

Excellent Mustard, 48r
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Excellente moustarde

Fais seicher du pain au four puy le larde de girofle & Canelle & ainsy mects le tremper dans de bon vin Puy passe tout par lestamine estant bien pile & lincorpore avecq ta graine de moustarde.

Excellent mustard

Dry some bread in an oven, then stick cloves and cinnamon into it and put it to soak in good wine. Then, being well crushed, pass everything through a cloth strainer and incorporate it with your mustard seeds.

Our author-practitioner's only recipe for mustard appeared, at first glance, to be one of very few culinary recipes in the manuscript. A cursory look through the entries translated so far left us wondering why the author-practitioner had included this particular food recipe in a manuscript largely focused on other bodies of knowledge. While his curiosity was clearly wide-ranging, it does not seem to have extended to the vast body of culinary knowledge that was likely available to him.¹ Why mustard, then?

Mustard is mentioned elsewhere in the manuscript as a point of reference for the desired thicknesses of different substances (89v, 113v, 121v). These instances suggest that mustard had a relatively consistent viscosity that the target reader, if we can speak of one, would have been familiar with. These three non-culinary recipes helped us form a

¹ This recipe lies beneath a drawing showing the design of an oven for melting metals, between instructions on how to cure a dog of mange, above, and how to stuff animals and birds, below. Other "culinary" recipes in the manuscript include those for vinegar (40r) and "Vin brusle et sucre" ["Burned and sweet wine"] (71r). Most of the "food" recipes in the manuscript are actually related to food preservation (16v, 50r, 98v) or medicines (7v, 20v, 37r, 47r, 77r). For example, "Medecine pour lestomach qui leschaufe et desopile le foye" ["Medicine for the stomach which warms it [stomach] and unstops the liver"] (37r) is an opiate which clears gas and phlegm and heals the stomach. There are also several recipes related to keeping fruit- or nut-bearing trees.

clearer image of what our reconstructed mustard should look and feel like—a spreadable paste thicker than sauce. Still, the main early modern uses and qualities of mustard were unclear to us before beginning our experimentation and research.

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As we ground our yellow mustard seeds by hand in a marble mortar with a marble pestle, we noticed no spicy smell wafting up towards our faces, only the physical challenge of breaking each tiny, firm seed open and pulverizing it.² [Fig. 1, grinding mustard seeds] The ground cinnamon and clove, added to dried bread, smelled familiarly warm and aromatic. [Fig. 2, bread and spices] In our first trial we used red wine to soak our spiced bread; in our second, tripartite trial we used Concord grape juice, muscat wine, and red wine for three different mustard variations. [Fig. 3, three mustard varieties in progress] In all cases, shortly after the spiced liquids combined with the mustard seeds, we were able to smell the pungent seeds. [Fig. 4, combining ingredients] The initial smell was incredibly sweet due to the sugars in the liquids combined with cinnamon and clove, spices we associate with sweet foods and drinks. This eventually gave way to the stronger, stinging smell of mustard.

² In our most successful experiments, we used the following ingredients and protocol: 11 oz bread (whole wheat or white); 2 sticks cinnamon; 50 cloves; 1.5 cups of red wine, muscat wine, or Concord grape juice; 1/16 cup yellow mustard seeds. If bread is not already dry (hard), preheat oven to 300 F. Slice bread to 1-1 ½-in thick slices. Place bread directly on oven tray and leave until dry, about 18 min. In the meantime, grind clove and cinnamon roughly in mortar with pestle. Grind mustard seeds finely, and sift through tight sieve to remove large husks. Remove bread from oven, combine in bowl with cinnamon and clove, 1.5 cups liquid of choice, crush all together with pestle, leave to soak for 20 min or longer, depending on bread. Strain through cotton cheesecloth and combine enough of resulting liquid with ground mustard seeds to produce desired paste.

After tasting it, our first batch of mustard seemed to remain present as a burning sensation in our mouths, throats and stomachs far longer than we wanted it to. We later related this tingling to the early modern belief that mustard, when applied topically, could draw diseases to the skin's surface so that other medicines could access them. Subsequent batches of mustard made with the three different liquids mentioned above varied in color and flavor. The mustard made with muscat wine differed from the other two samples primarily in color—it had a golden color familiar to us from contemporary mustard. [Fig. 5, muscat wine mustard] Its flavor was milder than the red wine mustard, but sharper than the Concord grape juice mustard. [Fig. 6, three finished mustard varieties]

