

Calendula



Dried forms of the herb usually include the flower head. Petals alone are preferable.

*An herbalist, midwife, or physician trained in the use of botanicals during pregnancy should be consulted when using herbs medically—that is, to treat a specific symptom or condition—rather than simply nutritively or as a general pregnancy tonic, as one would use red raspberry leaf or nettles.*

#### ARE HERBS SAFE DURING PREGNANCY?

Herbs have been used for millennia in the treatment of discomforts and problems arising during pregnancy. Childbearing women commonly experience minor complaints for which the use of natural remedies may be gentler and safer than over-the-counter and prescription pharmaceuticals. Little is known scientifically about the risk of using herbs during pregnancy, as most herbs have not been formally evaluated, and ethical considerations limit human clinical investigation during pregnancy.<sup>6–10</sup> Much the same can be said for the use of many pharmaceuticals during pregnancy.

Most of what is currently known about the use of botanicals during pregnancy is based on a significant body of historical, empirical, and observational evidence, and limited pharmacological and animal studies. Overall, most herbs are safe, with little evidence of harm. Few reported adverse events have occurred, and those that have been reported typically involved the consumption of known toxic herbs, adulterants such as unsafe herbs or even pharmaceutical additives, or inappropriate use or dosage of botanical therapies.

However, lack of proof of harm is not synonymous with proof of safety. Some of the harmful effects of herbs may not be readily apparent until after use has been discontinued, or may occur only with cumulative use. While

gentle herbs and simple home remedies have a long historical track record of safety, pregnant women are increasingly seeking advice from sources that may not always be reliable—e.g., the Internet—and may be trying to treat potentially serious problems that can arise during the childbearing cycle.<sup>11</sup>

There are different schools of thought on whether or not herbs should be used routinely during pregnancy. Some believe that because most herbs are not proven safe during pregnancy, they should be entirely avoided, while others see certain herbs more as foods that can provide additional sources of nutrition during pregnancy, or as tonics that can encourage and support optimal pregnancy health and uterine function.<sup>12, 13</sup>

Perhaps the most reasonable approach to herb safety is that of risk/benefit, taking into account the safety of the individual herb, the severity of the symptom and/or condition, and the safety of the corresponding conventional medical approach. However, certain signs and symptoms arising during pregnancy always warrant medical attention, and should not be treated with herbs (see sidebar, “Warning Signs during Pregnancy”).

#### USING HERBS DURING PREGNANCY

The most prudent approach is to avoid using herbs during the first trimester of pregnancy unless medically indicated (e.g., nausea and vomiting

TABLE 3:

