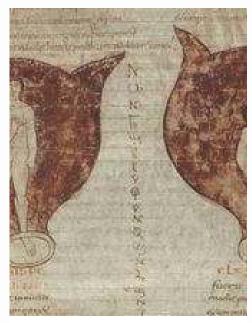


Herbs and Women's Health

Twenty-first century women generally assume that we enjoy greater agency over health and fertility than women of the pre-modern world, thanks to scientific advancements in women's health as well as the availability and effectiveness of contraceptives. We accept that without modern obstetrics, gynecology, and hormonal contraceptives, our foremothers were simply victims of biology—if they survived the perils of their first pregnancy and childbirth, they spent much of their lives pregnant. While it is true that for much of history women did not have reproductive knowledge derived from technological advancements and modern gynecology, it is incorrect to assume that they had no reproductive knowledge or choice. In fact, for much of history, women's agency over their health and fertility was due in large part to their knowledge of medicinal herbs—herbs like dittany.



Foetal positions in womb,...

An Ancient Herb from an Ancient Tradition

Dittany—an aromatic herbaceous plant—has been used as a medicinal herb, particularly for women's health, for more than 2,000 years. Roman statesman and naturalist Pliny the Elder wrote that dittany "... acts as an emmenagogue, and is an expellent of the fœtus when dead or lying transversely in the uterus... indeed so active is it in its effects that ordinarily it is forbidden to be introduced into the chamber of a woman lying-in..." Pliny mentions two types of dittany—"dittany" and "pseudodictamnum," also known as bastard (or false) dittany. While both types of dittany worked as an emmenagogue (an aid to stimulate menstruation) or to help expel a fetus, as the name suggested, pseudo or bastard dittany was considered less potent.



By the beginning of the Medieval period, the works of classical authors such as Pliny and Dioscorides were continuously collected and reproduced to create a genre of manuscripts known collectively as herbals. Today, we define herbals as a family of related books produced by naturalists, physicians, and proto botanists that identify and describe plants through text and/or illustrations and explain plants' medicinal virtues, often incorporating local or indigenous knowledge as well as recipes for therapeutic preparations. As a genre, herbals were also highly interconnected. Authors of herbals routinely cited one another, commented on, or translated previously published herbals, synthesizing information on plant nomenclature, origin, and botanical lore in the process.



One such lore was the power of dittany for women's health. According to the Roman physician Dioscorides, arguably the most influential ancient author on medicinal herbs, "diktamnos," as he called it, was a hot plant with woolly leaves, and true dittany grew only on the island of Crete. Like Pliny, Dioscorides described the medical virtues of dittany (and bastard dittany) for women, which he said when drunk, used as suppository (pessary), or burned as incense had the power to expel a dead fetus. Dioscorides's *De Materia Medica* served as the foundational text for most European herbal manuscripts. As such, Dioscorides's description of dittany as well as his claim that it had the power to quicken birth and expel a dead fetus, were repeated in medieval herbal manuscripts as well as in early modern printed herbals.

By the early modern period, dittany was often described in herbals in three forms. The first was true dittany, a rare herb which, as Pliny wrote, grew only on rocky cliffs on the island of Crete. The second was white dittany (sometimes called fraxinella), and the third was bastard or false dittany. Today, these correlate to three different species across three related genera—*Origanum dictamnus*, *Dictamnus albus*, and *Ballota pseudodictamnus* respectively. While we now classify dittany as three distinct species, in early modern herbals the main differences between the three were origin and, most importantly, potency. Whether described in two or three forms, dittany continued to be classified as a potent emmenagogue and an expellant for both a fetus and afterbirth in early modern herbals.

Herbals and Women's Medical Knowledge

The historical record is largely silent on how early modern women perceived and experienced menstruation, pregnancy, and childbirth. Very few surviving sources explicitly discuss these experiences for women, and even fewer were authored by women. This leaves historians with the difficult task of reconstructing the practical realities of women's health from male-authored sources.