A few clues helped us clarify the recipe we were taking on. First, the suggestion about its thickness, mentioned above. After our first trial, we noticed that the mustard seeds might make a more consistent and finer powder if the seed husks were removed, [Fig. 7, mustard seeds during grinding; Fig. 11, first mustard results] which was confirmed by Hugh Plat's 1602 recipe for "Mustard Meale":

IT is usuall in Venice to sell the meale of Mustarde in their markets as we do flower and meale in England: this meale by the addition of vinegar in two or three dayes becometh exceeding good mustard, but it would bee much stronger and finer, if the husks or huls were first divided by searce or boulder, which may easily bee don, if you drie your seeds against the fire before you grind them. The Dutch iron handmils, or an ordinarie pepper mill may serve for this purpose.³

³ Hugh Plat, *Delightes for ladies to adorne their persons, tables, closets, and distillatories with beauties, banquets, perfumes and waters* (London: Peter Short, 1602), Chap. 25. Accessed via EEBO at http://gateway.proquest.com.ezproxy.cul.columbia.edu/openurl?ctx_ver=Z39.88-2003&res_id=xri:eebo&rft_id=xri:eebo:citation:22095229 Interestingly, Plat continues: "I thought it verie necessarie to publish this manner of making of your sauce, because our mustard which wee buy from the Chandlers at this daye is manie times made vp with vile and filthy vinegar, such as our stomak would abhorre if we should see it before the

Based on this and our experiences in our first trial, we decided to sieve the husks from the seed kernels in our later trials, which gave us better results.

In Plat's recipe, we learned also that we might have saved time by using a hand-mill instead of a mortar and pestle. An illustration in Bartolomeo Scappi's 1570 treatise *Opera* shows a nutmeg grinder, [Fig. 8, Scappi's nutmeg grinder] suggesting that specialized grinding tools were available, and a recipe for "Terre fondue des potiers" (90v) in our manuscript make use of a "moulin de moustard," or "mustard mill."⁴

A second image in Scappi's treatise helped us imagine what "lestamine" ["a cloth strainer"] mentioned in our recipe might look like [Fig. 12, Scappi's cloth strainer]. We used a cotton cheesecloth, single or doubled-up depending on the thickness of our liquid, as a readily available modern substitute for a tammy cloth.

Our greatest challenge in executing the author-practitioner's recipe for mustard consisted in establishing the correct proportions of liquid to dry ingredients, and understanding how long to leave the spiced bread in this liquid to achieve the exact desired thickness. Our first trials left us with an extremely thick paste, [Fig. 10, thick spiced wine paste] nearly impossible to squeeze through one layer of our cotton cheesecloth, [Fig. 9, squeezing paste through cloth] but later trials left us with a very thin liquid. The type of bread used and the way its gluten reacts to manipulation and liquids most likely have an effect on this and should be studied further.

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mixing thereof with the seedes."

⁴ Bartolommeo Scappi, *Opera*, (Venice: Michele Tramezzino), 1570. Accessed at <https://archive.org/details/operavenetiascap00scap>.

Early European mustard recipes date back to ancient times,⁵ and black mustard (*Brassica nigra*) and its less pungent relative white (sometimes called “yellow”) mustard (*Brassica alba*) grew in Western Europe at the end of the sixteenth century. The availability of the seed and the frequency with which mustard is mentioned in early modern recipes suggest that the substance was not rare. A 1606 declaration in Rouen, reproduced in a nineteenth-century publication, demonstrates that local *moutardiers* (as well as *vinaigriers*, *aigriers*, and *faiseurs d’eau de vie*) were regulated as a profession in response to unhealthy practices like the addition of improper ingredients to a mustard, such as, “des graines de choux et de rabettes qui la randaient huileuse et de mauvaise goût, et du jour au lendemain putrefaict, conséquemment indigne d’entrer au corps humain” [“cabbage and [?] seeds, which make it oily and bad-tasting, and from one day to the next rotten, therefore unfit to enter the human body.”]⁶

As the “first and only native pungent spice available to early Europe,”⁷ mustard played a unique role, but not only as a readily available flavor for the European palate. According to Aristotelian and Galenic humoral theory, foods and people were understood

⁵ Lucius Iunius Moderatus Columella, *De Re Rustica*, vol. XII, 57.

⁶ Ch. de Robillart de Beaurepaire, *Cahiers des États de Normandie sous le règne de Henri IV*, vol. 2, (Rouen: C. Métérie, 1880-2), 282-85. Accessed via Gallica at http://gallica.bnf.fr/Search?adva=1&adv=1&tri=&t_relation=cb341030166&q=moutardiers+cahiers. The account mentions that the King himself attached such significance to this ordinance to see it through quickly, though the author seems to think this was for fiscal reasons. The accompanying ruling stated that active members of the aforementioned professions, including *moutardiers*, had to be apprenticed to a master for at least three years. Interestingly, although production was limited to authorized masters, “Sera néanmoins permis aux bourgeois d’en faire pour leur usage.” [“The bourgeois will nevertheless be to make it for their own use.”] See also Hugh Plat’s comment on vile vinegar in fn. 3, above. All bracketed translations except BnF Ms Fr translations are by the author of this annotation.

