

A Colonial Midwife's Pharmacopoeia
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HISTORICAL BACKGROUND:

It is beyond the ability of most folks nowadays to even begin to imagine what everyday life was like back when **routine** medical care was anything but. At the end of the Colonial Era, medical science was in its infancy and thus people who cared for the ill and injured, physicians and lay alike, still possessed a relatively limited understanding of the workings of the human body and neither did they know with absolute certainty which of the many herbal remedies they employed were efficacious for curing the many illnesses and diseases that were common to the lives of Americans then and for the better part of a century thereafter. An apt description of what the ill and injured were subjecting themselves to when they sought medical help comes from Lewis Thomas (1913-1993), a noted American physician, who observed that: bleeding, purging, cupping and the administration of infusions of every known plant, solutions of every known metal, every conceivable diet including total fasting, most of them based on the weirdest imaginings about the cause of disease, concocted out of nothing but thin air--this was the heritage of medicine until a little over a century ago.

For the majority of people who lived in the Colonial era, medical treatment was something they received at home from the head female of the household or from a midwife either because they didn't live near a physician or because they couldn't afford the physician's fees. Typically, the knowledge home practitioners possessed of the *products* and *procedures* they employed derived from generations old traditional knowledge; passed down orally from mother to daughter or, in the case of midwives, learned through apprenticeship as the majority did not have ready access to "medical/pharmaceutical" texts available at the time such as William Lawson's ***A Countrie Houswifes Garden*** (1617), Nicholas Culpeper's ***The English physitian: or an astrologo-physical discourse of the vulgar herbs of this nation*** (1652), E. Smith's ***The Compleat Housewife or, Accomplish'd Gentlewoman's Companion*** (1751), and Elizabeth Nihell's ***A Treatise on the Art of Midwifery, Setting Forth Various Abuses Therein, Especially as to the Practice with Instruments*** (1760). Of particular interest and value to colonial settlers would have been John Josselyn's ***New England's Rarities Discovered*** (1672) in which he presented "The Physical and Chyrurgical Remedies Wherewith The Natives Constantly Use To Cure Their Distempers, Wounds and Sores" and John Tennent's ***Every Man his own Doctor: or, the Poor Planter's Physician*** (1736). A United States pharmacopoeia (a book containing a compilation of pharmaceutical products with their formulas and methods of preparation) did not exist until 1820.

Out of necessity, because they seldom had immediate access to an apothecary or a physician, home-based medical practitioners cultivated the plants that comprised their personal pharmacy either just outside the door in a dooryard garden or out in the kitchen garden interspersed amongst the staples growing there. They also harvested medicinal plants local to the area, their knowledge of the curative powers of said plants garnered from the natives; much of whose orally transmitted medicinal tradition survived the annihilation of its transmitters only as a result of its being grafted onto the white man's medical knowledge base. Furthermore, in addition to growing or gathering their medicinal stock; which, it should be noted; they had to be able to

identify on sight from memory; these women needed to know how to preserve and prepare their medicinal plants in order that they would have the needed remedies on hand during the out-of-season months. All things considered, it's a wonder anyone survived and yet survive they did.

GUIDING QUESTION/S:

- What constituted *state of the art* medicinal knowledge at the close of the Colonial Era?
- How were medicinal plants prepared for dispensation to the sick and injured?
- What traditional medicinal plant knowledge from the Colonial Era has carried over into the present?

LEARNING OBJECTIVES:

At the end of this lesson, students will demonstrate their understanding of

- how/where medical *practitioners* of the American colonial era obtained the raw materials that went into the medicines they dispensed to cure and/or ease the sufferings of the ill and injured
- how these materials were prepared, and
- the extent of development and the general efficacy of medical and medicinal knowledge available to American medical *practitioners* at the end of the American colonial era

through

- 1) the compilation of an illustrated and annotated pharmacopoeia of the medicinal herbs prepared and used by Martha Ballard as presented in *A Midwife's Tale*.
- 2) An essay in which students reflect upon and discuss the significance of Martha Ballard's diary in light of the scientific/medical community's revived interest in and pursuit of traditional herbal knowledge; in particular that possessed by aboriginal natives of the world's tropical rainforests and in Africa

Prep for Teachers:

- Pre-read/preview *A Midwife's Tale* (book and movie) You might wish to have already compiled an identification/terminology list of the forms of herbal preparations and medical procedure terms such as those on page 50 (tea, decoction, syrup, pill, clister, vapor, smoke, poultice, plaster, blister, cataplasm, bath, ointment and salve) and elsewhere in the text to facilitate discussions. In the appendix to the book, Ulrich has gathered together a listing of the medicinal ingredients mentioned in the diary.
- Print out selection from Tennent's pamphlet presented by the Armory Hill Living History on their website or taken from the text itself if you can find a copy.
- Print out *Medicine & Health* selection from Stratford Hall website
- Check links for (1) botanical illustrations (botanical.com – please note that not all plants in this site have illustrations) and (2) medicinal properties of selected plants.