## HERBAL TREATMENT OF COMMON PREGNANCY COMPLAINTS AND CONCERNS

symptom/ condition	herbal treatment	botanical name	typical application	dose	safety comments/concerns
Nausea and vomiting	Ginger root	<i>Zingiber officinalis</i>	Tea Fresh or dried root Other: ginger ale, candied ginger	Up to 1 gm daily; take in divided doses as needed for symptomatic relief.	Several recent trials demonstrate the safety and efficacy of ginger for the treatment of nausea and vomiting. This herb was previously contraindicated by the <i>German Commission E Monographs</i> <sup>1</sup> and the <i>Botanical Safety Handbook</i> <sup>2</sup> due to concerns over mutagenicity, but these concerns have been resolved; the herb is now considered safe for use in recommended doses.
Urinary tract infection	Uva ursi	<i>Arctostaphylos uva-ursi</i>	Infusion	3 gm dried leaves to 150 ml water as a cold or hot infusion steeped for 30 minutes, and taken up to 4 times daily, not to exceed 7 days. <sup>3,4</sup> Doses should provide no more than the equivalent of 400–840 mg arbutin daily, divided among 2–4 doses. Traditionally combined in equal parts with marshmallow root as an emollient for irritation and inflammation of the urinary tract.	There is some controversy as to the safety of using uva ursi during pregnancy, based on a single case report in the literature associating its use with uterine contractions. A recent review by Upton suggests that the herb can be safely used during pregnancy for periods of up to 1 week at the recommended dose. <sup>5</sup>
	Marshmallow root	<i>Althea officinalis</i>	Decoction	1.5 gm dried root steeped with uva ursi	
	Cranberry	<i>Vaccinium macrocarpon</i>	Juice	Prevention: 4–32 fl oz daily Treatment: 16–32 fl oz daily	No known contraindications to use of this herb during pregnancy; theoretically may interfere with the absorption of medications, so use with care for patients taking prescription drugs.
			concentrated extracts	300–400 mg; 2–3 times daily	No known contraindications or restrictions during pregnancy.
Colds	Echinacea root	<i>Echinacea spp.</i>	Tincture Capsules	3–5 ml up to 4 times per day for 5–7 days 250–1000 mg per day for 5–7 days	Safe use was demonstrated during pregnancy in a retrospective clinical trial. <sup>6</sup>
	Ginger root	<i>Zingiber officinalis</i>	Tea	See the Ginger entry under “Nausea and vomiting” above.	Traditionally used as a tea of fresh root for the treatment of colds, chills, aches, and dyspepsia associated with colds. See safety comments under “Nausea and vomiting.”
Vaginal yeast infection	Tea tree oil	<i>Melaleuca alternifolia</i>	Suppository (as an anti-microbial)	3–5 drops per vaginal suppository, inserted 1–3 times daily	Safety during pregnancy has not been studied for the external application of these herbs, but there is no known contraindication. Tea tree oil and garlic can cause contact irritation; therefore use the former in suppositories with other herbs and oils. <b>[Editor's note: Peel papery cover off un-nicked garlic clove (leave thin membrane). Wrap in layer of gauze. Attach 5"-piece of thread or floss. Dip clove in olive oil. Insert. Leave overnight.]</b>
	Garlic	<i>Allium sativum</i>	Suppository (as an anti-microbial)	1 clove inserted into vagina once per night for 7 nights	
	Calendula oil	<i>Calendula officinalis</i>	Suppository (to heal damaged, irritated tissues)		
Iron-deficiency anemia	Nettles	<i>Urtica dioica</i>	Infusion	7–14 gm daily	No studies available; widely used by midwives, who report beneficial effects.
Irritable uterus	Cramp bark	<i>Viburnum opulus</i>	Tincture	3–4 ml, repeated up to 6 times daily as needed	Traditional and empirical evidence only; no known contraindications, though may theoretically lead to postural hypotension in hypotensive women.
Tonic to ease labor, prevent complications	Red raspberry leaf	<i>Rubus idaeus</i>	Infusion	1.5–5 gm daily	No known contraindications.

## NOTES

1. M. Blumenthal et al., *The Complete German Commission E Monographs: Therapeutic Guide to Herbal Medicines* (Boston: Integrative Medicine Communication, 1998).  
2. M. McGuffin et al., eds., *American Herbal Products Association Botanical Safety Handbook* (Boca Raton, Florida: CRC Press, 1997): 231.

3. See Note 1.

4. M. Wichtl, *Herbal Drugs and Phytopharmaceuticals: A Handbook for Practice on a Scientific Basis*, 4th ed. (Stuttgart, Germany: Medpharm, 2004).

5. R. Upton, *Uva Ursi Leaf: Arctostaphylos uva-ursi* (Scotts Valley, CA: American Herbal

Pharmacopoeia, 2007).

6. M. Gallo et al., “Pregnancy Outcome Following Gestational Exposure to Echinacea: A Prospective Controlled Study,” *Archives of Internal Medicine* 160, no. 20 (November 2000): 3141–3143.

in pregnancy, or threatened miscarriage), and after that to use herbs that are known, whether scientifically or historically, to be safe during pregnancy.

Beverage and nutritive teas that are known to be safe in moderate amounts (e.g., red raspberry, spearmint, chamomile, lemon balm, nettles, rose hips), and ingestion of normal amounts of cooking spices, are generally considered safe to be used freely.

The constituents of many herbs—such as nettles (*Urtica dioica*), milky oats (*Avena sativa*), and red raspberry leaf (*Rubus idaeus*)—are mostly benign, nutritive substances such as carbohydrates, vitamins, and minerals. Several herbs have also been scientifically demonstrated to be safe during pregnancy; see “Table 1: Herbs Considered Safe in Pregnancy.” On the other hand, there are many herbs whose use in pregnancy is entirely contraindicated, for safety reasons. Extensive lists are available; “Table 2: Herbs to Avoid during Pregnancy” lists the most important therapeutic categories and some representative herbs.

