In 1985 in his groundbreaking article, ‘The patient’s view: doing history from below’, Roy Porter demanded historians re-evaluate their methodological approach to doing medical history and consider patient experience. In his five ‘broad guidelines for future investigations’, Porter complained that historians were overly concerned with diagnosis and cure. Instead, he suggested scholars turn their attention to the everyday acts of health care; the preventative measures individuals took to ward against disease. Porter opined, ‘We commit gross historical distortions if we fail to give due weight and attention to traditional medical interest in the weather, in diet, in exercise, in sleep – or, in other words, in the whole field of “non-naturals”’. Roy Porter’s work became field-defining, but while the patient-centred approach has become dominant, few have taken to Porter’s other recommendation. Until recently there has been little concerted attempt to redress the relative historical silence on the role of the Non-Naturals in early modern regimes of care, or to properly integrate practices aimed at promoting longevity into extant histories of the way bodies were experienced.

The ebb and flow of humours were central to the way early modern people understood the body and the way it functioned. Health was dependent on the air one breathed, how one slept, the movements the body made, what one ate and drank, the regularity of excretion and the
passions of the soul. Within this framework each person had their own particular complexion, which meant that individualised regimes were considered to be more favourable for the maintenance of health than universal ones. Lifestyle and social standing played a role in this: for example, scholars did not have the same health needs as labourers. Complexion was also gendered and age-related. Adult females were cold and wet, men hot and dry. At birth, bodies were at their hottest and wettest whilst ageing meant losing radical moisture and heat.

Scholars have long noted the importance of considering how age determined complexion in early modern European medicine, but with the exception of Hannah Newton, who has examined the health of children, this has also remained an area of relative scholarly silence. Here, I hope to speak to two neglected areas of research: preventative medicine and the health of infants.

There have been several important studies about the bodily experience of pregnancy in early modern Europe. However, the infant – its body and health – have been entirely absent. This chapter will address these absences by showing how babies were medically unique, demanded their own specific care, and how this changed over time after birth. Understanding the ways in which the infant body was readied for later life, and the role that Non-Naturals played in preventative health care, is important not just to the study of childbirth and parturition, but also to deciphering the ways early modern people thought about well-being.

The chief source for this study is childbearing manuals printed in England in the seventeenth century. The late sixteenth and seventeenth centuries witnessed a particular explosion in the publication of vernacular medical texts. Elizabeth Lane Furdell has uncovered 200 printers and sellers who handled medical books in London between 1475 and 1700. Similarly, Mary E. Fissell has stated that by 1700 there was one vernacular medical work in circulation in England for every four families. Of particular currency were guides directed to midwives and women in ‘child-bed’, providing advice on the whole process of parturition. Richard Jonas’ 1540 and Thomas Raynalde’s 1545 English translations of Eucharius Rösslin’s Der Rosengarten were the first of many such guides. Childbearing guides were, like many early modern vernacular medical books, composite texts that combined passages from ancient sources and often reprinted swathes of material from each other, verbatim.
Essentially, childbearing manuals, which were generally written by physicians, served to reinforce the authority of the ancients while popularising knowledge so that ‘breeding’ women and their midwives might be better informed about the correct way to manage generation. They were structured chronologically: they provided advice on how to conceive; what to expect during pregnancy; how to prepare for birth; what positions to adopt in labour; how to recover from childbirth; and finally, how to care for an infant in the first months of life. This latter stage was often termed ‘ordering the infant’, and such chapters set out the various acts of care designed to ensure infant survival. The Non-Naturals were a dominant theme in this literature. The hot and wet constitution of infants drove the care they received. Excretion of moisture was important in facilitating the gradual maturation of the infant. This was achieved through hygiene, promoting crying and through creating friction on the infant’s body by rubbing and stroking. A prominent theme in regimens was also ensuring babies were contented and their passions were not roused; distress could cause illness or death.

In addition to vernacular medical texts, this chapter also draws on a group of sources which have been termed ‘life-writing’ – that is, family correspondence, diaries and journals – which allow the historian to access the ways in which prescription and practice interacted. This is a difficult task. The very nature of the time immediately after birth, in which the mother was confined to bed and the household played host to visitors, means that in-depth written descriptions of care are hard to come by. Letters informing family members about births were generally not sent until a week or two later, and often these are frustratingly brief. What is present in family correspondence, however, are expressions of concern that the mother-to-be was adequately prepared for impending labour and had all the necessary people and things on hand so that both mother and child could survive the birth and the precarious first few days. This of course, applied to the newly delivered woman as much as to the infant, but it nevertheless indicates that there was an acceptance that babies would need care, and often professional help, after birth.

