

# Big Data, Yummy Cookies



Discover EVERY Chocolate  
Chip Cookie Recipe ..



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Discover EVERY Chocolate  
Chip Cookie Recipe..



by Michael Ohene

Illustrations and Graphics by Michael Ohene and Zusa Suwik  
Photographs by Chelsea Ellison and Michael Ohene  
2016



# Measurement Conversions

INGREDIENT	VOLUME	WEIGHT (GRAMS)
All-purpose flour	1 cup	141
Butter	1 Tbsp/1 stick (8 Tbsp)	14/112
Large egg	1	50
Almond/pecan/walnut flour	1 cup	120
Oats	1 cup	86
Cocoa powder	1 cup	86
Semisweet/bittersweet chocolate	1 ounce	37
Chocolate chips	1 cup	182
 White sugar	1 cup	200
 Brown sugar	1 cup	220
 Dark brown sugar	1 cup	220

DECIMAL	0.125	0.25	0.33	0.375	0.5	0.67	0.75	0.875
FRACTION	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{2}{3}$	$\frac{3}{4}$	$\frac{7}{8}$

For all conversions, visit:  
[www.easierbaking.com/cakey.php](http://www.easierbaking.com/cakey.php)

To Mom and Dad



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# Preface and Acknowledgements

This whole book began as a challenge a few years ago. I was in New Orleans for a funeral with my former landlord, John Dauer, and two of his former tenants, Erik and Andrew. One day around lunchtime we made the obligatory stop at Café du Monde for beignets, and since our minds were fixated on sweets, John mentioned my Easierbaking website which compared baked goods. When Erik and Andrew heard about Easierbaking, they quickly began making requests for elaborate features, all requiring detailed knowledge of baking recipes. To avoid a challenge, I initially wrote the requests off as impossible tasks because I had already spent years (?! ) studying baking recipes.

My quest to understand baking had reached its peak while I was working in exile for three months in Guadalajara, Mexico. Before that period, I was researching, programming, and fine-tuning mathematical equations until the early morning. Now back in New Orleans, I finally had to accept the fact that I had another journey to complete.

After the passing of a few years I found a solution to the baking recipe problem. Solving the problem was a daunting process that not only involved intense mathematics, but had also consumed the precious years of my youth and had taken just a bit of courage — creative courage

I would really love to show you the procedure that shed so much light on baking recipes but this is a chocolate chip cookie book, not a math book. Therefore, we should **focus on cookies : ) !**

Our goal here is to bake without fear; without having to overthink, calculate, or do anything else that takes time away from baking. To help you, I have presented baking in the simplest, most accessible form possible. And remember...

Just bake cookies  
and enjoy.



## **Acknowledgements**

Thanks to all the people who shared their suggestions for this book. It all began quite humbly and those who believed in its promise were Erik Lokensgaard who suggested improvements; Mr. John Dauer who shared the idea with others; Lucie Benoit who told me what people want to see; Sarah Bolm who advised me to make my objective clearer; Ada Cuciuc who advised me to publish a book; Michael Chu of CookingforEngineers who published the first article and raised important questions; Ron Hipschman of the Exploratorium in San Francisco who took time to review my charts; Angela Zoss of Duke University Library who provided detailed comments on the use of infographics; Ms. Frances Corgnati who served as my mentor; Zuza Suwik who created the graphic designs and layout; Erinn McGowan who introduced me to baking addiction; Chelsea Ellison who spent time proofreading and taking many of the book's photographs; and also Caitlin Grabarek who supplied her proofreading expertise.

## What is this book?

This book presents useful templates to solve two of the most serious problems with cookbooks: the complexity and inflexibility of recipes. To achieve this, recipe charts are used. Each chart has constant and variable ingredients. You can change each variable ingredient by using the *Minimum*, *Moderate*, or *Maximum* columns on the chart. This will allow you to automatically review and customize recipes without the risk of failure. Therefore, you will be in full control of what you bake. How is this accomplished? Simply browse the book's chapters and decide the level of fat you want in your cookie, your salt preference, how sweet you want your cookies, etc. The charts do the rest of the work.

