

Modern Recipes: A Case of Miscommunication

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Adam Weiner, a culinary instructor at JobTrain in Menlo Park, California, tells a story about a student who was asked to double a cookie recipe. A few minutes after receiving his instructions, the student returned to Adam's office to inform him that he couldn't complete the recipe because the oven wouldn't go as high as 700 degrees.¹ When asked, Chef Weiner provides example after example where his students, generally novice cooks, attempted to literally interpret the recipe they were endeavouring to follow. Other chef-instructors teaching in the United States community college system relate similar examples.

In my own experience as a part-time instructor for ten years at a cooking implement store, I've encountered students with multiple college degrees who thought water had to be stirred while it was brought to a boil. Others thought that you only stirred the surface level of the liquid. Still others thought that 'salting to taste' meant adding salt until it could be tasted.

With all these students, there was a breakdown in communication between the recipe and the reader. There was a failure to impart or exchange information. A recipe is simply 'a statement of the ingredients and procedure required for making something.'² There is no guarantee implied or stated that the cook will understand either the statement of ingredients or the procedure.

A brief history of cookbooks (and who used them)

Although a case could be made that this was always the relationship between cooks and recipes, the situation with the typical twenty-first-century cook is particularly problematic. Both cooks and recipes have changed significantly over time.

Fourteenth-century recipe collections that have survived to today, such as *Viandier pour appareiller toutes manières de viandes*, *Libre de sent sovi*, *Daz büch von güter spise*, and *Forme of Cury*, were written by professional cooks to use as an *aide-mémoire* for themselves or other professional cooks.³ Such professionally-oriented books continued to be written for four hundred years with *Le Grand Livre de la cuisine*, published in 1929, possibly being the last such book.⁴ Later books, written as instruction books for culinary students, do not assume that the reader is already a knowledgeable cook.⁵

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Le Ménagier de Paris, written near the end of the century was arguably the first cookbook written as a set of instructions for a second party to use when managing a third party, in this case, for the young wife of an elderly gentleman to use as a guide for household management including supervising the cook.⁶ By the eighteenth century, similar instruction books written for the wives of the landed gentry to run their households were common.⁷ The eighteenth century also produced the beginning of cookbooks written for smaller, middle-class households.⁸ These books often contained recipes for non-food items such as medicines and cleaning products. Whether written for direct use by the reader or for use in instructing the household help, these books tended to concentrate more on the preparation of food and less on the running of a middle-class home than the books meant for larger households.

In the nineteenth century, significant books were published in France and England that were directed both to the middle-class woman directing her staff and to the less fortunate soul having to take a more direct hand in household management. Audot's *La Cuisinière de la Campagne et de la Ville* was first published in 1818.⁹ Many other editions followed with possibly the last, the seventy-fourth, being published in 1896.¹⁰ It was also translated into English and published in England and the United States.¹¹ Beeton's *The Book of Household Management* was initially published in 24 monthly instalments from 1859 to 1861 and then published in a bound edition in 1861.¹² Even though the author died four years later, the book was steadily expanded by her husband and others until in 1907 it reached 74 chapters and two-thousand pages. It is still in print. In America, although there are many books similar to Audot and Beeton published during the nineteenth century, none achieved a long-lasting status until the end of the century when Fannie Farmer publishes her version of *The Boston Cooking-School Cook Book*.¹³

The third decade of the twentieth century saw the addition of the *Joy of Cooking* in the United States and *Je Sais Cuisiner* in France.¹⁴ During this period, economic downturns were causing more middle-class households to reduce or eliminate the number of employees in service.¹⁵ Cooking became participatory rather than supervisory for the 'lady of the household', assuming that she was not attending to full-time employment outside the home. Both books would go through many revisions and editions and still remain in print almost one-hundred years after their initial printings.

After the Second World War, the transition from supervisor to participant became more common and more pronounced. Whether the cooking responsibility included

training the new generation of ‘baby boomers’ varied from household to household. It was also the start of generations beginning to lack basic cooking knowledge. By the time that recipes become more common on television than in the daily paper, the boomer’s grandchildren were beginning to achieve a degree of independence and in some cases, wanting to learn how to cook. These new adults no longer started with any knowledge of the kitchen like their forebears may have exhibited. Whatever tradition there was of passing minimum cooking skills down from generation to generation, was now reduced to a minimum. Teenage social groups like the Brownies, Girl Scouts, Girl Guides, and the Future Farmers of America saw a reduction in membership and a change in emphasis from homemaking skills to future professional skills. Even the number of classes in schools that provided instruction in cooking dropped. Today, those that remain are often taught by teachers not fluent in the subject matter.¹⁶

Archaic words

At the turn of the twenty-first century, the market for printed recipes was filled with readers who were unfamiliar with basic cooking terms to the point that at least one major U.S. daily published a list of six or seven common cooking words that they felt could no longer be used in the recipes they published.¹⁷

According to *The Recipe Writer’s Handbook*, in one national study of 735 Americans between the age of 25 and 54, all of whom considered themselves to be good to excellent cooks, three-fourths flunked a basic 20-question cooking quiz.¹⁸ ‘A staggering 45 percent of respondents didn’t know how many teaspoons are in a tablespoon.’¹⁹

The Handbook list ten cooking terms that the authors believe should no longer be used in recipe writing.²⁰

sauté	dice	cream
deglaze	cube	fold
roast	blend	
pan-broil	braise	

Note that all of these words are used in their verb form. These are all shorthand ways of describing specific cooking techniques, techniques that used to be taught to the younger generation by the older one.