In 1699, for example, Penelope Mordaunt, who was heavily pregnant, wrote to her husband expressing her worries that she was poorly prepared if she were to go into labour prematurely:

I grow very uneasie now a days as well as nights w[hi]ch has made mee this day send to Mrs Barns for blankets and things for the child, Lest I
Pen was her youngest daughter, and was ill-equipped to play nurse. In early modern England, nurses were often hired in addition to a midwife to attend to the newborn child, thus we can assume Pen would probably have been caring for her sibling rather than her mother. By representing only the female experience in childbirth we have obscured the important processes of care that were enacted on the infant body after birth, for which a nurse was often acquired. A considerable proportion of the scholarly discussion of early modern English childbirth has been devoted to the idea that premodern women were gripped by an overwhelming fear of birth. The emphasis on how women understood and perceived maternal mortality has meant that the period after birth has invariably been represented as one of social relief and celebration. Laura Gowing, thus, has argued that after birth, ‘the focus of the social ritual which surrounded new mothers shifted from pain and fear to thanksgiving and celebration’, although she notes that the infant was ‘carefully watched’. Whereas watching the infant has previously been represented as a passive activity, I argue that the processes of care enacted on the newborn body after birth demanded considerable effort and investment. Although it was often a nurse or midwife who ‘ordered the infant’, mothers were not excluded from this process of care – but helped to direct it, and as their own health improved, took over the regimen of bathing, clothing and feeding. In this way, the bodily work of labouring for the infant’s well-being did not end with birth, but rather when the infant was perceived as healthy.

Crying and changing colour

Immediately after birth, the first task of the nurse or midwife was to encourage the baby to cry. Crying played a prominent role in ensuring the regulation of several of the Non-Naturals in the early days of an infant’s life. The Welsh medical writer John Jones observed as early as 1579 that if an infant ‘weepe a little’, at birth ‘then (as sayth Avicen) it shal not be unwholesome, nor to many fathers irksome, but rather joyfull news’. When Anne, Countess of Arundel, looked after her daughter’s newborn son in 1689, she wrote to a family member,
observing that although she was worried that the child had not been able to feed, the fact it was ‘a most earnest crier’ was a promising sign of future health, despite it sometimes holding its breath until ‘he look black’.\textsuperscript{15} Weeping signified that an infant was able to cope with life and function independently of the maternal body. It was only once an infant cried that medical authors suggested that the midwife or nurse should cut the navel cord.

One reason medical writers interpreted crying as an important sign of viability was because it was seen as an impulse that was unbidden and uncontrollable that expressed the baby’s needs for future care. Jacques Guillemeau, in the English translation of the French manual, explained that infants were unable to cry in the womb, but ‘as soone as he is born, and sees the light’, out of ‘necessity, and his owne feeling doe force and as it were wring from him cries and moanes’. Through these noises, newborns demanded and craved ‘the succor of … [their] owne Mother’.\textsuperscript{16} Pregnancy meant women had little active choice in whether or not they nourished and cared for their infants, but after birth, medical texts stressed that women had to choose to look after their infants, and crying was a plea for comfort and warmth that demanded a response.

Perhaps the most medically important reason crying was paramount to infant survival immediately after birth was because it allowed the baby to expel the moisture that had clogged its throat, brain and stomach during pregnancy. The midwife Jane Sharp argued that, at birth, infants ought to cry clear and loud ‘for it is better for the brain and lungs, that are thus opened and discharged of superfluous humours’.\textsuperscript{17} Mucus was thought to be particularly dangerous to the brain, something which crying shed.\textsuperscript{18} Timothy Bright, the author of \textit{Treatise on Melancholy}, explained that tears were the ‘excrementitious humidity of the brayne, not contained in the vaynes’.\textsuperscript{19} As tears formed, the brain compressed and forced moisture out of the tear ducts.\textsuperscript{20} For this reason crying was more suitable for certain bodies than others. Women, for example, had ‘loose, soft and tender’ flesh and were more moist, and this was why women seemed to weep more often than men.\textsuperscript{21} Importantly, babies had an even greater need to cry because they were both naturally more moist and they had been surrounded by fluid in the womb for nine months. Hence, Nicholas Culpeper described how the brain of infants was ‘very moist, and hath many excrements which Nature cannot send out its proper passages’.\textsuperscript{22} Crying thus marked the first act of excretion
which continued steadily over the first days and weeks of the infants’ life. By raising the temperature of the body, weeping was additionally a form of exercise.

Moderate exercise was understood as an important part of a healthy regimen. However, for infants, even the exercise involved in excessive crying was seen as dangerous to their bones which were excessively flexible. Medical authors were anxious to ensure that crying was occasional and that sobs did not wrack the body. Vigorous crying could distort an infant’s wax-like bones and cause strains and ruptures. Authors warned of the possibility of ‘broken belly’ in infants, a condition that could cause the navel cord to bleed. Indeed, crying was such a concern for medical authors that Robert Barret the author of *A Companion for Midwives* argued that ‘Above all’ other concerns, the nurse or mother should be ‘very careful not to suffer the Child to cry too much.’ By ‘turning it clean and dry, and removing what may fright or grieve it’, he proposed that infants could be soothed and placated.

Domestic recipe books also contain a large number of remedies for convulsions and swellings, and often identify these cures as specifically for infants. The recipe book of Elizabeth Okeover, for example, compiled between c.1675 and 1725, lists five remedies for convulsive fits, three for troubled or fretful young children and two for rupture in the belly.