You are already creative. This book simply allows you to unravel the otherwise mysterious baking process. Also, you can finally move beyond the restrictions and basics of other cookbooks.

Even though these dynamic recipe charts can apply to other baked goods our focus is the chocolate chip cookie because:

*A Guide to America's Darling*

It is one of America's most popular home-baked cookies.

*A Marriage between Mathematics and Baking*

Its simplicity allows new dimensions of recipes to be unveiled through mathematics.

*Petite*

It is important to keep this book portable by limiting the scope.

Baking should be fun, easy, and accessible. In this book, that means pushing aside fancy gadgets and wordy instructions and picking up a few simple items: a bowl, a whisk, a fork, and measuring utensils.

## The Idea Behind the Recipe Chart

The idea behind baking is simple; baking recipes are combinations of wet and dry ingredients. This idea has been studied by Michael Ruhlman, Shirley Corriher, Harold McGee, and many other food writers with varying results. For the most part, the results have produced very flexible rules-of-thumb — none of which agree with each other.<sup>1</sup>

The reason why there is such disagreement about how to mix ingredients is that there is no one definition of *wet* and *dry ingredients*. Prior to writing this book, I created a definition. By providing this accurate definition, uncommon baking ingredients can be used to create new recipes. That premise is the foundation of the charts in this book.<sup>2</sup>

## A Brief Note about Cookie History

Surprisingly, the official history of the cookie is almost non-existent. The stories that do exist are anecdotal and raise red flags due to their insularity. So let's ask the basic question:

*Who discovered the cookie and why does it matter?*

Baking is an intertwined history of the world told through not-so-official sources. These are the narratives, religious texts, and literature that contain passing references to cookies and cakes.

Based on surviving records, one thing that is known is that the cookie's journey originates in the Middle East, yet few details find their way into Western literature. In an attempt to break this Western impasse, two contemporary historians, Nawal Nasrallah and Habeeb Salloum, have provided details about cookies of the past.<sup>3</sup>

In an article appearing in *Repast: The Quarterly Publication of the Culinary Historians of Ann Arbor*, historian Nawal Nasrallah traces the roots of a medieval Iraqi cookie called *kleicha*. Researching regional

influences, Nasrallah uncovers an etymology shared with other baked goods (e.g. Russian *kulich*, Eastern European *kolach*, Greek *Koulourakia*, and Persian *kuleech*; all, ring-shaped pastries with a possible origin to the *kleicha*).<sup>4</sup>

The *kleicha* of the 13<sup>th</sup> and 14<sup>th</sup> centuries usually included flour, light sesame oil or *samn* (clarified butter), sesame seeds, pistachios, almonds, rosewater, sugar, cinnamon, and cloves.<sup>5</sup> The modern Dutch cookie *speculaas* is similarly constructed, containing flour, butter, ginger, sugar, cinnamon, cloves, nutmeg, and cardamom.<sup>6</sup>

These cookies matter since they give us a foundation for chocolate chip cookies, because despite the slight change in ingredients, seven centuries of bakers agree that sugar, butter, and spices are essential to a good cookie. This ingredient fascination extends to the chocolate chip cookie.

### But why did people make cookies and cakes?

The children gather wood, the fathers light the fire, and the women knead the dough and make cakes to offer to the Queen of Heaven. They pour out drink offerings to other gods to arouse my anger. - Jeremiah 7:18<sup>7</sup>

Perhaps for the same reason people make them today; for anniversaries, late night snacks, and for lunar events after Spring Equinox? What?!

Yes, oddly enough, Nasrallah mentions the devotion to the Mesopotamian Goddess Ishtar, Queen of Heaven, and her resurrected husband Dumuzi. To mark Dumuzi's resurrection after three days and nights of suffering, ancient peoples held celebrations on the first crescent moon following the Spring Equinox (March 20<sup>th</sup>). Pastries made for these festivities are believed to have represented phases of the moon.<sup>8</sup> Major events occurred that spread the cookie throughout the world. This dispersion reaches beyond the scope of this cookie book so let us skip forward 2000 years.

