

# The `cuisine` package

Ben Cohen

2014/06/26, v0.7

## Abstract

This package provides an environment for typesetting recipes in steps in which each ingredient is on the left of the page next to the method step where it is used.

## 1 Introduction

There appear to be two styles of typesetting recipes in general use. The more common (at least in recipe books in the U.K.) is where the ingredients appear at the top above the method, as in the class `macros/latex/contrib/other/recipe`. Another way is to have each ingredient next to the method step in which it appears, as in the package `macros/latex/contrib/supported/cooking`; the `cuisine` package also uses this style, but closer to the format in *Practical Professional Cookery* by H. L. Cracknell and R. J. Kaufmann.

## 2 Usage

The package is loaded using the header `\usepackage{cuisine}`; the available options are:

- **number** Recipes will be numbered sequentially to the left of the recipe title. (This is the default.) The recipe *steps* will always be numbered.
- **nonumber** Recipes will not be numbered.
- **index** Recipe titles will be written to the index for the document.
- **noindex** Recipe titles will not be written to the document index. (This is the default.)
- **contents** Recipe titles will be written to the contents for the document.
- **nocontents** Recipe titles will not be written to the document contents. (This is the default.)

You will need the package `nicefrac`; it comes with current versions of `teTeX` and is also available from CTAN as part of the package `units` in `macros/latex/contrib/supported/units`.

**recipe** Each recipe is set out in a `recipe` environment. The three parameters are the title, and two recipe description fields—it is assumed that they are used for the number of servings and the preparation time, for example:

```
\begin{recipe}{Title} {Number of servings} {Preparation time}
:
\end{recipe}
```

There is no reason why the descriptive fields cannot be used for other things (such as the number of calories).

**\ingredient** Within the environment, you type in method details directly, and you type  
**\ing** the ingredients using `\ingredient` or the shorter version `\ing` before the method step beside which you want the ingredient to appear. A new method step is started whenever there is method text before an `\ingredient`. Two consecutive `\ingredient` declarations will appear next to the same method step.

The `\ingredient` command is used as follows:

```
\ingredient{Quantity} {Ingredient}
```

There is an optional first parameter which allows you to separate the numerical quantity from the name of the unit of measurement:

```
\ingredient[Numerical quantity] {Unit of measurement} {Ingredient}
```

Examples include:

```
\ingredient{a pinch}{salt}
\ingredient[4]{oz}{sugar}
```

**\Ingredient** There is an alternative way to specify ingredients using a single description for  
**\Ing** both the quantity and the ingredient, as follows:

```
\Ingredient{Ingredient and quantity}
```

This can be used where describing awkward descriptions of units. It would also be preferable if you simply don't like the appearance of separating units from ingredients as required by `\ingredient`. (My taste has apparently changed over the last decade and a half!) For example:

```
\Ingredient{zest and juice of 2 lemons}
\Ingredient{Worcestershire sauce, to taste}
```

`\fr` Within the recipe you can use `\fr` to typeset fractions using `\fr12` to get  $\frac{1}{2}$ , or `\fr{11}{12}` to typeset  $\frac{11}{12}$ . If the numerator or denominator of the fraction is more than one digit long then you will need to enclose it in braces (otherwise they are optional).

`\degrees` A degree symbol can be obtained using `\degrees` or the shorter form `\0`; for example `120\0` gives  $120^\circ$ . A times symbol,  $\times$ , can be obtained using `\X`. As is usual with  $\text{\LaTeX}$ , to obtain a percent sign,  $\%$ , you must use `\%` since `%` on its own starts a comment.

### 3 More advanced usage

The `cuisine` package has been designed so that it is easy to vary the widths of the columns.  $\text{\LaTeX}$  has very wide margins by default so the text width is very narrow which may be unsuitable for typesetting recipes using this package. (It might be worth looking at the KOMA-Script classes in `macros/latex/contrib/supported/koma-script/` as an alternative to the standard  $\text{\LaTeX}$  classes.)

`\RecipeWidths` The `\RecipeWidths` command is designed to be used in conjunction with the  $\text{\LaTeX}$  commands for changing the page layout. It is used as follows:

`\RecipeWidths{Total recipe width}{Number of servings width}{Step number width}{Ingredient width}{Quantity width}{Units width}`

`\ResetRecipeCounter` The `\ResetRecipeCounter` command will reset the recipe counter so that subsequent recipes are numbered from 1.

`\newstep` Within the recipe environment, to force a new step if you do not want to declare any ingredients, use the `\newstep` command. (A `\newstep` command with no preceding ingredient or method text will be ignored to prevent completely empty steps from appearing.)

`\newpage` `\newpage` ends the current step (as for `\newstep`) but also tells the environment that the next step will appear on the next page. It is not normally necessary to use this command since page breaking after each method step will be done automatically by  $\text{\LaTeX}$  as necessary. Page breaks can only occur between method steps; method steps will not be split across pages. (Consequently, it may be advisable to keep method steps fairly short.)

`\freeform` To typeset text across the whole width of the recipe instead of just the width of the method, use the `\freeform` command. This is equivalent to `\noalign` in tables. Freeform text is not given a step number.

The recipe environment has an optional first parameter with which you can assign a label to a recipe.

`\begin{recipe}[Label]{Title}{Servings}{Preparation time}`  
`\end{recipe}`

`\pageref` and `\ref` then refer to the recipe page number and recipe number respectively of the recipe with that label. For example, the label in the recipe below will make `\ref{Zabaglione}` give recipe number 1. (Note that you cannot use `\label` for this purpose within the environment because it breaks the formatting.)

