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Basic Cooking Measurements & Kitchen Conversion Chart



By: [Becky Hardin](#) Posted: 7/6/17 Updated: 11/9/20

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Cooking measurements, cooking equivalents, and cooking conversions can be really confusing at times, but they don't have to be! I'm explaining all the basics when it comes to measuring and converting in the kitchen, including how to convert metric to standard, common cooking measurements and equivalents, and more. Plus we've got a FREE printable Kitchen Measurement Conversion Chart for you, so you can check it any time you need!

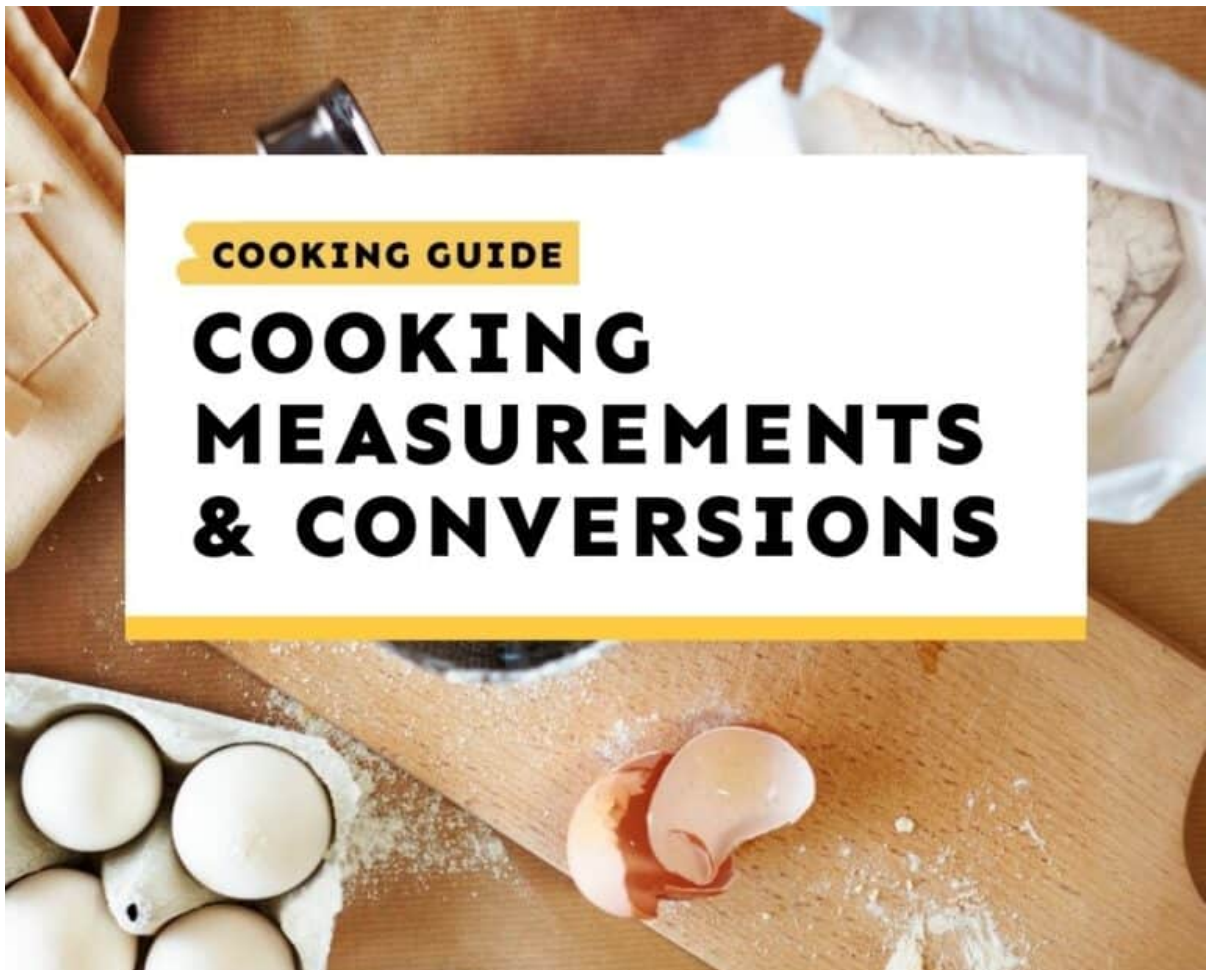




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Cooking Measurements & Cooking Conversions

Cooking measurements and cooking conversions are a point of confusion for many people. Whether you're a newbie cook or even quite seasoned, sometimes measurements just don't seem to make sense!