Even if these words were to be passed down to new cooks, the passing may include the modification of what the words mean. Even the authors, by suggesting alternative terms, contribute to the confusion these words impart.

They define ‘braise’ as ‘To slowly cook meat or poultry in a covered pan or baking dish in a small amount of liquid. Avoid using this term; say “simmer, covered.”’²¹ The first part is essentially correct, although lacking in essential detail. My issue is with the second part since most people I talk with state that simmering implies that the article being cooked is totally submerged. The suggested alternative cooking technique ignores that braising is performed slowly, with low heat, and in a steam environment.

They define the verb ‘cream’ as ‘To mix one or more foods (usually fat and sugar) with a spoon or electric mixer until soft and smooth. Avoid using this term as a verb, use “beat.”’ Most cooks stop at the point where the combination is smooth. The point of being soft, where air is uniformly incorporated into the mixture, takes significantly more time is never achieved by most cooks. To simply replace this complicated term with the single term ‘beat’ is totally inadequate.

Although I think Ostmann and Baker were correct in identifying the archaic words they listed, I feel that the alternative terms they suggested often contribute to the miscommunication between the recipes and their readers. Furthermore, to the words previously suggested, I would add an additional twenty-one terms.

divided	disjoint	chop
cut in	pan-fry	mount
sweat	bain-marie	shell
scald	julienne	nap
temper	scallop	toss
rice	adjust	sieve
zest	to taste	pare

These words, although commonly found in modern cookbooks, are just as archaic as the earlier list. Like the earlier list, these words are likely to be misunderstood or meaningless to many cooks. The Glossary at the end discusses each of the words in the list.

Imprecise words

Sometime in the 1990s, trade cookbooks, possibly following the influence of Julia Child, began to move away from the ‘Add this, add that’ school of recipe writing. According to Judith Jones, Child’s longtime editor, ‘She used gutsy words. She plopped things in a bowl and squished them with her fingers.’²² ‘Jones championed authors who connected to readers as a friend and mentor, authors who wrote as if they were in the kitchen with you’.

It would take almost thirty years for the cookbooks of Julia Child and others seeking to imitate her style to come to drive the writing of cookbooks in America. Child provided an image that you, the reader, were in the kitchen with her, and that she was speaking directly to you. Other authors and their editors failed to capture her true style. They thought that by adding unnecessary words to the ingredient list and instructions, they too could be sitting on your shoulder giving sage advice.

Now that many of these imprecise words—mostly adjectives—have become normalized in recipe writing, professional editors insist that they are required to provide clarity and understanding.²³ I suggest the opposite.

- Large, medium, small: How large is large? How small is small? My largest pot has a 12-litre capacity and my smallest pot barely holds a quarter of a litre. In between, there are eleven pots of seven different sizes. Which one is a medium-sized pot? Is your smallest pot as small as mine? Relative sizes need something to

relate to. For example, if it is necessary to tell the reader the size of a bowl to use for a task, the actual, or maybe minimum, size should be provided. Otherwise, let the reader learn on their own how to determine which of the bowls they have in their kitchen is the right one to use.

- High, medium, low: Although mostly referring to levels of heat, these terms will also show up at other times. The terms come from traditional markings on control knobs. Modern cook tops may have numerical markings in addition to the words or instead of. They may also use term like ‘melt’ or ‘warm’ instead of ‘low’ or ‘power boil’ instead of ‘high’. A cook can certainly be told to use the highest or lowest setting on a particular hob, but the recipe author has no *a priori* knowledge of the thermal output of the hob the cook chooses. My ‘medium’ setting may be hotter than your ‘high’ setting.
- Coarse, medium, fine: Like the previous imprecise adjectives, this series of words are internally relative. To some extent, size varies with noun being described. Is a fine chop the same as a fine dice? Is coarse salt the same size granule as coarse cornmeal?
- Hot, warm, cool, cold: These terms are highly subjective for both the recipe author and the recipe reader. My warm may be your hot. When an oven is considered hot, it can either be at a high temperature or when it has reached its temperature setting, which may be well below maximum. The temperature of water from a cold tap is much warmer than the temperature of food in your refrigerator, both of which are called cold.
- Top, bottom: These terms are relative to how an item is being held or set on the work space. The statement, ‘Cut off the top of the eggplant,’ probably implies removing the stem and calyx from the aubergine, but to a cook unfamiliar with the anatomy, the result may be different.²⁴ Beef ‘top round’ comes from the inside of the leg and ‘bottom round’ from the outside. It’s called ‘top round’ in the United States because when the beef hip is placed on the work surface by a butcher, this is the muscle group of the leg oriented upwards. In Canada, the same portion or cut is referred to as the ‘inside round’.
- Brown, golden, bright green: Colour is always highly subjective, and in cooking may be temporary. An item that is described as golden one minute may be brown the next and burnt before long. ‘Cook the green beans [...] until they are tender-crisp and bright green’.²⁵ Bright green can have different meanings as well as not all varieties of the pods of the common bean react the same way when heated.
- Stir, beat, whip, whisk: Confusion arises because to some cooks the tool is called a whip and to others it is called a whisk. When its noun form is used as a verb, the confusion remains. To some authors, either a