There we find successful restaurateur Ruth Wakefield of the Toll House Restaurant. She was not in a kitchen, but six miles high in an airplane, thinking of chocolate on her return flight from Europe. Her thoughts spawned a collaboration with her pastry chef Sue Brides. This collaboration yielded a cookie that would be unrecognizable as a chocolate chip cookie today. It was hard like an English biscuit instead of the soft delicacy with crispy edges that we have come to know.<sup>9</sup>

## Final Note

Despite all the detailed technical analysis, I strongly believe food is not about recipes as many purport. Great recipes are necessary starting points, but do not necessarily result in great food. Great food is about caring — caring about ingredients, timing, and technique.



# Introduction

If you are unfamiliar with baking, don't worry, the questions below will help guide you through this book:

## What ingredients do I need?

At a minimum you need: all-purpose flour, butter, eggs, salt, baking soda (not baking powder), chocolate chips, vanilla extract, light brown sugar, and granulated white sugar. In the United States, all the items are easily obtainable. See page 17. *Total Cost: \$20-\$25*

## How much of each ingredient do I need?

See Chapter 1 – Chapter 6.

## What equipment do I need?

An electric mixer is essential for mixing large batches of cookie batter. If you are making small batches, i.e. using less than 1 large egg in a recipe, you can use the following equipment: measuring spoons and measuring cups, a metal whisk, a large glass mixing bowl, a fork, a spatula, and a baking sheet. See page 18. *Total Cost: \$30*

## How do I mix the ingredients?

For large batches, use an electric mixer. For small batches, beat the butter and sugars with a whisk for 25–30 seconds (until the mixture begins to smear), finish mixing with a fork for another 30 seconds, then mix in each ingredient with a fork. See the pictures on page 20.

## How much batter do I use for each cookie?

This book assumes 3 tablespoons of batter per cookie. If you use 1½ tablespoons of batter, bake your cookies for 1 minute less than recommended.

### How should I store my cookie (batter)?

You should refrigerate the batter for up to 24 hours. Cover and store baked cookies for up to 2 days at room temperature or wrap and freeze baked cookies to store them for longer than 2 days.

### At what temperature should I bake my cookies?

You should almost always bake chocolate chip cookies in a preheated 350°F oven.

### How long / where should I bake my cookies?

Bake cookies for 11–14 minutes depending on the cookie size. Larger cookies need more time to bake than smaller cookies. See page 20–21.





All-purpose flour (leveled)



Old-fashioned rolled oats



Ground nuts (walnuts)



Large egg



White granulated sugar



Light brown sugar, packed



Dark brown sugar



salt



Baking soda



Vanilla extract



Chocolate chip morsels



Melted chocolate



Softened butter

Images of the standard chocolate chip cookie ingredients, measured.

## Equipment



5oz measure glass



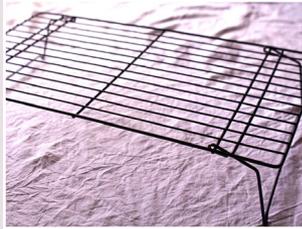
Measuring cup set



Measuring spoon set



Whisk



Wire rack



Mortar and pestle



Spatula



Small, 12"x8.75" baking sheet

Measuring instruments common in chocolate chip cookie making.

The previous answers addressed all the factors that will affect your chocolate chip cookies. If you change (e.g. melt the butter or use hard butter) any of these factors, you will drastically change your cookie. You are now ready to bake.

On a very important side note, baking requires *the utmost respect for the clock*. A good baker removes slightly gooey cookies from the oven after 11–14 minutes because the recipe directed him or her to do so. A betrayal of your senses may be seen as contrary to good reason, but as a true baker knows, it ultimately results in

# Good cookies.



Is there an easy way to remember how to mix ingredients?