MATERIALS:

- Bone folder
- Punch
- wood to protect tabletop when punching ... about 5" square
- Right Angle Triangle (preferably one that is about 6" or more on one side)
- Waxed Linen Thread (2 lengths about 36" long)
- Bookbinding Needles (4 each) #16 blunt
- Text Weight Paper (9" x 12")
- Leather (about 5" x 12"), plus a long 36" strip for tying the book together
- colored pencils
- computer
- printer.

LESSON PROCEDURE:

In this lesson, students will begin their inquiry by **observing** a practitioner of colonial era medicine at work via the *lens* of Laurel Thatcher Ulrich's *A Midwife's Tale* in written and visual (DVD) format. The book contains 10 diary chapters of which chapters 1, 5, and 7 and the aforementioned appendix are the most relevant to the purpose of this inquiry. Depending on class size, you may prefer to assign each individual, or if necessary pair, a chapter to read from the book so that as many chapters as possible are covered. In my own class I typically have 10 to 15 students of widely varying reading/comprehension ability and so I would pair a low-level reader with one of higher ability to ensure that the former is able to identify and extract the required information. I would give the higher ability students the option of *interrogating* an additional chapter.

- 1) Instruct students to *interrogate* their respective chapters. They are to record mention of illnesses, medical procedures and herbs/remedies they encounter in both the diary passages and Ulrich's analytical segments. Instruct them as well to indicate their familiarity with/questions about the same. For example, do they know/have they experienced the 'canker rash" that is the focus of Chapter 1 and if so, what treatment (procedure/remedy) did they receive? How did the treatment they received differ from that in the text? Do they know of anyone who has died from the "canker rash"? When was its cause/cure discovered? For this and other illnesses that Ulrich discusses at length such as Ascariasis (intestinal worms, Chapter 7) you may wish to have students prepare a K-W-L chart.
- 2) View the movie or, if you prefer or time is a consideration, selected scenes. You can access a transcript of the movie at:
<http://www.pbs.org/wgbh/amex/midwife/filmmore/pt.html>
- 3) Distribute supplemental reading materials. Refer students as well to Nicholas Culpeper's work.
- 4) **CLASS DISCUSSION:** After completing the reading and/or the viewing of the movie, introduce students to the medicinal listing in the Appendix. Through a class discussion, uncover their familiarity with any of the plants just as plants. For example, Foxglove is common to flower gardens in this area. Do any of the students' own families have a flower garden or an herb garden? Which, if any of the medicinal plants do they grow? Do they use any of the plant matter and if so, for what purpose? Discuss as well their familiarity with pre-packaged herbal remedies. For example, do they use Echinacea and Green Tea to treat a cold? In their opinion, is it effective?

- 5) **PHARMACOPOEIA:** May be compiled in either print (soft-covered Coptic book <http://home.comcast.net/~meisterin.katarina/coptic_book.html>) or Power Point. Ulrich lists 53 local plants Martha Ballard used as material for the remedies she dispensed to her patients. For the pharmacopoeia, students will **(1)** obtain the botanical illustrations, from the internet <<http://www.botanical.com/botanical/mgmh/mgmh.html>> **(2)** research and identify which parts were used, how they were prepared and in what form they were dispensed to the patient and **(3)** ascertain the viewpoint of the medical establishment regarding the plants – are they used medicinally in the present time?

Since it is necessary to access a variety of sources, these tasks may be assigned in a number of ways depending on the abilities/interests of the class. One approach would be to divide the # of plants by the # of students and have each student responsible for gathering all the necessary information for their assigned plants. A second option, perhaps more suitable to classes in which there is a great disparity in language arts ability would be to assign some students the task of collecting the illustrations and other students the task of obtaining and organizing the technical information.

Once the materials have been gathered and organized, students either print and “publish” the pharmacopoeia in the form of a Coptic book or put it into a power point.

- 6) **Reflection Essay:** Prior to giving this assignment, you may wish to devote some time to a discussion of scientists’ revived interest in known traditional knowledge as well as their relatively recent recognition and pursuit of the potential value of aboriginal medicinal knowledge. If it is found that an aboriginal tribe possesses a cure to some illness, who owns that knowledge? Who deserves to benefit from the marketing of such knowledge? In light of these developments, how significant is Martha’s diary and others like it we have yet to re-discover?

