5 Weaning and Lactation Cessation in Late Antiquity and the Early Byzantine Period

Medical Advice in Context

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Introduction

I open this chapter with a story that is very evocative of the pains associated with lactation cessation: that of the martyrdom of Perpetua and Felicity, as told in the *Passion of Perpetua and Felicity (PPF)*, a text that exists both in Latin and in Greek. As the Latin version is likely to be the primary one, it is the one I will use.¹

In AD 203, under the rule of Septimius Severus, near Carthage, a group of Christians were put to death in the arena, where they had to fight against wild beasts. The crowds, we are told, were particularly shocked at the appearance of two women in the group, Perpetua and Felicity:

Thus, stripped naked and covered with nets, they were brought forward. The crowd shuddered when it gazed upon them: one a tender girl [Perpetua], the other [Felicity] with her breasts dripping [milk], as she had recently given birth.

Itaque dispoliatae et reticulis indutae producebantur. Horruit populus alteram respiciens puellam delicatam, alteram a partu recentem stillantibus mammis. (*PPF* 20.2, eds Farrell and Williams 2012)

This scene is, as scholars have noted, implausible, as well as being erotically charged. It would not have been possible for the spectators, perhaps even those nearest to the women, to discern the milk dripping from Felicity's breasts.² Yet, this far-fetched scene played an important role in the *PPF*'s narrative; in the words of Alicia Myers, it "reinforce[d] the physicality of the miracles provided by God."³ For the bodies of Felicity and Perpetua, each representing a different stage in the

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¹ There is much scholarship on the *PPF*. See e.g. Cobb and Jacobs 2021; Gold 2018; Heffernan 2012; Bremmer and Formisano 2012b. For the primacy of the Latin, see Bremmer and Formisano 2012a, 2. For the *PPF*, with a focus on the Greek text, see Chapter 1 in this volume. Unless stated otherwise, all translations from the Latin and Greek are mine.

² See e.g. Bremmer 2012; Heffernan 2012, 340; Frankfurter 2009, 221–224.

³ Myers 2017, 144.

lactation cycle had been transformed by the grace of God. Felicity, upon praying to God for deliverance, had given birth to a girl in the famously dangerous eighth month, a few days before the games; her milk was flowing on the arena, perhaps for the first time. Perpetua, for her part, had recently ceased to breastfeed her son and therefore to lactate. We are told the story of this lactation cessation in Perpetua's own first-person narrative, a rare record of an ancient woman's voice, if it is indeed authentic.

In her account, Perpetua referred on several occasions to the breastfeeding of her son, whose age is not specified. Translator and commentator Thomas Heffernan gives this age as 18 months but there is very little to substantiate this claim in Perpetua's narrative.⁵ All we can tell is that the child was not a very small infant when his mother was arrested. Perpetua described in detail the pain she felt upon being separated from her son when she and her companions were arrested and put in prison. She was "distressed by anxiety for [her] baby" (PPF 3.6), an anxiety which, as argued by Stamatia Dova, might have been both mental and physical, as Perpetua's breasts became engorged when they were not drained of milk.6 The Christian group, however, was later moved to another part of the prison, where visitors were allowed. Perpetua then breastfed her son whom she found "weakened because of the lack of food" (PPF 3.8). After a few days, mother and son were allowed to stay in prison together, an event which had a very positive effect on Perpetua: "immediately I regained strength, as I was relieved from pain and anxiety for my baby" (PPF 3.9). The child stayed with his mother, "receiving the breast," until, at a hearing, the Christians were condemned to death in the arena (PPF 6.7). Perpetua's father removed the child, refusing him a last feed, and condemning Perpetua to painful torments. She was, however, saved by God:

But this was God's will, not only did the child no longer long for my breasts, but also they did not cause me fever, so that I may not be distressed by anxiety for my baby and pain in my breasts.

Et quomodo Deus voluit, neque ille amplius mammas desideravit neque mihi fervorem fecerunt ne sollicitudine infantis et dolore mammarum macerarer. (*PPF* 6.8)

Dova interpreted the mention of a *fervor* (fever), *phlegmonē* (inflammation) in the Greek version, as one of "weaning fever," which can accompany sudden lactation cessation.⁷ This touching and detailed description of lactation cessation is unique for antiquity. It is particularly noteworthy for its acknowledgement of the pain, both physical and psychological, that sudden weaning can cause to both mother

⁴ The description of the birth is at PPF 15. See Totelin 2021a, 247–249.

⁵ Heffernan 2012, 151.

⁶ See Dova 2017, 254.

⁷ Dova 2017, 257–258. Heffernan (2012, 207) takes the references to engorgement as a sign that "male authorship [is] less probable."

and child. By contrast, Felicity's pain at being separated from her daughter while her milk was coming in is glossed over in the *PPF*. This silence, perhaps, better reflects the situation in the ancient literature, where women's and children's experiences of breastfeeding, its initiation and cessation, and its emotional impact on the breastfeeding dyad (whether it is constituted of biological mother and child, or nurse and child) are to be read between the lines, teased out from often dispassionate texts, such as the writings of ancient physicians.

In this chapter, I focus on the descriptions of two linked processes, lactation cessation (in a lactating woman) and weaning (in a child), in the works of the Byzantine medical authors, Oribasios of Pergamon (doctor and friend of the emperor Julian the Apostate in the 4th c. AD), Aetios of Amida (active in the 6th c. AD, and perhaps associated with the court of Justinian), and Paul of Aegina (active in the 7th c. AD). As these authors are known to have abbreviated earlier medical authors, I will at times mention those, and in particular Soranos (1st–early 2nd c. AD), Dioskorides (fl. 1st c. AD), and Galen (AD 129–ca. 216/217). I also refer to texts that are very difficult to date but which fall roughly within our chronological span: Metrodora's gynaecological text, and pseudo-Galen's second book *On Procurable Remedies (Rem. Parab.)*. Finally, where relevant, I call upon a few non-medical texts, as well as bioarchaeological evidence.

Weaning

Byzantine medical authors made occasional reference to weaning, *apogalaktismos*, or the act of weaning, *apogalaktizō*. ¹⁰ As these words make clear, the ancients considered weaning as the act of taking away (*apo*) the breastmilk (*gala*) that infants consumed. The advice that they gave, however, indicated that they considered this "taking away from the breast" as the end of a long process, taking place over several months during which infants were slowly accustomed to taking some semisolid and then solid foods, as well as other drinks. In what follows, I will refer to the starting point of this process as "initiation of weaning," when after a period of exclusive breastfeeding, infants are introduced to supplementary foods. I will refer to the end point of the process as "cessation of breastfeeding" or "completion of

- 8 Information on all the ancient medical authors mentioned in this chapter can be found in Keyser and Irby-Massie 2008. Several of the texts studied here are also examined in Gourevitch 1995 and in Lascaratos and Poulakou-Rebelakou 2003. On these and other medical texts, see also Chapters 2, 4, and 6 in this volume.
- 9 Calà and Chesi (2022) suggest a date in the first century AD and discuss other dates, which range between the first and the sixth centuries AD. On the pseudo-Galenic *Rem. Parab.*, see Totelin 2021b.
- 10 Apogalaktismos: Orib. Medical Collections Incerti (Med. Coll. Inc.) 39.1 (CMG 6.2.2, 138.22–23), ed. Raeder 1933; Aet. Tetrabiblos (Tetr.) 4.29 (CMG 8.1, 370.27), ed. Olivieri 1935. Apogalaktizō: Aet. Tetr. 4.28 (CMG 8.1, 370.26). The phrase "apo tou galaktos" also appears in, e.g., Orib. Med. Coll. Inc. 39.1 (CMG 6.2.2, 138.19).

weaning." The process of weaning was – and still is – one that could be risky for the child, who became more prone to illnesses. It also marked an important change in the relation between an infant and its breastfeeder, whether its biological mother or a nurse, and therefore was a turning point in the development of an infant's personhood.¹²

Oribasios is the Byzantine medical author who provided the most advice about the weaning process. In his *Medical Collections* (*Med. Coll.* or *Med. Coll. Inc.*), he presented various summarized passages on the matter which he had extracted from earlier authors (Galen, Rufus of Ephesos, Mnesitheos, and Athenaios), not seeking to resolve differences between them. It is therefore very difficult to determine what exactly Oribasios' views on weaning were. The first author whom Oribasios summarized on the topic of weaning was quite naturally Galen, who had described the weaning process in his *Hygiene* (*San. Tu.*):

From Galen's works, on the rearing of the nursling (*paidiou*) until the age of fourteen. At first, one must feed the nursling (*paidion*) with milk alone. But when **its front teeth have grown**, one must already accustom it in some way to bear some thicker food, as indeed women do, taught by experience, when they pre-chew food and then put it in nurslings' (*paidiōn*) mouths: first a little bread, and next pulses, meats, and other similar things.

