

Luxurious Dentifrice in Rome

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We know a good deal about the dentifrice used in Roman times. The word is derived from *dentifricium*, which, as something that 'rubs' the teeth (*dens* and *frico*), should be powder rather than paste. So we should expect: powder or a solid block was easy to keep, while paste would tend to dry out. That what was used was a powder is confirmed by a passage in an ancient author. Apuleius, who was born in Africa in about A.D. 123, married a middle-aged widow and was charged with using magic against her. In his defence, the *Apology*, Apuleius even had to account for the make-up of some dentifrice that he had recommended to a friend. Apuleius refers to his formula in a verse commercial as a fine, high-class powder (10). In English the word 'dentifrice' was taken over as part of a proprietary name ('Gibbs' Dentifrice') but has passed out of normal usage, so we employ the term 'toothpowder' throughout.

Clearly, the ancients were troubled by dental problems, caries (tooth decay), halitosis, and gum troubles. Among authors of the first century A.D. alone, Scribonius Largus, one of the doctors who attended the Emperor Claudius and who travelled with him to Britain in A.D. 43, and the encyclopaedist Pliny the Elder make that clear. Pliny mentions a horrific remedy for toothache and on a graph of caries rates from Neolithic times to the present, Roman Britain is one of the high points.

Toothpowder speaks out

All the same, the ancients aimed in a positive way at having white, gleaming, healthy-looking teeth, and took a pride in them when achieved. Another writer of the late first century A.D., the poet Martial, has a nice reference to false teeth, which seems to attest the common use of toothpowder (14, 56). 'Dentifricium' is the title of the epigram, and Tooth-powder speaks: 'What have I got to do with you? I'm for a young girl's use: I'm not one for putting a shine on teeth that have been paid for'. Formulae for toothpaste appear in the elder Pliny's *Natural History* alongside remedies for dental problems, and Apuleius, as we have seen, claims that he was asked for an effective formula. But there had to be a limit to the methods used. Two centuries before Apuleius offered his formula, Catullus was attacking the abhorrent practice of the Celtiberians in Spain of using urine to make the teeth whiter and the gums red. Greek prose writers of the age of Augustus go one better and claim that Celtiberians also bathed themselves in urine. Finally, Apuleius continues his defence in court by recommending his opponent to use charcoal off a funeral pyre. We restrict ourselves to decent, approved Graeco-Roman formulae of the first century B.C. and the first and second centuries A.D.

Recipes

Formulae in common use are to be found in Pliny the Elder. 'The Arabian stone, which resembles ivory, can, if calcined, be suitably used as toothpowder (36, 153 tr. Eichholz), and it has been suggested that the unidentified stone may be onyx marble (a quartz related to agate) from the Arabian hills of Egypt. A little later on Pliny alludes to another ingredient of toothpowder, pumice stone, the usually obsidian (that is, vitreous) lava of which he says the best quality comes from Melos, Nisyros, and the Aeolian islands. Finally Pliny mentions calcined *murex* or purple fish – presumably the shell of the animal which was so highly valued for the dye it produced. Of these three ingredient (they are not

necessarily the only ones) even the ground onyx, if that is what it was, might not be too expensive because it would only be made from the chips left over from making onyx vases, its main use, and the pillars so much in vogue for the luxuriously appointed dining rooms of Rome. The verse formula provided by Apuleius for his friend contained vegetable products from Arabia, and he claims that it had medicinal as well as cosmetic properties: it brought down swelling of the gums.

Luxurious princesses

In a competitive society that set a premium on teeth that were not only healthy but whiter than white, the rich and powerful had access to the rarest and what of course were thought to be the most effective ingredients. We find luxury escalating just where it had greatest scope and where success meant most to the contenders: amongst female members of the imperial family. In his book of prescriptions Claudius' doctor, Scribonius Largus, gives the complete formulae for toothpowders used by three imperial ladies (*Compositiones* 58ff.).

First Augustus' sister and Antony's wife, Octavia, who died in 11 BC.

Toothpowder which makes the teeth gleam and strengthens them: one should sprinkle one pint of barley flour with a vinegar and honey mixture, knead it for some time and that done cut into six dumplings. When these have been rolled out mix in half an ounce of rock-salt, then heat in an oven until they are reduced to charcoal. Then one should take the dumplings and mix in what seems to be enough spikenard to make them scented. This is what Octavia, sister of Augustus, used.

Next, Largus offers the formula favoured by Augustus' wife Livia (58 B.C.-A.D. 29):

Most people use toothpowder of this type, too: they pick pellitory-of-the-wall when it has already gone to seed, and with as much of the root as possible; then, after washing it, they dry it for one day and on the following day macerate it in fresh pickling brine; on the third day they squeeze it dry and pack it together in a new pot; from time to time they insert layers, as it were, of rock salt. That done, they cook it thoroughly in a bath-furnace until it is reduced to charcoal. Next, crushing some spikenard until it is one third its original volume, they mix in an adequate quantity to make it a solid consistency. Besides making the teeth white it does also strengthen them. The Empress Livia is well known to have used it.

The main ingredient of this formula is pellitory-on-the-wall (*herba urceolaris* in Largus' Latin), a plant found most commonly on old walls and heaps of rubbish, said to have been introduced into this country by the Romans and to grow on the walls of St. John's College in Parks Road, Oxford. The botanical name is *Parietaria officinalis*, a species of the nettle family, *urticaceae*: this and the English name pellitory are derived from the Latin *paries*, wall, but Largus' name recalls the use to which the plant was put: it was used to polish glass vessels (*urceolus*, pitcher). Nettles contain oxalic acid and are rather gritty; this suggests that the root was valued for a mildly abrasive quality. But with regard to this particular type of nettle, we are told by an expert that its most striking component, a major one is potassium nitrate (saltpetre).

Messallina's tastes

Very different from this homely formula is what follows. 'The recipe used by Messallina [born before A.D. 20, died A.D. 48], on the other hand', continues Largus, 'the wife of our divine Emperor Claudius Caesar is as follows: stags' horns burnt in a new pot and reduced to ashes, one pint; with one ounce of mastic gum from Chios and one eighth of an ounce of Libyan rock-salt'.

The impression given by these formulae is of an increase in luxury between the generation of Augustus' wife and sister and that of his great-nephew's wife: Livia and Octavia used toothpowder with common ingredients, indeed Largus specifically says that Livia's formula was in common use; while two of the ingredients of Messallina's toothpowder are from overseas (mastic gum exudes from the bark of *pistacia lentisus*) - and first catch your stag ... There is another factor to be noticed. For Messallina wanted, not only white, strong, and gleaming teeth: what she used was toothpowder plus: stag's horns have strongly aphrodisiac associations - which the imperial doctor, writing in her heyday between 43 and her execution in 48, naturally fails to mention.

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