: Woodcut of a woman in bed...

53

Ancient, medieval, and early modern herbals were by and large written by men and were the product of a learned textual tradition rather than lay or common knowledge.² As such, the simple appearance of dittany as an herb for women's health in herbals is not sufficient evidence to suggest that women knew the plant's medicinal virtues and used it accordingly. However, while the initial production of early modern herbals was spurred by learned medical humanists seeking to elucidate classical scholarship to produce more useful guides for identifying medicinal plants, the popularity and proliferation of herbals increased substantially over the course of the sixteenth and seventeenth centuries. This indicates that herbals were consumed by an increasingly larger audience. Furthermore, many herbals produced in the late sixteenth century, such as Castore Durante's 1585 Roman herbal, were simplified versions of more complicated Latin herbals, written in the vernacular and, thus, far more accessible to a wider, albeit literate, audience.

Hat radius Tal van a au v a complet. The confluence of the conflue

!

[]

Historians of early modern medicine have demonstrated that elite and middling European women actively read vernacular medical books such as herbals and advice manuals, in addition to collecting medicinal recipes, since they were expected to have general medical knowledge in order to fulfill their Christian duties as wives, mothers, and caregivers, both within the home and the community. Recipe collections are particularly telling when assessing the intersection of learned and lay medicine. Recipes collected and circulated by elite women often incorporated, combined, or refined medicinal knowledge found in herbals. For example, in a set of seventeenth century handwritten recipes dealing with issues of conception, the author,

Take of Listory of snain of madder of each one of smalage of snain of madder of each one of smalage of snains or leart Bennet of each chalf am ounce; may nort, penyroyah, Calliment littany of Greet Baim saven of each one good Randfull of Cathons half an ounce, of maces cinamon vinds of Cathons half an ounce, of maces cinamon sail our dragmes y half of Centric g Saffron a scruple shirt of hearts y bruses the other telings, then took them all in 3 quits of white wine in a dult were them all in 3 quits of white wine in a dult were them all in 3 quits of white wine in a dult were them as his a stage of white wine in a dult were them as his a stage of white wine in a dult were them as his of white wine in a dult were them as his ort of them boyles course on the a traver that is not left them boyles from so softly some longer, when they are lost keeps of them his strayed out by strong comprished y keeps is strained ligaer for use

Receipt book of Rebeckah Winche [manuscript].

Rebeckah Winche (died c. 1713), listed the ingredients for a potion used for "purging the wombe from all hurtfull or superfillus humers which hinder conception." The ingredients for the potion included mugwort, pennyroyal, and dittany of Crete, all commonly described as substances that provoke menstruation, birth, and afterbirth in early modern herbals.

There is also evidence that women not only consumed herbals and vernacular medical literature, but they also passed them down through generations. Historian Kevin Hayes has illustrated how women in colonial North America passed down to female family members Nicolas Culpeper's *London Dispensatory*, the first medical work to be printed in America—and which lists white dittany and dittany of Crete as a root that "promotes the terms [menstruation]." A 1667 London edition of Culpeper's Dispensatory in the Boston Medical Library was originally owned by Elizabeth Greenleaf, who passed the copy to her daughter Grace. Grace eventually gave the book to her sister. The 1720 edition of the Dispensatory, also in the Boston Medical Library, contains an inscription stating that the book was passed down to Rachel Martin by her mother five days before she died on March 13, 1765.