Έκ τῶν Γαληνοῦ. Περὶ τροφῆς παιδίου ἄχρι ἐτῶν ιδ. Τρέφειν δὲ τὸ παιδίον τὰ μὲν πρῶτα γάλακτι μόνῳ· ἐπειδὰν δὲ φύση τοὺς πρόσθεν ὀδόντας, ἐθίζειν ἤδη πως αὐτὸ καὶ τῆς παχυτέρας ἀνέχεσθαι τροφῆς, ὥσπερ οὖν καὶ τοῦτο αὐτὸ πείρα διδαχθεῖσαι ποιοῦσιν αὶ γυναῖκες, ἄρτου μέν τι πρῶτον, ἐφεξῆς δ' ὀσπρίων τε καὶ κρεῶν [καὶ] ὅσα τ' ἄλλα τοιαῦτα προμασώμεναι κἄπειτα ἐντιθεῖσαι τοῖς στόμασι τῶν παιδίων. (Orib. *Med. Coll. Inc.* 35 (CMG 6.2.2, 129.21–27))¹³

Galen had identified the cutting of the front teeth as a turning point in an infant's growth. This was by no means a fixed time since, if we assume that teething patterns have not changed much since antiquity, some infants can start teething before four months (some can even be born with teeth), while others will only acquire their first teeth after 12 months. Most infants, however, start teething around six months. ¹⁴ Galen acknowledged women's experience in preparing foods for infants

¹¹ In his important review of the anthropological evolution of infant feeding, Daniel W. Sellen defined weaning as "The termination of suckling. Weaning is a uniquely mammalian life history marker that may or may not be preceded by a period of feeding on other foods in addition to mother's milk" (Sellen 2007, 126). The language I employ is closer to that used in Fulminante 2015.

¹² See Marklein and Fox 2020, 574 for further references.

¹³ The corresponding passage in Galen is *San. Tu.* 1.10.1 (CMG 5.4.2, 23.4–9), ed. Koch 1923; an English translation of *Hygiene* is available: Johnston 2018. The vocabulary referring to young children is not always precise. Here, I adopt the translation suggested by Golden 2015, 11.

¹⁴ See https://www.nhs.uk/conditions/baby/babys-development/teething/baby-teething-symptoms/. Accessed April 2022.

by pre-chewing them, a practice still witnessed in some parts of the world. Not all ancient authors, however, approved of pre-chewing. Mnesitheos (4th c. BC), whose views on weaning were also preserved by Oribasios, noted that "one must not give [the infant] any pre-chewed food, but one must give boiled wheaten flour, cereal meal, or triturated millet. All these must be boiled well and for a long time" (Orib. *Med. Coll. Inc.* 37.4–5 (CMG 6.2.2, 135.25–28)). Despite what is sometimes mentioned in the modern scholarship, neither Galen nor Oribasios in his summary gave a timeline for the completion of weaning and the cessation of breastfeeding at three years of age. Galen, followed by Oribasios, had indicated that until the third year of a child's life (that is, from its second to its third birthday), its nurse should take precautions so that the *krasis* of her milk remains good (Gal. *San. Tu.* 1.9.1 (CMG 5.4.2, 21.34–22.4)). These medical authors did not, however, give a fixed point for breastfeeding cessation, perhaps allowing for flexibility in response to individual circumstances.

Oribasios also preserved Rufus of Ephesos' (1st c. AD) advice on infant feeding, which differed from that of Galen:

From the works of Rufus, on the care of the nursling (paidiou) ... Until a certain time, then, one must maintain [the child] on milk alone, and not give it any other food; but when it itself is eager to take some other food and gives us the hope that it will be able to digest it, then give crumbs of bread in watery wine. One must above all avoid giving meat, because the belly is not yet ready to digest it ... One must also avoid thick soups and porridges, because nothing thick is appropriate for a child since, even without that, it tends by nature to produce phlegm ... It is sufficient to feed the child with milk for two years, and then to change onto [solid] foods.

Έκ τῶν Ῥούφου. Περὶ κομιδῆς παιδίου ... μέχρι μὲν οὖν τινος ἐπὶ μόνου τοῦ γάλακτος φυλάσσειν, σιτίον δ' ἄλλο μηδὲν προσφέρειν ὅταν δ' αὐτό τε πρόθυμον ἢ λαμβάνειν καὶ ἐλπίδα παρέχη ἐκπέψειν, τηνικαῦτα ἤδη <καὶ> σιτίον διδόναι, ἄρτον εἰς ὑδαρῆ οἶνον καταθρύψαντας. τὰς δὲ τῶν κρεῶν προσφορὰς πεφυλάχθαι παντὸς μάλιστα· οὐ γάρ πω ἰκαναὶ αἱ γαστέρες καταπέσσειν ... πεφυλάχθαι δὲ καὶ τὰ ἔτνη καὶ τὰ ῥοφήματα· παχὺ γὰρ οὐδὲν παιδίφ συμφέρει διὰ τὸ καὶ ἄλλως τὴν φύσιν πρὸς τὸ φλεγματῶδες ῥέπειν ... ἀρκεῖ δ' ἔτη δύο τρέφειν τῷ γάλακτι, τὸ δ' ἐντεῦθεν μεταβάλλειν πρὸς σιτία. (Orib. Med. Coll. Inc. 38.13–23 (CMG 6.2.2, 137.12–138.3))

Like Galen, Rufus did not give a fixed time for the initiation of weaning, stating that one should take cues from the child itself, a practice that recalls modern

¹⁵ Danielle Gourevitch (1995, 286) reported having witnessed this "répugnante habitude" ("disgusting habit") in France in her childhood.

¹⁶ Valerie Fildes stated that "the child should be weaned completely from the breast at the age of three, according to Galen" (Fildes 1986, 35). This is often repeated in the literature on ancient weaning.

¹⁷ Cf. Orib. Med. Coll. Inc. 30.1 (CMG 6.2.2, 121.10-14).

"baby-led weaning." Rufus did, however, display a certain anxiety towards supplementary foods, especially those that were "too thick." Rufus also mentioned that it was sufficient to feed an infant on milk for two years. This is a rather ambivalent statement, which can be interpreted either as a recommendation to stop breast-feeding once the infant has reached 24 months or as an acknowledgement that the infant can be exclusively breastfed for two years, even though it might wish to take some food earlier. The former interpretation (breastfeeding to end at 24 months) is perhaps more likely but the recommendation does not amount to a prohibition of breastfeeding beyond two years.

In his shorter works, the *Synopsis for Eustathios (Eust.)* and the *Books to Eunapios (Eun.)*, Oribasios gave advice that was similar to that found in Rufus, perhaps indicating his own preference:

Synopsis for Eustathios: Care of the nursling (paidiou) ... When it itself is eager to take it and gives us hopes that it will be able to digest it, then give it food, avoiding surfeit. If by mistake the child is overfilled, it will immediately become sleepier and sluggish, there will be swelling in the belly and flatulence, and the urine will be more watery. When this is recognized, one must not give the child anything until the food has been consumed. It is sufficient to feed the child with milk for two years, and then to change onto [solid] foods.

Κομιδὴ παιδίου ... ὅταν δ' αὐτό τε πρόθυμον ἦ λαμβάνειν καὶ ἐλπίδας παρέχῃ εἰς πέψιν, τηνικαῦτα ἤδη καὶ σιτίον διδόναι μὴ ἐμπιπλᾶσαν. εἰ δέ που λαθόντα πληρωθείη, ὑπνωδέστερά τε εὐθὺς γίνεται καὶ νωθρότερα, καὶ ὄγκος ἐν γαστρὶ ἔνεστι καὶ φῦσα, καὶ οὐρεῖ ὑδατωδέστερα, οἶς χρὴ τεκμαιρομένην μηδὲν διδόναι, ἔστ' ἂν καταναλώση. ἀρκεῖ δ' ἔτη δύο τρέφειν τῷ γάλακτι, τὸ δ' ἐντεῦθεν μεταβάλλειν πρὸς σιτία. (Orib. Eust. 5.5 (CMG 6.3, 155.15—23), ed. Raeder 1926)

Books to Eunapios: When the nursling (*paidiou*) is able to use other foods [than milk], there should be no obstacle to its efforts, for it is by nature that it reaches for exercises and foods. For **there won't be surfeit**, since much blood is consumed by growth.

τοῦ δὲ παιδίου καὶ τῶν ἄλλων τροφῶν οἵου τε ὄντος ἤδη προσφέρεσθαι, μηδαμῶς ταῖς προθυμίαις ἐμποδὼν γίνεσθαι, φυσικῶς ὁρμῶντος ἐπὶ τὰ γυμνάσια καὶ τροφάς: οὐ γὰρ ἔσται πλησμονὴ πλείονος τοῦ αἵματος εἰς τὴν αὕξησιν ἀπαναλισκομένου. (Orib. Eun. 1.1.8 (CMG 6.3, 320.23–27), ed. Raeder 1926)

¹⁸ See https://www.nhs.uk/conditions/baby/weaning-and-feeding/babys-first-solid-foods/. Accessed 29 June 2022.