## 4 Fonts

The fonts used in the different parts of a recipe can be altered by changing the definition of the following macros; this should be done using, for example, `\renewcommand*{\recipefont}{\sffamily}`.

<code>\recipefont</code>	The default font used for the fonts below
<code>\recipefonttitlefont</code>	The font for the recipe title
<code>\recipeservingsfont</code>	The font for the number of servings
<code>\recipetimefont</code>	The font for the preparation time
<code>\recipenumberfont</code>	The font for the recipe number
<code>\recipestepnumberfont</code>	The font for each step number
<code>\recipequantityfont</code>	The font for the numerical quantity
<code>\recipeunitfont</code>	The font for the unit of measurement (or descriptive quantity)
<code>\recipeingredientfont</code>	The font for the ingredient
<code>\recipefontmethodfont</code>	The font for the method details
<code>\recipefontfreeformfont</code>	The font for freeform descriptions

## 5 Examples

### 5.1 A simple example

There is only whitespace between the first three ingredients, so they are used for the first step with the method text which follows. (Had there been text before the first ingredient, that text would become the first step and the heating instruction would be the second step.) The fourth `\ingredient` signals the end of the method text and starts a new step. The final `\end{recipe}` finishes that step.

```
\begin{recipe}{Yorkshire Pudding}{4 portions}{1\fr12 hours}
\ingredient[\fr12]{pt}{milk}
\ingredient[2]{oz}{butter}
\ingredient[5]{oz}{self-raising flour}
Heat the milk and butter until nearly boiling. Add flour and allow to
seeth over.
\ingredient[3]{}{eggs}
\ingredient{to taste}{salt and pepper}
Add the remaining eggs and whisk again. Cook at 220\OC for about 1 hour.
\end{recipe}
```

Yorkshire Pudding			4 portions
			1½ hours
1	½ pt 2 oz 5 oz	milk butter self-raising flour	Heat the milk and butter until nearly boiling. Add flour and allow to seeth over.
2	3 to taste	eggs salt and pepper	Add the remaining eggs and whisk again. Cook at 220°C for about 1 hour.

The recipe below is the same but using the single-argument `\Ingredient` command. As you can see, the alignment is different from that of `\ingredient` and mixing them probably won't produce a pleasing output. If you are using only `\Ingredient` then the ingredients column can probably be made narrower (remember that this is still the sum of the quantity, unit and ingredient widths).

Yorkshire Pudding			4 portions
			1½ hours
1	½ pt milk 2 oz butter 5 oz self-raising flour		Heat the milk and butter until nearly boiling. Add flour and allow to seeth over.
2	3 eggs salt and pepper, to taste		Add the remaining eggs and whisk again. Cook at 220°C for about 1 hour.

## 5.2 A more complex example

We can change the widths of the columns using, for example,

```
\RecipeWidths{.75\textwidth}{3cm}{0.5cm}{1.75cm}{.75cm}{.75cm}
```

and the `small` environment to produce a different layout. We can also change the fonts, for example:

```
\renewcommand*{\recipetitlefont}{\large\bfseries\sffamily}
\renewcommand*{\recipenumberfont}{\large\bfseries\sffamily}
\renewcommand*{\recipequantityfont}{\sffamily\bfseries}
\renewcommand*{\recipeunitfont}{\sffamily}
\renewcommand*{\recipeingredientfont}{\sffamily}
\renewcommand*{\recipefreeformfont}{\itshape}
```

The example below demonstrates the `\newstep` and `\newpage` commands, and also how to use `\freeform` to create freeform text. `\freeform` can also be used

to create rules in the same way as when using `\noalign` in tables. In this case, recipe numbering has been turned on, and the `small` environment is being used. Note the label declaration “Zabaglione”.

```
\begin{recipe}[Zabaglione]{Zabaglione alla Marsala}{4 Portions}{\fr12 hour}
\freeform This is a well-known Italian recipe which is
great for piling on the calories.
\ingredient[6]{egg yolks}
\ingredient[2]{oz}{granulated sugar}
\ingredient[6--8]{tbsp}{Marsala (or sherry)}
\ingredient[\fr14]{oz}{gelatine}
\ingredient[2]{tbsp}{cold water}
In the top of a double boiler, combine the egg yolks with sugar and
Marsala, and whip the mixture over hot, but not boiling, water until it
thickens. Stir in gelatine, softened in cold water and dissolved over hot
water.
\ingredient[3]{tbsp}{brandy}
\ingredient[\fr38]{pt}{double cream}
Put the pan in a bowl of ice and stir the
zabaglione well until it is thick and free of bubbles. When it is almost
cold, fold in brandy and whipped cream and pour into individual moulds.
\freeform\rule{\textwidth}{0.05pt}\newpage
\freeform\rule{\textwidth}{0.05pt}
\ingredient[3]{egg yolks}
\ingredient[1]{oz}{granulated sugar}
\ingredient[3--4]{tbsp}{Marsala (or sherry)}
\ingredient[1\fr12]{tbsp}{brandy}
To make the sauce, combine egg yolks and sugar in the top of a double
saucepan. Whisk mixture over hot, but not boiling, water until the
sauce coats
the back of a spoon. Stir in the Marsala and brandy.
\newstep
Chill the zabaglione, unmould it, and serve with the sauce immediately.
\freeform\rulefill
\end{recipe}
```

## 1 Zabaglione alla Marsala

4 Portions

$\frac{1}{2}$  hour

*This is a well-known Italian recipe which is great for piling on the calories.*

1	<b>6</b>	egg yolks	In the top of a double boiler, com-
	<b>2 oz</b>	granulated	bine the egg yolks with sugar and
		sugar	Marsala, and whip the mixture over
	<b>6–8 tbsp</b>	Marsala (or	hot, but not boiling, water until it
		sherry)	thickens. Stir in gelatine, softened
	$\frac{1}{4}$ oz	gelatine	in cold water and dissolved over hot
	<b>2 tbsp</b>	cold water	water.