You've got tablespoons and cups and then there's fluid ounces. And on top of that, there's recipes that use metric cooking measurements but you only understand U.S. standard measurements...it's a lot. Cooking measurements and equivalents should be one of the first step in learning how to cook, but it's easy to get by still not quite understanding it all.

I'm going to explain everything you need to know about basic cooking measurements, converting metric to imperial/standard in the kitchen, understanding kitchen measurement equivalents, AND give you a free printable kitchen conversion chart to help you figure

it all out. Cooking should be fun and easy, not some kind of math test.

So if cooking conversions and measurements cause you pain on a regular basis, this post is for you! I'm here to help so that you can follow recipes without hassle and feel CONFIDENT in the kitchen.

Be sure to bookmark this post and/or print our free kitchen measurement conversion chart so you always have the information handy!

Kitchen Measurement Tools

Most of your cooking measurements can be done with these basic kitchen measurement tools.

Remember that liquid ingredients and dry ingredients should always be measured with the proper tools (i.e. measure liquids in a liquid measuring cup, measure dry ingredients in dry measuring cups).

A kitchen scale can be used when ingredients need to be weighed instead of measured by cups, etc. This is ideal for more exact recipes, or when using recipes that measure in grams.

- Measuring spoons
- Measuring cups
- Liquid measuring cup
- Kitchen scale

Cooking Measurements Abbreviations

When you're following a recipe, it's pretty important to understand those cooking abbreviations. Many recipes (including mine) will use shorthand when writing out recipes, and if you don't know what they mean, you could end up making a few mistakes.

Kitchen Measurement Abbreviations (Standard and Metric)

Abbreviation	Measurement
tbsp	tablespoon
tsp	teaspoon
oz	ounce
fl. oz	fluid ounce
c	cup
qt	quart
pt	pint
gal	gallon
lb	pound
mL	milliliter
g	grams
kg	kilogram
l	liter

Measuring Liquid Ingredients vs. Dry Ingredients

Dry ingredients and liquid ingredients should be treated differently when measuring. Measuring cups and spoon sets are generally intended for dry ingredients, while liquid measuring cups are (obviously) intended for liquid ingredients. Using the right measuring tools will ensure exact measurements.

- When measuring dry ingredients, generally you should fill the cup to the brim, and then scrape the excess off the top to get the most accurate amount (scoop and level method). This cannot be done with a liquid measuring cup, which is just one reason why it should not be used.
- While you will get a more exact liquid measurement with the liquid measuring cup, when a recipe calls for small amounts of liquid, sometimes you will need to use measuring spoons instead.
- These tips are most important when making recipes that truly require exact measurements (like [baking recipes](#)).

Ounces vs Fluid Ounces

Using ounces vs fluid ounces comes back to the liquid ingredients vs dry ingredients. Ounces measure weight, while fluid ounces measure volume. Dry ingredients are measured in ounces (by weight), while liquid ingredients are measured in fluid ounces (by volume). So if a recipe calls for 8 ounces of flour, that doesn't mean you need 1 cup.

Rest assured, most U.S. recipes (using standard/imperial system) will list dry ingredients by cups/tablespoons/etc rather than by ounces. Just keep this in mind when measuring your ingredients!

Basic Kitchen Conversions & Equivalents

Understanding basic cooking measurements and cooking conversions is important knowledge to have in the kitchen. When you're following a recipe, you need to know what it all means. And sometimes you just can't find that darn tablespoon to measure out your ingredients, so you have to wing it. But if you know that 1 tablespoon also equals 3 teaspoons, then you can measure away without worry!

Just follow these kitchen conversion charts, and soon enough you'll memorize them just like those multiplication charts from school. Check our [How to Cut Recipes in Half](#) post if you need help with that

too.