whisk or a whip is used to ‘beat’. Some will use the verbs ‘stir’ and ‘beat’ interchangeably, even though they imply different speeds to cooks.

Misused measurements

Prior to the availability of inexpensive tin, volumetric measuring tools, accurate cooking measurements were performed with scales. Items like teacups and dessert spoons were surprising close to common sizes, and the flexibility of recipes allowed the author’s ‘teacup of sultanas’ to be close enough to the reader’s ‘teacup of sultanas’ to not make a significant difference. Volumetric measurements were mostly used for measuring liquids, which always have a level top.

Lincoln suggested that all volumetric measurements required an adjective such as heaping, rounded, or level.²⁶ She provided many examples of the proper way to measure different common food items. Her successor at the Boston Cooking School further simplified the issue by saying that all measurements had to be level.²⁷ ‘A cupful is measured level. [...] A tablespoonful is measured level. A teaspoonful is measured level.’

Modern cookbook authors tend to confuse accuracy with precision.²⁸ Accuracy is the degree of closeness of a measurements of a quantity to that quantity’s actual value. Precision of a measurement system is the degree to which repeated measurements under unchanged conditions show the same results.

The statement, ‘Cook at 64 °C (147.2 °F) for 3 hours and 15 minutes’, implies a mixed use of precision where the precision of the Fahrenheit measurement is one-eighteenth that of the Celsius measurement.²⁹ The primary statement implies an accuracy of one degree Celsius, but the tool specified in the recipe uses a thermocouple that is only accurate to within three degrees Celsius. Without the cookbook providing calibration instructions, the specified accuracy cannot be assured by the cook.

- Cup: The cup measure is probably the most common volumetric measurement and possibly the oldest. In modern recipes, it no longer stands the test of time. ‘Top each burrito with ¼ cup lettuce [...] and serve hot’.³⁰ Modern cookbook authors and editors see nothing wrong with volumetrically measuring leafy greens. Then there is the question of how much does a cup of all-purpose flour weigh? It depends on packing, humidity, ability to level, measuring cup used, and the cook. Depending strictly on volumetric measuring reduces the reliability and repeatability of a recipe. Volumetric measurements are appropriate for most liquid measurements when the measuring cup is used properly, a skill lacking in most students.
- Tablespoon, teaspoon: Spoon-based volumetric measurements have the same issues as the larger cup. Many home cooks buy measuring spoons based on style rather than accuracy. There are differences in

volume from brand to brand. Most users fail to use measuring spoon properly, especially for liquid measuring. Then there's the issue that one tablespoon is not always equal to three teaspoons, sometimes, one tablespoon is equivalent to four teaspoons.³¹ Non-standard abbreviations are also an issue. The word tablespoon can be written out or commonly abbreviated as 'T' or 'tbsp'. Likewise, teaspoon can be 't' or 'tsp'.

- Inches, centimetres: Eyeballing and measuring with a ruler are not the same. Many authors only guess at linear measurements, especially thin ones. Thickness below unity are a problem for authors that don't understand fractions, which is quite common. Conversions in cookbooks are often wrong, even famous ones 'written' by authors with physics backgrounds. In the \$625, five-volume, cookbook *Modernist Cuisine* there are numerous examples of errors in unit conversions. 'Cut log crosswise into 3 cm/2¼ in pieces' appears twice in a single recipe.³² (It is also grammatically incorrect!)
- Hours, minutes, seconds: Authors seem to approximate time rather than checking with a timepiece. Small units of time—those in seconds—seem to be the most troublesome. In the last few years, time is used more as an endpoint than some qualitative aspect of the food being cooked. It's not unusual to see an instruction like 'Cook for 6 minutes'.³³ In this case the item being cooked is a salmon fillet. There's no mention of the fillet's thickness. The fillet is cooked in a nondescript grill pan over medium-high heat, an issue that has already been discussed.
- Degrees: Thermometers are notoriously inaccurate. The newer digital, thermocouple-based devices are better but still require calibration. The reading speed of modern digital thermometers is faster than the tradition bimetallic or spirit-filled versions, but their speed is still a function of the diameter of the probe. Inexpensive models with three-millimetre diameter probes can still take upward to a minute to get a reading. Finally, thermometers are often misused and abused, which can cause their readings to be unreliable.
- Ounces, grams: The use of scales in the kitchen was more common at the turn of the twentieth century than it was at the turn of the twenty-first. Inexpensive, quick reading, digital scales are now readily available, but most cookbook authors are reluctant to specify mass measurements. If they do, they are often calculated from other forms of measuring rather than being the primary specification. Furthermore, in the American kitchen, there is confusion between mass ounces (avoirdupois) and fluid ounces.