2	3 3/8	tbsp pt	brandy double cream	Put the pan in a bowl of ice and stir the zabaglione well until it is thick and free of bubbles. When it is almost cold, fold in brandy and whipped cream and pour into individual moulds.
---	----------	------------	---------------------------	--

---

---

3	<b>3</b>	egg yolks	To make the sauce, combine egg yolks and sugar in the top of a double saucepan. Whisk mixture over hot, but not boiling, water until the sauce coats the back of a spoon. Stir in the Marsala and brandy.
	<b>1 oz</b>	granulated sugar	
	<b>3–4</b> tbsp	Marsala (or sherry)	
	<b>1½</b> tbsp	brandy	
4			Chill the zabaglione, unmould it, and serve with the sauce immediately.

---

## 6 Bugs, Issues, Features, . . .

- Method steps can't be split across pages. This means you can get lots of empty white space at the bottom of pages, especially if you have long methods.
- There may be alignment problems if the recipe fonts differ much in height.
- Formatting doesn't work very well when the ingredient quantity is too wide for its box.
- There is no support for dual sets of quantities, for example where two systems of measurement are used or for different numbers of servings. You can write `\ingredient{<4 oz>/<100 g>}{butter}`, or use `\Ingredient` but I don't think implementing commands such as `\ingredient[1]{oz}[25]{g}{butter}` would be worthwhile.

Please e-mail me at [ben\\_c@tiscali.co.uk](mailto:ben_c@tiscali.co.uk) if you can help find or solve any problems with this package.

## 7 Change History

*v0.5* Written—release on CTAN.

*v0.6* Fixed a couple of vertical alignment problems. Labelling of recipes for `\ref. \X (times)` macro. Added different index and contents options, and corrected a bug that sometimes gave the wrong page number. If `recipe's #4` is empty, don't leave a blank line. The step number width can be changed but the recipe number width varies.

*v0.7* Added the `\Ingredient` command for single-argument ingredients.



## 8 Identification section and initialisation

The package declaration follows the standard form.

```
1 \NeedsTeXFormat{LaTeX2e}
2 \ProvidesPackage{cuisine}[2014/06/26 v0.7 recipe typesetting]
```

We use the `nicefrac` package for “nice” fractions.

```
3 \RequirePackage{nicefrac}
```

## 9 Counters, booleans and lengths

`r@cipenumber` is the recipe number counter. This could be made dependent on, say, the section number.

```
4 \newcounter{r@cipenumber}
```

`\ResetRecipeCounter` The `\ResetRecipeCounter` macro resets the recipe number counter to 0.

```
5 \DeclareRobustCommand{\ResetRecipeCounter}{%
6   \setcounter{r@cipenumber}{0}%
7 }
```

`st@pnumber` is the step counter within recipes. It is zeroed whenever the recipe counter is incremented.

```
8 \newcounter{st@pnumber}[r@cipenumber]
```

`ingr@dnumber` is the ingredient counter within recipes and steps. It is zeroed whenever the step counter is incremented.

```
9 \newcounter{ingr@dnumber}[st@pnumber]
```

`ifnumb@ring` determines whether or not recipe numbers are printed. (Step numbers will always be printed.)

```
10 \newif\ifnumb@ring
```

`ifc@ntentsing` determines whether we are writing the recipes to an contents file or not.

```
11 \newif\ifc@ntentsing
```

`ifind@xing` determines whether we are writing the recipes to an index file or not.

```
12 \newif\ifind@xing
```

`iffr@eforming` determines whether or not we are in freeform mode.

```
13 \newif\iffr@eforming
```

`ifn@wpaging` determines whether or not the next step will be on a new page.

```
14 \newif\ifn@wpaging
```

`\R@cipeWidth` is the total width of the recipe.

```
15 \newlength{\R@cipeWidth}
```

The following are, respectively, the widths of the recipe number box, the recipe title box, the recipe number-of-servings box, and the total of the recipe title and number-of-servings boxes.

```
16 \newlength{\R@cipeNumberWidth}
17 \newlength{\R@cipeTitleWidth}
18 \newlength{\R@cipeServingsWidth}
19 \newlength{\R@cipeTandSWidth}
```

This is the distance ingredient (etc.) paragraphs are outdented.

```
20 \newlength{\R@cipeOutdent}
```

These are the horizontal spaces between the quantity and units, and between the unit and the ingredient.

```
21 \newlength{\R@cipeIngQUSpace}
22 \newlength{\R@cipeIngUISpace}
```

These are the vertical distances for the recipe title-to-rule adjustments (usually negative).

```
23 \newlength{\R@cipeTitleVerticalAdjustTop}
24 \newlength{\R@cipeTitleVerticalAdjustBot}
```

These are the widths of the ingredient descriptors and combinations of them.

```
25 \newlength{\R@cipeIngredientWidth}
26 \newlength{\R@cipeQuantityWidth}
27 \newlength{\R@cipeUnitsWidth}
28 \newlength{\R@cipeQandUWidth}
29 \newlength{\R@cipeIandUWidth}
30 \newlength{\R@cipeIQUWidth}
31 \newlength{\R@cipeSingleIngWidth}
```

\R@cipeMethodWidth is the width of the method text.

```
32 \newlength{\R@cipeMethodWidth}
```

\St@pNumberWidth is the width of the step number and \R@cipeStepWidth is the width of everything within a step.

```
33 \newlength{\St@pNumberWidth}
34 \newlength{\R@cipeStepWidth}
```

The following macros are to set the lengths defined above.