¹⁹ For the second interpretation, see Gourevitch and Chamay (1992, 79), who note that some unspecified breastfeeding contracts stipulate a two-year period of exclusive breastfeeding. Children usually reach for food earlier, when they can stay in a sitting position and when their hand–eye coordination allows them to bring food to their mouth. See https://www.nhs.uk/conditions/baby/weaning-and-feeding/babys-first-solid-foods/. Accessed 29 June 2022.

The *Synopsis for Eustathios* passage is particularly close to that of Rufus. It expresses anxiety about surfeit in the infant who is being weaned. That anxiety is not found in the *Books to Eunapios* passage, which emphatically states that surfeit will not occur at this time of growth. This unease around surfeit is also found in a passage of Athenaios (1st c. AD) excerpted by Oribasios, which seems to focus on slightly older children, who have recently completed weaning:

From the works of Athenaios, on healthy regimen. One must allow infants $(n\bar{e}pious)$ who have been taken off milk [i.e. weaned] to live in a relaxed way and in play ... One must give them light foods and in moderate amounts. For those who, during weaning, fill them with foods and try to give them foods that are rather nourishing lead them to poor nutrition and prevent their healthy growth because of the weakness of their nature. Many of these infants, because of frequent indigestion and the downward motions of the belly, suffer from ulcerations and inflammations of the intestines, from prolapses of the anus, and from severe diseases.

Έκ τῶν Ἀθηναίου. Περὶ ὑγιεινῆς διαίτης. Τοὺς νηπίους καὶ ἀπὸ τοῦ γάλακτος γεγονότας ἐν ἀνέσει τε ἐᾶν καὶ παιδιῷ ... καὶ τροφὰς αὐτοῖς προσφέρειν ἐλαφροτάτας καὶ τῷ πλήθει συμμέτρους οἱ γὰρ διὰ τὸν ἀπογαλακτισμὸν ἐμφοροῦντες αὐτοῖς τὰς τροφὰς καὶ ταύτας πειρώμενοι πολυτροφωτέρας διδόναι εἰς κακοτροφίαν καὶ ἀναύξειαν αὐτοὺς περιτρέπουσι διὰ τὴν τῆς φύσεως ἀσθένειαν. πολλοῖς δ' αὐτῶν διὰ τὰς συνεχεῖς ἀπεψίας καὶ τὰς καταφορὰς τῆς κοιλίας ἐλκώσεις τε καὶ φλεγμοναὶ τῶν ἐντέρων καὶ προπτώσεις τῆς ἔδρας καὶ νόσοι χαλεπαὶ συμβαίνουσιν. (Orib. Med. Coll. Inc. 39.1–2 (CMG 6.2.2, 138.18–28))

These precautions around the introduction of new foods were legitimate. Demographic studies indicate a correlation between weaning and infant mortality in antiquity, as weaning exposed children to new bacteria and parasites, and could lead to "weanling diarrhoea."²⁰

Oribasios, then, transmitted several different sets of advice on weaning, not really trying to reconcile them. One of his medical predecessors whose weaning recommendation he did not include was Soranos, whose *Gynaecology* (*Gyn.*) was, by contrast, Aetios' source on the topic of weaning. Here is Aetios' summary on the topic:

When to wean (*apogalaktisteon*) infants (*nēpia*). Until the infant (*nēpion*) has become **firm**, it should be fed milk only. When its body has already strengthened, give some soft morsels in hydromel, honey-wine, sweet wine, or milk; and later eggs that can be sipped ... As a drink, give mixed wine.

²⁰ See e.g. Parkin 2013, 55; Garnsey 1998, 267; Sallares 1991, 231. On the diseases which ancient medical thinking associated with weaning, see Bertier 1996, 2182–2184. On infant mortality more generally and its high rates in antiquity, see also Chapters 1 and 3 in this volume.

As soon as the newborn/small baby (brephous) can confidently take cereal food, which in the majority of cases occurs around the twentieth month, then stealthily and little by little wean from the breast (aposunēthizein). If the child becomes ill while being weaned (apogalaktisthen), one must again change to milk, and when the disease has stopped, and the little body has recovered, only then wean (apogalaktizein)

Πότε ἀπογαλακτιστέον τὰ νήπια. Μέχρις ὰν οὖν παγῆ τὸ νήπιον, γάλακτι τρεφέσθω. ἐστερεωμένου δὲ ἤδη τοῦ σώματος τροφὴν δίδου ψίχας τρυφερὰς ἐξ ὑδρομέλιτος ἢ οἰνομέλιτος ἢ γλυκέος οἴνου ἢ γάλακτος, εἶτα καὶ ἀὰ ῥοφητά· ... ποτὸν δὲ διδόναι οἶνον κεκραμένον· ἤδη δὲ τοῦ βρέφους λαμβάνοντος ἀδεῶς τὴν σιτώδη τροφήν, ὅπερ ὡς ἐπὶ τὸ πολὺ γίγνεται περὶ τὸν κ μῆνα, τότε λεληθότως καὶ κατ' ὀλίγον ἀποσυνηθίζειν αὐτὸ τοῦ μαστοῦ· εἰ δ' ἀπογαλακτισθὲν νόσφ περιπέσοι, πάλιν αὐτὸ δεῖ μεταγαγεῖν ἐπὶ τὸ γάλα. καὶ μετὰ τὸ παύσασθαι τὴν νόσον ἀναλαβεῖν τὸ σωμάτιον καὶ οὕτως ἀπογαλακτίζειν. (Aet. Tetr. 4.28 (CMG 8.1, 370.17–26))²¹

Soranos and Aetios recommended initiating the weaning process when the baby's body became firm, a notion that does not really resonate with modern milestones (unless perhaps the ability to sit counts as "firmness") but is linked to ancient concepts of moulding the malleable body of an infant, which was like wax.²² Soranos had specified that the firmness stage was unlikely to occur before the age of six months (Sor. Gyn. 2.46.3 (CMG 4, 86.9)), but Aetios omitted that information.²³ The importance of the "firmness" stage is signalled by the change of vocabulary to designate the infant: before it is firm, the infant is a brephos (newborn), then it becomes a nepios (infant). Neither Soranos nor Aetios prescribed an end point for breastfeeding. Instead, they recommended slowly and stealthily withdrawing breastmilk: Soranos suggested doing so from the "third or fourth half-year of the infant's life" (Sor. Gyn. 2.47.1 (CMG 4, 86.26–27)), that is, from 12 months to 24 months, linking this stage to the growth of the teeth that enable mastication (molars), while Aetios indicated the 20th month. They also allowed for a return to exclusive breastfeeding if a child became ill during the weaning process.

The final main Byzantine medical encyclopaedist, Paul of Aegina, gave brief instructions on weaning, which are verbatim repetitions from two sections he found in Oribasios: Athenaios' advice on healthy infant diet and Oribasios' summary in his *Synopsis for Eustathios* 5.5 (CMG 6.3, 155.15–23).²⁴

²¹ See Sor. Gyn. 2.46.3–47.1 (CMG 4, 86.7–31), ed. Ilberg 1927; for an English translation of Soranos' treatise, see Temkin 1956.

²² On infant-rearing as moulding wax, see Holman 1997.

²³ Soranos recorded that Mnesitheos and Aristanax recommended weaning girls six months later than boys because they were weaker, a practice he rejected (*Gyn.* 2.48.2 (CMG 4, 87.9–13)). Soranos also indicated that some women attempted to give cereal foods from 40 days (*Gyn.* 2.46.2 (CMG 4, 86.2)).

²⁴ Paul Aegin. Epitome of Medicine (Epitome) 1.5 (CMG 9.1, 10.27–11.6) and 1.14 (CMG 9.1, 13.15–14.3), ed. Heiberg 1921.

In sum, the Byzantine medical authors, and the predecessors from whom they borrowed, were more prescriptive about the beginning of weaning, which should not happen before certain milestones are reached (even if those milestones could be reached at different times by different babies), than about the end of the weaning process, on which they showed much flexibility, because they knew that the weaning period could be beset with dangers and bring with it risks of morbidity and mortality. In any case, they favoured relatively long-term breastfeeding, and never suggested completing weaning before the child had reached 24 months. It is difficult to determine who exactly would have followed this medical advice. but it can be assumed that the medical authors had as their main audience wealthy families, who could often afford wet nurses. As Tracy Prowse et alii rightly noted, these medical texts were "prescriptive rather than descriptive;" they depicted what their authors considered to be good practice and might bear little relation with the lived reality of infants and those who breastfed them.²⁵ Nevertheless, other types of ancient sources ("biographies," documents, and bioarchaeological data) do testify to the breastfeeding of toddlers.

