

# BREAD

FEBRUARY 2013



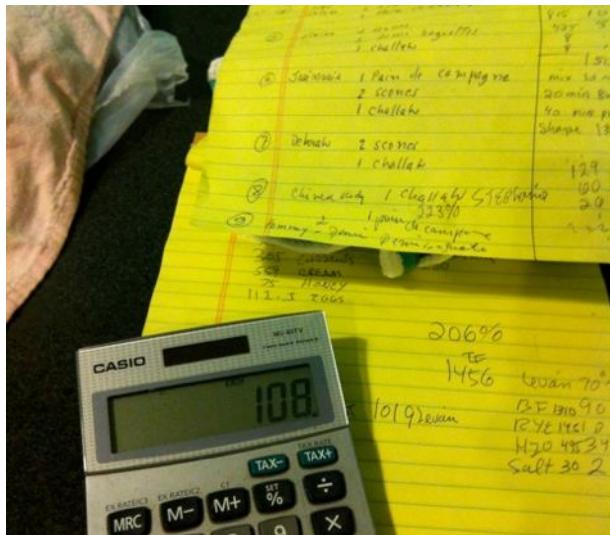
SELLING BREAD | GRAINS | SPROUTING

# BREAD

Published by Insanely Interested  
Copyright © 2013, Insanely Interested

All text, unless specified otherwise, is made available under the terms of the Creative Commons Attribution 3.0 license ([CC BY-3.0](#)). All photos are the property of their respective owners, used according to licenses specified by them or by written permission. Photo credits and licensing information are on page 66.

Email: [contact@insanelyinterested.com](mailto:contact@insanelyinterested.com)  
Web: <http://bread.insanelyinterested.com/>  
Facebook: <http://facebook.com/interested.bread/>



# CONTENTS

## 3 WELCOME!

A few words on craft.

## 6 MINIMUM EFFECTIVE DOSE

What is the minimum knowledge needed for baking a perfect loaf of bread?

## 16 MICRO BAKING IN NEW YORK CITY

Every Friday night, Jeremy Shapiro bakes for a small but loyal group of customers.

## 23 BREADGRAM

A bunch of friendly bakers hang out on Instagram. Find out where.

## 29 Q&A: BAKING AT HIGH ALTITUDE

Tips for baking a good loaf of bread at high altitude.

## 31 A BAKER FOR A DAY

A popup bakery is a clever way to practice

your skills at making a bit more bread than usual and selling it to neighbors.

## 37 KICKSTARTING A BAKERY

Jason Raducha used Kickstarter to collect funding for starting his bakery, directly from his future customers.

## 45 WHOLE GRAINS IN BREAD

Whole grains bring interesting texture to a bread but require some additional preparation.

## 51 SPROUTING FOR BREAD MAKING

Sprouting grains is an exciting way to bring new flavors to a loaf of bread.

## 57 LEIPÄ&POIKA

How renovating a house turned into an adventure in baking naturally leavened bread.

# WELCOME!

IN THE BUZZING shopping district of Ginza, Tokyo, in the basement of a business building, sits Sukiyabashi Jirō, a world-famous ten seat sushi restaurant.

The restaurant has no billboards or neon lights, just a traditional Japanese sliding door opening to the metro station. Unless you know what you are looking for, you might very well miss the place.

But a lot of people know what they are looking for.

SUKIYABASHI JIRŌ offers only one menu: 20 carefully selected and crafted pieces of sushi, shaped right there in front of the dining customers.

The dinner costs 30,000 Yen (about 350 U.S. Dollars), and to get a seat at the restaurant you will have to book at least a month in advance.

All of this for a good reason: according to many, Sukiyabashi Jirō, with its three Michelin stars, is the best sushi restaurant



in the world.

THE OWNER and head sushi chef is Jirō Ono, a man who has devoted his life to mastering sushi.

Having made sushi since he was forced to leave home at the age of nine, Ono—now 87—still has no plans of quitting. Ono says he will keep working as long as his customers are comfortable looking at the old man prepare their sushi.

JIRŌ ONO is the focus of the 2011 documentary film, *Jiro Dreams of Sushi*.

The movie follows Ono as he makes sushi and talks about his ideals, his thoughts on craft, his passion for always improving, and passing his expertise to his two sons. Sons who will have a very hard time living up to their father's legacy once he is gone.

It's a beautiful movie and watching it moved me deeply. But why am I talking about it in a magazine about bread?

IN A SCENE in the movie, the audience is presented with one of Ono's apprentices. This man, in his early thirties, has been apprenticing at Sukiyabashi Jirō for about ten years, preparing fish and slowly learning the trade.

Now, after all the years, he has finally

reached a state where he is allowed to start practicing making an omelette, the Atsuyaki-tamago.

After ten years, he is still a beginner.

The man practices his Atsuyaki-tamago for three months, making over two hundred omelets. And every time, Ono keeps finding something to improve.

Until one day, he approves.

The apprentice falls into tears for the joy of having made an omelette that the master approves of.

AS A HOME BAKER, it is easy to forget that this is what craft is about: Practicing. Getting better. Learning to be consistent in results. Learning from the best. Always improving.

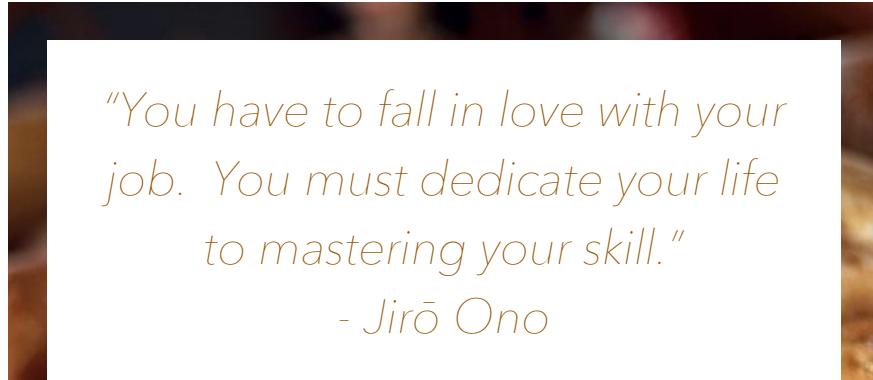
You can't expect to be a success overnight. Success takes practice, humility and long hours.

But the smile on the face of the old master when he proudly watches over you as you prepare a beautiful and delicious piece of hand crafted food is something you can't get any other way.



TIMOTHY FERRISS takes the opposite stand.

The San Francisco based writer-



entrepreneur has built himself a career around learning new skills and becoming world class at different things, fast.

To do this, Ferriss defines world class differently than Jirō Ono ever would. Instead of going for the top 1%, Ferriss settles for the top 5%.

And this, he says, changes everything.

Ferris says that by carefully selecting the most important learning units (the 20% that lead to 80% of the results) and practicing them in a well defined order, "[i]t is possible to become world-class, enter the top 5% of performers in the world, in almost any subject within 6-12 months, or even 6-12 weeks."

CRAFT IS dreaming about sushi—or bread—and always working on new ways to reach better and more beautiful results. It isn't something to be rushed.

The joy comes from the process of mixing the dough again and again, not "mastering" bread and moving on.

But when you are just beginning, getting to good results fast and without unnecessary obstacles and confusion does have its merits.

## ABOUT THIS MAGAZINE

THIS MAGAZINE lives at the intersection

of these two ideas.

On the one hand, we look at craftspeople doing beautiful work so that we can learn from them and be inspired by their work.

On the other hand, we try to skip what isn't necessary so that we can focus on understanding the concepts that really matter.

## IN THIS ISSUE

AS WE BEGIN the second year of BREAD, in this issue, I will present my current best attempt at summarizing the key concepts of good bread on a couple of pages, as a cheat sheet or reminder of the steps that lead to a good loaf of bread.

But we will not stop there. There is so much more to learn and explore.

WE WILL LOOK at using whole grains in the dough: soaking them, sprouting them, and even malting them. We will dig into a reader question about baking at high altitudes.

But most importantly, this issue is about very small bakeries that sell bread on a small scale.

THROUGH THE IDEAS from Jeremy Shapiro, who runs a bakery in his New

York City home, we look at running a tiny bakery in a city apartment.

Jason Darucha shares his story from having started a bakery with the help of a successful Kickstarter fundraising campaign.

Then, equipped with ideas and experiences from these two bakers, we turn to the idea of running a popup bakery and trying your luck at selling bread just for fun. If you have ever been wondering about what to do with all that bread that comes out of your oven, this issue will leave you with a bunch of ideas to consider.

Happy baking, and thank you for reading!

—Jarkko Laine

*P.S. Even though this magazine is a paid publication, feel free to share your copy with anyone you feel will enjoy reading it (you paid for it so it's yours is how I see it).*

*And if you want to get in touch, don't hesitate to email me at [contact@insanelyinterested.com](mailto:contact@insanelyinterested.com).*



# MINIMUM EFFECTIVE DOSE

TO BE AT THE top of the world in making bread is to bake bread that tastes good and looks beautiful, and to do it consistently.

The last step is what separates the best from the rest of us.

As Richard Bertinet told me when I interviewed him a year ago: "The main thing for any baker is to be able to make bread consistently the same every single day. If you make bread, you need to go for consistency."

"If your bread is never the same, then you've got a serious problem. For me, my quest any time I bake is to get consistency in my bread. So I never get bored. Even with just one recipe I bake every day. And that's the aim for any baker: to be consistent."