As well as facilitating breathing, expelling harmful moisture and representing potentially dangerous movement of the body, crying was related to another Non-Natural: the passions of the soul, or the emotions. Passions acted on the spirits and humours; they were influenced by, and a product of, humoral balance. Hence Barret’s recommendations point to another underlying assumption in vernacular medical literature: that babies, like adults, cried because they were provoked emotionally. Crying in contemporary society is seen as the occupation of a young child. Babies are thought to cry for all manner of reasons that might not be cause for concern. For seventeenth-century medical writers, however, after the first cry, successive episodes of weeping indicated to the carer that all was not well. Over the seventeenth century weeping was increasingly connected to overflowing passions, and medical writers explained that babies often cried because they had a desire for physical affection or comfort. John Pechey, for example, noted ‘most commonly Children do not cry without a cause, but are provoked by something that disturbs them.’ Driving home a distinctly
moral message he noted that a ‘Prudent Mother or Nurse, will endeav-
our to find out what is the cause that being removed, the Child may be
quiet.’ An affectionate relationship between carer and child could
ward against emotional distress, and its dangerous consequences. In
this way, the quality of care – how attentive and affectionate the mother
or nurse was in tending to the infant – determined its well-being and
health.

Watching newborns carefully formed the basis for the next impor-
tant stage in vernacular childbearing guides: observing the colour of the
baby’s skin as a barometer of health. Medical writers argued that if a
baby was born pink, the prognosis for survival at least into childhood
was good, whilst infants born pale or black were perceived as dead,
dying or unwell. However, more crucial than being pink was that in the
days after delivery its visage slowly changed. Sharp commented that
children that ‘look white and pale when they are born, are weak and
sickly, and seldom live long’. If, on the other hand, the infant was a
‘reddish colour all over the body, when it is first born, and this colour
change by degrees to a Rose colour, there is no doubt of the child but
it may do well.’ Similarly, Pechey stated that ‘you must mind what is
the colour of the new-born infant’, stating that ideally it should be
‘reddish all over the body, for that by degrees turns daily florid.’ This
change had to be gradual or progressive, since babies that were ‘at first
Florid or White’, Pechey explained, would not live long, or would other-
wise mature to be of ‘an ill temperament, Cold, Dull’. The change
ought to be gradual and ‘daily’, something Sharp and Pechey both called
‘turning’.

Bodily development after birth, guided by the care administered by
a mother or nurse, would give indications not just of how likely it was
for a baby to survive into childhood and adulthood but it could reveal
future personality. Pechey’s observation that infants born florid or
white would grow up to be ‘cold’ and ‘dull’ adults suggests that an indi-
vidual’s complexion or humoral make-up was in some way present at
birth. This early period of care was about discovering the nature of the
baby; a process in which the Non-Naturals played an important role.
Crying and the changing colour of a baby’s skin were external manifes-
tations of internal transition and maturation that had to be steady and
gradual. Although the Galenic-Hippocratic tradition saw the young as
invariably hot and moist, newborns were not homogenous and varied
in complexion. Between womb and cradle, newborns occupied a somewhat problematic state. Not only was the child an unstable figure in the family structure and its religious state undefined prior to baptism, but bodily it was in a way becoming itself.

Searching the body and enabling excretion

After the baby had cried and its skin seemed increasingly pink, medical writers stressed that it was important to search the body of the infant so as to identify any bodily impediments. Ensuring and enabling excretion was central to this searching process. Hygiene in early modern medicine did not just refer to the removal of external ‘dirt’, but rather incorporated various processes of care that aimed to facilitate the body’s expulsion of harmful impurities and residues. Similarly the removal of excrement did not just refer to faeces and urine, but sweat, oil and other waste from the body. For infants, there was an urgent need to manage the excretion of moisture owing to their period in the womb. Crying, as I have shown, was an important preliminary act in emptying the brain and passages of problematic moisture and mucus, but it only freed the lungs and passages of excrement, and did little to contribute to the general drying of the body.

In order to facilitate this process of maturation, any blockages had to be removed. First, the midwife or nurse was instructed to insert her fingers into the baby’s mouth to clear any phlegm. Raynalde described in 1545 how ‘with youre fynger (the nailye beynge pared) open the chylde nosetrelles, and purge them of flythynesse’. With a tented cloth, the midwife should clear the ears. Similarly, by rubbing the belly, carers could encourage the baby to void its bowels. Raynalde told nurses to ‘handle so the chyldes syttng[e] [sitting] place that it maye be prouoked to purge the belly’. The 1656 edition of the Complete Midwifes Practice suggested offering newborns wine because it ‘cuts the flegm which the Child has in its throat’. This had the triple benefit of promoting defecation, clearing the throat and allowed ‘the spirit’ to rise up to the head, which ‘comforts and strengthens it’, preventing epilepsy later in life.

