mustard, Bengal pepper, ginger, alkaline ash, and salt" (1,2). The Roman poet Gaius Catullus recommended daily gargling with one's urine, a habit still advocated in 1746 by the "Father of Modern Dentistry, Pierre Fauchard (3).

A typical description of how one should care for clean teeth is found in the 1530 Zene Artzney, the first book dedicated to dental remedies (4). In William Vaughn's 1602 treaty, "*take a linen cloth, and rub your teeth well within and without, ...take halfe a glasse-full of vineger, and as much of the water of the mastic tree of rosemarie, myrrhe, mastick, bole Armoniake, Dragons herbe, roche allome, of each of them an ounce (...)* and wash your teeth therewithall as well before meate as after" (5).

Gargling with one's urine gradually fell out of favor by the middle of the 18th century with the invention of a more appealing mouthwash, "*l'Eau de Botot*", invented by Dr. Julian Botot, physician to King Louis XV. It included gillyflower extract (clove), star anise, and cinnamon and claimed to heal dental pain and keep

teeth and gum healthy (6). Even late medieval formulations of the mouthwash included antibacterial and antifungal agents such as *Barringtonia* extract or ginger.

At the end of the 19th century, the modern mouthwash was introduced. Its formulation included antibacterial, anti-inflammatory, and antifungal agents. In 1879 Dr. Joseph Lawrence of St Louis, MO, and Jordan W. Lambert, introduced *Listerine* as a surgical antiseptic. It contained alcohol and four essential oils, including menthol, thymol, methyl salicylate, and eucalyptol. Later, specific antibacterial agents were added to mouthwash, including urea, dibasic ammonium sulfate (1949), sodium hexametaphosphate, hydrogen peroxide, chlorhexidine, zinc chloride, benzoic acid, and, from 1955, as an anti-caries agent, sodium fluoride.

References

1. Weinberger B. *An introduction to the History of Dentistry in America*, CV Mosby 1948.
2. Hoffmann-Axthelm W. *History of Dentistry*, Quintessence Publishing, Chicago, Berlin, Rio de Janeiro, Tokyo, p.36 and 189, 1981.
3. Fauchard P. *Le Chirurgien-Dentiste*. Volume 1. 2d Ed, p.167, 1746.
<https://dental.nyu.edu/aboutus/rare-book-collection/book-12.html>
4. Die Zene Arzney. [Artzney Buchlein wider allerlei kranckheyten und gebrechen der tzeen, getzogen auß dem Galeno Avicenna Mesue Cornelio Celso und andern mehr der Artzney doctorn seher nützlich tzu lesen]. 1530. <https://dental.nyu.edu/aboutus/rare-book-collection/16-c/book-1.html>
5. Vaughan W. *Naturall and Artificial Directions for Health, derived from the best philosophers, as well moderne as auncient*. R. Bradocke, London, p.70-76, 1600.
6. Botot J. *Moyens sur pour conserves des dents*. p.30, 1783.