Ingredient confusion

As Alexander Pope once wrote, 'A little learning is a dangerous thing'.³⁴ Most cookbook authors, no matter

what they may think, have not studied in depth the ingredients that they specify in recipes. They seem to assume that the carrot they can buy in their locale is the same as the carrot you or I have available. It may be, but probably not. Additionally, the author's knowledge of the ingredient may be dated or subject to the current hype around it. The name of the ingredient may even be localized.

- Extra virgin olive oil: Besides the current issues with false-labelling and adulteration, extra virgin olive oil has been generally misunderstood for a long time. The flavour can be affected by the time of year the olives are harvested and pressed. The oil can be affected by the type of press, storage, and transportation. Many authors mistakingly believe that olive oil is a neutral oil. Others don't understand the difference between refined and unrefined oil, or that heating extra virgin olive oil changes the oil into ordinary olive oil.
- Grape seed oil: A neutral oil that used to be selected for its high smoke point compared to other unrefined oils. Today, most oil is refined and the smoke points are sufficiently high for smokeless deep-frying.
- Peanut oil: In the 1950s, it was common to find peanut oil specified for cooking Chinese-style food because it has a high smoke point. Peanut oil was used because the typical Chinese cooking oil, one made from rapeseed, was not available in the United States or the United Kingdom. Today, rapeseed oil is readily available. For political reasons it is sold under the trade name of canola oil. Most ethnic food uses whatever oils are inexpensive and locally produced.
- Sea salt: All salt is from the sea! Even the salt that comes from mines which were once part of ancient seas. In reality, most salt marketed as sea salt is not naturally occurring but vacuum dried from sea water. There are two distinct ways to use salt: as a seasoning salt during cooking and as a finishing salt sprinkled over finished dish. In the first case, the salt is dissolved, and not to be tasted. In the second, its crunchiness and taste are separate from the underlying dish. When different types of salt are dissolved in distilled water at a concentration of one-percent by mass, people are unable to distinguish one salt from another.³⁵
- Kosher salt: This salt should in practice be referred to as koshering salt, its original purpose. U.S. chefs started using Diamond Crystal-brand Kosher Salt in the 1990s because it was the only coarse salt commonly available to them. Rather than specify a brand or coarseness in their cookbooks, they chose the unfortunate term of 'kosher salt'. Kosher salt is not purer than other salts, and all kosher salts are not equal. When measured volumetrically, all kosher salts have different amounts of salt. Nonetheless, many authors insist on specifying a volumetric amount of kosher salt—'1 teaspoon kosher salt'—but do not identify the brand being used.³⁶

- Coarse salt: This specification is a recent craze, yet the size of the crystal is never specified. The time to dissolve increases exponentially with coarseness, which may be fine for stews but bad for baking.
- Granulated sugar: This sugar is the common form of sucrose which consists of a single molecule of glucose combined with a single molecule of fructose. The same authors who rail again high-fructose corn syrup don't understand that honey also is mostly fructose. Granulated sugar is an important component of baking for moisture retention. Also, depending on what item is being prepared, crystal size can also be important.
- Eggs: Size matters. Each country has their own specifications regarding egg size. An extra-large egg in the U.S. is about the same internal mass as a large egg in the E.U. Freshness is hard to determine since the 'use by' date in most countries is based on packing, not laying, date. The term organic refers to the feed the hen ate, and most country regulations allow a certain number of work-arounds. The shell colour doesn't affect nutrition or cooking, it is simply an indication of the colour of the hen's ears. Terms like 'free-range' and 'cage-free' have radically different meanings between brands of eggs and jurisdictions.
- Flour: The term flour, when used in North America for general use, usually refers to all-purpose wheat flour, but other wheat flours are readily available where the protein level may be distinguished by use: bread flour, cake flour, pastry flour, pizza flour. Other countries may specify grind and protein directly. Flour can also be used as a term for ground starches such as corn flour in the United Kingdom. It is important for cookbook authors to thoroughly specify flour and all its variants.
- Butter: In the U.S. where the general differentiation in butter is whether it is sold salted or unsalted. The common term 'sweet cream' is strictly a marketing term. American butter has slightly more water than European butter, which is not an issue for savoury cooking but may be an issue in baking. Only in American is butter measured by sticks.
- Potatoes: Older cookbooks referred to potatoes by generic terms like waxy, fluffy, baking, new, and starchy. The cook knew that most of the time, he or she could find potatoes at the local grocery that matched those specified in the cookbook. Now, with about 80 varieties of potatoes available in the U.S. during the year, authors seem to be confused as how to call out potatoes.
- Onions: Few cookbook authors, and even fewer consumers, are aware that onions are a cured product. Onions have no skins. What we refer to as a skin is formed when the outer layers—technically leaves—of the onion are dried during the curing process. Uncured onions are commonly only available in the late spring. The term 'sweet' is not regulated and

