

# MAKING HEALTHY BREAD AT HOME

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**MAKING BREAD IS PART  
SCIENCE, PART ART,  
AND SOME LUCK ADDED  
IN FOR GOOD MEASURE**

like the first rule of cooking is to have fun  
and be yourself and the first rule of baking is  
to stay calm because the dough can sense  
fear



# TOOLS OF THE TRADE

## Essential

- Your hands
- A bowl
- A towel
- An oven
- A pan to bake on or in
- Instant read thermometer

## Nice to have

- Dutch dough hook or stand mixer
- Bowl scraper/bench scraper/lame
- Bannetons, bowls, proofing containers
- Dutch oven
- Scale

## Stepping up

- Spiral mixer
- Dedicated fridge
- Proofer
- Bread oven
- Cooling racks

# INGREDIENTS

## Necessary

- Flour
- Water
- Salt
- Leavening – yeast or starter

## Additions

- Sweetener – honey, sugar, maple syrup...
- Fat – oil, butter, eggs
- Mixings – nuts, cheeses, herbs, cocoa, espresso powder...sky's the limit

**Note – additions will affect dough performance**

**If the goal is the healthiest bread you can feed your family, it  
isn't in the sourdough.**

# **IT'S IN THE FLOUR!**

**Wheat contains 40 of the 44 essential nutrients our bodies  
need to survive**

**These are all lost in the commercial milling process**

**Milling your own flour is the healthiest option**

**Refer to Sue Becker of Bread Becker for more research on this**

# HYDRATION

- Ratio of liquid to flour, as a percentage
- High hydration = 80% and up
- Low hydration = 60% and down
- Higher hydration = more extensibility (stretch), fermentation, moister crumb, and keep better
- Higher hydration = stickier, more skill to work with, bake longer, thicker crusts
- Low hydration = easier to handle, better for shapes like braids, bagels, pretzels
- Low hydration = firmer, stiff dough, not as moist as higher hydration doughs

# BAKER'S MATH

- A ratio used to determine the percentages of ingredients
- Everything is based of flour, which is always 100%
- Used to multiple, adjust, add to, and troubleshoot recipes
- Example: my basic sourdough recipe starts with 475g flour. I want to use 70% water, 2% salt, and 30% starter:

$$\text{Water} = 475 * .70 = 333\text{g}$$

$$\text{Salt} = 475 \times .02 = 10\text{g}$$

$$\text{Starter} = 475 * .30 = 143\text{g}$$



# DESIRED DOUGH TEMPERATURE

- Between 75-78F
- Calculated by taking temperature of all ingredients
  - Add room temperature
  - Exclude water (this is what you are figuring out)
- Friction Factor (FF)
  - mixers – 22-24F
  - hand mixing – 6-8F
- Example: Room temp 68F, flour 65F, starter 68F, FF 24F  
DDT=  $78 \times 4 = 312 - 68 - 65 - 68 - 24 = 84$ F water temperature

# THE PROCESS OF MAKING SOURDOUGH BREAD

- Gather and measure out ingredients
- Mix flour and water
- Autolyze
- Mix in starter and salt
- Bulk ferment with stretch and folds or coil folds
- Pre-shape/Shape
- (Cold retard)
- Bake and Enjoy!

# THE PROCESS OF MAKING YEAST BREAD

- Gather and measure out ingredients
- Mix yeast with warm water to proof
- Mix in flour and salt
- Bulk ferment with stretch and folds or coil folds as needed
- Pre-shape/Shape
- (Cold retard)
- Bake and Enjoy!

# KEY NOTES ON MAKING BREAD

- Everybody forgets the salt a few times...
- Every baker is always learning, discovering, trying new things.
- Practice skills at lower hydrations before trying higher ones
- Learn to watch your dough, don't rely in time
- If possible, make dough by hand to gain an understanding of how it feels at different stages
- Give yourself grace – even pro baker's fail at times
- If all else fails – focaccia!

# SOURDOUGH DISCARD USES

- Cookies, muffins, pancakes, quick breads, English muffins, scones, donuts, etc
- Chicken feed
- Compost

**DO NOT PUT DISCARD DOWN YOUR DRAIN! IT WILL HARDEN AND BECOME AN EXPENSIVE REPAIR!**

# MILLING YOUR OWN FLOUR

- Stone mills versus impact mills vs hand-crank mills
- Where to source wheat berries
- How to store wheat berries
- Things to consider when using fresh milled flour

# RESOURCES

- Sue Becker – food scientist with over 30 years experience milling her own flour. Owner of *Bread Beckers*. Look up her “*Bread of Life*” video on YouTube.
- *The Perfect Loaf* – The book and website. Maurizio Leo has all but perfected the use of sourdough.
- Thefreshloaf.com – bulletin board forum with tons of information. Good place to ask questions and troubleshoot.
- Any book by Peter Reinhart, especially for artisan breads. He has been the go-to expert in this area for over 20 years.
- Me 😊 [www.reveillebakery.com](http://www.reveillebakery.com) or email [info@reveillebakery.com](mailto:info@reveillebakery.com)

# RESOURCES

- Pleasant Hills Grain – [www.pleasanthillsgrain.com](http://www.pleasanthillsgrain.com) good source for mills and other items
- Bread ratio calculator – [www.brdcllc.com](http://www.brdcllc.com) – I use this to figure out all my recipes and bakes.
- Grains in Small Places – great for recipes and inspiration.
- King Arthur Baking – [www.kingarthurbaking.com](http://www.kingarthurbaking.com) Places to learn, recipes, shop, and more.
- There are various groups on Facebook as well. They are good for the most part, but your mileage may vary.
- [www.ddtcalculator.com](http://www.ddtcalculator.com) – Desired Dough Temperature calculator



# BASIC LEAN BREAD RECIPES

## Sourdough Bread

- 425g flour (100%)
- 290g water (68%)
- 9g salt (2%)
- 85g starter (20%)

## Yeast Bread

- 425g flour (100%)
- 298g water (70%)
- 9g salt (2%)
- 9g yeast (2%)

## Sandwich Bread

(experimental)

- 425g flour (100%)
- 234g water (55%)
- 9g salt (2%)
- 9g yeast (2%)
- 21g EVOO (5%)
- 43g honey (10%)

Note- if using active dry yeast, mix this with 110F water and let sit 10-15 minutes to activate before using.