**\R@cipeMethodWidths** \R@cipeMethodWidths is to set the widths of the boxes/columns used in the recipe steps. There are four parameters: #1 is the step number width, #2 is the ingredient width, #3 the quantity width, #4 the units width. The other lengths below are deduced from these and \R@cipeMethodWidth. The 0.5cm values are to leave a little space between the columns.

```
35 \DeclareRobustCommand*\R@cipeMethodWidths}[4]{%
36   \setlength{\St@pNumberWidth}{#1}%
37   \setlength{\R@cipeIngredientWidth}{#2}%
38   \setlength{\R@cipeQuantityWidth}{#3}%
39   \setlength{\R@cipeUnitsWidth}{#4}%
40   \setlength{\R@cipeQandUWidth}{\R@cipeQuantityWidth}%
```

```

41 \addtolength{\R@cipeQandUWidth}{\R@cipeUnitsWidth}%
42 \setlength{\R@cipeIQUWidth}{\R@cipeQandUWidth}%
43 \addtolength{\R@cipeIQUWidth}{\R@cipeIngredientWidth}%
44 \addtolength{\R@cipeIQUWidth}{0.5cm}%
45 \setlength{\R@cipeIandUWidth}{\R@cipeIQUWidth}%
46 \addtolength{\R@cipeIandUWidth}{-\R@cipeQuantityWidth}%
47 \setlength{\R@cipeStepWidth}{\R@cipeWidth}%
48 \addtolength{\R@cipeStepWidth}{-\St@pNumberWidth}%
49 \setlength{\R@cipeMethodWidth}{\R@cipeStepWidth}%
50 \addtolength{\R@cipeMethodWidth}{-\R@cipeIngredientWidth}%
51 \addtolength{\R@cipeMethodWidth}{-\R@cipeQandUWidth}%
52 \addtolength{\R@cipeMethodWidth}{-0.5cm}%
53 \setlength{\R@cipeSingleIngWidth}{\R@cipeIQUWidth}%

```

Allow for the ingredient paragraph outdenting.

```

54 \addtolength{\R@cipeIngredientWidth}{-\R@cipeOutdent}
55 \addtolength{\R@cipeUnitsWidth}{-\R@cipeOutdent}
56 \addtolength{\R@cipeQandUWidth}{-\R@cipeOutdent}
57 \addtolength{\R@cipeSingleIngWidth}{-\R@cipeOutdent}
58 \addtolength{\R@cipeSingleIngWidth}{-\R@cipeIngQUSpace}
59 \addtolength{\R@cipeSingleIngWidth}{-\R@cipeIngUISpace}
60 }%

```

**\R@cipeTitleWidths** \R@cipeTitleWidths is to set the widths of the boxes/columns used in the recipe title. There are two parameters: #1 is the number of servings width. The title width is deduced from that.

```

61 \DeclareRobustCommand*\R@cipeTitleWidths}[1]{%
62 \setlength{\R@cipeServingsWidth}{#1}%
63 \setlength{\R@cipeTitleWidth}{\R@cipeWidth}%
64 \addtolength{\R@cipeTitleWidth}{-\R@cipeServingsWidth}%
65 \setlength{\R@cipeTandSWidth}{\R@cipeServingsWidth}%
66 \addtolength{\R@cipeTandSWidth}{\R@cipeTitleWidth}%
67 }

```

**\RecipeWidths** \RecipeWidths combines the above macros in a useable form. There are six parameters: #1 is the recipe width, #2 the number of servings width, #3 the step number width, #4 the ingredient width, #5 the quantity width, #6 the units width.

```

68 \DeclareRobustCommand*\RecipeWidths}[6]{%
69 \setlength{\R@cipeWidth}{#1}%
70 \R@cipeTitleWidths{#2}%
71 \R@cipeMethodWidths{#3}{#4}{#5}{#6}%
72 }%

```

Now we set up the default values. These appear to be reasonable for the LaTeX default page layout (A4, portrait, one column, etc.) I don't think the LaTeX default width is good for a recipe book though!

```

73 \setlength{\R@cipeOutdent}{0.3cm}%
74 \setlength{\R@cipeIngQUSpace}{0.1cm}%
75 \setlength{\R@cipeIngUISpace}{0.2cm}%

```

```

76 \setlength{\R@cipeTitleVerticalAdjustTop}{-0.25cm}
77 \setlength{\R@cipeTitleVerticalAdjustBot}{-0.25cm}
78 \RecipeWidths{\textwidth}{3cm}{0.8cm}{3.5cm}{1cm}{1.7cm}