Thus, we find references to children aged two and beyond being breastfed in several saints' Lives dating to the early Byzantine period. For instance, in the *Miracles of Thekla* (2.24, ed. Dagron 1978), we read about a little child "who has just been weaned" (*apotitthon arti gegonos*), who risked losing his sight because he was crying so much as a result of his weaning. His nurse (*tithē*) therefore took him to the church of Thekla in Seleucia. While the exact age of the child is not given, we hear that he was able to walk, run, and play, which would suggest he was around 18 months. Further, in the *Life of Symeon Stylites the Younger* (5–6, ed. Van den Ven 1962), we read that the saint, after being baptized at age two, refused to take his mother's breast whenever she ate meat.

Documentary evidence from Ptolemaic and Roman Egypt, while a little early for the purpose of this chapter, also attests to long-term breastfeeding. Thus, in a letter preserved on a papyrus dating to the first century AD, a mother, Hikane, berates her son, Isidoros, for not writing to her, who had "carried [him] for ten months and nursed [him] for three years" (O. Ber. 2.129 = Trismegistos 89155). Wet-nursing contracts preserved on papyrus, for their part, specify a length of service for the wet nurse varying from 16 months to three years, with two years being the most commonly given period.²⁷

Bioarchaeological data from the late antique and Byzantine period also testify to long-term breastfeeding. Indeed, isotopic investigations (the study of nitrogen and carbon isotopes) of the protein found in bone collagen or tooth dentin make it possible to discern breastfeeding and weaning patterns.²⁸ While there are geographical variations, sometimes significant, in these patterns, the bioarchaeological evidence

²⁵ Prowse et al. 2008, 297. See also Powell et al. 2014, 91.

²⁶ See e.g. Bourbou and Garvie-Lock 2015, 175-176; Rey 2004, 368; Beaucamp 1982, 552.

²⁷ Parca 2017, 215.

²⁸ See Marklein and Fox 2020 for introduction.

points to an onset of weaning in the second half of an infant's first year (that is, after six months) and a termination of breastfeeding between two and five years. I have summarized some of the findings of bioarchaeological studies in Table 5.1. My criteria for inclusion in Table 5.1 were those studies that made mention of medical writings (usually Soranos, Galen, but sometimes also Oribasios) in their discussion of the archaeological evidence. Some archaeologists have tentatively suggested that ancient populations read the medical texts that have come down to us.²⁹ It is probably safer, however, to assume that the concordance between medical texts and bioarchaeological data is coincidental, or rather that the concordance reflects the fact that breastfeeding and weaning advice circulated orally among populations, especially among women, mothers, midwives, and wet nurses.³⁰ The different types of sources, then, would reflect – in different ways – this oral knowledge, and its flexibility. It should be noted that studies of non-industrial populations have shown that five to six months is a common age for the initiation of weaning, that weaning is a process that can take several years, and that the cessation of breastfeeding generally occurs between two and five years.³¹ In other words, it would be possible to find a correspondence between the vague recommendations preserved in ancient Greek medical texts and the weaning and breastfeeding practices in regions of the world where those texts could not have been read.

If breastfeeding anthropologically tends to last between two and five years, it is because it is a source of great comfort to children. That fact was acknowledged in the story of the child distraught by his weaning experience in the *Miracles of Thekla* and quietly hinted at in Soranos' and Aetios' recommendations to return to exclusive breastfeeding if a child became ill during the weaning process. Long-term breastfeeding does require investment, both in terms of time and emotions, from the breastfeeder, who could feel ambivalent towards the act, whether they were the infant's biological mother or a hired or enslaved nurse. Ancient breastfeeders at times used means to speed up the process. Thus, Soranos noted that some women anointed their nipples with bitter substances, a practice he opposed:

For thus [if the advice on weaning is followed] the infant will be weaned without harm, getting away little by little from the first habit. At the same time, the milk of the child's nurse will simply dry up because of the gradual elimination of suckling. For it is harmful to anoint the nipple with some bitter and ill-smelling things and thus wean the infant suddenly, because the sudden change has an injurious effect and because sometimes the infant becomes ill when the stomach is damaged by drugs.

οὕτω γὰρ ὰν μᾶλλον τὸ βρέφος ἀποσυνεθισθήσεται ἀλύπως κατὰ βραχὸ τῆς πρώτης ἀποχωροῦν συνηθείας, ἄμα δὲ ἀπεριέργως σβεσθήσεται τὸ γάλα

²⁹ See e.g. Cocozza et al. 2021, 435; Fulminante 2015, 41; Powell et al. 2014, 106 (who reject the idea; see the next note).

³⁰ On oral tradition, see Powell et al. 2014, 106-107.

³¹ See Dettwyler 2017; see also Centlivres Challet 2017, 897.

Table 5.1 Bioarchaeological studies of weaning pattern that mention ancient medical authors, alphabetically by modern country

Dakhleh Oasis, ca. A modern Egypt Various sites in 6th-modern Greece (including Greete)	Date of evidence	Type of evidence	Initiation of	Completion	Ancient author(s)	Author(s) of study/-ies)
rt Ce Para			weaning	of weaning	- 1	
ce ete)	ca. AD 250	Isotopic data from 49 bone samples and dentin of 102 individuals	Around 6 months	By 3 years	Soranos, Galen	(Dupras et al. 2001) (Dupras and Tocheri 2007)
	6th–15th c. AD	Isotopic data from bones of 61 individuals	Around 6 months	Between 3 and 4 years	Oribasios, Aetios, Paul, and other Byzantine sources	(Bourbou 2020; Bourbou and Garvie-Lock 2015; Bourbou et al. 2013; Bourbou and Garvie-Lock 2009)
Isola Sacra, Rome, 1st-? Italy	st–3rd c. AD	Isotopic data from 37 bone samples	End of first year	2–2.5 years	Soranos, Galen, Oribasios, wet-nursing contracts	(Prowse et al. 2008)
Avenches, modern 1st-3 Switzerland	st-3rd c. AD	Isotopic data from bones of 30 individuals	Not specified	Around 3 years	Soranos	(Bourbou et al. 2019)
Leptiminus, modern 2nd- Tunisia	2nd–5th c. AD	Isotopic data from bones of 99 individuals	Before 2 years	By 3 years	Soranos, Galen	(Keenleyside et al. 2009)
Queenford Farm, 4th–n Oxfordshire, AD modern UK	4th-mid 6th c. AD	Isotopic data from 87 bone samples	Not possible to establish but before 1.5 years	2–4 years	Soranos, Galen, Oribasios	(Fuller et al. 2006)
London, modern UK 1st-	st–5th c. AD	Isotopic data from bones of 58 individuals	Around 6 months	By 4 years	Soranos, Galen	(Redfern et al. 2018; Powell et al. 2014)
Bainesse, modern 1st-: UK	st–5th c. AD	Isotopic measurement on tooth increments from five individuals	Around 6 months	Between 2 and 5 years	Soranos, Galen, Oribasios	(Cocozza et al. 2021)

τῆς τιτθευούσης τὸ νήπιον τῆ κατὰ μικρὸν ὑφαιρέσει τῆς ἐκμυζήσεως. τὸ γὰρ πικροῖς τισι καὶ δυσώδεσι περιχρίειν τὰς θηλὰς καὶ ἀθρόως ἀπογαλακτίζειν αὐτὸ βλαβερὸν διὰ τὸ τὸν ἐν τῆ ἀθρόα μεταβολῆ ξενισμὸν ἐμποιεῖν καὶ διὰ τὸ κακούμενον ὑπὸ τῶν φαρμάκων τὸν στόμαχόν ποτε πάσχειν. (Sor. Gyn. 2.47.2 (CMG 4, 86.30–87.4))

One of the bitter substances used for this purpose of weaning might have been wormwood, which is used in this way in Shakespeare's *Romeo and Juliet*.³² Interestingly, none of the Byzantine medical authors referred to the practice of anointing the nipples with bitter drugs. We do, however, find allusions to this practice in religious and philosophical texts of the period. Thus, John Chrysostom (AD 340/350–407) alluded to the practice in an analogy he drew between a mother trying to wean her child off the breast and God trying to wean his devotees off Jerusalem:

A tender mother who has breastfed (*hupomazein*) her child but wants to lead it away from milk-nourishment and lead it towards other forms of food, when she sees that it is unwilling and vexed, and seeks for the breast, and insinuates itself into her motherly bosom, smears gall or some other bitter juice around the nipple of her breast, and thus forces it, unwillingly, to turn away from the source of milk.