Dry Measurements Conversion Chart

Teaspoons	Tablespoons	Cups
3 tsp	1 tbsp	1/16 c
6 tsp	2 tbsp	1/8 c
12 tsp	4 tbsp	1/4 c
24 tsp	8 tbsp	1/2 c
36 tsp	12 tbsp	3/4 c
48 tsp	16 tbsp	1 c

Liquid Measurements Conversion Chart

Fluid Ounces	Cups	Pints	Quarts	Gallons
8 fl. oz	1 c	1/2 pt	1/4 qt	1/16 gal
16 fl. oz	2 c	1 pt	1/2 qt	1/8 gal
32 fl. oz	4 c	2 pt	1 qt	1/4 gal
64 fl. oz	8 c	4 pt	2 qt	1/2 gal
128 fl. oz	16 c	8 pt	4 qt	1 gal

Butter Measurements Chart

Sticks	Cups	Tablespoons	Ounces	Grams
1/2 stick	1/4 c	4 tbsp	2 oz	57.5 g

Sticks	Cups	Tablespoons	Ounces	Grams
1 stick	1/2 c	8 tbsp	4 oz	115 g
2 sticks	1 c	16 tbsp	8 oz	230 g

Metric Cooking Measurement vs Standard/Imperial Cooking Measurements

Here in the U.S., we use the Imperial, or “Standard”, measurement system. So our recipes are measured in teaspoons, tablespoons, cups, pounds, etc. We’re in a bit of a bubble on that though, because the rest of the world (for the most part) uses the metric system. Recipes are generally measured in grams and milliliters.

So what happens when you want to use a recipe that uses metric cooking measurements, but you only know (and only have tools for) imperial cooking measurements? Well that’s where cooking conversions charts come in handy!

Whether you’re trying to measure for volume or weight, or need to convert oven temperatures from Celsius to Fahrenheit (or vice versa), these charts will help you get it right.

Metric to US Cooking Conversions

Use these charts to quickly convert metric measurements to standard/imperial measurements (including oven temperatures!).

Oven Temperatures Conversion

(Degrees) Celsius	(Degrees) Fahrenheit
120 C	250 F
160 C	320 F

(Degrees) Celsius	(Degrees) Fahrenheit
180 C	350 F
205 C	400 F
220 C	425 F

Liquid Measurements (Volume)

Metric	Standard
1 mL	1/5 tsp
5 mL	1 tsp
15 mL	1 tbsp
240 mL	1 c (8 fl. oz)
1 liter	34 fl. oz

Dry Measurements (Weight)

Metric	Standard
1 g	.035 oz
100 g	3.5 oz
500 g	17.7 oz (1.1 lb)
1 kg	35 oz

US to Metric Cooking Conversions

Standard	Metric
1/5 tsp	1 ml
1 tsp	5 ml
1 tbsp	15 ml
1 fl. oz	30 ml
1 c	237 ml
1 pt	473 ml
1 qt	.95 l
1 gal	3.8 l
1 oz	28 g
1 lb	454 g

What Does 1 Cup Equal?

I think it's helpful to know what 1 cup equals, because even when you're short on kitchen measuring tools, most people will have a 1 cup measurement. If you have that, you can go far! Plus it can be useful for making cooking conversions when trying to halve or double recipes. Just remember that 1 cup equals these various measurements...which means that everything in this chart is equivalent!

- 1 cup = 8 fluid ounces
- 1 cup = 16 tablespoons
- 1 cup = 48 teaspoons
- 1 cup = ½ pint

- 1 cup = $\frac{1}{4}$ quart
- 1 cup = $\frac{1}{16}$ gallon
- 1 cup = 240 ml

Baking Pan Conversions

Sometimes you come across an awesome cake recipe that's made for a specific type of baking pan...but you don't have that type or size, or you just prefer to make a different style of cake. No worries! By figuring out how much cake batter goes into each cake pan, you can change up the recipe to fit in another type of baking pan. (The cups refer to how much batter fits into the pan)

- 9-inch round cake pan = 12 cups
- 10-inch tube pan = 16 cups
- 10-inch bundt pan = 12 cups
- 9-inch springform pan = 10 cups
- 9 x 5 inch loaf pan = 8 cups
- 9-inch square pan = 8 cups

Common Baking Measurements (Conversions)

Remember earlier when I told you about the difference between ounces and fluid ounces? Here are some numbers to back up the importance of that tip. 8 fluid ounces of liquid will often equal 1 cup, but 8 ounces (weight) of a dry ingredient will rarely equal 1 cup.