The need to ascertain whether the infant was capable of opening its bowels led to some toe-curling interventions. ‘Slipping’ of the fundament (anus), or prolapse, was thought to be a particularly common
condition in infants, caused by excessive crying or straining, something that could obstruct defecation. Similarly, medical writers worried that some newborns were born entirely lacking fundament. The East Riding gentlewoman Lady Margaret Hoby who famously attended to her neighbours in their many ailments, cared for an infant born without a fundament in 1601. An incision was made in order to ensure that the infant was able to defecate, a measure that was unsuccessful. The baby died not long after.34

The broader need to discover bodily abnormalities triggered a process of searching the whole body, which was intrinsic to after-birth care regimes. Vernacular medical guides instructed carers to ‘search whether any thing be amiss in any part that it may be rectified as much as may be.’35 In this, the arms and legs were extended to observe movement, and the mouth was probed to ensure the infant was not tongue-tied. This was not simply about knowing what was wrong with a newborn, but also marked the beginning of a process of potentially remedying such ailments, so the infant could go on to lead a healthy life. Although moisture was something that needed to be managed, it also meant the bodies of newborns were malleable. Medical texts were optimistic that this flexibility could be harnessed to straighten crooked limbs, and lengthen parts that appeared stunted. This was primarily achieved through the process of swaddling. This phase of identifying parts that were ‘amiss’ in Pechey’s words, points to an underlying belief in vernacular medicine that this early period of life was bodily unique and could be capitalised upon for future health.36

We can find this same process of searching and identifying what might be ‘amiss’ in life-writing sources. In 1686, Dorothy Osborne wrote to her daughter-in-law Bridget Osborne passing on advice about Bridget’s newborn son. She instructed Bridget to ‘take care he [the infant] does not use exercise too soon and pray good advice about it that you may be sure there is nothing out.’ She stressed, ‘I don’t Doubt your care’ but could not resist communicating her anxieties ‘because I fear my nephew Herbets lamness was first occasioned by a fall w[hich] was not known or thought dangerous.’37 Understanding whether there was anything amiss with an infant, or in Dorothy’s terms, ‘nothing out’, meant that these problems could be potentially fixed. By not recognising the severity of her nephew’s fall, Dorothy feared she had failed to
capitalise on a period of bodily flexibility, a mistake she was not willing to make again.

Similarly, the Yorkshire gentlewoman, Alice Thornton, described in her spiritual meditations the birth of her second child, Naly, in 1653, and catalogued the newborn's appearance including all that was amiss. Naly became stuck during the long labour 'staining one full hour in the birth at neck & shoulders'. When delivered, Naly was 'well nigh choked with Pleagme and the nauill string ... twice about her necke, & Arms' so that 'she was without any breathing or appearance of life'. Thornton's reflections belie a preoccupation with the problematic presence of mucus and moisture in newborns shared by medical authors, as well as the systematic way in which newborn bodies were searched to account for and classify their health. Despite these initial troubling signs – we can assume that Naly did not cry immediately after birth – Thornton stressed that Naly was not small, weak or imperfect. Rather, she was 'sweet & beautiful, comlie'. Indeed, Naly went on to recover and survived into adulthood. There are many striking echoes of the medical literature in this reflection: the emphasis on breathing as a tool for discovering infant health. Thornton's account also encapsulates the optimism of seventeenth-century medical authors that impediments in infants could easily be overcome owing to their excessive moisture: they could simply be reshaped back into health.

Pamphlets and court cases detailing instances of infanticide are also a useful source in thinking about the ways in which individuals might define an infant as healthy or unhealthy, and also normative expectations of after-birth care, something infanticidal mothers obviously failed to meet. Women accused of infanticide often argued that they had suffered a miscarriage. According to a 1624 law if an unmarried woman concealed a pregnancy and the body of an infant was discovered she was automatically guilty. Courts were, however, willing to consider strong evidence that an infant had been born before it was full-term or had obvious impediments which made stillbirth a more likely explanation. In such cases, the infant body became a central site of evidence and the 'evidence' mostly about newborn health or lack thereof.

This is clearly seen in the 1651 pamphlet describing the charges brought against Anne Greene, a 22-year-old maid from Oxfordshire, who was accused of delivering her infant into the 'house of office' (lavatory) and abandoning it. The infant upon inspection was judged to be
‘very unperfect’. In the first place it was ‘not above a span in length, and
the sexe hardly to be distinguished: so that it rather seemed a lump of
flesh, then a well and duly formed Infant’; it lacked hair on its head. The midwives employed by the court to inspect the infant’s body deter-
machined that it had never lived. Anne herself described how the baby had
fallen from ‘her unawares’ and that the delivery was quick and pain-
less. The same process of inspecting bodily proportions which is
present in vernacular medical literature is rehearsed in this pamphlet
– the limbs and length of the child were noted and its relative state of
bodily perfection – adding to Anne’s case that she had miscarried rather
than murdered her child.