```

## 10 Fonts

This is where the default fonts are set up. `\recipefont` is the default font for the other recipe fonts; thus the other fonts inherit from this but can be altered individually.

```

79 \newcommand*\recipefont{\normalfont}
80 \newcommand*\recipetitlefont{\recipefont}
81 \newcommand*\recipenumberfont{\recipefont}
82 \newcommand*\recipestepnumberfont{\recipefont}
83 \newcommand*\recipequantityfont{\recipefont}
84 \newcommand*\recipeunitfont{\recipefont}
85 \newcommand*\recipeingredientfont{\recipefont}
86 \newcommand*\recipemethodfont{\recipefont}
87 \newcommand*\recipeservingsfont{\recipefont}
88 \newcommand*\recipetimefont{\recipefont}
89 \newcommand*\recipefreeformfont{\recipefont}

```

## 11 Boxes

`\st@pingrbox` is to hold the ingredients cumulatively as each `\ingredient` command is processed; `\st@pingrtmpbox` and `\titl@tmpbox` are used as temporary transfer boxes.

```

90 \newsavebox{\st@pingrbox}
91 \newsavebox{\st@pingrtmpbox}
92 \newsavebox{\titl@tmpbox}

```

This is used to hold a single ingredient as it is being processed:

```

93 \newsavebox{\st@pIUbox}

```

This is to hold the method (or freeform) text for the step:

```

94 \newsavebox{\st@pmethodbox}

```

## 12 Options

**nonumber** — Should recipes be numbered? (The default is yes.)

```

95 \DeclareOption{number}{\numb@ringtrue}
96 \DeclareOption{nonumber}{\numb@ringfalse}

```

**contents** — Should recipes be indexed to a file? (The default is no.)

```

97 \DeclareOption{contents}{\c@ntentsingtrue}
98 \DeclareOption{nocontents}{\c@ntentsingfalse}

```

`index` — Should recipes be indexed to a file? (The default is no.)

```
99 \DeclareOption{index}{\ind@xingtrue}
100 \DeclareOption{noindex}{\ind@xingfalse}
```

Process the options, using the defaults if necessary.

```
101 \ExecuteOptions{number,noindex,nocontents}
102 \ProcessOptions\relax
```

## 13 The main macros

### 13.1 Macros for displaying the steps and title

`\DisplayStep` `\DisplayStep` displays the ingredients and method for the current step and resets things ready for the next step.

```
103 \DeclareRobustCommand{\DisplayStep}{%
```

First, increment the step counter and put extra vertical space between steps. (But it isn't uniform yet, unfortunately.)

```
104 \stepcounter{st@pnumber}%
```

Display this step.

```
105 \makebox[\R@cipeWidth]{%
106 \makebox[\St@pNumberWidth][l]{\recipestepnumberfont\arabic{st@pnumber}}}%
107 \usebox{\st@pingrbox}%
108 \usebox{\st@pmethodbox}%
109 }%
```

Finally, clear the step storage boxes for the next step.

```
110 \savebox{\st@pingrbox}[\R@cipeIQUWidth]{}
111 }%
```

`\FreeFormStep` `\FreeFormStep` displays a free form description; it works in the same way as `\DisplayStep`.

```
112 \DeclareRobustCommand{\FreeFormStep}{%
113 \usebox{\st@pmethodbox}%
114 \savebox{\st@pmethodbox}[\R@cipeMethodWidth]{}%
115 }%
```

`\DisplayStep` This calls one of the two display routines above, depending on whether we are freeforming or not.

```
116 \DeclareRobustCommand{\DisplayStep}{%
117 \iffreeforming%
118 \FreeFormStep%
119 \else%
120 \DisplayStep%
121 \fi%
122 \ifn@wpaging%
123 \recipen@wpage%
124 \else%
```

```

125     \vskip0.2cm%
126   \fi%
127   \n@wpagefalse%
128 }%

```

`\r@cipetitle` `\r@cipetitle` displays the recipe title construction, given the parameters #1 the title, #2 the number of servings and #3 the preparation time.

```

129 \DeclareRobustCommand{\r@cipetitle}[3]{%

```

The `\parskip` ensures that the distance between the rule and the text above and below does not change when the page's vertical glue "sets". The following displays the text line above the rule; the recipe number width is automatically determined here.

```

130   \mbox{%
131     \makebox[\R@cipeWidth][t]{%
132       \parbox[t]{\R@cipeWidth}{%
133         \ifnum@ring%
134           \savebox{\titl@tmpbox}{%
135             {\recipenumberfont\arabic{\r@cipenumber}}\ }%
136           }%
137           \setlength{\R@cipeNumberWidth}{\wd\titl@tmpbox}%
138           \addtolength{\R@cipeTitleWidth}{-\R@cipeNumberWidth}%
139           \addtolength{\R@cipeTandSWidth}{-\R@cipeNumberWidth}%
140           \lineskipOpt\mbox{}\ll[-\baselineskip]%
141           \parbox[b]{\R@cipeNumberWidth}{%
142             \rule{0pt}{\baselineskip}%
143             \strut\usebox{\titl@tmpbox}%
144             \strut%
145           }%
146           \makebox[\R@cipeTandSWidth][t]{%
147             \parbox[t]{\R@cipeTandSWidth}{%
148               \lineskipOpt\mbox{}\ll[-\baselineskip]%
149               \parbox[b]{\R@cipeTitleWidth}{%
150                 \rule{0pt}{\baselineskip}%
151                 \strut{\recipetitlefont #1}\strut\hfill}%
152               \parbox[b]{\R@cipeServingsWidth}{%
153                 \strut{\hfill\recipeservingsfont #2}\strut}%
154             }%
155           }%
156           \addtolength{\R@cipeTandSWidth}{\R@cipeNumberWidth}%
157           \addtolength{\R@cipeTitleWidth}{\R@cipeNumberWidth}%
158         \else%
159           \lineskipOpt\mbox{}\ll[-\baselineskip]%
160           \parbox[b]{\R@cipeTitleWidth}{%
161             \rule{0pt}{\baselineskip}%
162             \strut{\recipetitlefont #1}\strut\hfill}%
163           \parbox[b]{\R@cipeServingsWidth}{%
164             \strut{\hfill\recipeservingsfont #2}\strut}%
165         \fi%