The easiest way to remember the ingredient mixing order is **SEVEN-D** ("Seventy"):

**S**ugars and creamy fats — *white/brown sugar, butter, peanut butter, etc.*

**E**ggs — *eggs.*

**V**anilla extract — *vanilla extract, coffee extract, etc.*

**E**xtras — *melted chocolate, etc.*

**N**uts and chocolate chips — *nut pieces, flaked coconut, chocolate chips, toffee pieces, chopped dates, etc.*

**D**ry Ingredients — *flour, baking soda, salt, ground nuts, flours, old-fashioned oats, spices, etc.*

# The Simplest Step-by-Step Mixing Guide

How to make cookies in less than 30 Minutes

*Tip:* Instead of softening butter at room temperature for 3 hours, mash butter with a fork for 30 seconds and leave it at room temperature for 5 minutes before using it.

How do I mix the ingredients for small batch recipes?

Mixing is simple. Turn on your oven to 325°F, 350°F, or 375°F. While your oven is preheating, start mixing the ingredients using **SEVEN-D**.

S.



Mashed butter



White sugar



Brown sugar

Whisk for 25-30 seconds. Knock butter/sugar free from whisk. Then mix with fork.

E.



Large egg

Mix in one egg at a time.

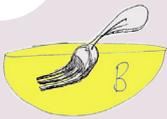
V.



Vanilla extract

Mix in the Vanilla

**E.**   **Melted chocolate**  
Mix in the melted chocolate, if any.

**N.**   **Chocolate chips**  
Mix in the nuts and Chocolate

**D.**  

Add a portion of the dry ingredients to wet ingredients, mix. Add a little more, mix, Add the last portion of dry ingredients and mix.

Place the baking sheet with lumps of cookie batter in the preheated oven, bake the cookies for 11-14 minutes, then use an ovenmit or thick cotton cloth to remove the cookie sheet from the oven, and remember to turn the oven off. After waiting about 5 minutes, use a spatula to place the cookies on a wire rack, and let the them cool for around 30 minutes for the best cookies – if you can wait that long.

Done.

.....o.o.o.o.o.o.o.o.o.o.o.o.o.o.o.o.....

# 100 Recipes in One Chart

## Introduction to the Recipe Chart

This chart has constant (red) and variable (black) ingredients. You can change each variable ingredient using the *Minimum*, *Moderate*, or *Maximum* columns on the chart. If a measurement is unavailable, use another column.

Use: **2 $\frac{1}{8}$  Cups All-Purpose Flour<sup>4</sup>**

Makes:<sup>15</sup> **18 cookies**

INGREDIENTS:	MINIMUM <sup>1</sup>	MODERATE <sup>2</sup>	MAXIMUM <sup>3</sup>
Butter <sup>5</sup> (Tbsp) <sup>14</sup>	12 (¾ cup)		16 (1 cup)
Eggs + Yolk <sup>6</sup>	—	1 + 1	2 + 0
Baking soda <sup>7</sup> (tsp)	½	—	1
Salt <sup>8</sup> (tsp)	½	—	1
Vanilla extract <sup>9</sup> (tsp)	¾	1	2¼
Chocolate chips <sup>10</sup> (C)	1½ (9 oz)	1¾ (10.5 oz)	2 (12 oz)
Nuts <sup>11</sup> (C)	¾	—	1
White sugar (C) + Brown sugar (C)	½   ⅔   ⅔ +   or +   or + ¾   ⅔   1	⅔   ¾   ½ +   or +   or + ¾   ¾   1	⅔   ¾   ½ +   or +   or + 1   1   1¼
 White sugar <sup>12</sup> (C)	   <sup>16</sup>	  	  
 Brown sugar <sup>13</sup> (C)	  	  	   

Table 1 Standard Recipe Chart

But how do you read the Recipe Chart?!

Look on the opposite page...

## Guide to Chart Annotations

### 1. Minimum

Near the minimum amount of the ingredient that should be used with the constant ingredient(s)

### 2. Moderate

A moderate addition to the constant ingredient(s).