Καὶ καθάπερ μήτηρ φιλόστοργος ὑπομάζιον ἔχουσα παῖδα, εἶτα αὐτὸν ἀπαγαγεῖν τῆς γαλακτοτροφίας σπουδάζουσα καὶ πρὸς ἐτέραν άγαγεῖν τροφήν ἐπειδὰν ἴδῃ μὴ βουλόμενον καὶ δυσανασχετοῦντα καὶ τὸν μαζὸν ἐπιζητοῦντα καὶ πρὸς τὸν κόλπον καταδυόμενον τὸν μητρικόν, αὐτὴν τοῦ μαζοῦ τὴν θηλὴν κύκλῳ χολὴν περιχρῖσασα ἢ καὶ ἐτέρῳ τινὶ πικροτάτῳ χυμῷ, καὶ ἄκοντα ἀναγκάζει τοῦ γάλακτος άποστραφῆναι λοιπὸν τὴν πηγήν. (John Chrys. Homily against the Jews 2, eds and trans. Pradels, Brändle, and Heimgartner 2000, 42–44)

And the Neoplatonist philosopher Simplikios (6th c. AD), in a discussion on pleasure and pain (*On Epictetus (In Epict.*)), referred to physicians and mothers who apply bitter drugs:

Accordingly, the good physician, by applying unpleasant [things], causes them [the souls] to turn away from what they lean towards, just as women who wish to wean infants anoint their nipples with something bitter.

Ό τοίνυν ἀγαθὸς ἰατρός, ἀνιαρὰ ταῦτα εἰς ἃ νένευκεν αὐτῆ προσφέρων, ἀποστρέφεσθαι ποιεῖ αὐτά, ὅσπερ αἱ τὰ παιδία ἀπογαλακτίζειν βουλόμεναι πικρῷ τινι τὰς θηλὰς ὑπαλείφουσι. (Simpl. *In Epict*. 14, ed. Hadot 1996)

Both John Chrysostom and Simplikios described the practice of anointing the breasts with a bitter drug in neutral to positive terms, unlike Soranos, who had seen

it as injurious to the child. These authors implicitly acknowledged that a breast-feeder might at times have wished to wean an infant off the breast, although they did not give explanations as to why she might have wanted to do so, beyond her wish to give the child some other forms of nourishment.

Weaning in the Byzantine period, in sum, was a process that ideally was gradual. Byzantine medical authors did not mention the physical effects this weaning would have on mothers and nurses, presumably because they expected it to lead to painless lactation cessation – if that effect was the one wished for. Indeed, we must not forget that some women might have had other children to breastfeed. Neither did the Byzantine medical authors describe the psychological effects that weaning might have on the nursing woman; the ambivalence she might have felt towards the process is passed over entirely in silence.

Extinguishing the Milk

Byzantine medical authors, then, did not describe in any detail the gradual lactation cessation that accompanies weaning in the second year of a child's life. They did, however, mention several drugs that could induce a quick lactation cessation when needed. I now turn to these drugs and the contexts in which they would have been used. In the same way as the ancients knew of drugs that could promote lactation, they knew of drugs that could stop it.³³ These fell into two categories: simple drugs (single ingredients) and compound ones (recipes involving several ingredients). The references to simple drugs are found in treatises, or sections of treatises, devoted to simples, that is, lists of natural products, often organized alphabetically; the references to compound drugs are found in treatises, or sections of treatises, devoted to women's health.

Byzantine medical authors listed three simples as having the power to extinguish the milk: sweat, the faba bean, and wine lees (see Table 5.2). The Greek expressions used to refer to the powers of these ingredients are *gala sbennusi* or *gala sbennutai*, which have strong connotations of drying out the milk, of extinguishing it in the breasts. Oribasios also gave a general statement regarding the drugs that promoted the production of milk, and those that stopped it, indicating that thick substances could extinguish the milk – opposites (a thick substance) for opposites (fluid milk):

In order to promote the production of milk, a substance must therefore be moderately warming and not at all thick, hence why such substances [that display this quality of being thick] extinguish the milk rather than promote it.

δεῖται δὲ δήπου συμμέτρως εἶναι θερμὸν καὶ οὐδαμῶς παχὺ πρὸς τὴν τοῦ γάλακτος γένεσιν, ὅθεν ὅσα μὲν τοιαῦτα σβέννυσι μᾶλλον ἢ γεννῷ τὸ γάλα. (Orib. *Med. Coll.* 14.63.6 (CMG 6.1.2, 234.4–6), ed. Raeder 1929)

Table 5.2 Simple remedies that are said to extinguish the milk in Byzantine medical works

Hidrōs, sweat	Aet. <i>Tetr.</i> 2.107 (CMG 8.1, 191.15–16): "This remedy, when used as an ointment, extinguishes the milk (<i>sbennusi gala</i>) accumulated in the breasts very well" ("τοῦτο τὸ φάρμακον ἐπιχριόμενον σβέννυσι γάλα πληθύνον ἐν τοῖς τιτθοῖς ἱκανῶς.").
Kuamos, faba bean	Orib. Eun. 2.1k96 (CMG 6.3, 368.37): "It extinguishes milk (gala sbennutai) in a cataplasm" ("καὶ τὸ γάλα σβέννυται πρὸς τοῦ τοιούτου καταπλάσματος").
	Aet. Tetr. 1.233 (CMG 8.1, 98.11): "And it extinguishes the milk (gala sbennutai) in a cataplasm" ("καὶ γὰρ καὶ τὸ γάλα σβέννυται πρὸς τοῦ καταπλάσματος").
	Paul Aegin. <i>Epitome</i> 7.3.10 (CMG 9.2, 232.13): "In a cataplasm, it cures inflammation and swellings and extinguishes the milk in the breasts (<i>gala sbennusin</i>)" ("καταπλασσόμενος δὲ φλεγμονάς τε καὶ ὄγκους ἰᾶται καὶ γάλα σβέννυσιν ἐπὶ τῶν τιτθῶν"). ²
Trux oinou, wine lees	Paul Aegin. <i>Epitome</i> 7.3.19 (CMG 9.2, 267.22–23): "It extinguishes milk (<i>gala sbennusin</i>) in over-distended breasts" ("καὶ μαστῶν σπαργώντων τὸ γάλα σβέννυσιν").

¹ See also Gal. On the Capacities of Simple Drugs (SMT) 10.1.14, 12.284K, ed. Kühn 1826.

Surprisingly, the Byzantine authors did not list hemlock among the simples that extinguished milk. That plant had been noted for this power by Dioskorides, who had stated that the plant could dry up both milk and semen:

The herb and foliage [of hemlock], crushed and applied as a poultice to the testicles, help those who emit semen during their sleep; applied as a poultice, they relax the genitals, they dry up the milk, they prevent breasts from growing in young girls, and they make the testicles of boys atrophied.

ή δὲ πόα καὶ ἡ κόμη λεῖα καταπλασσόμενα <ἐπὶ> τῶν διδύμων ὀνειρώττουσι βοηθεῖ· παρίησι δὲ καὶ αἰδοῖα καταπλασθέντα καὶ γάλα σβέννυσι, μαστούς τε ἐν παρθενία κωλύει αὕξεσθαι καὶ διδύμους ἀτρόφους ποιεῖ ἐπὶ παίδων. (Diosk. *On Medical Substances (Materia medica)* 4.78.2, ed. Wellmann 1907–1914)³⁴

Both semen and milk were considered to be transformed blood, and it was therefore to be expected that a drug that would dry up one of those bodily fluids would dry up the other.³⁵

The Byzantine descriptions of substances that dry up the milk posit a link between the wish to extinguish the milk and breast inflammation (see Table 5.2). They do not mention, however, that such inflammation can be very painful and lead to fevers, as Perpetua had feared. This inflammation, called mastitis, is today one of the reasons why mothers choose to stop breastfeeding; but, conversely, ending breastfeeding suddenly and early can lead to mastitis, as today's public health

² See also Diosk. *Materia medica* 2.105.1; Gal. SMT 7.10.59, 12.50K.

³⁴ An English translation of the full text of Dioskorides is available in Beck 2020.

³⁵ See Pedrucci 2013.

messages make clear to women.³⁶ Yet, we should be wary of over-comparing our modern situation with that of the ancients: neonatal death was much more prevalent in the ancient world than it is today, at least in the Western world, and it must have been one of the main reasons why women needed to extinguish their milk. In their descriptions of simple drugs drying up the milk, however, Byzantine medical authors mentioned neither neonatal death nor any other context in which women developed breast inflammation and wished to stop lactating.³⁷

We can gain some insights into these contexts from Byzantine treatises, or sections of treatises, devoted to women's health, in which medical authors described compound recipes to dry out the milk. For instance, Aetios gave the following recipe to extinguish the milk in his sixteenth medical book, the gynaecological book, in a chapter on "the curdling of milk in the breast":

To prevent the curdling (*thrombousthai*) of the milk in the breasts ... Another very good prescription: Asian stone and wax, of each two ounces; rose oil or kiki-oil, eight ounces. Mix together and use, changing twice a day. For it extinguishes the milk (*sbennuei gala*) and stops inflammations (*phlegmonas*).