```

```

166     }%
167   }%
168 } \par%

```

Next we display the rule, being careful not to allow page breaks during the title, using the adjustments as specified above. (This is a bit vague and nasty...)

```

169 %% \nopagebreak
170 %% \vspace{\R@cipeTitleVerticalAdjustTop}%
171 \nopagebreak
172 \rule[-\R@cipeTitleVerticalAdjustTop]{\R@cipeWidth}{0.4pt} \par%
173 \nopagebreak
174 \vskip\R@cipeTitleVerticalAdjustBot%
175 %% \vspace{\R@cipeTitleVerticalAdjustBot}%
176 \nopagebreak

```

Finally we display the text line below the rule if it isn't empty:

```

177 \ifx\relax#3\relax%
178   \else
179     \makebox[\R@cipeWidth][r]{\recipetimefont #3} \par%
180   \fi
181 \nopagebreak
182 }%

```

## 13.2 Macros for the method box

These macros are to input the method box `\st@pmethodbox`, and are hence called at the start and end of the method box, or equivalently the *end* and *start* of the ingredient (etc.) macros.

`\r@cipesloppy` This is a version of which doesn't cause problems with the definition! (The L<sup>A</sup>T<sub>E</sub>X definition has a problem where the empty box detection in `\pr@ingred` fails.)

```

183 \def\r@cipesloppy{%
184   \tolerance 9999%
185   \emergencystretch 3em%
186   \hfuzz.5pt%
187   \vfuzz.5pt%

```

This is not in `\sloppy`: avoid warning on underfull boxes, which are more common since the columns are very narrow. This value may need to be adjusted...

```

188   \hbadness 1500%
189 }%

```

`\pr@ingred` This macro is called at the start of ingredients (that is, the end of the method box). It first ends the minipage-box which was started in the previous `\p@stingred`.

```

190 \DeclareRobustCommand{\pr@ingred}{%
191   \endminipage\end{lrbox}%

```

Here we compare the width of the `\st@pmethodbox` with zero to determine whether anything was entered into it. (The idea for determining whether box is empty was from Donald Arseneau, `comp.text.tex`.)

```

192 \ifdim\wd\st@pmethodbox=0in%
193 % \PackageWarning{cuisine}{No text}% % use for testing
194 \else%
195 % \PackageWarning{cuisine}{Method text}%
196 \DisplaySt@p%
197 \fi%
198 }%

```

`\p@stingred` And this macro is called at the end of ingredients (the start of the method box). This is very odd. Using `\begin{lrbox}...\end{lrbox}` isn't supposed to work properly over an environment definition (and doesn't seem to, either). So we use `\lrbox...\endlrbox`. But we want to nest a `\minipage` inside this, which fails. But it does work with `\begin{lrbox}\minipage...\endminipage\end{lrbox}`.

WHY?!

What happens, anyway, is that a new minipage-box is started. Provided the user doesn't put anything other than whitespace and comments between this and the next `\pr@ingred` then the box will be empty. This is how `\p@stingred` knows whether to display the step or not when called by `\ingr@dient`.

```

199 \DeclareRobustCommand{\p@stingred}{%
200 \fr@eformingfalse%
201 \begin{lrbox}{\st@pmethodbox}\minipage[t]{\R@cipeMethodWidth}%
202 \recipeMethodfont%
203 \noindent%
204 \ignorespaces%
205 \r@cipesloppy%
206 }%

```

### 13.3 Step terminating macros

These macros call `\pr@ingred` and `\p@stingred`, and can (through `\pr@ingred`) cause the next step to be started.

`\m@thodend` The `\m@thodend` command (which is `\newstep` in the environment) forces a new step unless there is no method **and** no ingredient.

```

207 \DeclareRobustCommand{\m@thodend}{%
208 \endminipage\end{lrbox}%
209 \ifdim\wd\st@pmethodbox=0in%
210 \ifnum\value{ingr@dnumber}>0%

```

In this case, the method box is empty so we put something in it to avoid problems with alignment.

```

211 \savebox{\st@pmethodbox}[\R@cipeMethodWidth]{\mbox{}}%
212 \DisplaySt@p%
213 \fi%
214 \else%
215 \DisplaySt@p%
216 \fi%
217 \p@stingred%
218 }%

```



`\r@cipen@wpage` `\r@cipen@wpage` is a macro which sets `\n@wpagingtrue`—so that the next step will appear on the next page—and then forces the next step.

```
219 \DeclareRobustCommand\r@cipen@wpage{\global\n@wpagingtrue\m@thodend}
```

