

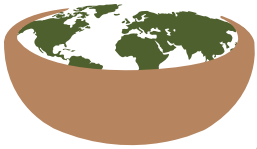


Food Recommendations in the Trotula Italian Prescription for Health?

By: Theresa A. Vaughan

Greek theoretical understanding of the human organism and centuries of practical experience in the treatment of illness were the twin influences on medicine in eleventh and twelfth century Europe. While the writings of Aristotle and Hippocrates were the most influential writings, use of them in the training of medical practitioners was somewhat limited. By the twelfth century, however, with the influx into Europe of new Greek writings from the Arab world and the synthesis and systemization of Greek medical theory by Arabic writers (Waines 1999), a new, more theoretical model of medicine arose (Siraisi 2009). Occurring simultaneously with the rise of the university, a flowering of medical literature and diagnostic commentary emerged. Salerno, in southern Italy, had earned a reputation as a location of talented healers and medical treatment, although not as a location for theoretical medicine. However, in the twelfth century, Salerno was well placed to receive the medical knowledge of the Arab world, as well as Jewish medical thought (Einbinder 2005). As academic medicine began to develop there, Greek understanding of the functioning of the human body, often filtered through the translators and systematists of the Arab world, came to influence both traditional and academic healers. One collection of writings out of twelfth century Salerno, which came to be known as the *Trotula*, offers evidence of this influence (Green 2002). In this research report, I examine the recommendations on diet found in the *Trotula*.

The population of Salerno was a combination of Christian, Muslim and Jewish inhabitants in the twelfth century. Being a port city, some direct trade brought regular contact with other Mediterranean cities, but perhaps even more influential was Salerno's proximity to Sicily with its very active mixture of different cultures. The cross-cultural exchange of medical writings and ideas (Waines 1999) was key to the development of medicine in Salerno. A "school" of medicine had existed there for several centuries, and there were Salernitan medical treatises from before the twelfth century, most notably the *Regimen Sanitatis Salerni*, compiled around 900 AD (Bifulco, Marasco, and Pisanti 2008). It was perhaps the most ancient school of



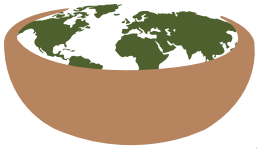
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medical knowledge in medieval Europe, predating the rise of the university. “The school achieved its splendor between the tenth and thirteenth centuries, during the final decades of Longobard power; it combined the Greek and Latin culture with the Arab and Jewish tradition to form a whole harmonious scientific knowledge comprehensive of the different learning” (Bifulco, Marasco, & Pisanti 2008:602). It was also probably the first European site of medical learning to take the more theoretical turn which would characterize the medical training at universities (Wallis 2010:129).

Diet had long been a consideration in medicine. While European notions of what constituted a healthful diet traced its origins to Greek understanding, particularly of the humoral system, other large-scale civilizations had also developed systematized theories of the role of food in health, most notably in China, India and the Arab world (York 2012). For Europeans and eventually Arabs, the fundamental understanding of the humoral system came from Hippocrates, extended by Galen. This, combined with the natural philosophy of Aristotle, suggested an individually-based recommendation for proper health stemming from a series of mixes of humors and characteristics which constituted proper health. “The adage ‘eat to live, not live to eat’ translates, in medieval terms, to a search for a good equilibrium, aided by proper food, of the constitutive mix of the human body which characterizes it or their complexion(s)” (Jacquart 2006:260).¹ Proper diet could, of course, be supplemented with medicines, fumigations, bleeding, cupping and a wide range of other treatments—but proper diet was considered fundamental to human health.

Different foods were processed in a variety of ways by the body. The utility of any given foodstuff was dependent upon the nature of the food itself as well as the cooking technique used (Laurioux 2006:224). It was also the very nature of the body to process food into useful components depending on the complexion of the individual body itself—in humoral terms, a cold and moist complexion, such as might be found in some women, might not make effective use of the same types of food as a hot and dry body, such as might be found in some men. Generally speaking, it was believed that the food could reconstitute into vital bodily substances (or wastes) according to their similar natures. At creation, medieval people believed, everything was made out of the four elements, including food. Ingesting the right kind of food could address deficiencies or excesses of these elements, which translate in the body into humors. “Blood was analogous to air, therefore it was hot and wet; ...phlegm, cold and wet, is homologous to water; [yellow] bile, hot and dry, is homologous to fire; finally [black] bile, cold and dry, is homologous to the earth” (Jacquart 2006: 261).² Therefore general guidelines existed for food consumption, but a physician was expected to understand the nature



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and proper balance of a patient based upon his or her complexion, and what foods might maintain or restore a proper humoral balance (Laurioux 2006). Numerous treatises from the Middle Ages often provide similar information on the proper preparation and nature of different foodstuff for promoting health (Nicoud 2008:8). These ideas seem to have remained fairly fixed throughout the medieval era and were held not just by the learned but found in folklore and the oral tradition as well (Benedek 1978).