Πρὸς δὲ τὸ μὴ θρομβοῦσθαι τὸ γάλα ἐν μαστοῖς ... Ἄλλο κάλλιστον. Λίθου ἀσίου, κηροῦ ἀνὰ γοβ΄. ἤτοι οὐγ. β΄. ἐλαίου ῥοδίνου ἢ κηκίνου γοη΄. ἤτοι οὐγ. η΄. ἀναλαβὼν χρῶ δὶς τῆς ἡμέρας ἀλλάσσων, σβεννύει γὰρ τὸ γάλα καὶ τὰς φλεγμονὰς παύει. (Aet. *Tetr*: 16.38, 51.28–52.1, ed. Zervos 1901)

And Oribasios gave a recipe for a similar purpose in the gynaecological sections of his *Synopsis for Eustathios* and *Books to Eunapios*:

Oil scrapings [from palaestrae] are a very effective remedy when applied to inflamed (*phlegmainontōn*) breasts. If it appears to you to be too dry, soften it with henna oil or rose oil. And this remedy is also very useful to extinguish the milk (*sbesai to gala*) which has transformed into cheese (*turōthen*) in the breasts after childbirth (*ek toketōn*).

Πάτος φλεγμαινόντων τιτθῶν βοήθημά ἐστι δραστικώτατον ἐπιτιθέμενον ἐὰν δὲ ξηρότερόν σοι φαίνηται, κυπρίνω μάλαττε ἢ ῥοδίνω. καὶ πρὸς τὸ ἐκ τοκετῶν δὲ σβέσαι τὸ γάλα τυρωθὲν κατὰ τοὺς μαστοὺς χρήσιμον ἱκανῶς ἐστιν. (Eust. 9.9.1–2 (CMG 6.3, 278.12–15))³⁸

Curdling of the milk in the breast is not a recognized condition in modern medicine but it was one that preoccupied physicians in antiquity and beyond. Like any process of milk curdling, the curdling in the breast turned the milk cheesy, as Oribasios made clear in the recipe above. The thick and cheesy breastmilk was allegedly very

³⁶ See Gianni et al. 2019.

³⁷ There is a reference to mothers with "full breasts" (*uberibus plenis*) dripping milk upon infants' funeral pyres in Statius' *Silvae* 5.5.15–17 (1st c. AD), ed. and trans. Shackleton Bailey 2003, 361.

³⁸ The same recipe also appears at *Eun.* 4.82.1 (CMG 6.2.3, 469.7–8).

difficult to digest for the infant; worse, according to Soranos, it could lead to "clogging up" in a baby's body (*Gyn.* 2.18.1–3 (CMG 4, 64.21–65.13)). Ancient authors associated the curdling/thickening of the milk mainly with the onset of lactation, a time when, as I have argued elsewhere, the milk risked becoming tainted through contact with lochial blood.³⁹ Lochial blood is the blood that is shed in the days after childbirth; it flows at its heaviest in the first three to five days, that is, during the days when the body produces a thick, yellowish milk, which we now call the colostrum and consider as an extremely beneficial substance, but one which the ancients considered to be cheesy and dangerous for newborn babies, who would fare better if they were given some honey or were fed by other women until their mothers' "proper" milk came in (Sor. *Gyn.* 2.17–18.3 (CMG 4, 64.1–65.13); Orib. *Med. Coll. Inc.* 31.28 (CMG 6.2.2, 124.3–8); *Eust.* 5.5 (CMG 6.3, 155.16–18)).

The ancient anxiety about the curdling of the milk in the breast must not be dismissed. Some women and their physicians must have felt extreme fear of killing infants with bad milk, and this might have encouraged them to use rather unpleasant remedies to extinguish their milk. We should not forget, however, that medicine can be a way for physicians to exert power over bodies, and in particular, over women's bodies. Instilling fear of their bad milk in women might at times have been a way to dissuade them from breastfeeding, for a variety of reasons. One of these reasons might have been social perceptions, especially in wealthier families that could afford wet nurses, and where it might therefore have been considered unsightly for the mother to breastfeed — a physically demanding task. Another reason to dissuade a woman from breastfeeding would have been to make her body available again for sexual intercourse. Indeed, there appears to have been a taboo against sexual intercourse while breastfeeding in antiquity, as it allegedly soured the milk, brought back the menses, and risked depriving the nursling from nourishment by redirecting it to the foetus. Finally, as noted by Claude-Emmanuelle

- 39 Totelin 2021a.
- 40 Some of the remedies to extinguish the milk include some unpleasant ingredients. See for instance: Aet. *Tetr.* 16.41 (54.15, 56.5–6 Zervos): "Against inflammations of the breasts, according to Philoumenos ... Or crush earthworms with quinces; or river crabs with egg. And this extinguishes the milk" ("Πρὸς τὰς τῶν μαστῶν φλεγμονὰς, Φιλουμένου ... ἢ γῆς ἔντερα λειώσας μετὰ κυδωνίων ἢ καρκίνους ποταμίους μετὰ ἀοῦ· τοῦτο καὶ τὸ γάλα σβεννύει").
- 41 The gender and social biases of medical writings are traceable in their language and style as well; see Constantinou and Skouroumouni-Stavrinou 2024, in press and 2022; see also Chapter 6 in this volume.
- 42 There were debates on maternal breastfeeding in antiquity, perhaps best exemplified by Favorinus' defence of maternal breastfeeding, preserved in Aulus Gellius' *Attic Nights* 12.1, ed. and trans. Rolfe 1927. One can also note a papyrus letter from the third century AD where a young mother's parent writes to their son-in-law, stating "I heard that you are compelling her to breastfeed. If she wants, let the baby have a nurse, for I do not want my daughter to breastfeed" (P. Lond. 3.951v = Trismegistos 31964, Il. 2–5). On the exhausting effects of breastfeeding, see also Sor. *Gyn.* 2.18.5 (CMG 4, 65.20–27).
- 43 See for instance Sor. *Gyn.* 2.19.11 (CMG 4, 67.28–68.2); Gal. *San Tu.* 1.9.4 (CMG 5.4.2, 22.10–13); Orib. *Med. Coll. Inc.* 30.3 and 31.19 (CMG 6.2.2, 121.17–20 and 123.18–20). Instructions to avoid sexual intercourse are also found in wet-nursing contracts on papyri from Ptolemaic and Roman Egypt; for references, see Ricciardetto and Gourevitch 2020, 54; Parca 2017, 211.

Centlivres Challet, avoiding breastfeeding, and placing that responsibility on someone else, might also have served as a mechanism, whether conscious or not, to protect families from emotional involvement with their infant in a world where infant mortality rates were high.⁴⁴

It is also possible that women themselves exploited the rhetoric of curdled milk in order not to breastfeed, and to regain control - or perceived control - over their bodies. 45 They could have done so for all the reasons outlined above (wishing to resume sexual intercourse; social anxiety; fear of high emotional involvement), as well as for cosmetic reasons, to avoid the perceived effects that breastfeeding had on the body. In this context, one can note that sections on the care of the breasts in ancient medical treatises sometimes included recipes of a cosmetic nature alongside ones to prevent inflammation. For instance, Paul of Aegina's Epitome of Medicine 3.35, devoted to afflictions of the breasts, opens with advice on how to deal with inflammations when the milk has turned cheesy in the breast after childbirth, then turns to remedies against spreading ulcers in the breasts (extracted from Archigenes), and closes with recipes for "preservatives for the breasts." While one of these preservative recipes is clearly marked as being for virgin girls, the other is not, and might have been used by women at any life stage, including women concerned about the alleged sagging of their breasts while breastfeeding (Paul Aegin. Epitome 3.35 (CMG 9.1, 221.4–222.22)). Similarly, in Metrodora's gynaecological treatise, the section on the breasts mixes recipes against pains in the breasts, recipes to promote or check milk production, and recipes to keep the breasts small and dainty. 46 Finally, Chapter 15 of Pseudo-Galen's second book of On Procurable Remedies also includes recipes to maintain the beauty of the breasts, recipes to dry out milk, recipes against inflammations, and recipes to bring out the milk.⁴⁷

Conclusions

I started this chapter with the story of the Christian martyr Perpetua's lactation cessation; I ended it with cosmetic recipes to keep the breasts dainty. It might seem callous to put these two things alongside each other but considerations of a cosmetic nature are not absent from Perpetua's story. The *PPF*'s narrator stressed that the martyr's body appeared beautiful and youthful in the arena. In her own account,

- 44 Centlivres Challet 2017, 898.
- 45 For refusal to breastfeed conceived as a punishable sin in religious contexts, see Chapter 3 in this volume.
- 46 Metrodora Chapters: 40–44 (remedies against afflictions in the breasts); 44–46 (recipes to make the milk come); 47 (recipes to dry out the milk); 48 (recipes to keep the breasts small); 49 (recipe to straighten drooping breasts); 50 (recipes to keep the breasts small and pert); 51 (recipes to make the breasts shiny and beautiful), ed. Del Guerra 1953.
- 47 Ps.-Gal. *Rem. Parab.* 2.15, 14.446–449K, ed. Kühn 1827: 15.1 (recipe to straighten drooping breasts); 15.2 (recipe so that the breasts remain dainty); 15.3 (recipe so that the breasts do not become large); 15.4 (recipe to dry out the milk); 15.5 (recipes against inflammation of the breasts); 15.6 (recipes to draw out the milk); 15.7 (recipe to prevent the flow of milk); 15.8 (preservatives of the breasts).