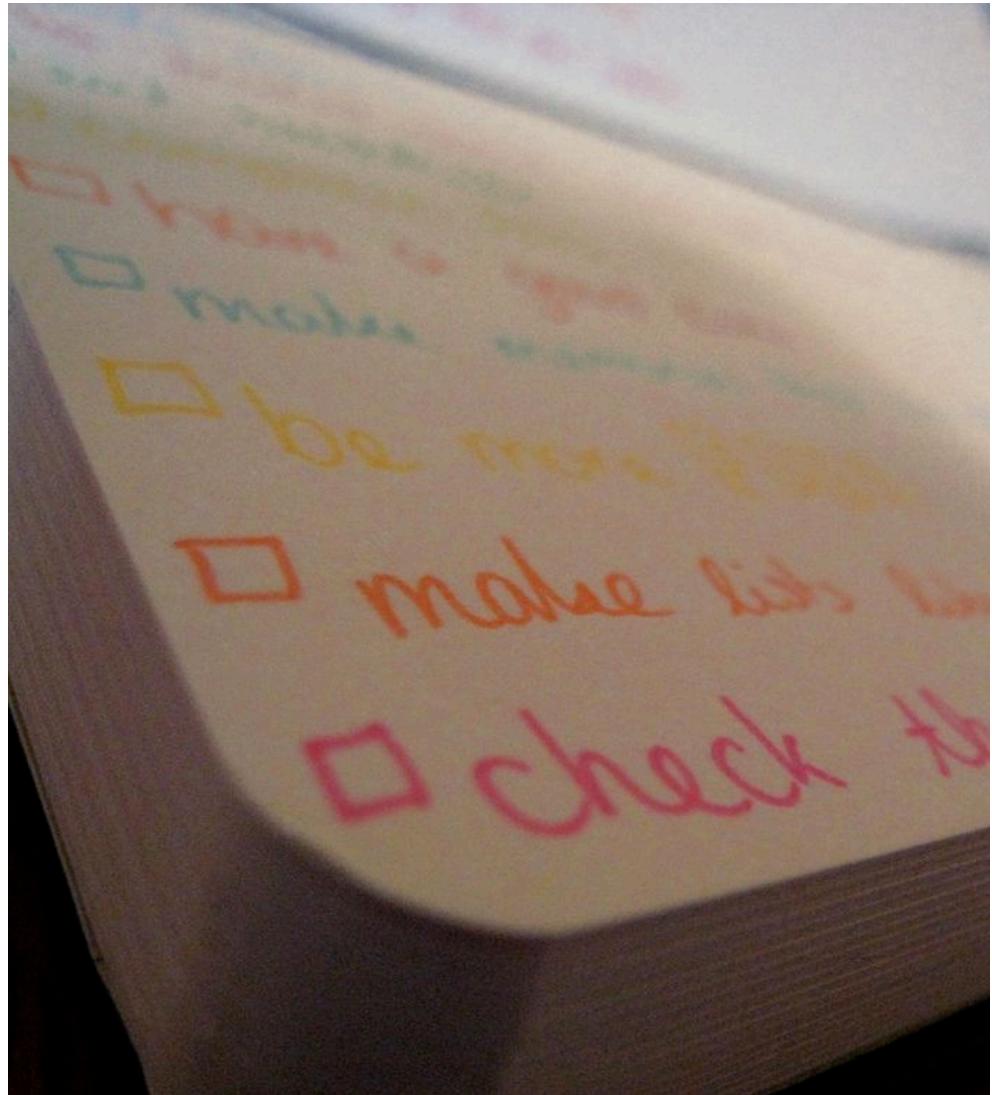
CONSISTENCY can only be learned through deliberate practice. Trying things out and asking why they work and why they don't.

Malcolm Gladwell famously said it takes 10,000 hours to master a skill. Jirō Ono, the sushi chef I presented in the introduction takes the idea even further and seems to think that even a lifetime is not enough.

BUT YOU HAVE TO start somewhere. And let's face it: most of us are not planning to be among the top 1% of bakers in the world (some might, and if that's you, I applaud your decision).

We want to bake good bread that bring joy to ourselves and our families.

Consistently, sure. But before you can



get consistently great results, you need to get great result occasionally.

IN HIS BOOK, *The Four-Hour Chef* (more a book about learning than it is about cooking), Timothy Ferriss presents the idea of *Minimum Effective Dose*, which he summarizes as "The lowest volume, the lowest frequency, the fewest changes that get us our desired result".

He sees applications for the method in fields as varied as weight loss, marketing, cooking, and learning a new language. Using language learning as example, he shows how "100 well-selected words give you 50% of the practical use of 171,476 words."

This, and another idea from the book, "the one-pager", inspired me to write this article and see if I can figure out what is the least you need to know about bread making to get to great results.

THE ONE-PAGER is simply a one page summary of the principles that lead to good results.

Ferriss writes: "I use two different types of one-pagers: The first is the Prescriptive One-Pager, which lists principles that help you generate real-world examples. In short: 'Here are the rules.' The second is the Practice One-Pager, which lists real-

world examples to practice that indirectly teach the principles."

We will focus on the first type of one pager for now.

IN THIS ARTICLE, we are going to look for the minimum you need to know and practice to make a loaf of bread you can proudly present to your family and neighbors. The starting point from where you can start working towards consistency and exploring new ways to bake different kinds of breads.

As I want to bring some detail into each step, the article is a bit longer than one page. The one page summary is built when you take the key concepts and collect them on one page, leaving out the details.

For even more detail on most of the topics covered in this article, take a look at the [back issues](#) of Bread published in 2012.

Let's get started.

## 1. DON'T SETTLE FOR BAD INGREDIENTS

EVERYONE I HAVE interviewed in the past year of running the magazine seems to agree on this: always use the best ingredients you can find. Don't settle.

*"In this article we are going to look for the minimum you need to know and practice to make a loaf of bread you can proudly present to your family and neighbors"*



Focus on the four basic ingredients—most importantly flour—and try different suppliers until you find one you like.

With flour, go for stone ground if you can find it. I don't believe in using the strongest flour available, but as a rule of thumb, choose bread flour over all-purpose flour and stronger over weaker.

Organic flour can be good for the environment, and maybe even for your health, but I haven't noticed any effect on the quality of the bread you make.

#### USE NATURAL, unrefined sea salt.

For example, Sel de Guérande from the French coast of Brittany is a beautiful gray salt that has a distinct taste of the sea.

If you can't find the specific brand, go for salt labelled Fleur de Sel or Flor de Sal (in Portuguese)—or as a last resort—any additive free variety of sea salt.

The taste from "regular" table salt just isn't the same.

APPLY THIS SAME approach to any ingredient you use in your bread—yeast, eggs, milk, butter, nuts. Only the best is good enough.

Break the rule when you have to, but keep it in mind and use the best you can find and afford.

## 2. USE A PRE-FERMENT

THE SIMPLEST OF bread recipes starts by mixing the ingredients all at once. But that leads to boring bread, so I would hardly call it "minimum effective dose."

For something that we can call effective, we need to go a bit further. A sourdough starter is a great choice, but as much as I love my sourdough, I don't believe it is the only way to make good bread.

Starting with a pre-ferment (or alternatively, slowing down your fermentation by putting the straight dough in the fridge right after kneading it) is enough, for now.

A PRE-FERMENT is simply a piece of dough that has been fermented on its own before including it in the final dough.

It can be a piece of dough saved from your previous bread dough or a starter created specifically for this purpose, such as a poolish.

To create a poolish, take an equal amount of flour and water—for example 200 grams of each—and a pinch of yeast. Mix the ingredients and cover with plastic wrap. Then place the batter on your kitchen sink for a few hours or in the fridge overnight. Use when it is full of bubbles.

## 3. THE RECIPE

THIS FORMULA IS all you need to remember and you can make great bread without ever looking at a recipe again.

The formula is presented in bakers' percentage, which means that every ingredient is counted as a percentage relative to the total flour in the dough (when using 1000 grams of flour, 70% water means 700 grams of water).

It's not your regular math but makes remembering and scaling formulas very easy.

100% FLOUR

70% WATER

2% FRESH YEAST, (OR

20% SOURDOUGH STARTER)

2% SALT

## 4. AUTOLYSE

AUTOLYSE IS ONE OF the simplest yet most effective ways to improve your bread making.

Here's how you do it: At least 20 minutes before you want to mix your dough (you can do it much earlier too), mix the flour with the water, then leave at

room temperature. This gives the flour a chance to hydrate and the gluten time to form before the fermentation begins.

The first time you try the autolyse, you will immediately notice the difference. The dough feels almost as if it had already been kneaded—even though you have done nothing but waited.

## 5. USE YOUR HANDS

THERE IS NO one right way to work the dough, but here is a method that does a great job when working with wet doughs (such as the one presented in step 3).

Most of the time, wet is what we are after: the more water you can incorporate in your dough, the bigger holes you can achieve (Ciabatta, for example is one of the wettest doughs in the world and also has some of the most impressive holes...).

I learned the technique from Richard Bertinet, but it has been around for centuries and was commonly used by French bakers before the rise of mixers.

1. WITHOUT FLOURING the surface, flip the dough on your table. Don't oil the table either. Sticking is good. In fact, if your dough doesn't stick to the table, this technique will not work.

If that happens, simply add more



water, a few drops at the time, until you have a dough that sticks.

2. GRAB the end of the dough closer to you and stretch it towards yourself.

3. FLIP the stretched dough over itself.

4. GRAB the middle of the dough and lift it in the air.

5. IN THE AIR, flip the dough upside-down and slap it back to the table.

This series of movements can be gentle, or if the dough doesn't want to stick—or you feel aggressive—you can use a little more force.

6. REPEAT from step 1.

WITH SOME PRACTICE, this series of movements will become natural to you. Almost like dance. Each stretch and fold brings strength and structure to the gluten network, in a much more natural and effortless way than any other kneading technique I have tried.

Knead for about ten minutes, then add the salt and finish working the dough.

Place the dough in a bowl for its first rest, known as the bulk fermentation.

A RELATED technique is stretching the dough and folding it over itself as it is going through its first rise. After 30 minutes of rest, either in the bowl or on your work surface, stretch the dough and fold it over itself to bring more strength to it before returning it to its bowl for further fermentation.

For doughs made with yeast where fermentation proceeds rather quickly, one or two stretch and fold sequences is the most you can get. When dealing with sourdough, you can go as far as to skipping the traditional kneading entirely by doing more stretches and folds instead.

## 6. USE THE POKE TEST

JUDGING THE READINESS of the dough is a skill you can learn only through practice, but the poke test is a good trick.

When you see that the dough has risen and you start to suspect that it may be ready for shaping (with yeast, this can be about an hour after the dough is mixed but the time depends on many factors, most importantly temperature), poke it with your finger (try to be firm but gentle) and see what happens.

If the dough bounces back, it is not ready. Let it rest some more.

If, on the other hand, the dent remains—assuming that the dough was well kneaded before leaving it to rest—it is ready and you can move on to the next step.

## 7. SHAPE INTO A BOULE

BREAD COMES IN many shapes and sizes, which is part of the beauty of the craft. But for a minimum effective dose, it's good to start with just one method that is easy to learn and master.

The round loaf shape that the French call the *boule* is a good starting point.

As a bonus, when you learn to shape a boule, you will also know how to shape perfect rolls!

LOOK AT THE series of photos on the next page as you follow these steps.

1. FLOUR your table lightly, then place your piece of dough in the middle.

2. STARTING FROM one of the corners of the dough, stretch the corner lightly and then tightly press it in the middle of the dough.

3. MOVING TO one direction, for example clockwise, grab the next corner and

"Bread comes in many shapes and sizes, which is part of the beauty of the craft. But for a minimum effective dose, it's good to start with just one method that is easy to learn and master."