In this way, the poor and unhealthy appearance of the body of a
newborn might be used to acquit women accused of infanticide. Con-
versely, however, if the infant was shown to be healthy and viable, as
in the 1610 pamphlet, The Bloudy Mother, which describes the crimes
of Jane Hattersley, searching the body could expose a mother’s double
sin: murder and duplicity. Jane’s baby was a ‘prety infant’ despite origin-
ating from ‘her polluted womb, into this world.’ The word ‘prety’
was often used interchangeably with ‘comlie’ and ‘lusty’ to refer to
infants that were without impediment and cheerful. In this pamphlet,
the author contrasted the viability of the infant, with the questionable
morals of its mother. There is no way that Jane’s baby could have been
confused for a stillborn child: it cried, struggled and was well-coloured
before its demise. When Jane concealed the baby to smuggle it out
of the house and end its life away from prying eyes, it made a ‘pitiful
[pitiful] shriekke’ to ‘tell his preseruers [preservers], that she told a
wicked and villainous untruth.’ As an inversion of the ideal normative
caring processes enacted by mothers or nurses in medical literature,
Jane ‘most carelessly wrapt [the baby] up in her apron, intending ... in
some impious and excreable sort to have it made away.’ It was only
when she was confronted by her landlords, demanding to inspect the
bundle of clothes, that the infant declared its health and vitality by
crying. Eventually, despite attempted interventions, Jane succeeded in
murdering her infant. Once again, colour, breath, the lack of obstruc-
tion in its throat, and the face of the infant featured prominently as
signs of health or increasing lack of it in the authors’ description; ‘the
babe by his mother breathlesse, with the mouth of it soyld with some,
that rose by her violent wringing.’ The contrast between the promising
bodily character of the baby after birth and its later poor health, made Jane’s decision to murder it all the more evil. ‘Good-wife’, the wife of Jane’s landlord, insisted that ‘She knew she left the child perfectly well, and to see it so suddainly dead’ only magnified and dramatised the crime.46 Watching infant bodies for external clues of well-being features in infanticide pamphlets as a way of supplying evidence in a legal sense. This suggests, however, that there was a certain shared lexicon about how a healthy newborn body should behave which had a wider social practice than the middling- and upper-sort world that women like Alice Thornton inhabited. Furthermore, print culture of this kind drew on a notion of transgressive motherhood – where women not only failed to provide proper care for their infants but actively destroyed them. In this way, we can see that the regulation of Non-Naturals was seen as an intrinsic part of the role of an assiduous and attentive mother in early modern England.

Rectifying imperfections through hygiene

Surveying the baby’s body for fault was useless without recourse to care that remedied these imperfections. After this process of searching and watching the infant had been conducted, carers were instructed to bathe the baby in warm water before drying and binding in swaddling bands designed to strengthen and straighten limbs. François Mauriceau explained that the ‘assistance’ mothers and nurses gave to infants in bathing and clothing was ultimately driven by a desire to remedy ‘such many Infirmitities, to which the weakness of his Age and tenderness of his Body renders him subject’.47 The regulation of hygiene was an important way in which the infant body was heated, cleansed and made more malleable, so that swaddling bands might perform their proper function: to straighten and strengthen the limbs.

Medical writers promoted two separate acts of hygiene for babies: shifting and bathing. In ‘shifting’, the infant’s swaddling bands were removed, and the anus and genitals wiped with a sponge to remove faeces and urine four or five times a day. Bathing was a more drawn out affair, generally performed once a day in which the baby was immersed in warm water, its head supported by a bolster or wadge of fabric.

As well as making the child ‘clean and dry’, however, shifting was couched in terms which suggest that the touching involved in this act
was also as important to infant health as the removal of waste. Sharp, for example, stated that when changing infants, parents or carers should ‘rub the belly down with butter as often as it is undressed’. The friction involved in stroking and rubbing the baby was thought to function in many ways as a substitute for exercise, in distributing nourishment and promoting concoction. By touching babies, carers also settled infants. John Pechey recommended that before laying a child down to rest the nurse should ‘see whither the Linnen be foul’d for Children love to be clean, and will not sleep quietly till filth close are removed from them’. If babies were ‘swaithed too hard’ or ‘pinched by the wrinkling of the Linnen, or pricked by a pin’, such distress could have a very damaging impact on the emotions and infant health more generally. When shifting babies, the room had to be warm and free of draughts. Great care was taken to make sure the temperature and light in the room was suitable for the changing process, as well as that the child was held properly. Thomas Raynalde provided detailed instructions of how to ‘shift’ an infant:

the nource [nurse] must geue all dilygence and hede that she bynd euery part ryght and in his due place and order, and that will all tendernesse (& gentell entreatyng, and not crokedly and confusedly, the which also must be done often-tymes in the day … yf it be crokedly handled, it wyll growe lykewyse.

It was important during this process that ‘it must be defended from ouer much cold, or ouermuch heate’. Wadges of material may have been inserted near the baby’s genitals to absorb excrement, termed ‘clouts’. Daniel Sennert, for example, described in his 1664 Practical Physick a particular rash that occurred on babies’ hips ‘when the clouts are not changed often’. The word ‘clout’ referred to a small cloth, particularly those used in washing dishes and removing dirt. Sara Read has recently suggested that the inclusion of ‘clouts’ in women’s inventories, indicates that these pieces of fabric were used more broadly for hygiene purposes, chiefly as menstrual rags, but also for removing faeces in adults. Clouts may have been an early form of cloth nappy, and shifting therefore aimed at removing specific kinds of excrement. Bathing served related but slightly different purposes. Bathing babies was an important and relatively frequent part of after-birth regimes of care. Raynalde recommended washing babies ‘two or
thre times in the daye’ in a warm bath, hotter in winter, until the ‘body begyn to ware red for hete’. After the first weeks, medical writers recommended decreasing the regularity of bathing. Jane Sharp proposed that in the early months carers should ‘wash the body of it twice a week with warm water’, but that once ‘it be weaned’ babies should be bathed as irregularly as adults. Bathing was no doubt a crucial and medically important act of care in early modern English medical texts, and certainly babies were washed more regularly than adults. The reason for this was not that infants were perceived as particularly filthy, but rather that through bathing, they lost some of the excessive moisture that was considered to be detrimental to health.