### 3. Maximum

Near the maximum amount of the ingredient that should be used with the constant ingredient(s)

### 4. All-purpose flour

The amount of all-purpose flour (141 g per cup) to use.

### 5. Butter

Softened salted or softened unsalted butter, Crisco, or equivalent measured in tablespoons. For brown butter start with 25% more butter than shown.

### 6. Eggs & Yolk

1+1 is 1 large egg + 1 large egg yolk; 1+0 is 1 large egg.

### 7. Baking soda

Not baking powder, measured in teaspoons.

### 8. Salt

Measured in teaspoons, if using unsalted butter, use the *Maximum* measurement.

### 9. Vanilla extract

Pure Vanilla extract, coffee extract, orange extract, etc. measured in teaspoons.

### 10. Chocolate chips

Semisweet/bittersweet chocolate chips, toffee, chopped dates, butterscotch, M&M's®, and/or dried fruit measured in cups.

### 11. Nuts

Macadamia, pecan, walnuts, and coconut – not peanuts, measured in cups.

### 12. White sugar

Granulated white sugar.

### 13. Brown sugar

Packed, light brown sugar.

### 14. Tablespoons (Tbsp), teaspoons (tsp), cups (C), ounce (oz).

### 15. Makes: 18 cookies.

Each cookie uses 3 tablespoons of butter.

### 16. Graph representing the amount of sugars/sweet- ness.

---

Spices are normally added to oatmeal chocolate chip cookies by fractions of a teaspoon.

# Reviewing a Chocolate Chip Cookie Recipe

No More Bad Cookies

Below, you will see how you read the Recipe Chart to rate recipes. This highlighted chart for  $2\frac{1}{8}$  cups all-purpose flour is the same as the recipe for *Good Cookie* found in Table 3 on page 25.

Use:  $2\frac{1}{8}$  Cups All-Purpose Flour

Makes: 18 cookies

INGREDIENTS:	MINIMUM	MODERATE	MAXIMUM
Butter (Tbsp)	12 ( $\frac{3}{4}$ cup)	—	16 (1 cup)
Eggs + Yolk	—	1 + 1	2 + 0
Baking soda (tsp)	$\frac{1}{2}$	—	1
Salt (tsp)	$\frac{1}{2}$	—	1
Vanilla extract (tsp)	$\frac{3}{4}$	1	$2\frac{1}{4}$
Chocolate chips (C)	$1\frac{1}{2}$ (9 oz)	$1\frac{2}{3}$ (10 oz)	2 (12 oz)
Nuts (C)	0	—	1
White sugar (C) + Brown sugar (C)	$\frac{1}{2}$ $\frac{2}{3}$ $\frac{1}{3}$ + or + or +	$\frac{2}{3}$ $\frac{3}{4}$ $\frac{1}{2}$ + or + or +	$\frac{2}{3}$ $\frac{3}{4}$ $\frac{1}{2}$ + or + or +
 White sugar (C)	  	  	  
 Brown sugar (C)	  	  	   

## Sample recipes

RECIPE 1 – GOOD COOKIE	RECIPE 2 – BAD COOKIE
2 cups + 2 Tbsp all-purpose flour	2 cups + 2 Tbsp all-purpose flour
½ tsp baking soda	½ tsp baking soda
½ tsp salt	½ tsp salt
12 Tbsp (1½ sticks) butter	10 Tbsp butter
1 cup packed (7 oz) light or dark brown sugar	1 cup packed (7 oz) light brown sugar
⅓ cup granulated sugar	⅜ cup granulated sugar
1 large egg	2 large eggs
1 large egg yolk	1 tsp vanilla extract
1 tsp vanilla extract	1½ cups chocolate chips
2 cups chocolate chips	—

Table 3 Sample Recipes

Recipe 2, *Bad Cookie*, is a bad cookie recipe since *10 Tbsp butter* is not on the chart of Table 2.; i.e. it is outside the range (lower than *Minimum* or higher than *Maximum*) of the chart.