Between the lists in these two tables fall those herbs whose use is inappropriate for daily, routine intake, but which can be used if necessary for brief or longer periods for specific conditions. Licorice is one of these: Used for no longer than a week for a sore throat, for example, it can be entirely safe and appropriate. However, licorice is contraindicated for patients with hypertension, and long-term use of even licorice candy containing actual licorice extract has been associated with preterm birth.<sup>14</sup>

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trained in the use of botanicals during pregnancy should be consulted when using herbs medically—that is, to treat a specific symptom or condition—rather than simply nutritively or as a general pregnancy tonic, as one would use red raspberry leaf or nettles. In addition to common complaints of pregnancy, pregnant and lactating women are also subject to the run-of-the-mill complaints and illnesses we all face—colds, indigestion, headaches, etc.—for which they may seek herbal care. Many of these problems can be addressed safely and gently with mild herbs such as echinacea, ginger, and chamomile, respectively.

#### COMMON CONDITIONS DURING PREGNANCY AND HERBS FOR TREATMENT: AN OVERVIEW

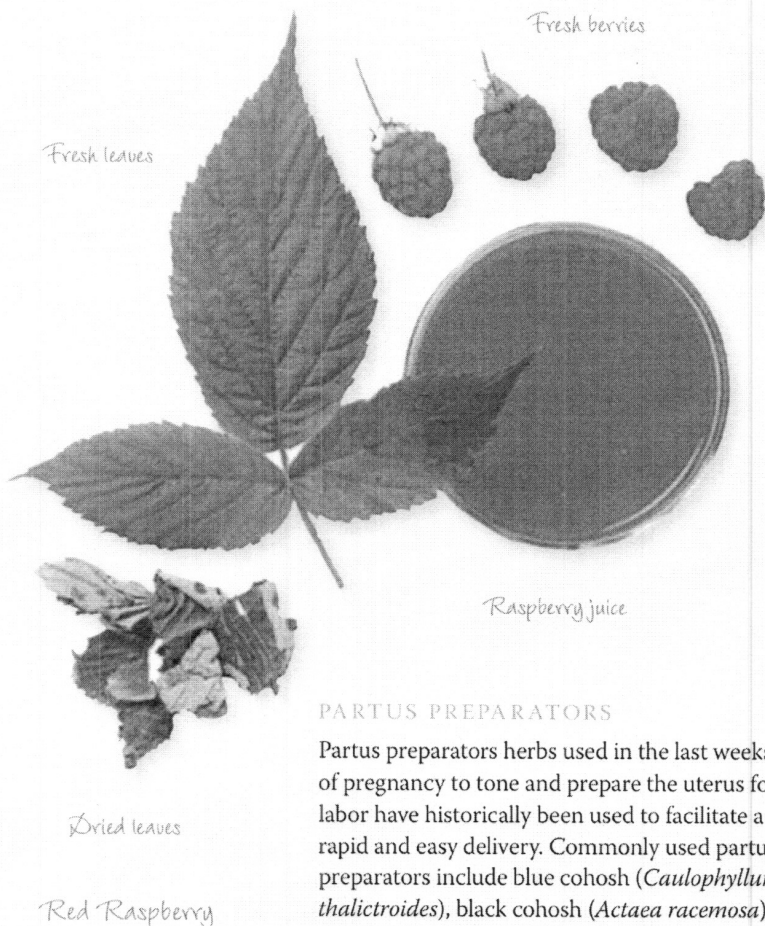
The herbs cited in the medical literature as most frequently used for pregnancy complaints vary slightly among studies, but include: echinacea, St. John’s wort, peppermint, spearmint, ginger root, fennel, wild yam, meadowsweet, blue cohosh, black cohosh, red raspberry leaf, evening primrose, garlic, aloe, chamomile, echinacea, pumpkin seeds, and ginseng.<sup>15–19</sup> In one study, patients cited anxiety, nausea, vomiting, and lower gastrointestinal-tract and urinary-tract problems as the most common reasons for using herbal therapies in pregnancy.<sup>20</sup> And another study indicates midwives most frequently recommend herbs for nausea and vomiting, labor stimulation, perineal discomfort, lactation disorders, postpartum depression, preterm labor, postpartum hemorrhage, labor analgesia, and malpresentation.<sup>21</sup> “Table 3: Herbal Treatment of Common Pregnancy Complaints and Concerns” provides guidelines for commonly used botanical treatments for several pregnancy problems, and provides a brief discussion of the safety of the herbs listed.