`\fr@eform` `\fr@eform` is for freeform text, like `\noalign` in tables. Again, as for `\m@thodend`, we want to force the new step unless there is no method and no ingredient.

```
220 \DeclareRobustCommand{\fr@eform}{%
221   \endminipage\end{lrbox}%
222   \ifdim\wd\st@pmethodbox=0in%
223     \ifnum\value{ingr@dnumber}>0%
224       \savebox{\st@pmethodbox}{\R@cipeMethodWidth}{\mbox{}}%
225       \DisplaySt@p%
226     \fi%
227   \else%
228     \DisplaySt@p%
229   \fi%
```

The rest is like `\p@stingred`:

```
230 \fr@eformingtrue%
231 \begin{lrbox}{\st@pmethodbox}\minipage[t]{\R@cipeWidth}%
232 \recipefreeformfont%
233 \noindent%
234 \ignorespaces%
235 \r@cipesloppy%
236 }%
```

`\ingr@dient` The `\ingr@dient` command takes 3 parameters, one optional. #3 is the ingredient. If #1 is non-blank then #1 is the numerical quantity and #2 the unit of measure, otherwise #2 is the quantity. Start by ending the method box.

```
237 \DeclareRobustCommand{\ingr@dient}[3][ ]{%
238   \pr@ingred%
```

The following is the main bit to typeset the ingredients list. (Thanks to Ulrike Fischer, `comp.text.tex`, for help with aligning box baselines.)

This is a hack to see if #1 is empty (Patrick Guio, `comp.text.tex`).

```
239 \ifx\relax#1\relax%
```

If it is empty we typeset #2 in the whole QandU width. We align the top of the ingredient box with the bottom of the quantity box but have the baseline as the top line of the quantity box. Use ragged right because the column is too narrow for flush right.

```
240   \savebox{\st@pIQUbox}{\R@cipeIQUWidth}[t]{%
241     \parbox[t]{\R@cipeIQUWidth}{%
242       \lineskip0pt\mbox{}}\[-\baselineskip]%
243     \rule{\R@cipeOutdent}{0cm}%
244     \parbox[b]{\R@cipeQandUWidth}{%
245       \raggedright\recipeunitfont%
246       \setlength{\parindent}{-\R@cipeOutdent}%
```

This sees whether the text is large enough to fit on one line, in which case it centres it; otherwise it formats it sensibly.

Note: the `\hfill` matches another one elsewhere to centre the line.

```

247         \savebox{\st@pingrtmpbox}{#2}%
248         \ifdim\wd\st@pingrtmpbox>\R@cipeQandUWidth%
249             \rule{0pt}{\baselineskip}%
250             \strut #2\strut%
251         \else%
252             \noindent%
253             \rule{0pt}{\baselineskip}%
254             \strut #2\hfill\strut%
255         \fi%
256     }%
257     \rule{\R@cipeIngUISpace}{0cm}%
258     \rule{\R@cipeOutdent}{0cm}%
259     \parbox[t]{\R@cipeIngredientWidth}{\raggedright%
260         \recipeingredientfont%
261         \setlength{\parindent}{-\R@cipeOutdent}%
262         \strut #3\strut}%
263 }%
264 }%
265 \else

```

If #1 was not empty, typeset #1 and #2 separately. First align the top of the ingredient box with the bottom of the unit box but have the baseline as the top line of the unit box; then repeat with that box below the quantity box.

```

266     \savebox{\st@pingrtmpbox}{\R@cipeIandUWidth}[t]{%
267         \parbox[t]{\R@cipeIandUWidth}{%
268             \lineskip0pt\mbox{}[-\baselineskip]%
269             \rule{\R@cipeOutdent}{0cm}%
270             \parbox[b]{\R@cipeUnitsWidth}{%
271                 \raggedright\recipeunitfont%
272                 \setlength{\parindent}{-\R@cipeOutdent}%
273                 \rule{0pt}{\baselineskip}%
274                 \strut #2\strut\hfill}%
275             \rule{\R@cipeIngUISpace}{0cm}%
276             \rule{\R@cipeOutdent}{0cm}%
277             \parbox[t]{\R@cipeIngredientWidth}{%
278                 \raggedright\recipeingredientfont%
279                 \setlength{\parindent}{-\R@cipeOutdent}%
280                 \strut #3\strut}%
281         }%
282     }%
283     \savebox{\st@pIQUbox}{\R@cipeIQUWidth}[t]{%
284         \parbox[t]{\R@cipeIQUWidth}{%
285             \lineskip0pt\mbox{}[-\baselineskip]%
286             \parbox[b]{\R@cipeQuantityWidth}{\rule{0pt}{\baselineskip}%
287                 \hfill %
288                 \raggedright\recipequantityfont%
289                 \strut #1\strut}%

```

```

290      \rule{\R@cipeIngQUSpace}{0cm}}%
291      \usebox{\st@pingrtmpbox}%
292    }%
293  }%
294  \fi%

Use \st@pingrtmpbox as a temporary holding box. The \lineskip0pt and the
\struts ensure that the ingredients' and the method text's baselines are aligned
correctly.

295  \savebox{\st@pingrtmpbox}[\R@cipeIQUWidth][t]{\usebox{\st@pingrbox}}%
296  \savebox{\st@pingrbox}[\R@cipeIQUWidth][t]{%
297    \begin{minipage}[t]{\R@cipeIQUWidth}%
298      \lineskip0pt%
299      \ifnum\value{ingr@dnumber}>0%
300        \usebox{\st@pingrtmpbox}\par%
301        \usebox{\st@pIQUbox}\strut%
302      \else%
303        \usebox{\st@pIQUbox}\strut%
304      \fi%
305    \end{minipage}}%
306  }%
307  % \usebox{\st@pingrbox}      % For testing: show cumulative boxes.
308  \stepcounter{ingr@dnumber}%
309  \p@stingred%
310 }%
```