### If you were to rate common baking recipes, how would they fare?

Let's take a look at recipes from the book *101 Perfect Chocolate Chip Cookies* on page 26.

## Chocolate Chip Cookie Ratings

RECIPE	BUTTER	EGG	SUGAR	BROWN	WHITE	CHOC.	NUTS	AP
¶Richard's	3	2	2	2	2	3	2	
¶Collen's	1	2	2	1	3	3	1	
¶Mona's	3	2	2	1	3	3	+	
¶Maca Milk	3	2	2	2	2	3	3	
Susan's	1	2	-	1	1	3	1	
Ric's	3	1	2	2	2	-	1	
Beverly	3	1	-	2	1	-	1	
Alexis's	3	2	+	3	1	+	+	
With Oil	1	1	-	2	1	-	1	
Gradma's	+	2	2	2	2	3	2	
Nutty	3	2	-	-	2	-	1	
Big Batch	2	2	-	1	3	-	1	
White Maca	+	-	+	3	3	3	3	
Dad's Favorite	1	-	1	3	1	3	1	
Melt-Mouth	+	+	3	3	3	+	3	
Milk	1	2	2	1	3	1	1	
Menthe	+	+	3	1	3	1	+	
Cowgirl Oat	2	1	2	2	2	1	1	3
Oat and Milk	1	1	1	1	1	3	1	2
Choco's Oat	1	1	2	2	2	3	1	2

Table 4. 101 Perfect Chocolate Chip Cookies Recipe Ratings continued<sup>10</sup>

### Table Notes:

- |                  |       |   |
|------------------|-------|---|
| 1. Minimum       | Brown | Brown Sugar   |
| 2. Moderate      | White | White Sugar   |
| 3. Maximum       | AP    | All-purpose flour                                       |
| - Not Enough     | Maca  | Macadamia   |
| + Too Much       |       | Outlier (Too Much or Not Enough<br>butter, eggs, sugar) |
| ¶ Finalist Award |       |   |

## What if you rated the Internet's most popular recipes?

### Chocolate Chip Cookie Ratings

RECIPE	BUTTER	EGG	SUGAR	BROWN	WHITE	CHOC.	NUTS
David Lebovitz's <sup>11</sup>	3	2	2	2	2	3	+
Shirley Corriher's Ground Pecan <sup>12</sup>	3	1	-	1	3	1	3
Martha Stewart's <sup>13</sup>	1	1	2	2	2	1	1
Jacques Torres' NYT <sup>14</sup>	1	1	2	3	1	+	1
Big Fat Chewy <sup>15</sup>	2	2	3	3	1	3	1
Best <sup>16</sup>	1	1	2	2	2	1	1

Table 5 The Best of the Best Internet Chocolate Chip Cookie Recipes

### Chocolate Chip Cookie Ratings

RECIPE	BUTTER	EGG	SUGAR	BROWN	WHITE	CHOC.	NUTS
Good Cookie	1	2	1	3	1	3	
Bad Cookie	-	2	1	3	1	3	

Table 6 Ratings from *Sample Recipes*, Table 3

## What we learn:

Your recipe needs to stay within the Recipe Chart. As we can see, Richard's cookies were rewarded while Grandma's *out-of-bounds* cookies were ignored.

## Similar Chocolate Chip Cookie Ratings

RECIPE	BUTTER	EGG	SUGAR	BROWN	WHITE	CHOC.	NUTS
Olivia's Old Fashion <sup>17</sup>	3	2	2	2	2	+	1
Toll House® <sup>18</sup>	3	2	2	2	2	3	2
¶Richard's	3	2	2	2	2	3	2
¶Maca Milk	3	2	2	2	2	3	3
David Lebovitz's	3	2	2	2	2	3	+
¶Mona's	3	2	2	1	3	3	+

**Table 7** Recipe selections showing similar recipe

Looking at Table 7, three of the 11 *Finalist* chocolate chip cookie recipes were the same type of chocolate chip cookie recipe. Not only were they the same type of recipe, they were slight variations of the NESTLE® Toll House® Chocolate Chip Cookie recipe. This adds a touch of ridiculousness to the fact the same cookie recipe has been hailed as "The Greatest" six times under six different names.