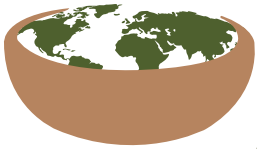
The *Trotula* emerges from this tradition. Focusing on women's health, the three treatises in the *Trotula* were traditionally attributed to a single author, a female physician by the name of Trota or Trocta, associated with the Salernitan school of medicine. While it is highly unlikely that all three treatises (*Liber de sinthomatibus mulierum* or *Book on the Conditions of Women*, *De curis mulierum* or *On Treatments for Women*, and *De ornatu mulierum* or *On Women's Cosmetics*) were written by Trota, Green (2002) argues convincingly that *On Treatments for Women* was likely based upon Trota's work, either through her own writing or a record of her teaching (2002:49-50). The collection concerns itself almost exclusively with the health concerns of women, with *Women's Cosmetics* comprised of head to toe beauty treatments.³ It is clear, however, that a woman of Salerno associated with the name Trot, Trocta or Trota was active in medicine in the eleventh century (Mosher Stuard 1974).

Dietary recommendations in the collection are not numerous, comprising only seven of 131 topics in *Conditions of Women* and three of 110 topics in *Treatments for Women*; however this analysis is limited to those recommendations. There are many treatments involving herbs and medicines to be ingested, but those have been eliminated from consideration. Instead, only treatments of food are included. Below are the recommendations in their entirety, from the English translation by Green (2002).

From the *Book on the Conditions of Women*

"On Excessive Flux of the Menses"⁴

"[34] Let her eat hens cooked in pastry, fresh fish cooked in vinegar, and barley bread. Let her drink a decoction made from barley, in which great plantain root is first cooked, and boil it with the decoction and it will be even better. And afterward boil [the root] in seawater until it cracks and becomes wrinkled, and let vinegar be added and let it be strained through a cloth and let it be given to drink. Let her drink red wine diluted with seawater. And if great plantain



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root⁵ is boiled with the decoction, so much the better” (Green 2002:70).

“On the Descent of the Womb”

“[58] Let her diet be cold and styptic, without cumin and pepper and all pungent things. For fruit, let her eat quinces, medlars,⁶ service-berries,⁷ quinces, bitter apples, and similar things. Let her drink wine mixed with warm seawater” (Green 2002: 73).

“On the Regimen of Pregnant Women”

“[79] Note that when a woman is in the beginning of her pregnancy, care ought to be taken that nothing is named in front of her which she is not able to have, because if she sets her mind on it and it is not given to her, this occasions miscarriage.⁸ If, however, she desires clay or chalk or colas, let beans cooked with sugar be given to her. When the time of birth comes, let her be bathed often, let her belly be anointed with olive oil or with oil of violets, and let her eat light and readily digestible foods” (Green 2002:77).

“On Difficulty of Birth”

“[98] Or let these names be written on cheese or butter ‘+ sa. e. op. ab. z. po. c. zy. e pe. pa. pu. c. ac.’⁹ sator arepo tenet os pera rotas,¹⁰ and let them be given to eat” (Green 2002:80).

“[115] Against difficulty of birth arising from constriction of the orifice (which cause is sometimes the most severe of all), we append this counsel. Let the woman herself see to it that in the last three months [of pregnancy] her diet consists of light and digestible foods, so that by means of these the organs are dilated. Such foods are the yolks of eggs, the flesh and innards of young fowl and small birds, that is, partridges and pheasants, and scaly fish with good sauces” (Green 2002:81).

“On Choosing a Wet Nurse”

“[127] Her diet. She should not eat salty or spicy or pungent things, nor those things in



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which heat is strong, nor styptic things, nor leeks or onions, nor the rest of those spices which are added to foods for flavoring, such as pepper, garlic, garden rocket, but above all garlic. Also, let her avoid anxiety and let her beware provoking her own menses. And if her milk is diminished, let porridges made of bean flour and likewise of rice, and wheat bread and milk and sugar be given to her to drink, by which things the milk is augmented, and let a little fennel seed be mixed in. If, on the other hand, her milk becomes thick, let her nutriment be made subtle, and so let her be compelled to work. In addition, vinegary syrup and light wine ought to be given to her. If the milk becomes thin, let her nutriments be thick and strong, and let her get more sleep. If the bowel of the child is loose, let constipating things be given to the nurse” (Green 2002:85).