**\Ingr@dient** The `\Ingr@dient` command takes just one parameter. It fits in the same final box as `\ingr@dient` but is much simpler. Start by ending the method box.

```

311 \DeclareRobustCommand{\Ingr@dient}[1]{%
312   \pr@ingred%

We typeset #1 in the single ingredient width, which is the IQU width minus the
outdent. Use ragged right because the column is too narrow for flush right.

313   \savebox{\st@pIQUbox}[\R@cipeSingleIngWidth][t]{%
314     \parbox[t]{\R@cipeSingleIngWidth}{%
315       \lineskip0pt\mbox{\}\[-\baselineskip]%
316       \rule{\R@cipeOutdent}{0cm}%
317       \parbox[t]{\R@cipeSingleIngWidth}{\raggedright%
318         \recipeingredientfont%
319         \setlength{\parindent}{-\R@cipeOutdent}%
320         \strut #1\strut}%
321     }%
322   }%
```

Use `\st@pingrtmpbox` as a temporary holding box. The `\lineskip0pt` and the `\struts` ensure that the ingredients' and the method text's baselines are aligned correctly.

```

323   \savebox{\st@pingrtmpbox}[\R@cipeIQUWidth][t]{\usebox{\st@pingrbox}}%
324   \savebox{\st@pingrbox}[\R@cipeIQUWidth][t]{%
325     \begin{minipage}[t]{\R@cipeIQUWidth}%

```

```

326         \lineskip0pt%
327         \ifnum\value{ingr@dnumber}>0%
328             \usebox{\st@pingrtmpbox}\par%
329             \usebox{\st@pIUbox}\strut%
330         \else%
331             \usebox{\st@pIUbox}\strut%
332         \fi%
333     \end{minipage}%
334 }%
335 % \usebox{\st@pingrbox}    % For testing: show cumulative boxes.
336 \stepcounter{ingr@dnumber}%
337 \p@stingred%
338 }%

```

## 14 The recipe environment

**recipe** This is the main environment in the package. Its 3 parameters are #2 is the recipe title, #3 is the number of portions, and #3 the preparation time. Of course, #3 and #4 can be whatever you like but that is one way of using them. #1 is the label.

```

339 \newenvironment{recipe}[4] [] {}%

```

These are the things that are put at the start of the recipe environment. First, set things up. Increment the recipe counter (which can be used in \label), make command aliases and empty the boxes. Note that \label is set through #1, **not** \label.

```

340 \refstepcounter{r@cipenumber}
341 \ifx\relax#1\relax
342 \else
343     \label{#1}
344 \fi
345 \let\label\relax
346 \let\newstep\m@thodend
347 \let\recipen@wpage\newpage
348 \let\newpage\r@cipen@wpage
349 \let\O\d@grees
350 \let\X\tim@s
351 \let\degrees\d@grees
352 \let\fr\fr@ction
353 \let\ing\ingr@dient
354 \let\ingredient\ingr@dient
355 \let\Ing\Ingr@dient
356 \let\Ingredient\Ingr@dient
357 \let\freeform\fr@eform
358 \n@wpagingfalse%
359 \setlength{\parindent}{0pt}
360 \savebox{\st@pingrbox}[\R@cipeIUWidth]{}
361 \savebox{\st@pmethodbox}[\R@cipeMethodWidth]{}

```

Make sure that the recipe is spaced appropriately from the preceding text and start a new page if necessary. This is not part of `\r@cipetitle` because putting the break after `\addcontentsline` might yield the wrong page number. The blank line below is intentional.

```
362
363   \bigskip\medskip
364   \pagebreak[0]
365   \parskip0pt%
```

Next deal with the contents/index entry if we need to. Again, the `\nopagebreak` prevents the contents line occurring on the previous page.

```
366   \ifc@ntentsing%
367     \addcontentsline{toc}{subsection}{#2}%
368   \fi%
369   \ifind@xing%
370     \index{#2 (\arabic{r@cipenumber})}%
371   \fi%
372   \nopagebreak%
```

Display the title and start the method box.

```
373   \r@cipetitle{#2}{#3}{#4}
374   \vskip0.2cm%
375   \p@stingred%
376 }%
377 {%
```

These are the things put at the end of recipes. End the method box and deal with the last step. Give a warning if the recipe is empty. It is apparently not necessary to reset the earlier assignments and `\parindent`.

```
378   \pr@ingred%
379   \ifnum\value{st@pnumber}=0% then complain!
380     \PackageWarning{cuisine}{The recipe did not have any steps}%
381   \fi%
382
383   \pagebreak[0]%
384   \medskip%
```

This prevents indentation problems after the end of the environment.

```
385   \@endpetrue%
386 }%
```

## 15 Miscellaneous useful macros

`\d@grees` This is to typeset a degrees symbol.

```
387 \DeclareRobustCommand{\d@grees}{%
388   ${}^{\circ}$
389 }
```

`\tim@x` This is to typeset a times symbol (like  $\times$ ).

```

390 \DeclareRobustCommand{\tim@s}{%
391   \relax${}\times{}}$\relax%
392 }%

\fr@ction This is to typeset fractions, currently using package nicefrac.
393 %   \begin{macrocode}
394 \DeclareRobustCommand{\fr@ction}[2]{%
395   \nicefrac#1#2%
396 }%

```