*"All of this is naturally just the beginning, but the results from these lessons alone make your bread better than most of what you can buy in supermarkets and stores."*

repeat the action from step 2.

Continue this way until the dough looks like a ball and has built some tension on the top. If you flip the dough and leave it on the table for a few minutes, it should keep most of its form.

4. FLIP THE dough and stretch it lightly by rotating it between your hands while gently pulling the dough from the top towards the bottom. This will add some more tension and help the dough keep its shape throughout bench rest and baking.

5. PLACE the finished boule in a proving basket or on a floured cloth to rest before baking it.

Using a basket is a great idea, and you can start very simply with just a regular round basket and a floured cloth. Later, if you feel like investing some money, banneton and brotform baskets are a great choice.

## 8. BAKE COVERED

I HAVE DEDICATED an entire issue of Bread to baking bread (see issue 4, "Heat") so I won't go deep into the topic here.

My best suggestion is that you bake your loaf in a cast iron pan, covered with a

cast iron pot or an oven safe clay pot to emulate the environment inside a brick oven.

You can achieve good results with just a baking stone as well, but it's far harder to do consistently. That's why this last step was the first I thought of when I started writing this article.

Bake the bread at 230°C (446°F) for 25 minutes, then remove the cover and bake for another 15 to 20 minutes depending on the type of crust you like best.

COOL THE BREAD on a wire rack for a while before eating. As the bread cools, it still keeps baking and setting to its final form.



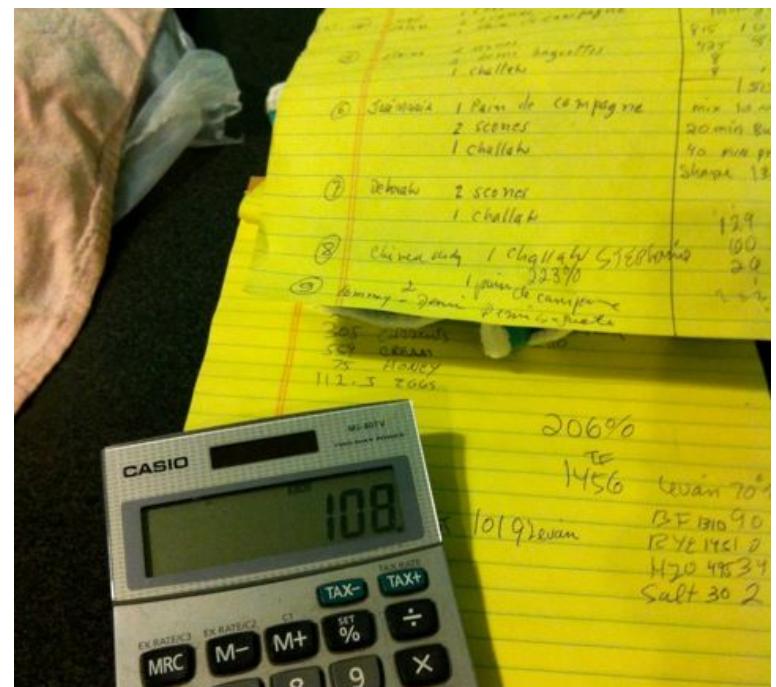
ALL OF THIS is naturally just the beginning, but the results from these lessons alone make your bread better than most of what you can buy in supermarkets and stores. And definitely better than anything you could do based on the recipes found in food magazines and cookbooks.

This magazine is all about getting deeper into these topics (and others), so keep reading as we practice our way deeper into bread making.





# MICRO BAKING IN NEW YORK CITY



JEREMY SHAPIRO IS A CHEF. As head chef at a private gentlemen's club in New York—so private he says he can't share the name—he creates food that can, according to his own words, "transform the greediest politician into a raving saint."

But after a busy day at work, he doesn't sit down and forget all about food. He jumps on his bicycle and rides it through the busy New York streets (he has the scratches and bruises to show) to his Sunnyside apartment in Queens, where he moves right into baking bread.

"I bake bread quite a lot. In between shifts, late at night. It's a constant learning process, my down relaxation time—what I call Bread meets Zen." Shapiro told me.

[On his blog](#), he writes: "Food and cooking are my passions. Bread and baking are my loves."

SHAPIRO certainly is one of the most productive bakers I have met so far. He is also an active user of a photo sharing application called Instagram (see page 23), and posts photos of his bread and food, and the process of making them every day.

As long as I have been following Shapiro on Instagram, I have been amazed by the amount of bread that goes

through his oven.

His small galley kitchen, which he says is "bigger than some", is full of different doughs. Pieces of paper are filled with formulas, and calculations in bakers' percentages.

Even when it comes to levains, he has more than one going on at a time. Seeing a liquid levain at 125%, a desem levain, a rye levain, and a biga share the space on his window sill is not uncommon.

When I once asked him about his productivity, his answer was simply, "Miracles!"

JEREMY SHAPIRO has been a productive baker ever since he took up baking, but in September 2012, he went to the next level and started a very small bakery he runs from his apartment window.

On his blog, he posted: "My love of baking doesn't rest on nights and weekends. In fact, a week working in a professional kitchen hasn't stopped my enjoyment of exploring bread and loaves. And so somehow I woke up one morning recently and realized that somehow I have started a part-time bakery. In my apartment!!!!"

Shapiro was already baking a lot and giving bread away to his friends and neighbors. When he told them about the





idea of selling bread, the group was supportive. Now he bakes bread for them every Friday night.

"My Friday night bake goes into morning, and then the rest of my baking is for testing for other projects." Shapiro says.

THE LIST of about ten customers, built completely through word of mouth, is growing, and Shapiro has dreams for the future beyond his current tiny bakery.

"My goal would be maybe a small bakery, boutique but for everyone, or perhaps a pizza oven and wine bar. I haven't solidified all my dreams and made them come true yet." Shapiro says.

He sees micro baking as a good step between baking for your own pleasure and opening a full-blown bakery.

"Micro baking is a great idea, especially in the way world economics have deteriorated in the past few years: I think smaller is better, and that goes for bread too. That said, making money to survive make that a difficulty for many people in all fields." Shapiro says.



MICK HARTLEY is a warm and entrepreneurial man from South Wales,

with a varied history in different jobs (he says he has never been able to stay interested in just one job for more than four years). After some bad luck in starting a bakery the traditional way, he decided to open his bakery in his home.

From December 2007 to February 2012, Hartley ran his micro bakery, *Bethesdabakers*, in his home, before retiring to write and teach bread making and micro baking. His first book was a sourdough tutorial, and in 2012, he published *Microbakin'*, a book that tells the story of how he got started with his bakery and how he ran its day-to-day operations.

As Hartley was one of the inspirations behind Shapiro's decision to start his own micro bakery, I bought myself a copy of Hartley's book and dug deeper.

HARTLEY, JUST AS Shapiro, is a strong believer in the idea of micro baking.

"My personal belief is that people have most chance of achieving satisfaction in life through tapping into that little bit of creativity we all seem to have in us."

Hartley writes, and adds that micro baking is one good way to achieve this.

While micro baking is a lot of work, Hartley says it is doable and can be a very rewarding way to make a living on your

own terms.

"With naturally leavened bread, the other advantage of working from home is the lack of traveling. The hours may be long but you only have to roll out of bed and you're at work. Roll the other way and you're back in bed." Hartley writes.

### SPACE NOT REQUIRED

THE LIMITATIONS of a home kitchen are what keep most of us from even thinking of starting a bakery in our homes. There just doesn't seem to be enough space.

Where do you place the doughs to rise? How can you fit them in your oven?

FOR SHAPIRO AND HARTLEY, these questions are simply challenges to be solved. Neither of the two micro bakers have the perfect space for running a bakery. Yet they haven't let the limitations keep them from baking.

Hartley goes as far as to say: "If you were choosing a house in which to run a bakery, you'd walk right past this one."

And when I asked Shapiro about how much space he has for bread making, his answer was "Space, what space?"

He then continued to explain: "I find space on counters, in my fridges, windowsill. It's a chaotic minefield, but it

works OK for the amount of baking I do."

SPACE apparently isn't a necessary requirement. Organization is.

"I used to be the 'lazy baker', I didn't use much accuracy or organization, I always wanted to try the next new loaf." Shapiro says, and continues:

"Slowly, I realized what I'd learned at school was a reason for organizing bread. We maintain the life of this living thing—bread—we take it through each step, and it's a life process. It may sound overly personal or spiritual, but once the bread bug has bitten you, you understand. So, yes, organize, take notes, weigh, measure. Bread is a science too, no magic."

Hartley echoes the sentiment: "In my experience, your organising skills and administrative systems, your ability to communicate with and provide variety for your customers, not to mention your resilience, will be more crucial to your success than your ability to bake."

### MAKING IT WORK

"OVER THE YEARS, I have tried all sorts of methods to fit my haphazard schedule and posted many funny stories of my trials on my blog." Shapiro says.

Lately, he has been more organized:

*"Your organising skills and administrative systems, your ability to communicate with and provide variety for your customers, not to mention your resilience, will be more crucial to your success than your ability to bake."*

"I have been doing longer bulk fermentations, about 15-18 hours or more, and now in winter just plonk my doughs in the chill of my kitchen window. Less mixing, longer fermentation is really maintenance friendly and using other grains like Kamut, spelt, or rye make for interesting breads."

"For mixing, I primarily use a KitchenAid, but sometimes hand mix for smaller batches. I use a standard home oven and a small Breville convection counter top, primarily for small sweet bread: muffins, scones, cookies. If I can, I use a Creuset pot for baking individual loaves, but that is mostly for just one bread per bake, time consuming!" Shapiro describes his setup.

Hartley also started with a regular home oven, in which he managed to bake four loaves in an hour. Only when the demand increased, he was forced to buy another oven (and come up with a place to put it) to meet the demand.

ON HIS [blog](#), Shapiro shares his experiments and stories, but also those from other bakers around the world.

"I have learned from most of them, not only from practical advice, but sharing the experience of bread and knowing that we are truly bonded by one thing, the bread. One of the first forums I joined was Dan

Lepard's. He and I met a couple of times in the past four years, most recently at The Loaf in San Sebastian."

"He didn't waste time, he took me to bake, that was where I learned the most important lessons..at the shaping, the scoring, the baking; and the sounds of bakers chatting at the table, talking about life, bread, how much salt was in the dough. Bread's a bond between bakers." Shapiro says.

And the journey continues.

"I have to bake more, and then maybe one day I will have that certain special favorite, but for now, every bread is my favorite. As it has made me a better baker and reveals a secret in each crumb and crust." Shapiro says when I ask him about his favorite bread.



ON HIS FIRST DAY, Hartley sold six loaves, grossing £7.20. But very soon he was baking a lot more than he had baked ever before.