⁷ Harold McGee, *On Food and Cooking: The Science and Lore of the Kitchen*, rev. ed. (New York: Scribner, 2004), 415-16.

to have complexions which generally had two of four qualities: hot, cold, wet and dry. Substances which had certain of these qualities would sometimes, but not always, feed the associated humors within the human body. In his treatise *De Simplicium Medicamentorum*, Galen mentions that pepper, for example, is cold to the touch but has the effect of heating the human body.⁸

In Robert Pemell's 1652 treatise on medicinal simples, the mustard seed is "hot & dry in the fourth degree."⁹ Following these qualities, mustard seeds were thought to be good for those suffering from cold and wet diseases like gout or "cold stomach," but bad for choleric. The medicinal properties of mustard were directly tied to its influence on cold and wet humors; as Pemell writes of mustard: "by the sharpnesse thereof it pierceth to the Brain, and purgeth it by sneezing and drawing down rheume and other tough humours which by their residence do much offend."¹⁰

Not surprisingly, the other ingredients in this recipe seem to share these basic characteristics. Pemell categorizes cinnamon as being "hot and dry in the third degree, or hot in the third-degree and dry in the second," while cloves are "hot and dry in the second or third degree."¹¹ Both are described as being used, like mustard, to combat cold and wet disease and are not recommended for choleric. Wine was known to contribute to the general revival of spirits, increasing blood flow because it was believed to be easily

⁸ Galen, *De Simplicium Medicamentorum*, I 11: XI 398f.

⁹ Robert Pemell, *Tractatus de simplicium medicamentorum facultatibus*. = *A treatise of the nature and qualities of such simples as are most frequently used in medicines, both purging, and others* (London: Printed by M. Simmons, for Philemon Stephens, at the guilded Lyon in St Pauls Church-Yard, 1652), Chapter 161. Accessed via EEBO at http://gateway.proquest.com.ezproxy.cul.columbia.edu/openurl?ctx_ver=Z39.88-2003&res_id=xri:eebo&rft_id=xri:eebo:citation:99865866. The author mentions "Galenus, printed 1549" as one of his sources.

¹⁰ Pemell, *Tractatus*, Chap. 161.

¹¹ Pemell, *Tractatus*, Chap. 14 and Chap. 91, respectively.

converted into blood.¹² Mustard was also included in the category of “aperients,” substances which dilate the inner body, increasing flow; again, this would be detrimental to a choleric’s health.¹³

It would be incorrect to apply our own distinction between medicines and foods to the early modern usage of mustard. Nevertheless, it appears that the recipe for “excellent mustard” on 48r is, rather than a culinary anomaly within the manuscript, another example of a substance with medicinal properties. The thick and spicy paste maintained its “hot and dry” nature even when used as a condiment for meats, as it is today.

Several early modern authors recommend mustard as a corrective to the less desirable qualities of meats and other heavy foods.¹⁴ This union of meat and mustard was about more than just flavor. Ken Albala mentions the belief that “mustard’s cutting and abstersive qualities will help us digest the gross and heavy pork.”¹⁵ Certain fatty or heavy meats, such as the animals’ heads mentioned by Baldassare Pisanelli in a 1586 treatise, were considered safer to eat if combined with mustard.¹⁶ William Bulleyn, whose health book was published in London in 1558, writes that a broth made with mustard helps with the digestion of meat.¹⁷ For Benedict of Nursia, whose work was published in 1475,

¹² Ken Albala, *Eating Right in the Renaissance* (Berkeley, CA: University of California Press, 2002), 74.

¹³ Albala, *Eating Right*, 101.

¹⁴ See also the dialog between Katharina and Grumio in William Shakespeare’s *The Taming of the Shrew*, IV.iii.17-35.

¹⁵ Albala, *Eating Right*, 242.

¹⁶ Baldassare Pisanelli, *Trattato della natura de’ cibi et del bere* (Venice: Giorgio Alberti, 1586), 88-89.