Perpetua stated that in a vision she saw herself during the preparations for the arena: she "became a man," whom assistants rubbed down with oil, as they would before an athletic contest – she became an athlete of God (*PPF* 10.7). In the arena, her firm body was contrasted to the dripping, leaking body of Felicity. Women in antiquity did at times feel anxiety about the appearance of their breasts while – and after – breastfeeding. In doing so, they might have internalized patriarchal views of the male body, supposedly firmer and stronger, as the norm from which the female body deviates, especially when it is put under the strains of childbirth and lactation. That is not, however, to diminish that anxiety, which compounded fears over breast inflammations and over the breastfeeder's ability to nourish a child and make it thrive.

Ancient medical sources relating to weaning and lactation cessation, whether sudden or gradual, when read in a sensitive manner, do much to reveal the ambivalence of women, of their physicians, and of society at large, towards lactating breasts, their power to impart nutrition, and their physical appearance. These sources also talk, even if very quietly, of the pain, both physical and psychological, that accompanies the separation of a nursing woman from her own child or charge, whether that separation be temporary or permanent.

References

Texts: Editions and translations

- Beck, L.Y. trans. 2020. *Pedanius Dioscorides of Anazarbus: De materia medica*. Translated by L.Y. Beck. 4th enlarged ed. Hildesheim: Olms and Weidmann.
- Dagron, G. ed. and trans. 1978. *Vie et miracles de Sainte Thècle*. Subsidia Hagiographica 62. Brussels: Société des Bollandistes.
- Del Guerra, G. ed. and trans. 1953. *Il Libro di Metrodora: Sulla malattie delle donne e il ricettario di cosmetica e terapia*. Milan: Ceschina.
- Farrell, J., and C. Williams. eds. 2012. "Passio Sanctarum Perpetuae et Felicitatis," in J.N. Bremmer, and M. Formisano (eds) *Perpetua's Passions: Multidisciplinary Approaches to the Passio Perpetuae et Felicitatis*. Oxford: Oxford University Press, 24–32.
- Hadot, I. ed. 1996. Simplicius: Commentaire sur le Manuel d'Epictète. Leiden: Brill.
- Heiberg, J.L. ed. 1921. *Paulus Aegineta, Libri I–IV, edidit J.L. Heiberg*. Corpus Medicorum Graecorum 9.1. Leipzig and Berlin: Teubner.
- Ilberg, J. ed. 1927. Sorani Gynaeciorum libri IV, De signis fracturarum, De fasciis, Vita Hippocratis secundum Soranum, edidit J. Ilberg. Corpus Medicorum Graecorum 4. Leipzig and Berlin: Teubner.
- Johnston, I. ed. and trans. 2018. *Galen: Hygiene. Books 1–4*. Loeb Classical Library 535. Cambridge, MA: Harvard University Press.
- Koch, K., G. Helmreich, C. Kalbfleisch, and O. Hartlich. eds. 1923. *Galeni De sanitate tuenda libri IV, edidit K. Koch. De alimentorum facultatibus libri III, edidit G. Helmreich. De bonis malisque sucis liber, edidit idem. De victu attenuante liber, edidit C. Kalbfleisch. De ptisana liber, edidit O. Hartlich.* Corpus Medicorum Graecorum 5.4.2. Leipzig and Berlin: Teubner.
- Kühn, K.G. ed. 1826. Claudii Galeni opera omnia. Vol. 12. Leipzig: Car. Cnoblochius.
- ——. ed. 1827. *Claudii Galeni opera omnia*. Vol. 14. Leipzig: Car. Cnoblochius.
- Levenson, J.L. ed. 2000. Romeo and Juliet. Oxford: Oxford University Press.

- Olivieri, A. ed. 1935. *Aetii Amideni Libri medicinales I–IV, edidit A. Olivieri*. Corpus Medicorum Graecorum 8.1. Leipzig and Berlin: Teubner.
- Pradels, W., R. Brändle, and M. Heimgartner. eds. and trans. 2000. "Das bisher vermisste Textstück in Johannes Chrysostomus, *Adversus Judaeos*, Oratio 2," *Zeitschrift für Antikes Christentum/Journal of Ancient Christianity* 5: 23–49.
- Raeder, J. ed. 1926. *Oribasii Synopsis ad Eustathium, Libri ad Eunapium, edidit J. Raeder*. Corpus Medicorum Graecorum 6.3. Leipzig and Berlin: Teubner.
- ——. ed. 1929. *Oribasii Collectionum medicarum reliquiae, libri IX–XVI*. Corpus Medicorum Graecorum 6.1.2. Leizpig and Berlin: Teubner.
- ed. 1933. Oribasii Collectionum medicarum reliquiae, libri XLIX-L, libri incerti, eclogae medicamentorum, edidit J. Raeder. Corpus Medicorum Graecorum 6.2.2. Leipzig and Berlin: Teubner.
- Rolfe, J.C. ed. and trans. 1927. *Gellius: Attic Nights. Volume 2: Books 6–13*. Loeb Classical Library 200. Cambridge, MA: Harvard University Press.
- Shackleton Bailey, D.R. ed. and trans. 2003. *Statius: Silvae*. Loeb Classical Library 206. Cambridge, MA: Harvard University Press.
- Temkin, O. trans. 1956. *Soranus' Gynecology*. Baltimore, MD: John Hopkins University Press.
- Ven, P. van den. ed. 1962. *La vie ancienne de S. Syméon Stylite le jeune (521–592)*. Subsidia Hagiographica 32. Brussels: Société des Bollandistes.
- Wellmann, M. ed. 1907–1914. *Pedanii Dioscuridis Anazarbei De materia medica libri quinque*. 3 vols. Berlin: Teubner.
- Zervos, S. ed. 1901. Gynaekologie des Aëtios. Leipzig: Fock.

Secondary Works

- Beaucamp, J. 1982. "L'allaitement: Mère ou nourrice?," *Jahrbuch der Österreichischen Byzantinistik* 32 (2): 549–558.
- Bertier, J. 1996. "La médecine des enfants à l'époque impériale," in W. Haase (ed.) Aufstieg und Niedergang der römischen Welt. Band 37/3: Teilband Philosophie, Wissenschaften, Technik. Wissenschaften (Medizin und Biologie [Forts.]). Berlin: De Gruyter, 2147–2227.
- Bourbou, C. 2020. "Health and Disease at the Marshes: Deciphering the Human–Environment Interaction at Roman Aventicum, Switzerland (1st–3rd c. AD)," in G. Robbins Schug (ed.) *Routledge Handbook of the Bioarchaeology of Environmental Change*. London: Routledge, 141–155.
- Bourbou, C., and S. Garvie-Lock. 2009. "Breast-Feeding and Weaning Patterns in Byzantine Times: Evidence from Human Remains and Written Sources," in A. Papaconstantinou, and A.-M. Talbot (eds) *Becoming Byzantine: Children and Childhood in Byzantium*. Washington, DC: Dumbarton Oaks Research Library and Collection, 65–83.
- Bourbou, C., and S. Garvie-Lock. 2015. "Bread, Oil, Wine, and Milk: Feeding Infants and Adults in Byzantine Greece," *Hesperia Supplements* 49: 171–194.
- Bourbou, C., B.T. Fuller, S.J. Garvie-Lock, and M.P. Richards. 2013. "Nursing Mothers and Feeding Bottles: Reconstructing Breastfeeding and Weaning Patterns in Greek Byzantine Populations (6th–15th centuries AD) Using Carbon and Nitrogen Stable Isotope Ratios," *Journal of Archaeological Science* 40: 3903–3913.
- Bourbou, C., G. Arenz, V. Dasen, and S. Lösch. 2019. "Babes, Bones, and Isotopes: A Stable Isotope Investigation on Nonadults from Aventicum, Roman Switzerland (First–Third century CE)," *International Journal of Osteoarchaeology* 29: 974–985.