What appears to be crucial to the rationale for bathing babies was both the temperature of the water (warm) and, as in shifting, the fact that the infant was touched, rubbed and contented. Bathing represented a mixed experience for medieval and early modern people because of the belief it interacted with the ‘cooking’ process of digestion, and could lead to a loss of radical moisture and heat in the body, prematurely ageing it. Babies’ bodies were wax-like, and easily distorted, and thus excessive movement was thought to cause deformity and illness. In this way, bathing provided an important and safe substitute for movement in encouraging digestion. The heat and frictions which accompanied bathing, John Pechey explained, helped ‘Concoction, and the distribution of nourishment, and serve instead of exercise and motion’.

What went into the baby’s bath along with warm water was of the utmost concern for authors. Early modern medical writers departed from the ancients in their prescriptions of how to cleanse babies perhaps more so than in any other aspect of the after-birth regimen. John Jones stated, ‘we differ from our elders, for we neyther sprinkle them with salte … nor spred on them Mirtle leaues’. He recommended ten parts warm water to one part milk. It is unclear whether this was cow, goat or human breast milk. Marylynn Salmon has shown that breast milk was a relatively common ingredient in seventeenth-century English and American recipes to cure inflammation and to help restore strength after illness. For Jones, milk was a more appropriate addition to water than salt because it comforted and soothed. Salt was an astringent, and in this way could disrupt the process of excretion. Pechey explained that ‘it is to be feared that the salt biteing quality was soon left off, and instead of it they washed the new-born Children with Wine’. Wine...
increased natural heat, making the body even more malleable. The cleansing routine Pechey recommended ‘upon its coming into the World’ was to ‘rub [the infant] all over with hot Canary or White-wine and fresh Butter, or Lard, and dry the Child with a hot Flannel’. The heat, friction and comforting properties of these hygiene regimens secured newborn development by facilitating excretion.

Early modern English medical writers expressed considerable anxiety about the potentially damaging effects of cold water on the infant body. Cold bathing not only hardened the body, but it also could be a sudden and abrupt change from what newborns were used to in the womb: it was at odds with the predominantly hot bodies of infants, and disrupted this gradual and incremental process of ‘turning’. In the late sixteenth century, John Jones recorded in his treatise the tragic mistake made by some priests who typically plunged newborn infants too vigorously to the ‘bottome of the font, not knowing ... that all sodayne mutations could be most daungerous’. He explained that ‘if the naturall heate within, shoulde be ouwercome of the outward colde, the liuing creature must needs perishe, when as of immoderate vse of Elements death ensueth’. One hundred years later, John Pechey warned of the dangerous consequences of cold bathing. The ‘barbarous people’ of Germany, he explained, ‘dip the warm Infant from the Womb in the next Brook, that thereby it may be rendred more strong and lusty, and to try the strength of their Children, whom they chiefly design for the Wars; for without doubt none but strong Children would survive such a dipping.’ Sudden changes from the environment that the infant had become accustomed to – the womb – were dangerous to infant well-being. Warm bathing facilitated the transition from womb to cradle by allowing the body to adapt to the outside world: it heated and dried the body slowly and safely.

Soothing and sleeping

After these acts of hygiene and the baby had been shifted and swaddled, vernacular medical authors instructed carers to set the baby down to sleep. ‘A Child new born sleeps more than he wakes, because his brain is very moist, and he used to sleep in the womb’, the famous herbalist Nicholas Culpeper explained. Sleeping aided consumption of the excessive heat and moisture in the infant body, but also crucially was
understood as the natural state for babies freshly out of the womb. For this reason authors recommended allowing newborns to sleep without restriction. After this early period, however, mothers and nurses should be prudent not to let their charges sleep for too long lest they become sluggish and slow, which would stunt their development.