"Two months later on 07 February I sold the equivalent of 84 small loaves to 15 customers." Hartley writes.

So, some planning and organizing is in place—your bakery might grow faster than you expect.



# TRY IT YOURSELF

— 1 —

LET YOUR FRIENDS and neighbors know that you are trying to make money selling your bread.

Hartley writes: "You already have a group of friends who have had the occasional loaf from you over the years. When they know you want to begin small scale production they will be insisting you start charging for bread—it will be you who has to overcome the embarrassment of taking the money."

— 3 —

DESIGN A SIMPLE selection of bread but spice it up with a weekly special that lets you explore new kinds of breads and fulfill your customers' special requests.

Doughs that can be baked into many kinds of breads by for example adding herbs or olives at the end of the mixing are good as they make it easier to organize your baking schedule.

— 2 —

PLAN A BAKING SCHEDULE that you know you can manage.

Shapiro bakes for his customers on Fridays. Hartley started with one bake day but soon added another, selling bread to his customers on Thursdays and Fridays.

If you want to keep things very small, why not start by only committing to baking once a month at first?

— 4 —

CHECK YOUR LOCAL regulations.

Bread is usually considered a rather risk-free food by health inspectors but make sure to check the regulations in your country and home town before starting.

This way, you will have a more enjoyable experience as a micro baker and will not have to worry about any potential issues with the law.



— 5 —

#### MAKE TECHNOLOGY work for you.

When starting a micro bakery, especially if you do it as a side business, it is important to keep things as simple as you can so you can focus on the essential: baking and selling bread.

Use a mailing list to send email notifications to your customers when it's time to send in the week's orders.

Showcase your products and collect orders through a web site, for example using the free WordPress software.

Following Hartley's example, you can then use a spreadsheet to automatically transform the orders into recipes listing how much dough you need in order to fulfill the week's orders.

IF SETTING UP web sites is something you would rather not touch, maybe you can find a bread loving programmer in your neighborhood and organize a barter?

— 6 —

JUST START. You will learn a lot, and even if in the end you decide baking bread for money is not for you, you will have baked a lot of bread and forwarded your craft.

Consistency in bread making is something you don't get to practice that much in home baking where you usually bake just one or two loaves at a time.

IN THE END, as Mick Hartley writes, "you have to be hard-headed to turn your dreams into reality. Fantasies are elusive and have to be pinned down. Most people are constrained by commitments and finances—you have to decide what is possible in your own circumstances."



# BREADGRAM

WHEN IT COMES to things such as slower living, being present, or baking bread, technology can be a double-edged sword. It can be a distraction that keeps you from being fully present, but it can also be something that helps you get more out of the every day moments.

Instagram is a popular photo sharing application for iPhone and Android smart phones that anyone can use to share quick shots from their daily lives.

IN THE PAST FEW months, I have noticed that a lot of bakers have started using Instagram to share photos of their breads and the process of making them. This, I believe, is a case of technology helping us connect with each other and to get inspired to work on our own craft.

By enabling us to share our breads and encourage each other to try out new things in bread making, Instagram is bringing us more, not less alive.

HERE IS HOW YOU can get started and join the fun.



**1. USING YOUR IPHONE OR ANDROID** device, visit the application market place (App Store or Google Play, respectively).

Install Instagram. It's free.

**2. CREATE AN ACCOUNT** and post your first photo.

**3. WHEN POSTING PHOTOS**, describe them with words related to bread to make it easy for other bread fanatics to find you.

To make your photos even more discoverable, use "hashtags." Despite the name, a hashtag is nothing more than a keyword prefixed with a # sign.

For example, #sourdough and #bread are both hashtags.

**4. SEARCH FOR USERS** to follow.

You can do this by searching with the user name (in the "explore" menu) or by topic.

Searching by topics looks for the

hashtags in photos. Some good key words to use when searching for users who post bread photos are "sourdough", "bread", "realbread", and "levain".

**5. ENJOY.** Look at the photos, comment on them, ask and answer questions.

It's a friendly place.



ON THE FOLLOWING PAGES, you will meet three Instagram users from around the world: *Jeremy Bollman* from North Carolina, USA, *Jonas Rieback* from Sweden, and *Nurhasanah Johari* from Singapore. Each of them Instagram users and bakers I follow myself.

Read on to hear who they are and why they like to use Instagram.

Jeremy Shapiro, from the previous article, uses the name [@jerm\\_11104](#) on Instagram.

# JEREMY BOLLMAN (@jayjbe)



## Who are you?

THAT'S A BIG QUESTION! Some days I wonder too...

Professionally, I am the head baker at Stick Boy Bread Company in Boone, NC.

Otherwise, I am semi-stay-at-home-dad with three daughters and a rock star wife (who is a pastry chef at the same bakery).

## Why are you on Instagram?

I HAVE TRIED most major social networks. Instagram is by far the best!

It's easy to use, the content is rich and the community amazing! Many bakers I've met are passionate and supportive.

The encouragement and sharing of ideas inspires me to try new things and to bake better bread. I also enjoy connecting with so many bakers around the world.

## What do you post on Instagram?

MOSTLY BREAD. Every now and then I share something I am cooking or a shot of my girls, but for me it's all about the bread!

## Who do you follow?

I FOLLOW bakers and bread nerds.

I am always on the lookout for bakers who are active, inspiring and engaging.

ONE OF MY FAVORITE Instagram bakers is [@surbagarn](#). He bakes amazing breads! I really dig his photography and am constantly impressed with what he can pull off in a home oven, without a dutch oven.

He's also great about encouraging bakers and stimulating conversation.

I ALSO RECOMMEND [@rosaprimula](#), [@sinisakrnjaic](#), [@indiesicle](#), [@bontanica](#), [@danielbarney](#), [@ladachi59](#), [@thebreadgeek](#), [@bakerhands](#), [@ghettogerda](#), [@clintlidster](#), [@ajiswilson](#), and of course [@jarkkolaine](#)!

These bakers are constantly inspiring me, making me hungry with beautiful photos and thoughtful insight.



TO FOLLOW JEREMY on Instagram, look him up using his Instagram name, [@jayjbe](#), and touch the "Follow" button.

# JONAS RIEBACK (@surbagarn)



## Who are you?

SURBAGARN on Instagram. Real name Jonas Rieback. Living in Gothenburg, Sweden.

Used to work in a car factory.

Started to bake a lot of bread at home when I lost my job because of big cutdowns.

I mostly bake sourdough bread with local, organic flour. I also have a bit of bakery education and experience, and am currently looking for artisan bakery work.

## Why are you on Instagram?

BECAUSE IT'S FUN.

Instagram is a good way to share pictures of what I do and see what others bake.

It is also a nice way to get in contact with other bread nerds and bakers.

## What do you post on Instagram?

PICTURES OF SOURDOUGH bread and other things I bake. Sometimes beer, coffee and food related pictures, but mostly bread.

## Who do you follow?

I FOLLOW BOTH home bakers and professional bakers — and also some other people.

It's hard to pick a few, but I really like @danielbarney, @mrpmoore, @bakerhands, @surdegslotta, @ghettogerda, @bbirdco, @lucmartin1, and @bontanica.



TO FOLLOW JONAS on Instagram, look him up using his Instagram name, [@surbagarn](#), and touch the "Follow" button.

# NURHASANAH JOHARI (@njohari)



## Who are you?

I'M A MALAY-MUSLIM lady in her mid 30s, happily married to [@chalith](#) (Instagram username). I reside in Singapore, working full-time in the semiconductor industry.

I have always loved to cook and bake but started to bake bread seriously 3 month ago. I'm very much into baking bread with natural yeast at the moment (sourdough and yeast water—it's through the yeast water hash tag that I found you).

I dream of opening my own little bakery one day.

## Why are you on Instagram?

I STARTED USING Instagram long ago, in its early days, just for fun. I use Instagram to post photos of things I like and what I am into at the moment.

On Instagram, I can use photo sharing to connect with people with similar interests.

Plus it's easy to use.

## What do you post on Instagram?

IN THE BEGINNING, it was cycling, day to day life and traveling.

Now, I post mainly bread photos since it's my latest obsession.

## Who do you follow?

I FOLLOW random people, mainly people with similar interests. I prefer every day shots that are captured beautifully over scenic shots.

For home bakers on Instagram, I recommend: [@davidorlovich](#), [@elpanaderocasero](#), [@surbagarn](#), and [@rosaprimula](#).

They are really good and very dedicated to their bread baking; they inspire me to keep on improving.



TO FOLLOW Nurhasanah on Instagram, look him up using her Instagram name, [@njohari](#), and touch the "Follow" button.

# GET PREVIOUS ISSUES



If you missed the first year of Bread, [click here to download the full 2012 package](#) and complete your collection.

# Q&A: BAKING AT HIGH ALTITUDE

**Q:** "I LIVE AT 10,200 FEET (3.1 km) altitude. Baking bread at this altitude, I have problems with my loaves being round and the holes being small.

"It would be nice to have some information on high altitude bread making and how to get those big holes in the bread."

—Sandi Halverstadt.

**A:** AT HIGH ALTITUDE, atmospheric pressure is lower than at sea level. This has an effect on everything from humans to the mountain ecology and—as it turns out, baking bread.

Susan Purdy has written a book on cooking at high altitudes, called *Pie in the Sky*. She writes:

"As the elevation rises, three major factors may cause a recipe to need adjustment in ingredients, cooking times, and/or temperatures. The higher in elevation you go:

- "1. The lower the boiling point of water
- "2. The faster liquids (and moisture in general) evaporate
- "3. The more quickly leavening gases expand."

WHEN IT COMES TO BREAD, this means most importantly that carbon dioxide, as it is released by yeasts in the dough, expands quicker than it does at sea level.

This causes the bread to rise too quickly: the gluten net is not ready when the dough has already doubled in size and seems ready for the next step, be it shaping or going into the oven.

As the still weak dough is then baked, the carbon dioxide escapes quickly, leaving the dough to collapse and turn into a dense loaf.

AS MY HOME is only at about 100 feet above sea level, I don't have experience in baking at high altitudes. But from what I learned as I researched this topic, the solution to baking good bread at high altitude is surprisingly close to the methods that in general make better bread: slowing down the yeast activity so that the gluten forming proteins get more time to react and build stronger bonds.

Try making one of the following changes to your recipe at a time, taking notes on what works best.

## 1. DECREASE YEAST

USE ABOUT one fourth less yeast than you would normally use.

Sourdough baking by definition is slower, and—not surprisingly—many sourdough bakers report that they have had no problems making good bread at high altitude.