#### WARNING SIGNS DURING PREGNANCY

Seek medical attention for any of these warning signs:

- Persistent vaginal bleeding
- Initial outbreak of herpes blisters in the first trimester
- Severe pelvic or abdominal pain
- Persistent, severe midback pain
- Edema of hands and face
- Severe headaches, blurry vision, or epigastric pain
- Rupture of membranes before Week 37
- Regular uterine contractions before Week 37
- Cessation of fetal movement

—AVIVA ROMM



*Good diet, exercise, a healthful lifestyle, a positive outlook, and strong social support are the cornerstones of an optimal childbearing experience.*

#### PARTUS PREPARATORS

Partus preparators herbs used in the last weeks of pregnancy to tone and prepare the uterus for labor have historically been used to facilitate a rapid and easy delivery. Commonly used partus preparators include blue cohosh (*Caulophyllum thalictroides*), black cohosh (*Actaea racemosa*), partridge berry (*Mitchella repens*), and spikenard (*Aralia racemosa*), among others. The use of such herbs to prepare women for labor begs the question of why one would use an herbal preparation to prepare the body for something it already naturally knows how to do.

Furthermore, the safety of these herbs prior to the onset of labor is questionable. Case reports have appeared in the literature that suggest an association between blue cohosh and profound cerebral ischemic episodes (stroke) or myocardial infarction (heart attack) in the newborn.<sup>22–23</sup> Blue cohosh contains a number of potent alkaloids, including methylcystine and anagyrine. The latter is known to have an effect on cardiac muscle activity. Other side effects of blue cohosh include maternal headache and nausea. Yet, as previously stated, blue cohosh is one of the botanical medicines widely applied by midwives, and one of those most commonly included in late-pregnancy formulas self-prescribed by mothers. The risks associated with extended third-trimester ingestion of blue cohosh specifically suggest that it should be avoided as a partus preparator. It seems that, unless otherwise indicated for the health of mother and baby, it would be preferable to focus

attention on methods of preparing for labor that are non-pharmacological.

#### FORMS OF ADMINISTRATION APPROPRIATE DURING PREGNANCY

The form in which an herb is administered (e.g., tincture, tea) can affect its strength and efficacy. During pregnancy, various forms of preparation can be used to maximize or minimize the volume and availability of more or less desirable constituents in an herb, as well as minimize exposure to other unwanted substances. For example, using water-based extracts (teas, infusions) can minimize the extraction of potentially harmful bioactive compounds, and avoid the excessive consumption of alcohol from alcohol-based preparations (which, typically, are also more medicinally concentrated). External application of most herbs, including to the vagina (e.g., to treat vaginal infections), is generally considered safe, but the internal and external use of some herbs known to be toxic—for example, poke root, pennyroyal oil, and thuja—should be avoided.

#### SUMMARY

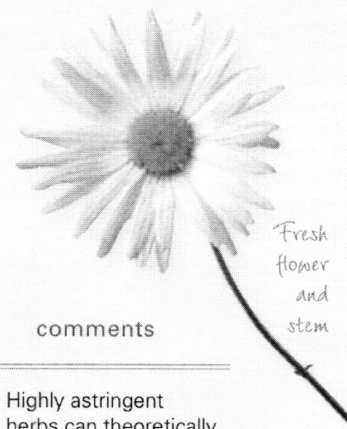
While herbs can provide substantial relief for common complaints and concerns that arise during pregnancy and childbirth, the power of herbs should be respected during pregnancy; in short, they should be used with caution. However, many herbs may be contraindicated on the basis of very limited findings, erroneous reports, or by association with a problem rather than a proven causal effect. Many herbs that have not been evaluated may nonetheless offer simple, safe, gentle, and effective solutions for common problems of pregnancy, ranging from anemia to vaginitis. Good diet, exercise, a healthful lifestyle, a positive outlook, and strong social support are the cornerstones of an optimal childbearing experience.

#### NOTES

1. E. Ernst, "Herbal Medicinal Products During Pregnancy: Are They Safe?," *BJOG: An International Journal of Obstetrics and Gynaecology* 109, no. 3 (March 2002): 227–235.
2. P. Gibson, "Herbal and Alternative Medicine Use during Pregnancy: A Cross-sectional Survey," *Obstetrics & Gynecology* 97, no. 4 Suppl. 1 (April 2001): S44.