STANDARDS:

CONNECTICUT FRAMEWORKS:

- 1.11-12.1 Formulate historical questions and hypotheses from multiple perspectives, using multiple sources.
- 1.11-12.2 Evaluate data within the history, social, political and economic context in which it was created, testing its credibility and evaluating its bias; and
- 3.11-12.1 Demonstrate an understanding of the ways that cultural encounters and the interaction of people of different cultures in pre-modern as well as modern times have shaped new identities and ways of life
- 4.11-12.4 Display empathy for people who have lived in the past
- 4.11-12.5 Describe relationships between historical subject matter and other subjects they study, current issues and personal concerns.

HISTORICAL THINKING – Standard 4 C, D

SUPPLEMENTAL MATERIALS

- 1) Excerpts from Every Man His Own Doctor: Or, The Poor Planter's Physician
<http://www.armoryhill.com/doctor01.html>

<i>Cough</i>	<p>I shall begin with a Cough, which is the Foundation of many bad Distempers, and therefore should be taken care of as soon as possible. It may be cured in the Beginning with riding moderately on Horseback every Day, and taking only a little <i>Ground Ivy Tea</i> sweeten'd with <i>Syrrup of Horehound</i>, at Night when you go to Bed. But in Case it be violent, it will be proper to <i>bleed</i> Eight Ounces, and be constant in the Use of the other <i>Remedies</i>. In the mean while, you must use a spare and cooling <i>Diet</i>. without either Flesh or strong Drink. Nor should you stove yourself up in a warm Room, but breathe as much as possible in the open Air. And to prevent this Mischief, don't make your self tender, but wash every Day in cold Water, and very often your Feet.</p>
<i>Whooping Cough</i>	<p>The Whooping Cough, (often fatal to Children,) is attended with a stronger Convulsion than ordinary, which causes the <i>Whooping</i>.</p> <p>For this, boil <i>Hysop</i> and <i>Elicampane</i>, a Handful of each, in 2 Quarts of water, strain it off, and adding 1 Pound of clean <i>Muscovado Sugar</i>, boil it again, and give the Patient 2 Spoonfuls every 3 hours.</p> <p>This same Remedy is good for a shortness of Breath and Hoarseness, only in those Cases, <i>Linseed Tea</i> sweeten'd with <i>Honey</i>, should be a constant Drink, and a spare and cooling <i>Diet</i> punctually observ'd.</p>
<i>Pleurisy</i>	<p>A Common Consequence of a violent Cough is a Pleurisy; which discovers it self by a brisk Fever, and sharp Pain, pretty low in one of the Sides, shooting now and then into the Breast, and sometimes quite back into the Shoulder-Blades: It is uneasy every Time the Patient draws his Breath, and more so when he coughs; which is generally the Case in this Disease.</p> <p>The Moment any Person finds these Tokens upon him, he must, without Loss of Time, take away 10 Ounces of <i>Blood</i>, and repeat the same 3 or 4 Days successively, if the Pain go not away before. On the Third Day, he may vomit with 80 Grains of <i>Indian Physick</i> (<i>Virginian Ipecoacanna</i>,) and every Night, drink 7 Spoonfuls of <i>Pennyroyal Water</i>, or the Decoction of it, moderately sweeten'd. In the mean Time, let him, every Three Hours, take Half a Spoonful of <i>Honey</i> and <i>Linseed Oyl</i> mixt together. He should also strew <i>Indian Pepper</i>, upon <i>Pennyroyal Plaister</i>, and apply it very hot to the Place where the Pain lies, and be sure to keep himself warm, and abstain</p>

from cold Water: Tho' if the Distemper should prove obstinate, you must apply a *Blister* to his Neck, and one to each Arm, on the fleshy Part above the Elbow.

The Patient's *Diet* should be light, and cooling; and his constant Drink, either *Linseed*, or *Balm Tea*, a little sweeten'd.

The best Way to prevent this Distemper, will be, to *bleed* in the Beginning of any great Hoarseness, or Cough, and also to forebear swilling great Quantities of Water, or Small Beer, in ordinary Life.

Bite of a Rattle Snake

If any One should have the Misfortune to be bit by a Rattlesnake, let him kill the *Viper* immediately, and apply its *Fat* to the Wound. This will sheath the *Poison*, and give Time for other Remedies, to expel it out of the *Blood*. The readiest Cure I know, is, *St. Andrew's Cross*, which grows providentially all over the Woods, during the whole Season that the *Snakes* are mischievous.