Vernacular medical texts reveal an assumption that it was only when a baby was relaxed, happy and soothed would it sleep. Strategies centred on touching and comforting the baby; writers recommended that mothers or nurses ought to set the baby down to sleep once it had been bathed and clothed. In this way, laying a child to rest was part of the process of shifting, bathing and clothing which involved touching, rubbing and stroking the infant. Guillemeau explained newborns could be pacified by ‘rocking’, ‘by singing to them’ and after the first sleep by ‘giuing them the breast’, all acts of affection and care. Vernacular medical texts reveal an assumption that it was only when a baby was relaxed, happy and soothed would it sleep. Strategies centred on touching and comforting the baby; writers recommended that mothers or nurses ought to set the baby down to sleep once it had been bathed and clothed. In this way, laying a child to rest was part of the process of shifting, bathing and clothing which involved touching, rubbing and stroking the infant. Guillemeau explained newborns could be pacified by ‘rocking’, ‘by singing to them’ and after the first sleep by ‘giuing them the breast’, all acts of affection and care. Vernacular medical texts reveal an assumption that it was only when a baby was relaxed, happy and soothed would it sleep. Strategies centred on touching and comforting the baby; writers recommended that mothers or nurses ought to set the baby down to sleep once it had been bathed and clothed. In this way, laying a child to rest was part of the process of shifting, bathing and clothing which involved touching, rubbing and stroking the infant. Guillemeau explained newborns could be pacified by ‘rocking’, ‘by singing to them’ and after the first sleep by ‘giuing them the breast’, all acts of affection and care.68 Parents could additionally offer their child pleasant sights, objects that pleased them or to carry ‘them abroad’, a phrase that appears to have encompassed carrying the infant around the home, or venturing outside for short distances. Such practices reveal the centrality of managing the passions of the soul to securing health after birth.69

Rocking was particularly prominent in the strategies writers listed to induce sleep in babies. François Mauriceau instructed the carer to ‘rock him gently with equal motion, without too great shaking’. Rocking too vigorously could ‘hinder … the digestion of the Milk in his Stomach, provoke him to vomit it up.’ The soothing motion of rocking could work in harmony with the nurse or mother’s singing. Singing could foster affectionate ties, but it also settled the child and allowed the carer to shake off their own troubles. A distressed or frustrated nurse could adversely affect the health of the baby she held. Robert Barret in his instructions for choosing a suitable nurse, informed parents that although some nurses ‘are huffing and bounding about, and do not mind the poor Child’, good nurses would ‘sing with a soft voice to lull it to sleep, rocking gently all the while’.71 John Jones described how ‘lullies’ (lullabies) served a dual purpose. First, ‘children disquieted may be brought to reste’, but second, ‘light affections [that] may happen to annoy’ the nurse could be uttered and tension alleviated through singing.72 This, he argued, would cool the passions and excitements of both nurse and child. It meant that animosity towards the child dissipated and did not contaminate milk, if the rocker was the same
individual who fed the child.\textsuperscript{73} Intense emotions such as anger or resentment in a breastfeeding mother or nurse could cause the milk to corrupt or dissipate.

Medical writers universally condemned allowing newborns to sleep in the bed with parents or nurses.\textsuperscript{74} Mauriceau stated that the infant should be kept away from sleeping nurses ‘lest unawares she overlay it’, but rather ‘let her lay it in a Cradle close by the Bed-side, and put a Mantle over the head of the Cradle to prevent the falling of dust on its Face, and that the Day-light, Sunshine, Candle, or Fire in the Chamber, may not offend it.’\textsuperscript{75} Likewise, Guillemeau stated that an infant must ‘be laid in his cradle: fitted with a little mattresse’.\textsuperscript{76} This should be ‘laid deepe to the bottome, that the sides of the cradle may be a great deale aboue the mattress’ so the infant would not ‘feare least he fall out of it’. He recommended tying strings around the infant so that if rocked, it would not fall out.\textsuperscript{77} Cradles appear to have been common accoutrement in even middling-sort families, so much so that Alice Thornton recorded that both her one-year-old and newborn had separate cradles, laid next to each other in their mother’s bedroom, until the illness of her elder child necessitated shifting the cradle to the ‘Blew Parlor, a great way off from me, least I hearing her sad scriks should renue my sorrowes.’\textsuperscript{78}

The ideal sleeping position of infants was much debated in childbearing guides. Most writers recommended laying infants on their back, with the head ‘sumwhat hyer than the rest of the bodye’, to help the excrements of the brain flow through the body.\textsuperscript{79} Additionally, mothers and nurses were instructed to continually shift the child from the left to right side of the bed so as to ensure asymmetry did not develop. Lighting was particularly important. If the light source was consistently on one side of the room in which the cradle was placed, the infant could develop a squint. Sleeping was the final step in the regime of care nurses and those tasked with caring for the child had to accomplish after birth. It was only once excretion, movement and passions of the soul had been regulated that a baby could be allowed to indulge in sleep.

\textbf{Conclusion}

The six Non-Naturals played a prominent role in securing infant survival in the minutes, hours and days after birth. They were tools in the
carers’ arsenal to ready the baby for life outside the womb, and they facilitated the gradual transition from womb to cradle. Sudden ‘mutations’ in John Jones’s terms were potentially fatal; babies were vulnerable and impressionable. While this could be problematic – infants that moved excessively could rupture their bellies or break and bend bones – it also meant their bodies were malleable, something that the practices of hygiene and swaddling made use of. Breathing was the prerequisite for life and it was only once the baby had voiced its vitality and viability that carers were instructed to embark on any of the above acts of care. The moisture that had sustained the infant during pregnancy, became life-threatening after birth and had to be excreted. As exercise was dangerous for young bodies, seventeenth-century childbearing manuals offered ways in which this Non-Natural could be managed through touch. Friction aided concoction and digestion, but it also settled infants and prevented the rousing of the passions of the soul. Through these tactile practices of care, the body could be shaped and moulded.