indicates acid level, not sugar level. The acid level reduces with cooking, and it is not uncommon for storage onions to have a higher sugar content than sweet onions.

- Green beans: Today's green beans are different from those of a few years ago. Most commercial varieties are bush beans, not pole beans. Many different cultivars are sold as blue lake green beans in market that attempt to distinguish cultivars for marketing purposes. Maturity and time since picking effect cooking time. Modern American cookbook authors often call for green beans to be under cooked.

The recipe paradox

Is there a way to mitigate the issues that so many words present? At first glance, there seems to be a paradox that needs to be overcome:

- Recipes with *limited* instructions may not provide sufficient information for a novice cook but be easy for an experienced cook.
- Recipes with *detailed* instructions may be appropriate for the novice cook but frustrating for the experienced cook.

Matching the thoroughness of recipe instructions to the abilities of the reader is a crap shoot at best. I could certainly claim that the 'perfect recipe' does not or may not or cannot exist. The 'perfect recipe' would require a 'perfect match' between the author and the cook.

Recipe alternatives

One attempt to radically change the way recipes were written was to replace the words with pictures.³⁷ (Figure 1) The patentees described their patent in part as the following.

This invention relates to cook books and the like and more particularly to the manner of setting forth the recipe.

Heretofore it has been the custom to arrange a list of words to indicate the ingredients of a particular article or product and to associate with each ingredient name, numerals and words to indicate the quantity of such ingredients. In using the cook book, the cook would frequently refer to the catalogue of ingredients since the mere words and numbers cannot easily be retained by the average mind. In other instances a cook book of this kind is useless, particularly to those having poor vision or illiterate persons who can not read or understand the words.

[...]

In accordance with these and other objects hereinafter referred to, the present invention may be said to reside in the provision of a cook book and the like wherein the recipes are pictorially set forth.

This is to say, the ingredients and the quantities thereof are indicated by pictures which most illiterate persons can understand and persons with poor vision can see; and which are readily grasped by the minds of those who are not in the above classes. [...] Further, as stated, by merely glancing at the pictorially indicated recipe of the present invention the cook can ascertain at a glance the required ingredients, can ascertain whether such ingredients are on hand, and, if not, the needed articles will be more easily remembered in purchasing the days supply of groceries, etc.³⁸

A different approach was taken in the book *Ratio*.³⁹ In this case, common recipes were provided as ratios between the ingredients. A biscuit, instead of a precise listing of ingredient quantities, became the ratio of flour to fat to liquid. Specifically, three parts flour, one part fat, and two parts liquid. Baking powder is added in a separate ratio of 1 teaspoon for every cup of flour. As well as this method works, it requires the student to perform some arithmetic, something many students are loath to do. The concept, to my knowledge, has not been tried in the last decade in nonprofessional cookbooks. The book goes closer to teaching the reader to cook than most modern books.

At least one, somewhat successful, cookbook has been published claiming to teach cooking without recipes.⁴⁰ By successful I mean that the author is able to provide a comprehensive set of cooking instructions while only resorting to a standard recipes late in the volume. The first chapter of the book is titled, 'The Insults of Modern Recipes', and subtitled, 'Following a recipe exactly, even one of your own, is a guarantee of bad food!'⁴¹ The book successfully gets around many of the issues described above.

Conclusion

It would be nice if we could roll back the clock a couple of decades and remove imprecise adjectives and misused measurements from recipes. I am not optimistic. Even though cookbook buyers hold out the dream that they can learn to cook from the books they buy, very few do. It is hard to learn to cook when most cookbooks are compendiums of recipes rather than lessons in cooking.