# Flawlessly Customize a Recipe

Let's create a classic chocolate chip cookie recipe using the 2¾ Cups All-purpose flour Recipe Chart.

Use: **2¾ Cups All-Purpose Flour**

Makes: **22 cookies**

INGREDIENTS:	MINIMUM				MODERATE				MAXIMUM				
Butter (Tbsp)					16 (1 cup)				20 (1¼ cup)				
Eggs + Yolk	1 +		2 or		+	—				—			
Baking soda (tsp)	½				¾				1¼				
Salt (tsp)	½				¾				1¼				
Vanilla extract (tsp)	1				1¼				2½				
Chocolate chips (C)	1⅞ (11 oz)				2⅞ (13 oz)				2½ (15 oz)				
Nuts (C)	0				1				1¼				
White sugar (C) + Brown sugar (C)	½	⅔	¾	1	1	¾	⅔	½	1	1⅞	1	¾	½
	+	or	+	or	+	or	+	or	+	+	or	+	or
	1⅞	1	1	1¼	1	1¼	1⅓	1½	1⅞	1⅞	1¼	1¼	1¼
 White sugar (C)													
 Brown sugar (C)													

**Table 8** Highlighted 2¾ Chart for classic chocolate chip cookies

Since there is no measurement under *Moderate* or *Maximum Eggs + Yolk*, use one of the two available measurements under *Minimum* (1+1 or 2+0). For *Vanilla extract*, you can use any measurement from 1 tsp to 2½ tsp.

Recipe notes:

The Moderate butter gives a standard richness to the cookies. The Minimum egg content keeps the cookie dense with just a little rise/height.

## Custom Chocolate Chip Cookie Recipe from Table 9

MEASURE	INGREDIENTS
2¾ cups	unbleached all-purpose flour
16 Tbsp	salted butter
1	large egg
1	large egg yolk
1 cup	light brown sugar, packed
1 cup	granulated sugar
½ tsp	salt
¾ tsp	baking soda
2½ tsp	vanilla extract
2½ cups	semisweet chopped chocolate chunks
1¼ cup	coconut flakes

**BAKE AT 350° FAHRENHEIT FOR 11 MINUTES**

**Table 9** The custom recipe (*Michael's*) written in standard recipe format

# Experiments

How changing the butter and egg content changes a Classic Chocolate Chip Cookie's appearance (Moderate Sugar content, using equal parts brown sugar and white sugar).

		
Image 5b Minimum: butter, Minimum: eggs	Image 5b Minimum: butter, Moderate: eggs	Image 5c Minimum: butter, Maximum: eggs
		
Image 5d Moderate: butter, Minimum: eggs	Image 5e Moderate: butter, Moderate: eggs	Image 5f Moderate: butter, Maximum: eggs
		
Image 5g Maximum: butter, Minimum: eggs	Image 5h Maximum: butter, Moderate: eggs	Image 5i Maximum: butter, Maximum: eggs



Image 6a

Image 6b

Image 6c

Minimum: butter, moderate: egg cookies (same ingredients)

Baked at 325°F

Baked at 350°F  
for same period as 6a

Baked at 375°F  
for 4 minutes longer than  
Images 6a and 6b.

The images show how we reduced the spread of our cookie by merely adjusting the baking temperature and time. But do not jump to conclusions. This does not mean we can always get a towering cookie just by increasing the temperature and time. See Image 7 and Image 8a-c.



Image 7

Ground pecan cookie baked at 350°F (left) and ground pecan cookie baked at 375°F (right). Both cookies were baked for the same time period.



Image 8a



Image 8b



Image 8c



Image 8d



Image 8e



Image 8f

### Cocoa chocolate chip cookie

Baked at 325°F

Baked at 350°F

Baked at 375°F

Image 7 and Image 8a-f show a slight rise, but not a dramatic rise when the baking temperature was increased. Using a different cocoa chocolate chip cookie recipe, Images 8d-8f show almost no rise with increasing temperature.