¹⁷ William Bulleyn, *A newe booke entituled the government of healthe* (London: John Day, 1558), 75v-76r.

flatulence caused by beans could be corrected with the addition of mustard and wine, among other ingredients.¹⁸

Our own experience in the kitchen and in the lab confirmed the difference between the inert mustard seed's status as a cold and dry substance and its activation into a hot and dry substance through the process of making mustard. Chemically, we now understand that the spiciness in the mustard seed, caused by irritants called isothiocyanates, emerges when it reacts with liquids: "The combination of moisture and cell damage revives the seeds' enzymes and allows them to liberate the pungent compounds from their storage forms."¹⁹

Interestingly, using an acidic liquid such as wine or vinegar, the two liquids most commonly used in early modern mustard recipes, slows down this reaction and makes the pungent taste last longer.²⁰ This sheds light on a recommendation in *Le Ménagier de Paris*: "If you want to make a supply of mustard that will keep long, make it during the picking-season (of wine grapes) from fresh stum."²¹ In fact, in our own experiments making mustard with three different liquids, we found that our mustard made with red wine, kept in a refrigerated airtight container for several weeks, held its sharp flavor even after the other two mustards had lost theirs.

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Through a combination of research and the direct observation of the powerful sensory experience of making and eating mustard, we can now suggest that our author-

¹⁸ Benedictus de Nursia [Nenedetto de' Riguuardati di Norcia] *Opus ad sanitatis conservationem* 2nd ed. (Bologna: Domenico de Lapis, 1477), 17r.

¹⁹ McGee, *On Food*, 415-16.

²⁰ McGee, *On Food*, 416-17.

²¹ Georgine E. Brereton and Janet Mackay Ferrier, eds., *Le Ménagier De Paris: A Critical Edition* (Oxford: Oxford University Press, 1981), 258.

practitioner's recipe for mustard is as much about its medicinal properties as its delight as a food substance. A powerful antidote or accompaniment to other foods, mustard fits into a series of recipes for wine- or vinegar-based remedies and other medicines for cold and wet diseases (see fn. 1) within the manuscript. What appeared to us at first as a superfluous condiment might in fact have been a common ingredient in early modern meals prized for its clearly defined physical properties and its effect on the human body.

Bibliography

Albala, Ken. *Eating Right in the Renaissance*. Berkeley, CA, USA: University of California Press, 2002.

A. T., practitioner in physicke. *A rich store-house or treasury for the diseased Wherein, are many approued medicines for diuers and sundry diseases, which haue been long hidden, and not come to light before this time*. 2nd ed. London: Thomas Purfoot and Ann Raph Blower, 1596. Accessed via EEBO at http://gateway.proquest.com.ezproxy.cul.columbia.edu/openurl?ctx_ver=Z39.88-2003&res_id=xri:eebo&rft_id=xri:eebo:citation:99853291

Benedictus de Nursia [Nenedetto de'Riguardati di Norcia]. *Opus ad sanitatis conservationem*. 2nd ed. Bologna: Domenico de Lapis, 1477.

Brereton, G.E. and J.M. Ferrier, eds. *Le Ménagier De Paris: A Critical Edition*. Oxford: Oxford University Press, 1981.

Bulleyn, William. *A newe booke entituled the government of healthe*. London: John Day, 1558.

Galen. *De Simplicium Medicamentorum [Temperamentis Ac] Facultatibus*. Book XI.

McGee, Harold. *On Food and Cooking: The Science and Lore of the Kitchen*. Rev. ed. New York: Scribner, 2004.

Pemell, Robert. *Tractatus de simplicium medicamentorum facultatibus*. = *A treatise of the nature and qualities of such simples as are most frequently used in medicines, both purging, and others*. London: M. Simmons, for Philemon Stephens, at the guilded Lyon

in St Pauls Church-Yard, 1652. Accessed via EEBO at
http://gateway.proquest.com.ezproxy.cul.columbia.edu/openurl?ctx_ver=Z39.88-2003&res_id=xri:eebo&rft_id=xri:eebo:citation:99865866

Pisanelli, Baldassare. *Trattato della natura de' cibi et del bere*. Venice: Giorgio Alberti, 1586.

Plat, Hugh. *Delightes for ladies to adorne their persons, tables, closets, and distillatories with beauties, banquets, perfumes and waters*. London: Peter Short, 1602. Accessed via EEBO at

http://gateway.proquest.com.ezproxy.cul.columbia.edu/openurl?ctx_ver=Z39.88-2003&res_id=xri:eebo&rft_id=xri:eebo:citation:22095229

Scappi, Bartolomeo. *Opera*. Venice: Michele Tramezzino, 1570. Accessed via Archive.org at <https://archive.org/details/operavenetiascap00scap>

Shakespeare, William. *The Taming of the Shrew*. New York: Washington Square Press New Folger Edition, 1992.