Most modern cookbook authors claim to meet the conditions for a 'good recipe' as described by Elisabeth Luard.⁴²

A good recipe is one that first encourages the reader to cook, and then delivers what it promises. A well-written recipe takes you by the hand and says, don't worry, it'll all be okay, this is what you're looking for, this is what happens when you chop or slice or apply heat, and if it goes wrong, this is how

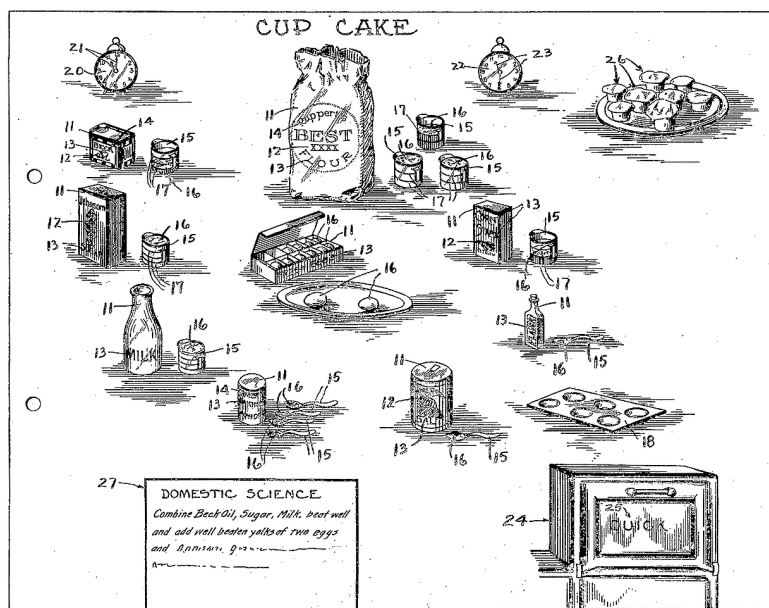


Figure 1. Illustration from US Patent 1,354,395 demonstrating an illustrated recipe with no words. The numbers are callouts from the patent description.

to fix it. And when you've finished, this is what it should look and taste like, this is what to eat it with. But above all, take joy in what you do.

In reality, most authors fail to meet the above conditions. It would probably be better if authors tried to match the writing of earlier recipe authors from the first half of the twentieth century when less space was given to fancy illustrations and more words were given to how to cook.

Glossary

- **Adjust:** Commonly used in the phrase 'adjust the seasoning' or similar. The word instructs the cook to increase or decrease the seasoning, namely salt, in a dish. Since the degree of salting can only be increased, the term is meaningless.
- **Bain-marie:** In the 19th century, this was a basin of water set on the corner of the flat stove top. Sauce pans and other containers were set into the warm water to keep sauces at serving temperature. The term also referred to placing a baking pan into a larger pan of water in an oven. The water prevents the bottom and sides of the baking pan from exceeding the temperature of the water, which is much lower than the oven temperature.
- **Blend:** Usually used to combine the function of adding and stirring one ingredient into another until the two ingredients are indistinguishable.
- **Braise:** A method of slow cooking where (mostly) meat is placed in a dry or almost dry pot, covered, and placed over low heat on the stove top or in a low oven. As water is slowly released, the meat simmers in the liquid and steams in the vapour above the liquid level. Today, cooks confuse this method with simmering,



Figure 2. Eighteenth century, blacksmith-made, single-blade chopping knife. (Scale: 2.5 cm grid) (Photo by author; Museum of American Heritage)

which is much hotter and causes faster shrinkage of the protein and a drier result.

- **Chop:** A method of cutting ingredients that involves sharply pushing the knife through the food without any back and forth motion of the knife. Besides being cut, the food is also crushed a bit when chopped. From the seventeenth to the middle of the twentieth century, chopping was performed with special chopping or mincing knives. (Figure 2)
- **Cream:** The process of rapidly mixing fat and granulated sugar in such a manner as to incorporate air and produce a light and fluffy mixture.
- **Cube:** To cut ingredients, especially meat, into cube-like shapes.
- **Cut in:** This is the process of incorporating fat into flour. Some people use two knives for the process although others use their fingers, a fork, or a dough blending tool. The process may also be rapidly done with a food processor. The dough resulting from the different methods may not produce the same baked result.
- **Deglaze:** A method of releasing ingredients stuck to the bottom of a hot pan by adding a cold liquid and then scrapping the stuck ingredients to release them.
- **Dice:** To cut ingredients, especially vegetables, into small, cube-like shapes.
- **Disjoint:** To separate a carcass, especially poultry, into individual serving pieces by cutting through the natural spaces between bone ends.
- **Divided:** To separate one portion into two or more portions. The term is often used in a ingredient list to

indicate a total quantity that will be apportioned into smaller portions for use in the recipe.