Baking in Ounces

Measurement/Ingredient	Ounces
1 c. all-purpose flour	4.5 oz
1 c. granulated sugar	7.1 oz
1 c. unsifted powdered sugar	4.4 oz

Measurement/Ingredient	Ounces
1 c. packed brown sugar	7.75 oz
1 c. rolled oats	3 oz
1 c. vegetable oil	7.7 oz
1 c. milk	8 oz.
1 c. heavy cream	8.4 oz
1 c. butter	8 oz.
1 large egg (white + yolk)	1.7 oz

Baking in Grams

Measurement/Ingredient	Grams
1 c. all-purpose flour	127 g
1 c. granulated sugar	200 g
1 c. unsifted powdered sugar	125 g
1 c. packed brown sugar	220 g
1 c. rolled oats	85 g
1 c. vegetable oil	218 g
1 c. milk	227 g
1 c. heavy cream	238 g
1 c. butter	227 g
1 large egg (white + yolk)	48 g

I hope these basic cooking measurements and cooking conversions help clear things up a bit! I know cooking and baking measurements have caused me a lot of confusion in the past, and I want cooking and following recipes to be EASY. I want it to make sense so that you guys can enjoy cooking and feel confident in the kitchen.

Printable Kitchen Measurements Conversions Chart

Kitchen Conversions

BASIC KITCHEN CONVERSIONS & EQUIVALENTS

DRY MEASUREMENTS CONVERSION CHART

3 TEASPOONS = 1 TABLESPOON = 1/16 CUP
 6 TEASPOONS = 2 TABLESPOONS = 1/8 CUP
 12 TEASPOONS = 4 TABLESPOONS = 1/4 CUP
 24 TEASPOONS = 8 TABLESPOONS = 1/2 CUP
 36 TEASPOONS = 12 TABLESPOONS = 3/4 CUP
 48 TEASPOONS = 16 TABLESPOONS = 1 CUP

LIQUID MEASUREMENTS CONVERSION CHART

8 FLUID OUNCES = 1 CUP = 1/2 PINT
 = 1/4 QUART
 16 FLUID OUNCES = 2 CUPS = 1 PINT
 = 1/2 QUART
 32 FLUID OUNCES = 4 CUPS = 2 PINTS
 = 1 QUART = 1/4 GALLON
 128 FLUID OUNCES = 16 CUPS = 8 PINTS
 = 4 QUARTS = 1 GALLON

BUTTER

1 CUP BUTTER = 2 STICKS = 8 OUNCES
 = 230 GRAMS = 8 TABLESPOONS

METRIC TO US COOKING CONVERSIONS

OVEN TEMPERATURES

120 C = 250 F
 160 C = 320 F
 180 C = 350 F
 205 C = 400 F
 220 C = 425 F

BAKING IN GRAMS

1 CUP FLOUR = 140 GRAMS
 1 CUP SUGAR = 150 GRAMS
 1 CUP POWDERED SUGAR = 160 GRAMS
 1 CUP HEAVY CREAM = 235 GRAMS

WEIGHT

1 GRAM = .035 OUNCES
 100 GRAMS = 3.5 OUNCES
 500 GRAMS = 1.1 POUNDS
 1 KILOGRAM = 35 OUNCES

US TO METRIC COOKING CONVERSIONS

1/5 TSP = 1 ML
 1 TSP = 5 ML
 1 TBSP = 15 ML
 1 FL OUNCE = 30 ML
 1 CUP = 237 ML
 1 PINT (2 CUPS) = 473 ML
 1 QUART (4 CUPS) = .95 LITER
 1 GALLON (16 CUPS) = 3.8 LITERS
 1 OZ = 28 GRAMS
 1 POUND = 454 GRAMS

WHAT DOES 1 CUP EQUAL ?