## 2. ADD AN AUTOLYSE STEP

MIX THE FLOUR and liquid at least 30 minutes before you add the leaven.

This way, the gluten forming proteins get hydrated and start building strength already before fermentation begins. See page 10 for more information.

## 3. RISE THE DOUGH TWICE

HALF-WAY INTO THE BULK RISE, gently press down the dough to release the gases. Then allow the dough to rise again.

Even better, while at it, stretch the dough and fold it over itself a couple of times.

This will strengthen the dough both through the act of stretching and folding and by giving it more time to build stronger gluten bonds. A stronger dough is better at retaining the carbon dioxide as the bread rises and bakes.

## 4. RETARD FERMENTATION

ANOTHER WAY TO slow down the fermentation is to place the dough in the refrigerator either for the bulk rise or the bench rest after shaping the breads—or both.

Beside slowing down the yeast activity, this method adds deeper flavor to the bread.

## 5. USE STRONGER FLOUR

IF DESPITE the autolyse step and a slower fermentation you still aren't getting the results you are looking for, try switching to a flour with higher protein contents.

If you are using all-purpose flour, try making your dough with bread flour instead.

## 6. DON'T SKIP SALT

IN ADDITION to bringing flavor to the bread, salt inhibits yeast activity, slowing down the fermentation process.

## 7. USE MORE WATER

AIR AT HIGH ALTITUDE is often drier than at sea level. To compensate for this difference, you may need to add more water to your dough.

Experiment with small increments until you find the right amount that works for you.

EXPERIMENTING with these tips, you should be able to find what works and bake beautiful loaves of bread also at high altitude.



IF YOU HAVE a bread related question you would like to have answered in the magazine, send it to me through email at [contact@insanelyinterested.com](mailto:contact@insanelyinterested.com).

I might not know the answer myself, but that's alright. I will look for someone who knows and share what I learn in the magazine.



People queuing for the vegan bakings of Kallion Herkut on the second Restaurant Day on August 21st, 2011 in Helsinki, Finland.

(Photo by Tuomas Sarparanta / Restaurant Day)

FOR AS LONG AS I HAVE been baking bread, I remember thinking about opening a bakery. At times more seriously, most of the time not so much. But even though most of us never act on this dream, it's hard to not think about it, knowing how happy real bread can make those who have a chance to taste it.

The microbakery (see page 16) is a good way to go about trying the viability of your bakery idea. But even a small bakery with a regular baking routine can feel overwhelming.

If that's how you feel, running a bakery for just one day could be the perfect way to test the waters.

THERE IS NOTHING NEW about pop-up restaurants and bakeries. Ever since the dawn of civilization, people have gathered at market places to sell and buy food and other products made in their homes.

In the past couple of years though, a new appreciation for good food and making things together has been growing in popularity. People young and old frustrated with all the bureaucracy and paperwork related to selling their products are getting out in the streets to make their dreams come true—if only for one day.



The goal may be to change the world, or simply to meet people, get together and have fun in community and sharing. Whatever the reason, the idea is gaining ground. People are excited about making and sharing good food.

ONE OF THE PIONEERS is [Restaurant Day](#), a global food carnival organized four times a year that invites people to host their own restaurant, café, or bar for one day. The event was first organized in Finland in 2011 and is quickly spreading across the world: the eighth Restaurant Day, celebrated on February 17th, 2013, inspired 630 restaurants in 31 countries.

I chatted with Kirsti Tuominen, one of the six volunteers in the Restaurant Day core team, about hosting a successful and enjoyable one-day pop-up bakery. Although there have been no bread-only bakeries in the history of Restaurant Day, she said that whenever bread is a part of the menu, people are excited about it:

"In one of my restaurants, *Herring Bar*, we served home made archipelago bread [a speciality of Finland's southwestern archipelago region, made with rye flour, rye malt, buttermilk, molasses and bran] as a part of the dish. People liked it a lot and even asked for some bread to take home

with them. I got the impression that people enjoy, and are looking for good bread."

## HOW TO RUN YOUR OWN POP-UP BAKERY

WHILE THE ACTUAL baking for a pop-up bakery is not that different from baking for a microbakery, the nature of the bakery is quite different.

A pop-up bakery is a one time event in which you get to try out your ideas and create a memorable experience for your visitors.

"The most popular places are those that have something fun or clever in their concept or create something new and unexpected. For example, a great idea last time was a sushi auction where people were sitting at a long table with numbered papers in their hands, bidding on pieces of sushi as the brokers brought them in one by one. The price always started at zero and went up as people bid in fifty cent increments. The place, a home in Helsinki, was packed." Tuominen says.

ALTHOUGH SOME PEOPLE always announce their restaurants only on the day of the event, it's a good idea to start

*"The most popular places are those that have something fun or clever in their concept or create something new and unexpected."*

preparing well in advance. At least two weeks before the planned date for the pop-up bakery, says Tuominen.

This will give you time to properly plan the event, and build some buzz in advance, but most importantly to collect a good team of people to run the bakery with you.

"Persuade a few friends to help you out. Doing it all on your own is a crazy amount of work, even if you keep it small. And it's a lot more fun when you do it with people." Tuominen recommends.

If you supply the bread, a friend could help by turning it into sandwiches or by selling drinks to go with the bread. Or if you only sell full loaves of bread in the way a regular bakery would, having more hands helping with the sales is always welcome.

WITH THE RIGHT team in place, start planning for the bakery.

Think of a unique theme or idea for your bakery (although, I suspect at the moment just serving really good sourdough bread with lots of butter is special enough). Then pick a good location for it: many restaurants on Restaurant Day are run in private homes, parks, and other public spaces. The choice

depends on the idea of your bakery and the availability of good choices in your area.

People who come to a pop-up restaurant are generally well aware that it's not the same as going to a normal restaurant. They are looking for experiences.

"If you implement your restaurant well, thinking about the details, and the location, people notice. It appeals to them. Try to create a comfortable atmosphere so that people will enjoy their stay and the word will spread. Make it an experience." Tuominen says.

AS YOU PLAN YOUR pop-up bakery, you may or may not decide to make it a part of Restaurant Day. Participating in the event will help you get some additional visibility through the restaurant listings on their popular web site.

On the carnival's web site, you add your restaurant to the map, describing your idea and offering briefly. People interested in eating out on Restaurant Day can then use the map—or one of the organization's mobile applications—to search for restaurants near them, and find your tiny bakery.

Although the Restaurant Day team



Yumi Matsumoto serves Gyozas and corn soup from a window in the Punavuori district.

(Photo by Roy Bäckström / Restaurant Day)

*"The next Restaurant Day takes place on Saturday, May 18th, 2013. Maybe we'll see your bakery as a part of the event? Or mine..."*

cannot actively market every restaurant participating, they do general marketing to raise awareness on the event, which together with the location based search will help in getting your pop-up bakery noticed.

However, even if you join the event, you shouldn't rely on just the marketing help you get from the team.

"We always recommend that people create an event for their restaurant on Facebook, invite their friends, and then ask them to invite more people." Tuominen says.

Once you have your Facebook event created, keep posting information about the bakery—the menu, the idea, the location—as the big day approaches. This will keep people interested and help the word spread to a wider group of people.

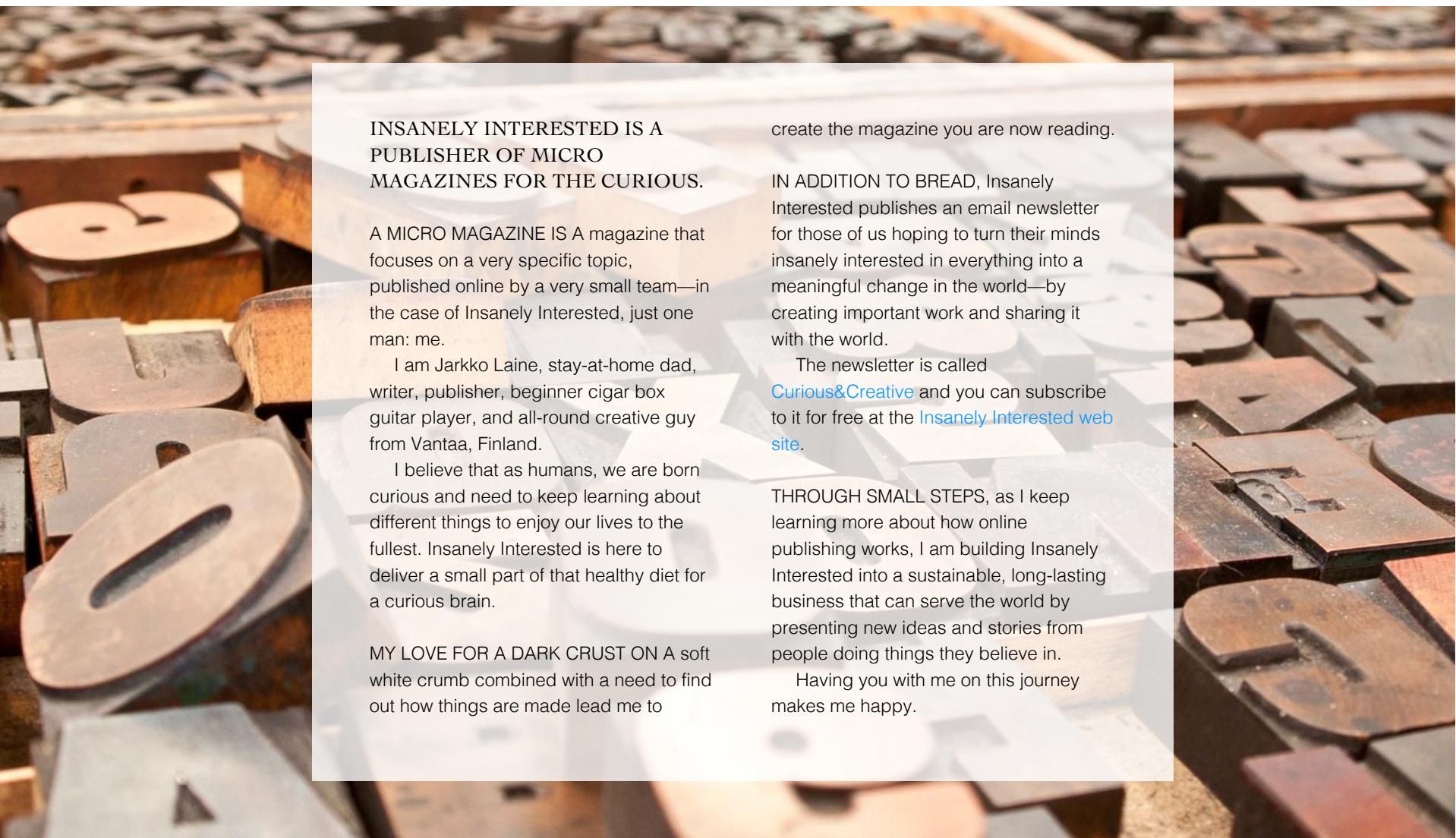
The more you plan on selling the more important this type of advance marketing becomes.