Let him take 60 Grains of the *Root* reduced to a *Powder*, or a strong *Decoction* of the Leaves and tender Branches, and if One Dose should not finish the Cure, he must take a Second. There are other Plants growing in this Country that will answer the same Intention, such as the *Fern-Rattlesnake Root*, *Ginger-Snakeroot*, and the smaller *Assa Rebecca*, *Oak of Jerusalem* and *Dittainy*; but *St. Andrew's Cross* is as powerful as any, and much easier procur'd, being Growth of every Soil, that hath not been clear'd, thro' the whole Colony. Nor is there an *Indian Trader*, but can bear Witness to its Vertue in this Particular.

--Excerpted from *Every Man His Own Doctor*, by John Tennent, 1734

2) Medicine and Health (<http://www.stratfordhall.org/ed-med.html>)

A Colonial teenager faced a struggle for existence. The average life expectancy was under twenty-five years. Diseases such as smallpox, malaria, tuberculosis, pneumonia, influenza, rickets, and fevers caused many deaths in children and adults. Wells for drinking water were often contaminated by nearby privies and unpenned animals, causing many illnesses.

Colonial homes had no bathroom, septic system, or running water. Chamber pots, hidden under beds and inside chests, performed the function of today's toilets. Slaves would dump the contents of the pots daily. Outdoor toilets of wood or brick, called privies, sometimes had four or more holes for larger families. The waste pits below the privies were normally cleaned by chickens; sometimes slaves would have to shovel out the pits. People in this period were accustomed to living with smells that we would consider extremely unpleasant.

Today most people bathe or shower daily, a practice that adults and children of the colonial period would have considered odd. They did not believe in bathing everyday, or even every week. They felt that bathing washed away the layer of dirt that was their protection against germs and disease. Most baths consisted of washing with a cloth dipped into a basin of water. When washing in warm water was desired, water had to be heated in the fireplace. No chemical deodorants or anti-perspirants masked body odors; however, since nearly everyone shared the same standard of cleanliness, odors were not as offensive. Pomanders, tussie-mussies, colognes, and lavender and other fragrant herbs used as air fresheners all helped to make indoor odors tolerable.

Colonists often wrote back to England for medical advice. Many were fascinated with Indian remedies made from herbs, minerals, and animal products. Home remedies for a variety of symptoms included ingredients such as snail water, opium, herbs, honey, wine, vipers, licorice, flowers, and berries. The alignment of the stars was believed to affect the healing properties of medicine.

Most family illnesses were treated at home. The plantation mistress or housekeeper usually kept a supply of medicinal herbs and other simple remedies in a physic chest in the Great House. She administered first aid and nursing advice as needed to all persons living on the plantation. Local barbers/surgeons would be consulted only after all other treatments failed. These barbers bled patients (a popular remedy) and pulled abscessed teeth in addition to their primary duties of shaving, cutting hair, and curling wigs. Midwives, who delivered babies, were extremely important since all babies were born at home and colonial families tended to have a larger number of children than those of today.

The term doctor was first used in the colonies in 1769. By the time of the Revolution only a small percentage of doctors had attended a medical school; most were either trained by another physician or self-trained. Physicians usually limited their treatments to rich patients who were chronically ill. Lack of knowledge of causes and cures of most diseases, effective medicines and pain-killers, and instruments such as the thermometer and stethoscope handicapped colonial doctors in their practice of medicine.

PRINT SOURCES

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HYPER-TEXTS

** Hyper-text version of Mrs. M. Grievess' *A Modern Herbal*:
(<http://www.botanical.com/botanical/mgmh/mgmh.html>)

Hyper-text version of Culpeper's [Complete Herbal](#):
<http://www.bibliomania.com/2/1/66/113/frameset.html>

Hyper-text version of Nihill's [A Treatise on the Art of Midwifery, Setting Forth Various Abuses Therein, Especially as to the Practice with Instruments](#): <http://dohistory.org/archive/doc071/>

URLs

American Experience – A Midwife's Tale, interactive website:
<http://www.pbs.org/wgbh/amex/midwife/>

Every Man His Own Doctor (excerpts), Armory Hill Living History Association,
<http://www.armoryhill.com/doctor01.html>

Online Archives of American Folk Medicine: <http://www.folkmed.ucla.edu/>

ON-LINE ARTICLES

Humorism or Humoralism: http://en.wikipedia.org/wiki/Four_humours

Medicine and Health (Colonial Era) <http://www.stratfordhall.org/ed-med.html>