- Bremmer, J.N. 2012. "Felicitas: The Martyrdom of a Young African Woman," in Bremmer and Formisano 2012b, 35–53.
- Bremmer, J.N., and M. Formisano. 2012a. "Perpetua's Passions: A Brief Introduction," in Bremmer and Formisano 2012b, 1–13.
- ———. eds. 2012b. Perpetua's Passions: Multidisciplinary Approaches to the Passio Pepetuae et Felecitatis. Oxford: Oxford University Press.
- Calà, I., and G. Chesi. 2022. "Alcune considerazioni sul trattaro attribuito a Metrodora: Le ricette cosmetiche," *Eugesta: Journal of Gender Studies in Antiquity* 12: 41–56.
- Centlivres Challet, C.-E. 2017. "Feeding the Roman Nursling: Maternal Milk, Its Substitutes, and Their Limitations," *Latomus: Revue d'études latines* 76: 895–909.
- Cobb, S., and A.S. Jacobs. 2021. *The Passion of Perpetua and Felicitas in Late Antiquity*. Berkeley, CA: University of California Press.
- Cocozza, C., R. Fernandes, A. Ughi, M. Groß, and M.M. Alexander. 2021. "Investigating Infant Feeding Strategies at Roman Bainesse through Bayesian Modelling of Incremental Dentine Isotopic Data," *International Journal of Osteoarchaeology* 31: 429–439.
- Constantinou, S., and A. Skouroumouni-Stavrinou. 2022. "Premodern 'Galaktology': Reading Milk in Ancient and Early Byzantine Medical Treatises," *Journal of Late Antique, Islamic and Byzantine Studies* 1: 1–40.
- ——. 2024. "The Other Mother: Ancient and Early Byzantine Approaches to Wet Nursing and Mothering," *Journal of Hellenic Studies* 145, in press.
- Dettwyler, K.A. 2017. "A Time to Wean: The Hominid Blueprint for the Natural Age of Weaning," in P. Stuard-Macadam, and K.A. Dettwyler (eds) *Breastfeeding: Biocultural Perspectives*. London: Routledge, 39–74.
- Dova, S. 2017. "Lactation Cessation and the Realities of Martyrdom in *The Passion of Saint Perpetua*," *Illinois Classical Studies* 42: 245–265.
- Dupras, T.L, H.P. Schwarcz, and S.I. Fairgrieve. 2001. "Infant Feeding and Weaning Practices in Roman Egypt," *American Journal of Physical Anthropology* 115: 204–212.
- Dupras, T.L., and M.W. Tocheri. 2007. "Reconstructing Infant Weaning Histories at Roman Period Kellis, Egypt Using Stable Isotope Analysis of Dentition," *American Journal of Physical Anthropology* 134: 63–74.
- Fildes, V. 1986. Breasts, Bottles and Babies: A History of Infant Feeding. Edinburgh: Edinburgh University Press.
- Frankfurter, D. 2009. "Martyrology and the Prurient Gaze," *Journal of Early Christian Studies* 17: 215–245.
- Fuller, B.T., T.I. Molleson, D.A. Harris, L.T. Gilmour, and R.E.M. Hedges. 2006. "Isotopic Evidence for Breastfeeding and Possible Adult Dietary Differences from Late/Sub-Roman Britain," *American Journal of Physical Anthropology* 129: 45–54.
- Fulminante, F. 2015. "Infant Feeding Practices in Europe and the Mediterranean from Prehistory to the Middle Ages: A Comparison between the Historical Sources and Bioarchaeology," *Childhood in the Past* 8: 24–47.
- Garnsey, P. 1998. "Child Rearing in Ancient Italy," in P. Garnsey (ed.) *Cities, Peasants and Food in Classical Antiquity: Essays in Social and Economic History*. Cambridge: Cambridge University Press, 253–271.
- Gianni, M.L., M.E. Bettinelli, P. Manfra, G. Sorrentino, E. Bezze, L. Plevani, G. Cavallaro, G. Raffaeli, B.L. Crippa, and L. Colombo. 2019. "Breastfeeding Difficulties and Risk for Early Breastfeeding Cessation," *Nutrients* 11: 1–10.
- Gold, B.K. 2018. Perpetua: Athlete of God. Oxford: Oxford University Press.
- Golden, M. 2015. *Children and Childhood in Classical Athens*. Baltimore: John Hopkins University Press.

- Gourevitch, D. 1995. "L'alimentation animale de la femme enceinte, de la nourrice et du bébé sevré," in *Homme et animal dans l'Antiquité romaine: Actes du colloque de Nantes* 1991. Tours: Centre de Recherches A. Piganiol, 283–293.
- Gourevitch, D., and J. Chamay. 1992. "Femme nourrissant son enfant au biberon," *Antike Kunst* 35: 78–81.
- Heffernan, T.J. 2012. The Passion of Perpetua and Felicity. Oxford: Oxford University Press
- Holman, S.R. 1997. "Molded as Wax: Formation and Feeding of the Ancient Newborn," Helios 24: 77–95.
- Keenleyside, A., H. Schwarcz, L. Stirling, and N.B. Lazreg. 2009. "Stable Isotopic Evidence for Diet in a Roman and Late Roman Population from Leptiminus, Tunisia," *Journal of Archaeological Science* 36: 51–63.
- Keyser, P.T., and G.L. Irby-Massie. eds. 2008. *The Encyclopedia of Ancient Natural Scientists: The Greek Tradition and Its Many Heirs*. London: Routledge.
- Lascaratos, J., and E. Poulakou-Rebelakou. 2003. "Oribasius (Fourth Century) and Early Byzantine Perinatal Nutrition," *Journal of Pediatric Gastroenterology and Nutrition* 36: 186–189.
- Marklein, K.E., and S.C. Fox. 2020. "The Bioarchaeology of Children in Greco-Roman Antiquity," in L.A. Beaumont, M. Dillon, and N. Harrington (eds) *Children in Antiquity*. London: Routledge, 567–580.
- Myers, A.D. 2017. Blessed among Women? Mothers and Motherhood in the New Testament. Oxford: Oxford University Press.
- Parca, M. 2017. "The Wet Nurses of Ptolemaic and Roman Egypt," *Illinois Classical Studies* 42: 203–226.
- Parkin, T. 2013. "The Demography of Infancy and Early Childhood," in J.E. Grubbs, T. Parkin, and R. Bell (eds) *The Oxford Handbook of Childhood and Education in the Classical World*. Oxford: Oxford University Press, 40–61.
- Pedrucci, G. 2013. "Sangue mestruale e latte materno: Riflessioni e nuove proposte. Intorno all'allattamento nella Grecia antica," *Gesnerus* 70: 260–291.
- Powell, L.A., R.C. Redfern, A.R. Millard, and D.R. Gröcke. 2014. "Infant Feeding Practices in Roman London: Evidence from Isotopic Analyses," in E.-J. Graham, and M. Carroll (eds) *Infant Health and Death in Roman Italy and Beyond*. Supplementary Series 96. Portsmouth, RI: *Journal of Roman Archaeology*, 89–110.
- Prowse, T.L., S.R. Saunders, H.P. Schwarcz, P. Garnsey, R. Macchiarelli, and L. Bondioli. 2008. "Isotopic and Dental Evidence for Infant and Young Child Feeding Practices in an Imperial Roman Skeletal Sample," *American Journal of Physical Anthropology* 137: 294–308.
- Redfern, R., R. Gowland, A. Millard, L. Powell, and D. Gröcke. 2018. "From the Mouths of Babes': A Subadult Dietary Stable Isotope Perspective on Roman London (Londinium)," *Journal of Archaeological Science: Reports* 19: 1030–1040.
- Rey, A.-L. 2004. "Autour des nourrissons byzantins et de leur régime," in V. Dasen (ed.) Naissance et petite enfance dans l'Antiquité: Actes du colloque de Fribourg, 28 novembre—1er décembre 2001. Fribourg: Academic Press, 363–375.
- Ricciardetto, A., and D. Gourevitch. 2020. "The Cost of a Baby: How Much Did It Cost to Hire a Wet-Nurse in Roman Egypt?," in L. Totelin, and R. Flemming (eds) *Medicine and Markets in the Graeco-Roman World and Beyond: Essays on Ancient Medicine in Honour of Vivian Nutton*. Swansea: Classical Press of Wales, 41–69.
- Sallares, R. 1991. *The Ecology of the Ancient Greek World*. Ithaca, NY: Cornell University Press.

- Sellen, D.W. 2007. "Evolution of Infant and Young Child Feeding: Implications for Contemporary Public Health," *Annual Review of Nutrition* 27: 123–148.
- Totelin, L. 2021a. "Breastmilk in the Cave and on the Arena: Early Christian Stories of Lactation in Context," in M. Bradley, V. Leonard, and L. Totelin (eds) *Bodily Fluids in Antiquity*. London: Routledge, 240–255.
- . 2021b. "Easy Remedies Difficult Texts: The Pseudo-Galenic *Euporista*," in C. Petit, S. Swain, and K.-D. Fischer (eds) *Pseudo-Galenica: The Formation of the Galenic Corpus from Antiquity to the Renaissance*. London: Warburg Institute Colloquia, 31–46.