ROOTS. The Phylitians Library. 57

Valerian, Spatling, Poppy, Carline and Coline, China, Cyperus long and round, Filipendula, Dog-grais, Spick. Mond. Billion and Indian, Parilley, Knee-holty, white Sarifrage. Womb. Birthwort long and round, Galanga greater and leffer, Peony and and American and Language of Spank. 8c. Mollife, Mallows, Marth-mallows, Repair cool the Head, Rofe-root. Jonatch. Sow thiffels, Engive. Mallife, Mallows, Marth-mallows, Repair cool the Head, Rofe-root. Jonatch. Sow thiffels, Engive. Mathemallows, Succory. Biffwort. Liver. Maddir, Endive. Ciches. The properties of the Rostr. Although I confest the properties of the Samples may be found out by the enthing explanation of the terms and I lippole by that means they were found out at first, and although I hate a lary fuddeat from my heart, yer to incourage young fludents in the Art. I half quote the cheffelt of them: I defire al Lovers of Phylick to ompare them with the explanation of these Rules, so shall they fee how they agree; so may they been been to include the properties of all Singles, to their own exceeding benefit in Phylick.

Rosts bird, Cyperus, Billort Tormenti, Cingenchi J. Beris prech. Water-flag, Alkanet, Toothwort Sc. Discup, St. Engles, Billort, Tormenti, Capers, St. Chine, thiffle, Succory, Endive, Flippon, Alarabacca, Carlick, Jecks. Options, Rapantick, Turnerick Carline, thiffle, Succory, Endive, Flippon, Alarabacca, Carlick, Jecks. Options, Rapantick, Turnerick Carline, thiffle, Succory, Endive, Flippon, Smallage, Grafie, Alphodel, Calandine, &c. Option, Alarabacca, Carlick, Louis, Paragus, Planatine, Capers, &c. Mallife, Mallows, Marth-mallows, Barawa, Caller, Mallows, Marth-mallows, Mallows, Barawa, Gallick, Ontine, Rapine Coline, Mallows, Marth-mallows, Mallows, Marth-mallows, Mallows, Barawa, Gallick, Colfus, Suppine Colins, Mallows, Marth-mallows, Mal

: Culpeper, London Dispensator... []

Dittany and Reproductive Control

As we can see, by the early modern period, dittany had been prescribed as an herb for women's reproductive health for more than a millennium. We also know that middling and elite women were aware of the purgative powers of dittany. Particularly notable was its use as an effective emmenagogue. In ancient, medieval, and early modern European medicine, regular menstruation was viewed as essential to a woman's health. Male physicians offered numerous theories and explanations as to why women menstruated; however, all agreed that missed or delayed periods signaled an imbalance or corruption of the humors. Menstruation was viewed akin to a purge, either as a means to purify the female body or to expel excess blood—and unexpelled menstrual fluid was deemed harmful. Thus, when a woman suffered from delayed menstruation, she turned to known emmenagogic herbs to induce bleeding and return her to health.



Drawing from a 13th-century...

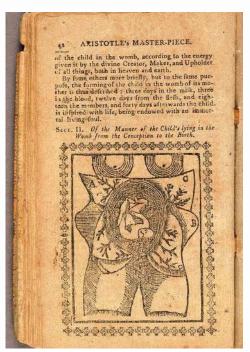
As many historians of science and medicine have concluded, the use of herbs to "draw the menses down" or "provoke menstruation" was rather well-known and commonplace in pre-modern Europe, especially among local midwives and herbalists, who were responsible for all aspects of women's health in their communities.⁵ Women of all social classes would have known of the medicinal uses of many herbs either through the local oral traditions of midwives and herbalists or, if literate, written sources like recipes and herbals. In fact, many herbals included examples of women's knowledge of medicinal herbs, especially midwives' knowledge of antifertility agents. For example, Durante's popular herbal lists 142 plants capable of provoking menstruation, including three types of dittany. Pietro Andrea Mattioli's influential herbal lists 125 and John Gerard's records 25 plants or plant-based remedies capable of provoking menstruation.

The ubiquity of emmenagogic plants in premodern herbals has led some scholars to question the explicit usage of these herbs. In the early 1990s, historian John Riddle posited that herbs like dittany were actually used to control fertility and prevent unwanted pregnancy. As is the case today, delayed or missed menstruation in the early modern world could have been caused by any number of health and environmental factors, such as poor nutrition and excessive labor. Pregnancy, however, was and remains a leading cause. Therefore, Riddle proposes, emmenagogues were not only used to restore women's health but were also employed as a means to prevent or terminate unwanted pregnancies. For example, in his entry on the flowering plant, stinking gladdon, Gerard stated, "It profiteth being used in a pessarie, to provoke the termes, and to cause abortion."