*Notes continued on page 60*

Chamomile



Fresh flower and stem

**TABLE 1:**  
**HERBS CONSIDERED SAFE IN PREGNANCY**

An overview of herbs that have been demonstrated to be safe to use during pregnancy through clinical trials or scientific evaluation of safety.

common name	botanical name	reason for use	clinical trials in pregnancy	typical daily dose	comments
<b>Red raspberry leaf</b>	<i>Rubus idaeus</i>	Mineral-rich nutritive tonic, uterine tonic to promote an expedient labor with minimal bleeding. Can also be used as an astringent in cases of diarrhea.	Positive <sup>1, 2</sup>	1.5–5 gm daily in tea or infusion	Highly astringent herbs can theoretically interfere with intestinal absorption of nutrients. <b>[Editor's note: Use lower dose for long-term administration.]</b>
<b>Echinacea</b>	<i>Echinacea spp</i>	Reduce duration or recurrence of colds and upper respiratory infection (URI).	Positive <sup>3</sup>	5–20 ml tincture [alcohol extract]	The dose listed here and considered safe by most herbalists is higher than that used in the study referenced.
<b>Ginger</b>	<i>Zingiber officinalis</i>	Prevent and relieve nausea and vomiting of pregnancy.	Positive <sup>4, 5</sup>	Up to 1 gm dried powder daily	Higher doses of ginger are traditionally considered to promote menstrual discharge (i.e., they are emmenagogic). Untreated excessive vomiting in pregnancy can cause serious adverse outcomes.
<b>Cranberry</b>	<i>Vaccinium macrocarpon</i>	Prevent and relieve urinary tract infection (UTI).	None found	16–32 fl oz of juice daily	Untreated UTI in pregnancy can cause serious adverse outcomes.
<b>Chamomile</b>	<i>Matricaria recutita</i>	Promote general relaxation, treat insomnia, treat flatulence.	None found	1–5 gm daily in tea	No reasonable contraindications. <sup>6</sup>

**NOTES**

1. M. Simpson et al., "Raspberry Leaf in Pregnancy: Its Safety and Efficacy in Labor," *Journal of Midwifery & Women's Health* 46, no. 2 (March–April 2001): 51–59.  
 2. M. Parsons et al., "Raspberry Leaf and Its Effect on Labour: Safety and Efficacy," *Australian College of Midwives Journal* 12, no. 3 (September 1999): 20–25.

3. M. Gallo et al., "Pregnancy Outcome Following Exposure to Echinacea: A Prospective Controlled Study," *Archives of Internal Medicine* 160, no. 20 (November 2000): 3141–3143.  
 4. W. Fischer-Rasmussen et al., "Ginger Treatment of Hyperemesis Gravidarum," *European Journal of Obstetrics, Gynecology, and Reproductive Biology* 38, no. 1 (4 January

1991): 19–24.  
 5. T. Vutyavanich et al., "Ginger for Nausea and Vomiting in Pregnancy: Randomized, Double-masked, Placebo-controlled Trial," *Obstetrics and Gynecology* 97, no. 4 (April 2001): 577–582.  
 6. T. Low Dog, *Women's Health in Complementary and Integrative Medicine: A Clinical Guide* (St. Louis, MO: Elsevier, 2004).

TABLE 2:

## HERBS TO AVOID DURING PREGNANCY

The lists of herbs under each category constitute representative examples and are not exhaustive. Additional herbs may fall into any of these categories.

