

RYE CRACKERS

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The Rye Crackers are made using the 100% Rye Miche dough.
In the class, I took off 300 g (10.6 oz) of the dough after it was mixed.

Now some math: The dough is comprised of whole rye flour (50%), medium rye flour (50%), water (78%), and salt (2%). These percentages total 180%.

We must first figure the actual weight of the flour in the formula. We do this as follows:
Dough weight--300 g divided by total percentages--180 = 1.67. This means that one "unit" of each of the ingredients weighs 1.67 g. I know that I have 100 "units" of flour, therefore I know that the total flour weight is 167 g. Using the same math formula, I can ascertain that the weight of the water is $1.67 \times 78 = 130$ g.

For the crackers, the dough must be firmer, specifically, 64% of the flour weight.

Here is the calculation to make this adjustment:

Water weight (130 g) divided by the desired water percentage (64%) = 2.03. This means that in the cracker dough, each ingredient "unit" will weigh 2.03 g. Since flour is always considered to be 100%, we'll need a total of 203 g of flour in the cracker dough. And we know that we currently have 167 g, so adding an additional 36 g of rye flour will give us the required total flour weight. The crackers also have ground caraway at 1.5% and instant yeast at .2%. Since each "unit" weighs 2.03 g, by multiplying that by the caraway and salt percentages we need to add 3 g of caraway and .4 g of yeast. The additional 36 g of flour requires .7 g of salt.

Whew. Thanks for your patience!

Add all these ingredients to the original 300 g of dough. Rest the dough for 30 minutes.
Roll the dough out to about 1/8" thick, using the minimum amount of flour necessary so the dough doesn't stick to the rolling pin or the work surface. Using a fork or dough docker, poke numerous holes in the surface. Cut into desired sizes, transfer to a sheet pan, and bake at 360F for about 20 minutes, until firm. When cool, place into an airtight tin.

Crackers can be made with any weight of dough, using the math formulas detailed above to ascertain the weight of ingredients in the base dough and in those added to it.