On the [Restaurant Day web site](#), you can specify how many people you will be able to accommodate. This, and the number of people who have accepted your invitation to join the event on Facebook, help you in estimating how much bread to bake. If you have a list of contacts interested in

the bakery, you can even ask them for orders in advance so you don't bake too much or run out of bread in the middle of the pop-up bakery day.

If you collect such a list during the pop-up bakery day, you can then use it to contact the customers again, in case you enjoy the experience and want to do it again. Many do.

THE NEXT Restaurant Day takes place on Saturday, May 18th, 2013. Maybe we'll see your bakery as a part of the event? Or mine...



## INSANELY INTERESTED IS A PUBLISHER OF MICRO MAGAZINES FOR THE CURIOUS.

A MICRO MAGAZINE IS A magazine that focuses on a very specific topic, published online by a very small team—in the case of Insanely Interested, just one man: me.

I am Jarkko Laine, stay-at-home dad, writer, publisher, beginner cigar box guitar player, and all-round creative guy from Vantaa, Finland.

I believe that as humans, we are born curious and need to keep learning about different things to enjoy our lives to the fullest. Insanely Interested is here to deliver a small part of that healthy diet for a curious brain.

MY LOVE FOR A DARK CRUST ON A soft white crumb combined with a need to find out how things are made lead me to

create the magazine you are now reading.

IN ADDITION TO BREAD, Insanely Interested publishes an email newsletter for those of us hoping to turn their minds insanely interested in everything into a meaningful change in the world—by creating important work and sharing it with the world.

The newsletter is called [Curious&Creative](#) and you can subscribe to it for free at the [Insanely Interested web site](#).

THROUGH SMALL STEPS, as I keep learning more about how online publishing works, I am building Insanely Interested into a sustainable, long-lasting business that can serve the world by presenting new ideas and stories from people doing things they believe in.

Having you with me on this journey makes me happy.



# KICKSTARTING A BAKERY

AFTER WIKIPEDIA PROVED that a big group of people each putting in small contributions can lead to impressive results, crowdfunding was the natural next step.

Applying Wikipedia's approach to funding, the proponents of crowdfunding asked if many people contributing small sums of money could support start-ups and projects. In 2009, Kickstarter, a web site for collecting funding for creative projects was founded, and in the following years crowdfunding turned from idea into reality.

2012 WAS A BIG YEAR for crowdfunding. On Kickstarter alone, according to the site's own reports, "2,241,475 people pledged a total of \$319,786,629 and successfully funded 18,109 projects."

Among those projects were huge hits such as *Double Fine Adventure*—an adventure game that collected \$3,336,371

in funding from 87,142 individual supporters.

A SMALLER—but no less impressive—success was Jason Raducha, who reached his goal of collecting \$20,000 to move his bakery out of his home kitchen and start baking for multiple farmers' markets in the city of Phoenix, Arizona.

128 backers saw the potential in the project and backed it with their wallets. And so Jason Raducha was able to get his bakery, [Noble Bread](#), started and the heart of it, a mobile wood-fired oven, built.

I asked Raducha a few questions about bread, his bakery, and his experiences with collecting money for a bakery project through Kickstarter.



**Jarkko:** How did you get started with bread?

**Jason:** I HAVE BEEN BAKING since I was young. Bread making has been something that has always interested me.

I remember as a boy, my Nana would make pepperoni bread and pan loaf breads. She would take these long pieces of rolled dough and put cheese and pepperoni in them, roll them up like a savory cinnamon roll. The left over dough she would put it in loaf pans and make bread.

I recall she would use half water and half milk, and the flavor was like nothing you could get at the supermarket, which I was used to.

When my Nana would visit, I would always talk her in to making bread for me—and then with me. She taught me about temperature of the liquids, how yeast worked, different flours and to have patience.

THROUGHOUT MY LIFE, I have always had an appreciation for pizza. Actually a deep love.

My cousin and I would spend weekends trying to perfect crusts, always tinkering with this and that.

In my 20s, I bought a house and

ordered a small wood fired pizza oven from Italy. That really got me going on a different way to bake breads and make pizza.

AS TIME WENT ON, I explored different books and ate different breads.

I was always striving for a flavor profile in my breads that was different. Like the breads I was eating from bakeries. I was introduced to a guy who was a baker pizza maker. He gave me a jar of starter in a clausen jar. That was my first real introduction to naturally leavened breads. It was my bread awakening. I was finally getting the flavor profile I was looking for.

My next big step was flour. I began experimenting with different brands and types of flours. At this point, I am lucky enough to use all organic flour that is custom milled for me.

I currently bake in a high mass radiant heat wood fired oven.

**Jarkko:** Was selling to your neighbors a natural result from your interest in bread? How did you get from being the neighborhood "bread man" to the point where you decided it was time to start a bakery for real?

**Jason:** SELLING MY BREAD to my

"I can't draw to save my life, or paint, but when my hands touch the dough, that I feel is my medium."

neighbors was a natural result from my interest in bread.

I was trying different recipes and I never make just one loaf, so I needed an outlet to get rid of the bread—eating all of it was not the answer.

GOING FROM THE "bread man" to deciding that I wanted to start a bakery is because when I bake it allows my creative juices to flow.

I can't draw to save my life, or paint, but when my hands touch the dough, that I feel is my medium.

Every one who has ever tasted my bread or seen it always says "this is good, or different, you should sell it." Also, I



*"Throughout my life I have always had an appreciation for pizza. Actually a deep love."*

have a good amount of friends who are in the restaurant world and they have asked me if I could supply bread to their restaurants.

**Jarkko:** The next decision was to collect money through Kickstarter. Can you tell about this? What inspired you to try Kickstarter?

**Jason:** I DECIDED TO go with Kickstarter for several reasons.

One, I wanted to make sure that if I did start this project that I would have the community behind me. I wanted to share with people what my dream was and get their reactions, to make sure I wasn't off base.

Second, I wanted to keep control of the product I created. I have seen a lot of people get investors into projects and have their dream get crushed because the investor wants to cut corners, make a product more profitable, at the sake of lowering the quality or influencing it in the wrong way.

That scares me. My brand and my product are an extension of me.

TO BE HONEST, I thought that I could never collect enough pledges on Kickstarter to make it happen, but as the

days went by, the messages I received were very positive.

It was amazing when I reached my goal!

**Jarkko:** As much as two thirds of all Kickstarter projects fail to reach their goals. But you made it. What do you think made the difference in your case?

**Jason:** I THINK WHAT made the difference is that my idea and plan was not too far off in left field.

It was simple: Feed people quality.

Everyone eats bread, so why not back or get behind something that will deliver you a better product than you have now.

My goal is to really take the wonder out of bread: four ingredients, simple, done in a traditional way.

**Jarkko:** Did you find other benefits from using Kickstarter beside getting the money?

**Jason:** I THINK the greatest benefit from using Kickstarter is meeting the people behind the pledges.

It is amazing to hear their stories on why they pledged, or how they were inspired by the project.

It is also amazing that I live in the 7th or



*"On Kickstarter, I can not stress how important it is to create a video. Make it simple. Short. Keep your kickstarters informed as much as possible. Answer questions (you will get a ton of them)."*

8th largest city in the U.S. and the press that I received from trying to start a small bakery. It was so heart warming to see how much people got behind the concept of Noble Bread.

**Jarkko:** *Were there surprises along the way? With Kickstarter or starting the bakery.*

**Jason:** A MILLION SURPRISES. Just like with bread, you have to have patience when starting a business.

Most of the rewards for my kickstarters were late—some still need to be fulfilled.

The oven took longer than expected to build.

It's tough because so many things are out of your hands, and you have to rely on so many people to get things done. There are way more moving parts to make it happen than you'd think. Most have no idea.

**Jarkko:** *After this experience, what do you think. how well does Kickstarter work as a platform for starting bakery projects?*

**Jason:** I HAVE WATCHED a lot of projects on Kickstarter... I believe it is hit or miss for bakery projects.

For the most part, people appear to

get behind bread baking over other bakery items. I think it works great, you can use it as a "test" bed to get potential customers thoughts and ideas about products.

**Jarkko:** *If I was to create a Kickstarter campaign for starting a bakery, can you share some tips and recommendations on how to make it a success?*

**Jason:** ON KICKSTARTER, I can not stress how important it is to create a video.

Make it simple. Short.

Keep your kickstarters informed as much as possible.

Answer questions (you will get a ton of them).

AND WHAT I THINK is the number one recommendation: pay it forward.

Read [Mission Street Food](#), figure out ways to give back!

**Jarkko:** *How have these months after the fundraising campaign been? You are making your first farmers' market appearances this week [January 2013]—how did they go, and what's next?*

**Jason:** THESE MONTHS AFTER the fundraising have been busy. Like I said

before, a lot of moving parts.

I had to create a brand, file paper work, build a logo, get shirts made, create a tag line, look at and pick colors, get papers printed, find suppliers, get tools and equipment, and continue to interact with new customers and my kickstarters.

And I did all of this while holding a full time job.

SO FAR SO GOOD with the farmers' markets.

I almost sold out the first day, and I am planning on selling out this weekend. The response was so good the first day, that we actually scheduled to attend another market, so a total of 3 this week.

It is a blast to get out and talk to people and have them sample the product. It is great to see peoples eyes open up and say "Wow!" after they taste the bread.

WHAT'S NEXT? I am going to continue the famers' markets, and do some catering on the side with some wood fired pizzas. The oven that was built for me is 10,000 lbs and it is "portable." It is on a trailer, so I can pull it with my SUV.



I want to get on a baking schedule that will allow me to supply a few restaurants and finally find a small store front where I can sell baked goods and eventually sandwiches and other items, perhaps pizza.

ON A PERSONAL NOTE, a few weeks before the bakery started we lost our precious Nana.

She saw my [Kickstarter campaign](#) and if you watch the video, she is the last image you see. She knew it was going to move ahead, but my work is dedicated to her.

She shared and gave me the passion for bread and food in general. I have created a naturally leavened pan loaf dedicated to her—I am going to call it the Nana Loaf.

THANK YOU for this opportunity.

Aim high and always follow your dreams. Someone told me a long time ago: "Do what you love."

I am finally doing it.

# KICKSTARTING YOUR PROJECT

ON KICKSTARTER, anyone can start a project, create a fundraising page and start collecting funding.