- **Fold:** A method of combining two or more ingredients or preparations of different bulks with a spatula or spoon by lifting and turning the materials over each other.
- **Julienne:** To cut ingredients into strips with a square cross section. This cut is sometimes referred to as a matchstick cut or *allumette*. The standard for the actual size of the strips varies with the group setting the standard.
- **Mount:** A cooking technique where small pieces of butter are quickly incorporated in a hot, but not boiling, sauce to give bulk and a glossy appearance.
- **Nap:** The process of coating a large ingredient with a thick sauce.
- **Pan-broil:** A method for cooking thin pieces of protein in a dry, hot frying pan to quickly sear the protein on both sides and thus cook it.
- **Pan-fry:** A method for cooking food in a frying pan with a minimal amount of fat.
- **Pare:** Most cooks wrongly think that paring and peeling are synonyms. As part of paring, peeling may be performed, but paring includes any trimming. Only in America is the knife used for paring called a paring knife. In most of the world it is referred to as an 'office' knife.
- **Rice:** This technique consists of pushing a soft material, such as a cooked potato, through a thick metal plate covered with small holes. The result is quite fluffy and easily mixed with fat or liquid.
- **Roast:** A method of cooking meat by means of radiant heat, such as dry in an oven or adjacent to an open hearth. The roast also refers to a piece of meat cooked in such a manner.
- **Sauté:** In the early nineteenth century, the word referred to a dish quickly cooked in a frying pan over high heat with a small amount of fat. Translators of the period chose to not translate the term to English and continued to use the term to refer to a particular type of dish. Eventually, English-language cooks adapted the word to mean quickly cooking in a frying pan over high heat with a small amount of fat, and the frying pan was renamed a sauté pan.
- **Scald:** In cooking, this term refers to bringing milk to a temperature of 82 °C (180 °F) to kill any bacteria present, destroy the enzymes, and denature most of the proteins. Most cooks judge the proper temperature for scalding milk to be when tiny bubbles form along the perimeter of the saucepan.
- **Scallop:** The English is derived from the French term *escalope* meaning a pounded or thinly cut piece of meat. In England and Australia, the term can also refer to a small cake made from thin slices of potatoes. In America, thin slices are referred to as scallops.

- Shell: This English term refers to the removal of the outer, sometimes hard, covering of nuts, beans, lentils, peas, and the like. It is sometimes replaced with shuck, which is incorrect, since it refers to corn or shellfish.
 - Sieve: Although sieves similar to those from a couple of centuries past are still used in professional kitchens for pureeing food, today home cooks use a strainer or colander for draining food and blenders and food processors for pureeing.
 - Sweat: A method for pan-frying most vegetables over medium heat. After addition to the pan, the vegetables are lightly salted. The salt causes the vegetables to exude some water, 'sweat', which produces steam to help cook the vegetables. Without the steam, there is insufficient contact with the bottom of the pan and therefore insufficient heat transfer to cook the vegetables on top of the pile before those on the bottom burn.
 - To taste: The instruction to add salt to a dish is often accompanied by the instruction to do so 'to taste'. Contrary to many starting cooks, this does not mean to add salt until it can be tasted. The term indicates to add salt until the base ingredient tastes at its fullest.
 - Temper: When making a custard, if the eggs are added directly to the hot liquid, they may rapidly coagulate. By slowing adding the hot liquid in small amounts to the eggs while continuously stirring, the eggs are 'tempered' and rapid coagulation is avoided.
 - Toss: An instruction usually given for mixing salad greens with a sauce. The greens are lifted from the bottom of the bowl in a manner not to crush them and so that the loose sauce is mixed with them. The term is also used for any mixing performed by holding the bowl and lobbing the contents slightly in the air to mix them.
 - Zest: This is the outer, coloured surface of citrus fruits. It contains oil glands that provide a pleasant smell and a bright taste. The technical term for the zest is the flavedo.
4. Prosper Montagné and Prosper Salles, *Le Grand Livre de la cuisine* (Paris: Ernest Flammarion, Éditeur, 1929).
 5. For example: *The Professional Chef*, ed. by Kate Mcbride, 8th edn (Hoboken [NJ]: John Wiley & Sons, 2006)
 6. *Le Ménagier de Paris*, 2 vols (Paris: the author, 1393; repr. Paris: Jerome Pichon, 1846).
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 8. For example: (Hannah Glasse) *The Art of Cookery, Made Plain and Easy; Which far exceeds any Thing of the Kind ever yet published.* (London: Hannah Glasse, 1747); Lydia Fisher, *The Prudent Housewife, or the Compleat English Cook* (London: T. Sabine and Son, 1781); Amelia Simmons, *American Cookery, or the Art of Dressing Viands, Fish, Poultry, and Vegetables* (Hartford: Simeon Butler, 1798).
 9. Georges Vicaire, *Bibliographie Gastronomique* (Paris: Chez P. Rouquette et Fils, Éditeurs, 1890) p. 54.
 10. Vicaire, p. 55; L. E. Audot, *La Cuisinière de la Campagne et de la Ville ou la Nouvelle Cuisine Économique*, 74th edn (Paris: Librairie Audot, 1896)
 11. —, *French Domestic Cookery combining Elegance with Economy* (New York: Harper & Brothers, 1846). An 'adapted translation' of the 13th edition of Audot's *La Cuisinière de la Campagne et de la Ville* by an unknown translator in England. From the preface by the English editor: '[...] there is an erroneus notion very common in England, that French Cookery is expensive and difficult; whereas, in the present work, it is shown that the French system is less costly than the English; while its simplicity is only equaled by its variety'.
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 13. Fannie Merritt Farmer, *The Boston Cooking-School Cook Book* (Boston: Little, Brown, and Company, 1896); Wikipedia contributors, 'Boston Cooking-School Cook Book', *Wikipedia, The Free Encyclopedia*, 2 April 2018, 19:57 UTC, <https://en.wikipedia.org/w/index.php?title=Boston_Cooking-School_Cook_Book&oldid=833866929> [accessed 6 August 2018]
 14. Irma S. Rombauer, *The Joy of Cooking* (St. Louis: Irma S. Rombauer, 1931); Ginette Mathiot, *Je Sais Cuisiner* (Paris: Éditions Albin Michel, 1932).

