

# MASTER RECIPE FORMULAS

**Gluten Free Mess to Masterpiece Lesson 3**

# CAN YOU IDENTIFY THESE RECIPES?

## Recipe #1:

1/2 lb (2 sticks) unsalted butter,  
softened

2/3 cup white sugar

1 large egg

1/4 tsp. baking powder

1/8 tsp. salt

1 1/2 tsp. vanilla

2 1/2 c. Mary's AP GF, SF flour

## Recipe #2:

1/2 c. brown rice flour

1/2 c. corn starch

1/2 c. sorghum flour

1/4 tsp. salt

2/3 tsp. xanthan gum

2 tsp. baking powder

3/4 c. water

1 c. sugar

3/4 c. oil

3 eggs

1 tsp. vanilla extract

# CAN YOU IDENTIFY THESE RECIPES?

## Recipe #3:

300 g water

26 g Bread Machine yeast

24 g sugar

30 g olive oil

100 g egg (2 large chicken eggs)

10 g cider vinegar

570 g Mary's GF Flour mix

24 g sugar

24 g salt

12 g xanthan gum

## Recipe #4:

6.5 oz (1 1/2 c.) brown rice flour

10 oz. (2 c.) corn starch

2.5 oz. (1/2 c.) sorghum flour

4 tsp. baking powder

2 tsp. salt

1/2 tsp. baking soda

2 tsp. xanthan gum

4 oz. (8 Tbsp.) butter

16 oz. milk

1 Tbsp. cider vinegar

1 large egg, beaten

LOOKING AT MASTER  
RECIPE FORMULAS

# WHAT PATTERNS DO YOU SEE HERE?

Pizza by volume:

- 2  $\frac{2}{3}$  c. water
- 4  $\frac{2}{3}$  c. Mary's AP GF Flour mix
- 2 Tbsp. instant yeast
- 2 tsp sugar
- 4 tsp. xanthan gum
- 2 tsp. Salt
- 4 tsp. Olive oil
- 4 tsp. Cider vinegar

# WHY WE USE WEIGHTS TO LOOK AT RECIPES

## Pizza by weight:

600 g water  
600 g Mary's AP GF Flour mix  
20 g Rapid Rise yeast  
8 g sugar  
12 g xanthan gum  
12 g salt  
12 g olive oil  
15 g cider vinegar

## Pizza by volume:

2  $\frac{2}{3}$  c. water  
4  $\frac{2}{3}$  c. Mary's AP GF Flour mix  
2 Tbsp. instant yeast  
2 tsp sugar  
4 tsp. xanthan gum  
2 tsp. salt  
4 tsp. olive oil  
4 tsp. cider vinegar

1 FLOUR:1 LIQUID

If you're using a flour mixture that is 55% bean/rice, 35% starch and 10% super absorbent, then the master recipe for pizza is equal parts flour and water.

# WHAT ARE THE MAIN INGREDIENTS?

Chocolate Chip Cookies

200 g Mary's GF All Purpose Flour

150 g sugar ( $\frac{1}{2}$  brown,  $\frac{1}{2}$  white)

100 g butter, softened

50 g egg

3 g salt

12 g baking powder

150 g. chocolate chips

4:3:2:1

If you're using a flour mixture that is 55% bean/rice, 35% starch and 10% super absorbent, then the master recipe for chocolate cookies is 4 parts flour: 3 parts sugar: 2 parts fat: 1 part egg.

# WHAT ARE THE MAIN INGREDIENTS?

Pie Crust

250 g starch flours

80 g grain flour

220 g shortening

110 g water

3 g xanthan gum

12 g salt

3:2:1

If you're using a flour mixture that is 75% starch, 25% grain bean, then the master recipe for pie crust is 3 parts flour, 2 parts fat, 1 part water.