<p><b>Abortifacients and Emmenagogues</b></p> <ul style="list-style-type: none"> <li>Angelica</li> <li>Mugwort</li> <li>Pennyroyal essential oil</li> <li>Rue</li> <li>Safflower</li> <li>Scotch Broom</li> <li>Tansy</li> <li>Thuja</li> <li>Wormwood</li> <li>Yarrow</li> </ul> <p><b>Essential Oils and Volatile Oils*</b></p> <ul style="list-style-type: none"> <li>Oregano</li> <li>Pennyroyal</li> <li>Peppermint</li> <li>Sage</li> <li>Tansy</li> <li>Thuja</li> <li>Thyme</li> </ul>	<p><b>Teratogens</b> <i>(can cause developmental malformations)</i></p> <ul style="list-style-type: none"> <li>Conium spp</li> <li>Datura spp</li> <li>Ferul spp</li> <li>Lupinus spp</li> <li>Nicotiana spp</li> <li>Prunus spp</li> <li>Senecio spp</li> <li>Solanum spp</li> <li>Sorghum</li> <li>Trachymene spp</li> <li>Veratrum spp</li> </ul> <p><b>Alkaloids*</b></p> <ul style="list-style-type: none"> <li>Barberry</li> <li>Borage</li> <li>Coltsfoot</li> <li>Comfrey</li> <li>Goldenseal</li> <li>Oregon Grape</li> </ul>	<p><b>Stimulating Laxatives</b></p> <ul style="list-style-type: none"> <li>Aloes</li> <li>Buckthorn</li> <li>Cascara sagrada</li> <li>Castor Oil</li> <li>Rhubarb</li> </ul> <p><b>Stimulants/Depressants</b></p> <ul style="list-style-type: none"> <li>Coffee</li> <li>Ephedra</li> <li>Guarana</li> <li>Kava</li> </ul> <p><b>Phytoestrogens</b></p> <ul style="list-style-type: none"> <li>Hops</li> <li>Isoflavone extracts</li> <li>Red Clover</li> </ul>
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\*Avoid internal use; external use may be acceptable under the guidance of an experienced practitioner of botanical medicine.

Continued from page 58

3. D. Hepner et al., "Herbal Medicine Use in Parturients," *Anesthesia & Analgesia* 94 (April 2002): 690-693.
4. G. Pinn, L. Pallett, "Herbal Medicine in Pregnancy," *Complementary Therapies in Nursing and Midwifery* 8, no. 2 (May 2002): 77-80.
5. A. Ranzini, "Use of Complementary Medicines and Therapies among Obstetric Patients," *Obstetrics & Gynecology* 97, no. 4 Suppl. (April 2001): 46.
6. See Note 3.
7. See Note 4.
8. A. Allaire et al., "Complementary and Alternative Medicine in Pregnancy: A Survey of North Carolina Certified Nurse-midwives," *Obstetrics & Gynecology* 95 (January 2000): 19-23.
9. R. A. Chez, W. B. Jonas, "Complementary and Alternative Medicine, Part I: Clinical Studies in Obstetrics," *Obstetrical & Gynecological Survey* 52, no. 11 (November 1997): 704-708.
10. M. Hardy, "Herbs of Special Interest to Women," *Journal of the American Pharmaceutical Association* 40, no. 2 (March-April 2000): 234-242.
11. E. Ernst, K. Schmidt, "Health Risks Over the Internet: Advice Offered by 'Medical Herbalists' to a Pregnant Woman," *Wiener Medizinische Wochenschrift* 152, nos. 7-8 (2002): 190-192.
12. See Note 1.
13. S. Weed, *Wise Woman Herbal for the Childbearing Years* (Woodstock, NY: Ash Tree Publishing, 1986).
14. T. E. Strandberg et al., "Preterm Birth and Licorice Consumption during Pregnancy," *American Journal of*

- Epidemiology* 156, no. 9 (November 2002): 803-805.
15. See Note 3.
16. See Note 11.
17. M. W. Beal, "Women's Use of Complementary and Alternative Therapies in Reproductive Health Care," *Journal of Nurse-Midwifery* 43, no. 3 (May-June 1998): 224-234.
18. See Note 2.
19. See Note 5.
20. See Note 8.
21. Ibid.
22. I. Wright, "Neonatal Effects of Maternal Consumption of Blue Cohosh," *Journal of Pediatrics* 134, no. 3 (March 1999): 384-385.
23. T. Jones, B. Lawson, "Profound Neonatal Congestive Heart Failure Caused by Maternal Consumption of Blue Cohosh Herbal Medication," *Journal of Pediatrics* 132 (March 1998): 550-552.

*Aviva Romm is a midwife (CPM) and herbalist, and is attending the Yale School of Medicine. The mother of four children and the author of numerous books, she is the president of the American Herbalists Guild, the author of the forthcoming Textbook of Herbal Medicine for Women (Elsevier, 2008), and the director of the long-distance learning program Herbal Medicine for Women. E-mail Avivajill@aol.com for more information about the program.*