“On Sterility on the Part of the Man”

“[131] ...If it is because of a defect of the seed, when they have intercourse they emit little or no semen. We help men such as this substances which augment and generate seed, such as onions, parsnip and similar things” (Green 2002:87).

From the book: *On Treatments for Women*

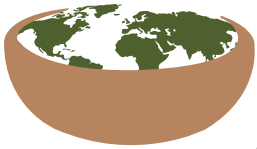
“For Conception”

“[142] ...And if she desires some food, let her first be given *rosata novella*.¹¹ Also, let her be given good and wholesome and warm food, and wine of the best quality taken moderately “ (Green 2002:91).

Note: this is for phlegmatic and fat women who are having difficulty conceiving

“[143] ...You will feed her well, and let her drink good and sweet smelling wine” (Green 2002: 92).

Note: this is for fat and “dropsical”¹² women, in order to render them thinner. The food is taken after a series of baths and sweats.



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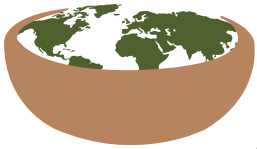
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“For Provoking the Menses”

“[213] For provoking the menses, take vervain and rue, and pound them heavily, and cook them with bacon, and give them to the patient to eat. Afterward, grind root of delicate willow and root of madder, and give juice to the patient with wine” (Green 2002:106).

The recommendations in the *Book on the Conditions of Women* were probably most influenced by Greco-Roman and Arabic medicine, as well as being more firmly in the written, rather than oral, tradition (Green 2002:36). In reviewing these dietary recommendations, we can see the influence of ideas such as the “wandering womb,” distinctly Greek in origin. Let us look at each dietary recommendation individually. The recommendation for the consumption of chicken, fish and barley—considered easily digested foods, likely comes from the idea that “women were unable to concoct (literally, “cook”) their nutrients as thoroughly as men” (Green 2002:20). For the Greeks, the only way for women to purge themselves of excessive waste, which they retained due to their cold nature and inability to fully concoct their food, was through the menses. When the menses were excessive, the recommendation for easily digested food would, theoretically, reduce the amount of waste needing to be eliminated (Green 2002:19). Likewise, the idea of eating “cold” and styptic foods to treat the descent of the womb was based on the Greek idea that the womb could become detached from its original position, wandering through the body causing distressing symptoms. Stemming largely from Hippocratic gynecology, writings in the Hippocratic tradition offer numerous remedies for moving the womb back into place. Most are not dietary, but cold and styptic foods would theoretically reduce blood flow and therefore be more likely to keep the womb in place.

The recommendation that there should be a certain diet for pregnant women was known in Greek and Arabic medicine. For example, around 900 AD, “Rhazes was one of the first Arabic writers to include a pregnancy-regimen in his regimen-cycle of the *Liber de medicina ad Al-mansorem*” (Weiss-Amer 1993:13). Dietary recommendations were also no doubt present in the practical oral tradition of midwives and other women healers. The concern that women not crave something she can’t have is common—and probably stems from the idea of sympathetic magic common to folk customs about what women eat or crave affecting her fetus. However, it has been noted that Greek texts also tend to be oriented towards pathology in pregnancy (Weiss-Amer 1993:12)— which may explain the interesting addition here of the recognition of the phenomenon now known as “pica,” or craving for non-edible foods. Not limited to pregnancy, but more common during pregnancy, the suggested treatment is for the patient to eat beans cooked with sugar—a



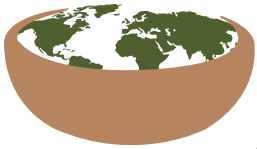
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starchy and sweet concoction that is filling and may resemble texture of chalk or other commonly desired substances. The prescription for eating light and easily digestible foods during labor is also logical, although in modern medicine women are often forbidden from eating any solid food during labor. Recommendation 115 also suggests light and digestible foods—egg yolks, poultry and fish—as some protection against a difficult birth. This is a continuation of the earlier recommendation for treating excessive menses, but in this case seems to be treatment for constriction of the orifices. Perhaps the general idea that women in a delicate condition eat what was considered appropriate for women and invalids was applied generally to women’s conditions.¹³ It should also be noted that the advice in the *Book of the Conditions of Women*, aimed at more professionally trained doctors in the literate tradition, was likely intended for women of the social classes sufficiently wealthy to be able to afford a doctor. Poultry and fish had long been recommended as appropriate food for the constitution of the aristocracy (Henisch 1976).