# BASIC FORMULAS COMPARED

Bread = flour + water

Cookie = flour + sugar + fat + (sometimes egg)

Pie Crust = flour + fat + water

Cake = egg + flour + sugar + fat + (often a liquid)

# COMPARE THESE TWO BREAD RECIPES

340 g Mary's gluten free flour mix  
340 g water  
10 g bread machine  
15 g sugar  
9 g xanthan gum  
12 g salt  
150 g eggs  
30 g oil  
5 g cider vinegar

440 g Bob's Red Mill GF AP Flour  
375 g water  
10g bread machine yeast  
15 g sugar  
9 g xanthan gum  
12 g salt  
185 g eggs  
30 g oil  
5 g vinegar

# IN SUMMARY

- Identify the basic building block ingredients
- Observe the relative proportions (by weight)
- Remember that the ratio for a given recipe is often dependent on the flour chosen.
- The math in a recipe won't always be neat and tidy. The Master Formulas are a starting point and a guide.

# LOOKING AT INGREDIENTS

# LIQUIDS

Some commonly used liquids are

- Water
- Buttermilk (acidic)
- Milk (enriches - contains sugar and fat)
- Beer (adds bubbles)

# FATS

Some commonly used fats are:

- Butter which melts at 90 - 95F
- Coconut Oil which melts at 78F
- Canola Oil which melts at 14F
- Lard which melts between 97 and 113F
- Crisco melts between 117 and 119F

The flavor of the oil should also be considered as well as its composition - dairy fats are generally not 100% fat.

# SUGARS

- Most recipes in the U.S. have historically been written for white, granulated sugar or brown sugar.
- If you want to use other sugars, the best way to learn about them is experiment.

# EGGS

Eggs have two very different parts, yolks and whites, and you can use them strategically in recipes.

Substitutions: egg replacement powders, flax eggs, applesauce

# LEAVENING AGENTS

Leavening agents include

1. Baking soda ( $\frac{1}{4}$  tsp to 1 c. flour)
2. Baking powder (1 tsp to 1 c. flour\*)
3. Steam
4. Yeast

Except for biscuits (not the cookie sort) which should have 1.5 tsp per flour.

# HOW TO IDENTIFY A GOOD RECIPE

# HOW TO SPOT A GOOD RECIPE

1. It is very specific about the flour mix to be used.
2. The flour mix makes sense for the kind of recipe.
3. It has the foundation ingredients for the kind of recipe that it's supposed to be.
4. It's written in weights rather than by volume.

ONCE YOU FIND A GREAT GF RECIPE, KEEP IT  
AND USE IT AS A “MASTER RECIPE” FOR  
MAKING NEW RECIPES

HOMework

# WHY DOES THIS COOKIE RECIPE WORK?

This is one of my family's favorite cookie recipes, but it doesn't look like the master cookie formula. Why does it work?

1 egg

1 c. peanut butter

1 c. sugar

Answer: <http://bit.ly/1RiGZ2Z>

# TAKE A LOOK BACK

Remember those recipes back at the beginning. Go back and take another look at them. Can you make a better guess at what they are?

The answers are on the next page. Don't peek!

# PRE-QUIZ ANSWERS

Recipe #1: Flour, sugar and fat are the main ingredients which makes this a cookie. In particular, it's a sugar cookie.

Recipe #2: Be sure to add the flours together in order to compare the different ingredients. This is a little more difficult since there aren't weights, but the main ingredients are flour, sugar, fat, eggs, and some liquid. This is a yellow cake.

# PRE-QUIZ ANSWERS

Recipe #3 is a bread. You can see that the largest ingredients are flour and water. But, there is quite a bit more flour than water. This is because this is a bagel recipe and requires a stiffer dough.

Recipe #4: 19 oz of flour and 16 oz of water mean this is another bread recipe. But it is leavened with baking powder and baking soda. This is a biscuit.

# FIND A MASTER RECIPE

Dig through your favorite GF cookbooks and/or blogs and find a recipe that you know works well.

If it's in volume, take a shot at converting it to weights based on the standard volume:weight given on the back of the flour package (where it generally tells you how much  $\frac{1}{4}$  c. weights)

Now, identify the main ingredients and right out the “master formula” for this recipe.