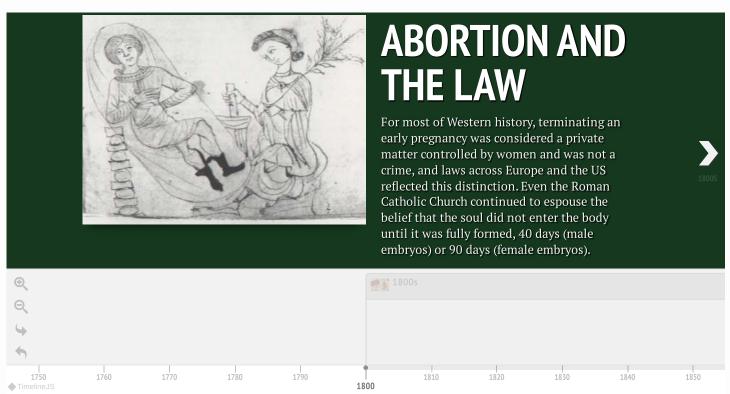
Gerard, Herball, 1597, p. 54

Gerard's explicit statement associating provoking menstruation with ending a pregnancy, however, was rare. As historian Londa Schiebinger explains, "the desire to curb fertility ran counter to mercantilist pronatalist policy." Thus, unlike Gerard's, most early modern European printed medical books did not openly state that women could provoke menstruation to avoid or end pregnancy. They did, however, routinely caution women from using emmenagogic herbs while pregnant. For example, a popular 1684 English sex and midwifery manual, *Aristotle's Masterpiece*, instructed women on the precautions to take after they think they have conceived: "Let her abstain from all things which may provoke either urine or the courses [menstruation]..." While intended to help women safeguard a desired pregnancy, this passage also clearly associates inducing menstruation with terminating a pregnancy.



: Aristotle's Masterpiece by an...

The line between contraception (avoiding pregnancy) and abortion (terminating pregnancy) was not clear in the pre-modern world. In the early modern context, the word abortion was more akin to miscarriage. Because of this, historians argue that using herbs to terminate an early pregnancy was not only socially acceptable, it was also legally permissible. Unlike contemporary science, pre-modern theories of conception did not distinguish between an embryo and a fetus. Early modern sources also did not assign full personhood to a fetus. Furthermore, a woman in the early modern world was not pregnant until she declared it. Without our contemporary tests and ultrasounds, detecting pregnancy within the first few months was difficult, and, thus, left up to the mother. Prior to the professionalization of obstetrics, it was a woman, not male physicians, who determined when a fetus became viable. The quickening—when a pregnant woman began to feel or perceive fetal movements, usually between fifteen to seventeen weeks (three to four months)—was the most important confirmation of a viable pregnancy and often when women announced it.



Did Dittany Work?

No twentieth or twenty-first century scientific studies specifically assess dittany's ability to provoke menstruation or its efficacy as an early-term abortifacient. It is telling, however, that in most early modern herbals, dittany was often compared to pennyroyal—a plant in the mint family—which has also been considered a powerful abortifacient since antiquity. In his herbal, Mattioli related dittany to "pulegium" or "pulegio," the early modern Latin and Italian names for pennyroyal. Mattioli stated that dittany was even sometimes called "pulegio salvatico," or wild pulegio. According to Mattioli, the difference was that dittany was from the island of Crete and had larger fronds. Mattioli's contemporary and associate, naturalist Ulisse Aldrovandi, also connected dittany and pulegio. Aldrovandi was an avid collector of nature and is credited with creating the first herbarium. His surviving herbarium specimens have been carefully preserved and digitized. Written under the name "Dictamnum Creticum" of his 400-year-old dried specimen is "Pulegium Sylvestre."