As you start your project, you define a fundraising goal and set a time frame for the project. This is in order to make fundraising safe both for the person starting the project and those backing it: if this goal is not reached within the time reserved for the fundraising, no money changes hands.

Take this into account if creating your own project, and set a goal that is realistic but high enough so that you can implement your project with the money raised.

ANOTHER IMPORTANT feature on Kickstarter are the incentives or rewards. For each project, you can create different rewards for different amounts pledged.

Well selected rewards will encourage people to fund the project, as well as to pledge higher sums than they otherwise would.

Many people also treat Kickstarter as a

way to preorder your products—which could be for example a year's supply of bread or a bread making course for a group of friends.

See this page for Kickstarter's instructions on [making an awesome project](#).

KICKSTARTER IS CURRENTLY only available for projects in the US and the UK. When backing projects, there are no such restrictions.

[Indiegogo](#) is the most popular alternative that works globally. There are also a number of crowdfunding platforms targeted to different countries, such as [Pozible](#) in Australia or [Mesenaatti](#) in Finland—to mention just two.

For bakery projects targeting a local demographic, a local site such as these probably works better, so do some research to see if there is one in your country (or use Kickstarter if you are in the US).



WHEN BAKING BREAD, simple is often best, and four ingredients—flour, water, salt, and leaven—more than enough.

But from time to time, adventure calls, opening a world of endless possibilities. Almost anything can be added into a bread dough, from left over mashed potato to sprouted grains, if you just prepare the additional ingredient properly and adjust the bread recipe accordingly.

Adding whole, unground grains to your bread gives the bread a different texture, adding something for your teeth to chew on. And, if you are not already using stoneground whole grain flour in your bread, adding grains to your dough also boosts the amount of fibre, vitamins and minerals in your bread.

PRACTICE IS THE FUN PART, so let's get started.

As usual, there is no one right way to use grains, so in this article, I will share some pointers that will help you figure out your favorite way of using grains in bread making, through experiments and practice.

## CHOOSING THE GRAINS

WHEAT, SPELT, RYE, AND BARLEY  
(basically any grain you would use in the



# USING WHOLE GRAINS IN BREAD



form of flour) are all good options. But there is no need to limit yourself to these obvious choices.

Millet, oat, quinoa, kamut, and buckwheat are good options too, and if you feel like going with rice or even corn, I say go for it.

Grains can be found at health food stores and farmers' markets. Sometimes, you might even find some from the supermarket. I buy my grains from *Eat&Joy Maataliori*, a farmers' market in the middle of Helsinki—except when I have some of my own balcony-grown wheat at hand. When you can, try to find organic grains so that you can be sure that they are clean and safe.

In *Tartine Bread*, Chad Robertson writes: "Any grain—as long as it is cooked or soaked in hot water and then cooled—can be added to the basic country bread dough." He speaks of his own basic recipe but the same is true for any basic bread recipe. After all, at their core, all breads are variations of the same recipe.

**SOAK OR COOK THE GRAINS FOR SOFTNESS**  
BITING INTO A HARD grain when you are enjoying a slice of fresh bread is no fun. Even worse is if you share your bread with

someone and she breaks her teeth because of it.

This is why you need to soak the grain before putting it into your dough.

Some recipes tell you to soak in tepid water, some in boiling water poured on the grain. Others go as far as to tell you to simmer the grains in boiling water for 45 minutes. And most of the time, the recipes give no explanation for this choice of softening method.

STUDYING FOR THIS ARTICLE, I came to the conclusion that the right way to soak the grain depends simply on the size and hardness of the grain you use.

If the grains are soft or small, soaking them in warm water overnight will do. For example, last fall, when I used grain from my own tiny wheat plot on my balcony, soaking the berries in cold water did the trick.

For bigger and harder grains such as rye, simmering in boiling water is worthwhile. When simmering, add more water as needed to keep the grains immersed in water.

Save the soaking water and use it as a part of the liquid in the final dough.

ON THE INTERNET, there is a lot of talk about soaking flour and grains to reduce

the amount of phytic acid. In [Dictionnaire universel du pain](#), Monica Franciosi describes phytic acid (translation mine):

"A biomolecule present in cereals and vegetables responsible, according to some scientists, for demineralization. The presence of this acid in the bread makes the assimilation of the minerals present in the bread impossible. Fermentation with natural leaven generates acidity; however, it activates enzymes called phytase that degrade phytic acid to inositol and mineral phosphorus, and release trapped minerals."

Soaking the grain, especially with some added acid, apparently has the same effect, so if you are adding grains to a yeasted dough that you plan to bake quickly, this could be another reason for soaking the grains.

When fermenting the dough slowly however, as in sourdough bread baking, the phytic acid gets broken anyway during the fermentation, rendering soaking unnecessary for improving the availability of minerals.

That's why, I would say, soak as long as you need to make the grain soft enough to bite into without having to worry about breaking any teeth. And that's it.

FOR MORE INTERESTING FLAVORS, soak

*"Some recipes tell you to soak in tepid water, some in boiling water poured on the grain. Others go as far as to tell you to simmer the grains in boiling water for 45 minutes. And most of the time, the recipes give no explanation for this choice of softening method."*



the grains in other liquids beside water, for example ale or wine as done in some of Dan Lepard's recipes in [The Handmade Loaf](#). He writes:

*"The crisp fruitiness of an Alsace wine provides gentle marinade for the cooked rye grains. Sometimes these grains are called 'berries', and the description makes sense when you taste them cooked this way. The rye grains swell and soften during the initial cooking in water, and then overnight the wine plumps up each grain and adds a slightly sharp sweetness, and you can happily eat the grains by the handful."*

For rye grains, Lepard recommends a combination of first simmering the grains for 45 minutes and then soaking in ale or wine overnight.

In the photos on the right, you will see how rye grains look before and after the simmering.

THE RIGHT AMOUNT OF grains, whether only soaked or cooked and soaked, in the dough depends on how you like your bread.

Using bakers' percentages, you can start for example with 40% of the total flour weight and then increase to 60 or higher. As you add more grains, the bread becomes denser, but if you are feeling

really adventurous and like a dense, pumpernickel style bread, there are even recipes that use [no flour at all](#)—just soaked grains.

JUST LIKE WITH soaking, you will find conflicting instructions on what is the right time to add the grains into the dough.

Some add the grains together with other ingredients, some later. The right choice depends on the type of bread you are making: A dense wholegrain bread with a high percentage of unground grains can't be kneaded much. In this case, mix everything at one go.

On the other hand, if you are adding grains in lower percentages to a regular sourdough loaf, I will side with the "later" camp and say that it is better to add the grains only at the end of working the dough. This makes working the dough easier and helps in creating a strong loaf of bread.

Flatten the dough by stretching it gently, then add one handful of grains, gently pressing them in the dough. Then fold the dough over the grains and repeat one handful at the time until you have used all of your grains.

Shape the dough into a ball and put in a floured or oiled container for bulk fermentation.



*"Equipped with this information, we are now ready to write a recipe for a sourdough loaf with 40% whole grains."*

## THE RECIPE

EQUIPPED WITH THIS information, we are now ready to write a recipe for a sourdough loaf with 40% whole grains.

We thoroughly soak (or even cook) the grains before using them, so no changes to the hydration level (amount of water) in the dough is necessary. The already hydrated grains will not absorb much if any water from the dough.

HERE IS ONE possible recipe (in bakers' percentages), using spelt and rye grains.

The recipe is based on our basic recipe presented in previous issues (most importantly, [see issue 3](#) if in doubt), so I'm not going into too much detail but just highlighting the changes needed to include the grains. Use it as a starting point for your own exploration, switching to a mixture of grains you like, in different proportions according to taste.

If you don't feel like using a sourdough starter, just replace the starter with 2% of fresh yeast (or perhaps a poolish or biga).

You can either use bread flour or—for a more interesting flavor—a mix of different flours. For example, for the bread you see above, I used 60% bread flour, 30% wholegrain spelt flour and 10% wholegrain rye flour.

100% FLOUR

70% WATER

30% SOURDOUGH STARTER

2% SALT

40% COOKED GRAINS

RYE IS A RATHER hard grain, so simmer the grains on low heat for about 45 minutes until they feel soft. Taste them to test readiness, then drain and allow to cool before making the dough.

Cooked grains absorb some of their cooking water and therefore weigh more than uncooked grains. So, for example to get to 300 grams of cooked grains, you need only 200 grams of grains and about the same amount of water. When cooking the grains, keep the heat low and watch over the pan, adding more water as needed.

MAKE THE BREAD just as you would if not using grains, applying the principles from the *Minimum Effective Dose* article.

For a beautiful final touch, just before you can roll the shaped bread in oats, seeds, or grains before putting the loaf into the oven.



# SPROUTING GRAINS FOR BREAD

PACKED TIGHTLY INSIDE the grain, the beginning of new life is waiting. Put the grain—the seed—into the ground, give it some water and wait. In days, the first small green leaves pop up from the ground. If nurtured properly, in a few months, the small seed will multiply into ten or more new grains.

This is the miracle of life that we call agriculture—the one thing that makes it possible for us to enjoy bread as we know it.

But you don't even need to bury the seed into the ground for it to start the process. Give the grain enough moisture, and sprouting begins. An enzyme called amylase gets to work inside the grain, converting the starches into maltose, a simple sugar that the seedling can use to

power its growth. For us, this also means new flavors that we can use in cooking and bread making.

SPROUTED GRAINS can be used in bread in many different ways: you can mix the grains into the dough as we did with whole grains in the previous article, you can grind the sprouted grains into a paste using a blender and then mix the paste into your bread dough, or you can even make a loaf of bread with nothing but sprouted grains.

By drying the sprouted grain, you can turn it into malt. Dan Lepard writes: "If the sprouted grain is dried, gently roasted and ground, the resulting powder can be mixed with the flour to add colour and flavour to the final loaf, and will be fermented by the yeast."

According to some bakers, most notably Peter Reinhart, you can even bake bread using nothing but malted flour.

For big quantities of malt, it's probably better to buy your malt directly from home brewing stores, but try it at least once for yourself—tasting your own malted flour is a memorable experience.

## SPROUTING PROCESS

SPROUTING IS EASY and requires no special equipment. The following instructions—adapted from Dan Lepard's *The Handmade Loaf* and the French bread dictionary, *Dictionnaire universel du pain*—will give you the best results.

1. CLEAN THE GRAINS, then soak them in cold water for six hours at 15 to 19°C (59-66 °F).

2. POUR THE GRAINS into a sieve and leave to drain at room temperature for four hours. Stir occasionally to make sure the grains dry evenly.