1 CUP = 8 FLUID OUNCES
 1 CUP = 16 TABLESPOONS
 1 CUP = 48 TEASPOONS
 1 CUP = 1/2 PINT
 1 CUP = 1/4 QUART
 1 CUP = 1/16 GALLON
 1 CUP = 240 ML

BAKING PAN CONVERSIONS

9-INCH ROUND CAKE PAN = 12 CUPS
 10-INCH TUBE PAN = 16 CUPS
 10-INCH BUNDT PAN = 12 CUPS
 9-INCH SPRINGFORM PAN = 10 CUPS
 9 X 5 INCH LOAF PAN = 8 CUPS
 9-INCH SQUARE PAN = 8 CUPS

BAKING PAN CONVERSIONS

1 CUP ALL PURPOSE FLOUR = 140 GRAMS

VOLUME

1 MILLILITER = 1/5 TEASPOON
5 ML = 1 TEASPOON
15 ML = 1 TABLESPOON
240 ML = 1 CUP OR 8 FLUID OUNCES
1 LITER = 34 FL. OUNCES

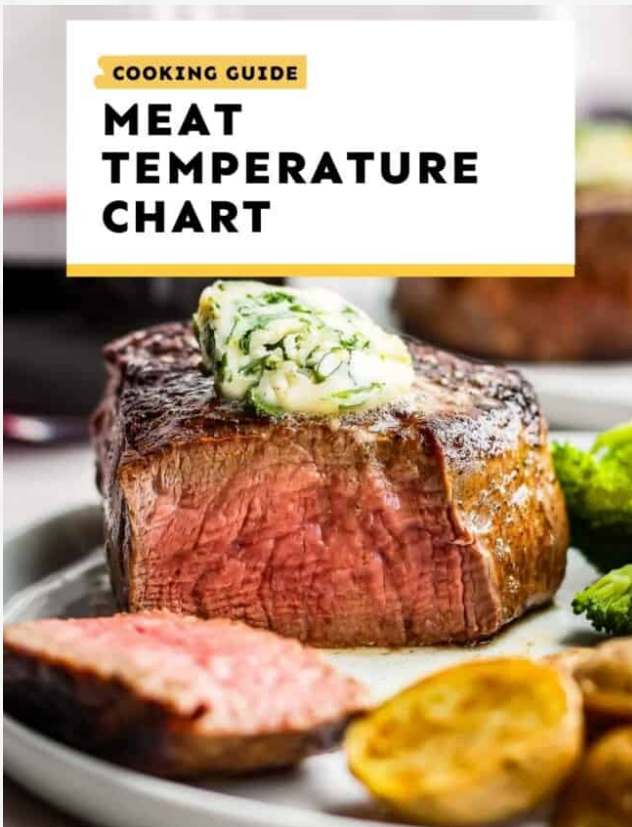
1 CUP ALL-PURPOSE FLOUR = 4.5 OZ
1 CUP ROLLED OATS = 3 OZ
1 LARGE EGG = 1.7 OZ
1 CUP BUTTER = 8 OZ
1 CUP MILK = 8 OZ
1 CUP HEAVY CREAM = 8.4 OZ
1 CUP GRANULATED SUGAR = 7.1 OZ
1 CUP PACKED BROWN SUGAR = 7.75 OZ
1 CUP VEGETABLE OIL = 7.7 OZ
1 CUP UNSIFTED POWDERED SUGAR = 4.4 OZ

THE *cookie* ROOKIE

[Click for FREE Printable of this Kitchen Conversions Chart](#)

Cooking Resources

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Angela

Thank you SO MUCH Becky, I'm grateful to have found your website. Your recipes are mouthwatering & amazing, yet realistic to achieve. You also provide great tips & helpful hints, it makes me feel as though I actually can create them myself. The way you've laid out your site is truly helpful but not overwhelming (except for the pop up ads). Thank you for all that you do!!

👍 Like 0 ↩ Reply

🕒 Posted on 4/25/2023



Reply From Becky Hardin

Thanks so much for your kind words, Angela!

Like 0 Reply

Posted on 4/26/2023



Mary Fox

I have a question not sure if I will word it right or not but here it goes. What are the measures of cooking teaspoon and tablespoon or ounces and pounds or quarts or quorts

Like 0 Reply

Posted on 4/14/2022



Chris K.

All of the weights for ingredients are wrong! It shows in this chart that powdered sugar weights more for a cup than sugar and flower (which all of those weights are wrong too); BE CAREFUL USING THIS CHART, and recheck things.

Like 1 Reply

Posted on 2/4/2022



Deborah Rio

You are a life saver. Thank you for your conversion chart! Now I just need to find conversions from kilograms to grams to use my kitchen scale.

Like 0 Reply

Posted on 1/21/2022



Becky Hardin

Thanks for stopping by!