While contemporary scientific research has not assessed dittany's biofactors in relation to reproductive health, researchers have identified pennyroyal's key active compound, pulegone. A lab experiment by Soares et al. revealed that the essential oil of pennyroyal and isolated pulegone does have the potential to produce significant effects on the female reproductive system. In fact, many plants high in essential oils have proven abortifacient properties. Nearly all of the herbs cited as an effective emmenagogue across the herbals of Mattioli, Durante, and Gerard have high essential oil contents, and mugwort, pennyroyal, and rue remain classed as herbs women should avoid while pregnant today. 10

The knowledge of how to provoke menstruation through herbs gave pre-modern women some reproductive control, either as a means to regulate menstruation to increase the likelihood of conception or as a means to end an unwanted, early-stage pregnancy. For more than 1,500 years medical texts and herbals associated dittany with women's health, particularly with issues of menstruation, as well as labor and delivery. This long association, coupled with the evidence that early modern elite and middling women read and applied plant knowledge derived from herbals, suggests that pre-modern women in the west did indeed seek to exercise agency over fertility and reproduction and that medicinal herbs like dittany were central to this endeavor.



People distilling from Rösslin, Kreuterbuch, 1550

References

- 1. Pliny the Elder, "Remedies for Female Diseases," in *The Natural History*, trans. John Bostock and H. T. Riley, accessed May 26, 2020, http://data.perseus.org/citations/urn:cts:latinLit:phi0978.phi001.perseus-eng1:26.9 ↔
- 2. It should be noted that there were some female-authored medieval pharmacopeias, most notably Hildegard of Bingen's Physica and the Trotula. For more on the Trotula, see Monica H. Green, ed. and trans., *The "Trotula": A Medieval Compendium of Women's Medicine* (Philadelphia: University of Pennsylvania Press, 2001).
- 3. Elaine Leong, "Herbals She Peruseth': Reading Medicine in Early Modern England," *Renaissance Studies* 28, no. 4 (2014): 556–78, accessed November 18, 2020, http://www.jstor.org/stable/24423854 ↔
- 4. Kevin J. Hayes, A Colonial Woman's Bookshelf (Eugene, Oregon: Wipf and Stock Publishers, 2016), 94. ←
- 5. Mary Lindemann, *Medicine and Society in Early Modern Europe*, 2nd ed. New Approaches to European History (New York: Cambridge University Press, 2010), 21–23. ←
- 6. John M. Riddle, *Eve's Herbs: A History of Contraception and Abortion in the West* (Cambridge, Mass.: Harvard University Press, 1997). ←
- 7. Londa Schiebinger, "Agnotology and Exotic Abortifacients: The Cultural Production of Ignorance in the Eighteenth-Century Atlantic World," *Proceedings of the American Philosophical Society* 149, no. 3 (2005): 316–43, accessed December 3, 2020, http://www.jstor.org/stable/4598938 ↔
- 8. P. M. Soares et al., "Inhibitory effects of the essential oil of Mentha pulegium," Planta Medica 71 (3) (2005): 214–218. \leftarrow
- 9. Sarah E. Nelson, "Persephone's Seeds: Abortifacients and Contraceptives in Ancient Greek Medicine and Their Recent Scientific Appraisal," *Pharmacy in History* 51, no. 2 (2009): 57–69, accessed December 4, 2020, http://www.jstor.org/stable/41112420 ←
- 10. Aviva Romm, "Pregnancy and Botanical Medicine Use and Safety," in *Botanical Medicine for Women's Health*, eds. Aviva Romm, Mary L. Hardy, Simon Mills (London: Churchill Livingstone, 2010), 321–333, https://doi.org/10.1016/B978-0-443-07277-2.00013-1 ↔

Explore the cultural histories of plants and their influence on human societies