Recommendations of producing an appropriately abundant milk supply of good nutritional value and of the right consistency is found in “On Choosing a Wet Nurse.” Women are cautioned against eating foods “hot” in nature, or foods that would impede the flow of milk—i.e. styptic foods. Sweet, bland and starchy foods are recommended for thickening milk and increasing milk production (sympathetic magic—like produces like), while work and wine are recommended to thin milk. The one dietary recommendation which seems to rely mostly on magical properties, rather than the inherent elemental makeup of food, is that of the cheese or butter (both milk-based foods in which one can easily make an impression) with the *Sator Rotas* palindrome inscribed upon it.

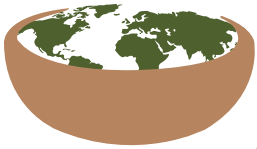
The three recommendations in *On Treatments for Women* are somewhat different in nature. More reflective of more practice-based, practical Salernitan medical tradition, two are for helping fat women, both phlegmatic and dropsical, to be able to conceive. Both actually list a regimen of baths, sweats and other treatments to induce weight loss, but still suggest nourishing food. However, the mention of a “phlegmatic” temperament still reflects the Greek tradition of the four humors—though likely this is used as was understood by less literate traditional healers. A “dropsical” woman was suffering from edema, an excess of water. The third recommendation for provoking the menses is more based upon herbal treatment, with the method of delivery mentioning food (bacon) and wine (drink). All three recommendations are probably the result of practical experience rather than a sophisticated theoretical understanding of the nature of the problem—and perhaps were more effective as a result.



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The medical school at Salerno would, by the fourteenth century, be eclipsed by other, larger, university-based medical schools. Medicine, now taught at many universities, became increasingly professionalized (Wallis 2010:xxiii). However, the *Trotula* continued to be a popular work, found in translation in other parts of Europe, through the fifteenth century. As a relatively early site of Arabic influence on Western medical theory, through the systemization of Greek ideas in Arabic writing translated into Latin, we can see the influences of Greek and Arabic medical understanding overlaid on the indigenous traditions of the southern Italian peninsula. While much has been written on the *Trotula*, little work has been done on the dietary recommendations found within the text. This research note takes the initial steps towards a better understanding of those recommendations.



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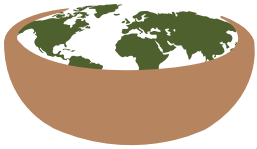
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Notes

¹ “L’adage <<manger pour vivre et non vivre pour manger>> se traduit, en termes médiévaux, par la recherche d’un bon équilibre, grâce à la nourriture, des mélanges constitutifs du corps humain qui caractérisent sa ou ses complexion(s).” Translation my own.

² “...le sang est homologue de l’air, car il est chaud et humide, les deux qualités caractéristique de la vie; le phlegme, froid et humide est homologue de l’eau; la bile, chaude et sèche est homologue du feu; enfin la mélancolie, froid et sèche, est homologue de la terre.” Translation my own.

³ For an interesting contemporary reading of On Women’s Cosmetics, see (Cavallo, Proto, Patruno, and Bifulco 2008), written by faculty at the Department of Pharmaceutical Sciences at the University of Salerno.

⁴ “Illnesses of this kind emerge on account of corrupt humors within, which corruption nature refuses to sustain” (Green 2002:70).

⁵ Most likely *Plantago major*

⁶ Most likely *Mespilus germanica*

⁷ Most likely *Sorbus domestica*

⁸ Note that this advice is also present in Arabic and Ayurvedic medical treatises (York 2012).

⁹ “The strings of letters and symbols in this recipe and in [100] reflect corruptions first introduced into the text in the proto-ensemble ” (Green2002:95). These were left to stand because they were assumed to be magical.

¹⁰ “The final verdict on the origin of the Rotas-Sator square is clearly dependent on future archeological discoveries. But in the present state of the evidence it seems reasonable to conclude that this charm, at least in the form we now have it, originated with Latin-speaking Jews (presumably settles in Italy) in the period immediately prior to the Christian Era. ...alternatively, it may have been a product of the pogroms of, e.g. A.D. 19 or A.D. 49. It would



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seem that it fell into disuse, to be revived later as a Christian symbol amid the new enthusiasm for symbolism characteristic of the third century and later” (Fishwick 1959). Essentially came to be used as a magic charm.

¹¹ A compound medicine, used (among other things) as a restorative. Commonly made of rose, sugar, licorice, cinnamon, cloves, spikenard, ginger, galangal, nutmeg, zedoary, storax, watercress, wild celery and honey (Green 2002:131).

¹² Dropsy equates to edema, or retention of too much fluid resulting in swelling.

¹³ See by way of comparison Bald’s Leechbook III—“A pregnant woman is to be earnestly warned that she should eat nothing salty or sweet, nor drink beer, nor eat swine’s flesh nor anything fat, nor drink to intoxication...” (Wallis 2010: 125).