Like 0 Reply

🕒 Posted on 1/27/2022



Jo Wallace

K=1000, so 1Kg is equal to 1000 grams

👍 Like 0 ➡ Reply

🕒 Posted on 3/8/2023



Julio Reyes

These conversions helped a lot since i am not very good at math i always have to guesstimate. now i printed them.

Thanks

👍 Like 0 ➡ Reply

🕒 Posted on 7/27/2021



Becky Hardin

Happy to have helped!

👍 Like 0 ➡ Reply

🕒 Posted on 7/28/2021



Andre Van Wyk

The world talks metric only the USA not. Why not give measurements in metric instead of the lay cook needing to work with a calculator in the hand

👍 Like 0 ➡ Reply


🕒 Posted on 6/3/2021



Becky Hardin

I am based in the United States and most of my following is from the US as well!


 Like 0  Reply


 Posted on 6/10/2021



Dts

When are you creating your page as you described? This person didn't charge you for their effort. Say thank you, and go create what you need.

 Like 1  Reply



 Posted on 2/23/2022




Mary

can you tell me how to convert 450 grams of butter & 450 grams of sour cream?

THANK YOU

 Like 0  Reply


 Posted on 3/18/2021



Becky Hardin

454 grams is a pound so 450 would be a little less than a pound!



 Like 0  Reply


 Posted on 3/25/2021



Barbara Kenney

How much is a 1/3 cup to ounces

 Like 0  Reply

 Posted on 2/19/2021



Becky Hardin

2 and 2/3 ounces!

👍 Like 0 ➡ Reply

🕒 Posted on 2/23/2021



Michelle Bassett-Shermo

your equivalent for butter is inaccurate. 1 cup = 16 Tbsp, not 8 Tbsp.

👍 Like 1 ➡ Reply

🕒 Posted on 2/14/2021



Beatrice

Some great information here, but the butter equivalent is incorrect.

Butter measurement equivalents

US Cups Grams Ounces Tablespoons

1/8 cup of Butter 28.4 g 1 oz 2 Tbsp

1/4 cup of Butter 56.7 g 2 oz 4 Tbsp

1/3 cup of Butter 75.6 g 2.7 oz Approx 5 Tbsp

3/8 cup of Butter 85 g 3 oz 6 Tbsp

1/2 cup of Butter 113.4 g 4 oz 8 Tbsp

5/8 cup of Butter 141.8 g 5 oz 10 Tbsp

2/3 cup of Butter 151.2 g 5.3 oz 11 Tbsp

3/4 cup of Butter 170.1 g 6 oz 12 Tbsp

7/8 cup of Butter 198.5 g 7 oz 14 Tbsp

1 cup of Butter 226.8 g 8 oz 16 Tbsp

👍 Like 3 ➡ Reply

🕒 Posted on 6/9/2021



Stella

AWESOME!!! this is so helpful..

👍 Like 0 ➡ Reply

🕒 Posted on 1/3/2021



Becky Hardin

You are quite welcome, Stella!

👍 Like 0 ↩ Reply

🕒 Posted on 1/6/2021

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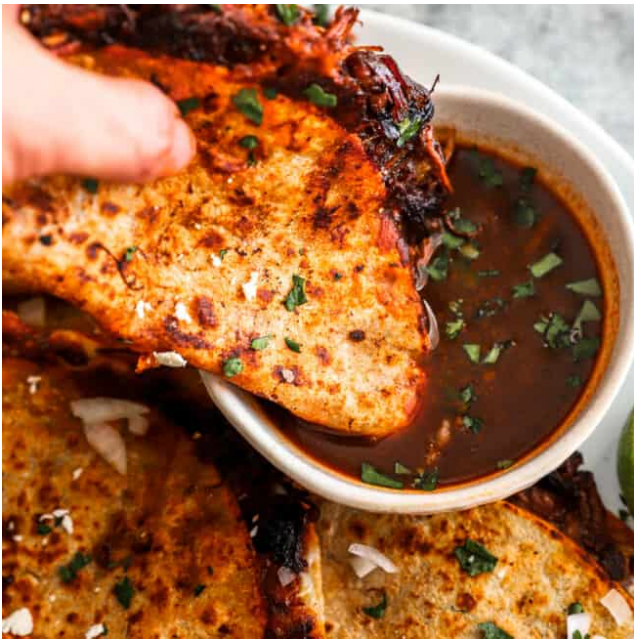




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