# Small Batches

## Making a Few Cookies at a Time

Before we jump into the heart of this book, let's talk about small batches. Small batches yield a small number of cookies. They are quick-to-prepare, guilt-free, and are also great for experimentation.

Unless you have kids or you are hosting a party, it becomes difficult to justify making more than 10 cookies at a time. The problem in creating smaller batches is the rule that says a cookie recipe cannot have more than 1 egg per a cup of flour.<sup>19</sup> That rule says *the smallest amount of cookies we can make is a recipe calling for 1 cup + 2 Tbsp of flour, or 11 cookies.*

The only way around this dilemma is to scale a recipe down and to use a fraction of an egg. This requires us to mix the egg (yolk and white), measure the quantity we need, and discard the rest of the egg. So in the two small batch recipes on page 35 you will see tablespoons of eggs in place of whole eggs.<sup>20</sup>



Image 9: Anchor hocking measure glass with  $\frac{1}{2}$  a large egg (0.9 oz egg)



The classic chocolate chip cookie is the khaki pants of the dessert world. It even looks like a pair of khakis. It is sold and marketed as the most delightful, yet non-offensive dessert in the United States. Just like most things with mainstream appeal, it is seen as unrebllious — it is no cookie any great poet will die eating, a cookie of which no books will be written. Actually... the classic chocolate chip cookie is spectacular if baked correctly. Please read on.

*The recipe of the chapter's main cookie shot is highlighted on page 43.*

Use: **1¾ Cups All-Purpose Flour**

Makes: **14 cookies**

INGREDIENTS:	MINIMUM	MODERATE	MAXIMUM
Butter (Tbsp)	—	10 <sup>2</sup> / <sub>3</sub> (2 <sup>2</sup> / <sub>3</sub> cup)	12 (¾ cup)
Eggs + Yolk	1 + 0	—	—
Baking soda (tsp)	¼	½	¾
Salt (tsp)	¼	½	¾
Vanilla extract (tsp)	¼	¾	2
Chocolate chips (C)	1½ (7 oz)	1½ (8 oz)	1½ (9 oz)
Nuts (C)	0	2 <sup>2</sup> / <sub>3</sub>	¾
White sugar (C) + Brown sugar (C)	1 <sup>1</sup> / <sub>3</sub> + ¾	½ ½ + or + 2 <sup>2</sup> / <sub>3</sub> ¾	2 <sup>2</sup> / <sub>3</sub> 1 <sup>1</sup> / <sub>3</sub> 2 <sup>2</sup> / <sub>3</sub> + or + or + 2 <sup>2</sup> / <sub>3</sub> 1 ¾
 White sugar (C)		 	  
 Brown sugar (C)		 	  

Use: **1½ Cups All-Purpose Flour**

Makes: **15 cookies**

INGREDIENTS:	MINIMUM	MODERATE	MAXIMUM
Butter (Tbsp)	10 <sup>2</sup> / <sub>3</sub> (2 <sup>2</sup> / <sub>3</sub> cup)	—	12 (¾ cup)
Eggs + Yolk	—	—	1 + 1
Baking soda (tsp)	¼	½	1
Salt (tsp)	¼	½	1
Vanilla extract (tsp)	½	¾	2
Chocolate chips (C)	1½ (7 oz)	1½ (8 oz)	1 <sup>2</sup> / <sub>3</sub> (10 oz)
Nuts (C)	0	¾	1
White sugar (C) + Brown sugar (C)	½ + 2 <sup>2</sup> / <sub>3</sub>	½ 2 <sup>2</sup> / <sub>3</sub> ¾ + or + or + ¾ 2 <sup>2</sup> / <sub>3</sub> 1	2 <sup>2</sup> / <sub>3</sub> ¾ ½ ¾ + or + or + or + ¾ ¾ 1 1 <sup>1</sup> / <sub>8</sub>
 White sugar (C)		  	   
 Brown sugar (C)		  	    