Notes

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2. 'recipe, n.' *OED Online*, Oxford University Press, June 2018 <<https://www.oed.com/view/Entry/159522>> [accessed 4 August 2018]
3. Terence Scully, *The Viandier of Taillevent* (Ottawa: University of Ottawa Press, 1988) p. 7; Joan Santanach, *The Book of Sent Sovi*, trans. by Robin Vogelzang (Barcelona: Editorial Barcino, 2008) p. 12; *Ein Buch von Guter Speise* (Stuttgart: Gedruçjt auf Kosten des literarischen Vereins, 1844); 'The Forme of Cury' in *Curie on Inglysch* ed. by Constance B. Hieatt and Sharon Butler (London: Oxford University Press, 1985) p. 20.

15. Susan Grayzel, 'Changing lives: gender expectations and roles during and after World War One', *British Library*, 29 January 2014 <<https://www.bl.uk/world-war-one/articles/changing-lives-gender-expectations>> [accessed 23 August 2018]
16. For the last eight years or so, I have judged regional and state cooking contests for Future Homemakers of America-Home Economics Related Occupations, now called Family, Career and Community Leaders of America, a pre-professional organization for secondary students enrolled in Family and Consumer Sciences programs in grades 6-12. The students are generally guided by teachers assigned to home economics-type classes. I have never met a teacher with training suitable for these classes.
17. Maria Guarnaschelli, cookbook editor, personal communication, July 2005. Ms. Guarnaschelli related to me that the Washington Post, she thought, had banned certain cooking words, but I was never able to locate the exact issue.
18. Barbara Gibbs Ostmann and Jane L. Baker, *The Recipe Writer's Handbook*, rev. and exp. edn. (New York: John Wiley & Sons, 2001) p. 5.
19. Ostmann and Baker, p. 6.
20. Ostmann and Baker.
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22. Ostmann and Baker, p. 141.
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27. Mary Johnson Bailey Lincoln, *Mrs. Lincoln's Boston Cook Book* (Boston: Roberts Brothers, 1884) p. 28–30.
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29. Peter Hertzmann, 'Accuracy and Precision in Food Writing', *Petits Propos Culinaires*, no. 107, January 2017, p. 38–51.
30. Thomas Keller, *Under Pressure* (New York: Workman Publishing Company, 2008) p. 105.
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32. *The Better Homes and Gardens Biggest Book of Slow Cooker Recipes*, ed. by Chuck Smothermon and Carrie Holcomb Mills (Des Moines [IA]: Meredith Corporation, 2002) p. 416.
33. Nathan Myhrvold, Chris Young, and Maxime Bilet, *Modernist Cuisine* (Bellevue [WA]: The Cooking Lab, 2011) v. 5, p. 274. In this example, 3 centimetres should equal $1\frac{3}{16}$ inches or $2\frac{1}{4}$ inches or equal $5\frac{3}{4}$ centimetres.
34. Deborah A. Renza, *Go Fresh: A Heart-Healthy Cookbook with Shopping and Storage Tips* (New York: Clarkson Potter/Publishers, 2014) p. 90.
35. Alexander Pope, *An Essay on Criticism* (London: W. Lewis, 1713) p. 12.
36. On 5 April 2012, 400 attendees at an 'After Dark' event at the Exploratorium in San Francisco were asked to taste three different salts dissolved in distilled water at a concentration of one percent. The number of tasters able to identify each of the salts was far less than chance.
37. Melissa Clark, *Dinner: Changing the Game* (New York: Clarkson Potter/Publishers, 2017) p. 40.
38. Dora L. Herrmann and Arthur A. Johnson, 'Cook Book and the Like', *US Patent 1,354,395*, issued 28 September 1920.
39. Dora L. Herrmann and Arthur A. Johnson, p. 4.
40. Michael Ruhlman, *Ratio* (New York: Simon & Shuster, Inc., 2009).
41. Glynn Christian, *How to Cook Without Recipes* (London: Portico Books, 2008).
42. Glynn Christian, p. 4.
43. Ostmann and Baker, p. 30.