Here, I have discussed the stages of care and caregiving that have largely excluded food and drink. This is because medical writers were adamant that these acts should be carried out before the infant suckled. John Jones stated that if the ‘youngly … be ordered as you haue harde [heard], it shall be time to giue it sucke’, stemming from the belief that greedy unborn children did little else but eat during pregnancy. Babies were born gluttons, but their ability to digest and excrete was limited and needed to be carefully managed. The author of Paidon nosemata explained, ‘by reason of the tendernes and softnesse of [their] Palat … they being unaccustomed to meat being newly born’ had insatiable appetites and could suck ‘more than they can digest’. Nurses or mothers were instructed to wait until both the infant appeared well and the mother’s milk was thin and white to begin breastfeeding. This advice appears to have been upheld within upper-sort seventeenth-century English families. The parliamentarian Simonds D’Ewes recorded in his diary that when his first son, Clopton D’Ewes, was born, doctors advised that the ‘child should not sucke any other till her [his wife’s] breasts were drawn, and made fit for it’. D’Ewes attributed the ‘cursed ignorance of such as were employed about my wife during her lying-in’ for his child’s premature death. Having delayed breastfeeding ‘it was so weakened as afterwards proved the cause of its ruin’. Excretion had to be established before the infant took on sustenance, and
thus the practices of care discussed in this chapter were very much about preparing infants for their first feed. Previous accounts of early modern infant feeding practices have focused on social and cultural attitudes to breast milk and wet nursing. More work is needed on what these measures reveal about concepts of infant health.

I have shown here that newborns were seen as bodily distinct from adults and children. This was inscribed in the formulaic regimen of care set out in childbearing manuals, of which the Non-Naturals were central in guiding the infant slowly to bodily independence.

Notes

2 S. Cavallo and T. Storey have been the first to make Non-Naturals the centre of a historical study: *Healthy Living in Late Renaissance Italy* (Oxford: Oxford University Press, 2013).


10 Penelope Mordaunt to Sir John Mordaunt, 12 October 1699, Warwickshire Record Office, CR1368, vol. 1, f. 21.


15 Anne, Countess of Arundle to Mary Talbot, 21 August 1689, Lambeth Palace Library (henceforth L.P.L), MS 3205, f. 143.

18 Cavallo and Storey, *Healthy Living*, pp. 240–70.
25 Wellcome Library, London, MS3712, Elizabeth Okeover, pp. 119, 203, 210, 212, 213; 142, 142 and 157; 91 and 198. This recipe book has been discussed in more detail: Richard Aspin, ‘Illustrations from the Wellcome Library: who was Elizabeth Okeover?’ *Medical History*, 44 (2003), pp. 531–40.
26 Hannah Newton argues that medical writers understood children to experience emotions more powerfully than adults. See *The Sick Child in Early Modern England*, pp. 41–5.
32 Raynalde, *The byrth of mankynde otherwyse named the womans booke*, f. 110r.
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esp. chapter 2; E. Botonaki, 'Dissecting bodies and selves in the Early Modern period', in Z. Detsi-Diamanti, K. Kitsi-Mitaka and E. Yiannopoulou (eds), *Flesh Made Text Made Flesh: Cultural and Theoretical Returns to the Body* (New York: Peter Lang, 2007), pp. 75–86.

36 Ibid.
37 D. Osborne to B. Osborne, c. December 1686, British Library (henceforth B.L.), MS Add 28050, f. 63r.
38 A. Thornton, B.L., Add MS 88897/1, p. 135.
42 L. Gowing has argued that 'It was established knowledge that poor women, and in particular the mothers of bastards, bore their children quickly and more easily than those full prepared for a lying-in, and that such labours were ’shamefully easy’. ‘Secret births and infanticide in seventeenth-century England’, *Past & Present*, 156:1 (1997), pp. 87–115, on p. 99.
44 Ibid.
50 Raynalde, *The byrth of mankynde*, f. 110v.
51 Ibid, f. 110r.
53 OED.
55 Raynalde, The byrthe of mankynde, f. 111r.
56 Sharp, Midwives Book, p. 375.
60 Pechey, A general treatise, p. 6.
61 Jones, The Arte, p. 32.
63 Pechey, A general treatise, p. 3.
64 Ibid.
65 Jones, The Arte, p. 36.
67 Culpeper, A Directory for Midwives, p. 144.
69 Ibid.
70 Mauriceau, The Accomplish’t Midwife, p. 368.
71 Barret, A Companion for Mid-wives, p. 91.
73 For the modest body of scholarship on the history of lullabies see Leslie Daiken, The Lullaby Book (London: Edmund Ward, 1959), and


76 Guillemeau, *Child-birth*, sig. Mm3v–Mm4r.


78 A. Thornton, B.L. Add MS 88897/1, pp. 134; 135.

79 Raynalde, *The byrth of mankynde*, f. 11r.