3. IMMERSE THE GRAINS in water again and soak for eight more hours in cold water at 15-19 °C (59-66 °F).

According to the dictionary, you should repeat steps 2 and 3 for two to three days, but Lepard moves directly to the next step. In my experience, his approach works very well.

4. DRAIN THE GRAINS and place them to muslin or paper towel. Cover lightly with another paper towel and leave to sprout. "Keep them at 15-19°C for 4-5 days, making sure the grains stay moist with

"You can mix the grains into the dough, you can grind the sprouted grains into a paste using a blender, or you can even make a loaf of bread with nothing but sprouted grains."

water, but not covered." Lepard writes.

Rinse the grains once a day with cold water to keep them clean. If the grains start to dry out, repeat the rinsing more often.

5. IN TWO TO FOUR DAYS, sprouts should start to show. Watch the grains closely: when the sprout is about the length of the grain, it is ready to be used.

You can continue longer, but this is the point where you get the best flavor out of the grain.

IN MY EXPERIENCE, you can also get good results using a much less structured method.

Simply start by soaking the grains overnight and then keep them moist, rinsing with fresh water once every day until sprouts start to show.

Try to keep the temperature cool and cover the grains so that they get to stay in the dark as they sprout, but if you can't find a place with precisely 15-17 °C, don't let it keep you from trying home sprouting. I have got good results at a room temperature of about 23°C.

If you place the grains inside a big freezer bag, they will stay moist more easily—just make sure to rinse them with water daily and make sure that no molds

start to develop.

LILIANE COLPRON, a baker from Québec, in a recipe published in the *Dictionnaire universel du pain*, echoes my experience. Her instruction for sprouting grains for the bread is simply: "Let the grains sprout at about 23°C at least 24 hours before mixing the dough. Make sure that the sprout is visible."

For the sprouting, she uses the following mix of organic grains: sunflower seeds, red clover, millet, soft wheat, sesame, wheat germ, alfalfa, flaxseeds and oat kernels.

DIFFERENT GRAINS take a different time to start sprouting, and also benefit from a slightly different procedure. For example, while a 6-12 hour soak works well for wheat, rye, barley, and millet, oats and buckwheat should only be soaked for 20 minutes to an hour.

In a grain mix such as the one selected by Colpron, on the other hand, it's not that bad if some of the grains haven't sprouted when you move to making the dough—after all, grains that haven't sprouted also taste good in bread.

WITH YOUR SPROUTED grains ready, you need to choose what you want to do with



them. The sprouted grains will keep for a few days in the refrigerator, or you can freeze them for future use—but most likely, you just want to bake some bread.

The simplest way to do this is to just mix the sprouted grains in your bread dough as we did in the previous article. This will give your bread a nice texture and a sweet, slightly grassy flavor.

Another simple way is to use a blender to grind them into a "smoothie" that can be then mixed into your dough. As you keep mixing, gluten starts to develop. If you like, you can continue and make the sprouts [into a dough on their own](#) without any added flour (see next page for a photo of such a loaf).

## MALTING

MALTING IS THE process of sprouting and then roasting the grain. It is an important part of brewing but can also be used in bread making to increase the enzymatic activity in the dough.

According to Lepard's instructions, you should dry the sprouted grains "in a warm room for 12 hours, then place in an oven at its lowest setting (somewhere between 50-70°C) for 2-3 hours in order to lightly colour the grain". This step, known as kilning, stops the sprouting and dries the





*"You might wish to do this if your normal flour seems to be giving a consistently pale crust, suggesting that there are insufficient sugars available to caramelise at the baking stage."*

malt.

Roasting at higher temperatures, you can bring new flavors to the malt. But notice that the higher the temperature, the more enzymes are destroyed, leading to a non-diastatic malt that only works as a sweet flavoring and does not contribute to the diastatic activity where the alpha-amylase enzymes present in malt convert starch into maltose.

AFTER DRYING THE MALT, you can store the dry grains in an airtight container and grind some of it whenever you need a small boost of enzyme activity in your bread recipes.

In *Bread Matters*, Andrew Whitley writes: "Malt flour can be added to dough in order to improve the conversion of starch to sugars. You might wish to do this if your normal flour seems to be giving a consistently pale crust, suggesting that there are insufficient sugars available to caramelise at the baking stage. Malt flour can be particularly useful in long-process doughs (including sourdoughs), where the length of the fermentation allows the yeasts to use up all the sugars."

But don't add too much of your malt flour. At little as 0.1 percent of the total flour amount will do.

Whitley writes: "excessive diastatic

activity can make the dough gummy, leading to the partial or complete collapse of the structure."

FOR GRINDING THE malted grains, I used my coffee grinder (see previous page). Grinding is some work but no more than grinding beans for coffee.

It might give your malt a tiny hint of coffee, but hey, that's just another interesting flavor to your bread!





# LEIPÄ & POIKA

LEIPÄ & POIKA, Finnish for "Bread & Son", is a small bakery in Porvoo, Finland. Founded in 2012, the bakery sold its first loaves in June last year.

The bakery is run by Julle Salminen and Johanna Hasu in a small house across the yard at their sea side home in Porvoo.

With no previous experience in bread making but driven by a strong interest in good bread, the two—a film-maker approaching retirement age and a mother with small children, as they tell themselves—went all the way and implemented their crazy idea of baking and selling bread from their home in the countryside.

I INTERVIEWED the bread makers in late 2012. In this article, they share their story

and invite us to not settle for bad bread but bake good bread ourselves instead.

\* \*

**Jarkko:** You started Leipä & Poika this year (2012). How did you come up with the idea to start a bakery and especially a small bakery focusing on local products and sourdough bread making?

**Leipä & Poika:** WE BOUGHT A HOUSE in Porvoo, on the sea shore, six years ago. While repairing the house, we built a brick oven to the kitchen. The oven is used for heating the house but also for cooking. It was obvious that we had to get to bake some bread of our own in the oven as



well.

We bought some flour and organic rye from the nearby manor house and used a small table mill to grind the flour for our own rye bread. And of course our own bread tasted much better than bread bought from the super market!

Inspired by the experiment, we tried to make some wheat bread as well. We joked that now we are going to start baking and selling bread...

WE TOOK SOME OF OUR BREAD to relatives and friends, gave some for our neighbors to taste, and donated some

more to the primary school restaurant day. We also sold some at a Christmas market and kept joking about having our own bakery on the side.

The house renovation was nearing its end, freeing the small building on the yard that we had been using as a shed and warehouse for other uses. We used the building as a studio for filming—we filmed for example the beginning of a plant's growth in the middle of the darkest winter, for a commercial.

In his career, film maker Salminen has shot over 3,000 commercial films. He has filmed coffee, milk, cars, beers, after-

*"We also sold some at a Christmas market and kept joking about having our own bakery on the side."*

shave, pretty much anything you can think of.

Julle—this Salminen—has started many companies in his career, so why not continue the line with a bakery? Starting a bakery is not such a complex thing comparing to for example starting a movie laboratory.

DURING THE RENOVATION we had been reading some Swedish magazines for ideas and inspiration for the house. In those magazines, they occasionally published fabulous articles on sourdough bread—*surdegsbröd* in Swedish.

The articles made us very curious.

At the same time we started to haphazardly search for more information on bread making.

We googled for articles, dough mixers, small bakeries, YouTube videos, photos. When we travelled, we scanned the bread shop offerings with a new attitude.

Little by little, we were drawn towards opening a bakery.

ONE DAY, Julle was at a bakery in an event organized by a bakery machine importer. At the end of the event, he asked the CEO of the bakery if he could work at the bakery for a little while, with

no salary. Just to learn hands-on about working at a bakery.

The manager approved, and for two weeks, Julle got to experience first hand what it means to work in a middle sized bakery.

All the employees were very helpful and let him try every step of the process of bread making. Before this, Julle had only been to a bakery for filming. Now he got a totally different touch to the dough.

This lead to the point that we asked for an offer for bakery equipment suitable for our small bakery to get a clear picture of what kind of prices we were talking about.

Then we chewed over the plans for a while.

A BAKERY EXHIBITION ORGANIZED in Stockholm in the fall of 2011 pushed us forward. We talked to the passionate bread maker Sébastien Boudet and he inspired us and got us to believe that starting a small *surdegsbageri* wasn't a totally crazy idea after all.

More trips to exhibitions, calls for offers, and searching for information followed. We went through different options for ovens: electric, gas, or oil? What was possible to get on our property? The amount of electricity needed to



*"Our oven arrived at the end of March and after all the installation we started making test batches. In June, we sold our first breads. The crazy idea had come true."*

power the electric oven wasn't available in the entire village!

In the end, we picked a French steam tube oven. We ordered the equipment and started to renovate the house on our yard to meet the requirements from building and health officials.

In the spring of 2012, we went to the Europain conference in Paris to smell the air and enjoy the mood. Our oven arrived at the end of March and after all the installation we started making test batches.

In June, we sold our first breads. The crazy idea had come true.

**Jarkko:** *How does a normal day at the bakery look like at the moment?*

**Leipä & Poika:** I WOULD RATHER talk about a week rythm.

At the bakery, we use a cold fermentation process so we don't have to get up to make the dough in the middle of the night.

We both work at the bakery, each having our own days and and own jobs at the bakery. But we are flexible about it, very flexible, after all there are still children living in the home.

IN THE SUMMER, as we were making ourselves known, we baked bread almost every day. We made five or six dough in different shapes.

Now, we deliver bread to local stores on Wednesdays and Fridays. The summer residents from the archipelago have mostly returned home to the city.

This means we have a moment to take a deep breath, do some product development and improve our processes.

At the moment we do three or four different doughs. There are more shapes though: baguettes, buns, big and small loaves, and tin loaves.

THE FIRST PART of the week we work on the doughs, weigh them and fold them into boxes to proof in the cold for one to three days.

On Wednesday, we bake, pack and deliver bread to resellers and customers who have ordered bread directly from us. And make some more dough.

On Thursday, we make rye bread. On Friday we bake and deliver more bread to the city.

We also sell bread directly from the bakery, mostly on the bake days.

Markets and festivals, as well as direct orders from customers, add their own

touch to the every day work.

**Jarkko:** How have these first months been for the bakery?

**Leipä & Poika:** THE DEMAND in the summer time exceeded our expectations. We were looking for a good reception, but the reception turned out great!

A couple of articles in local newspapers and one national mention brought action to the yard.

IT HAS BEEN nice to meet consumers and notice that they come again and again for good bread!

It has also been fun to listen to customers who, as they enter the bakery, admire how good the bread at the store look! Social media has been an enjoyable way to catch up with our customers.

ONCE A CUSTOMER called to leave a reclamation.

We had claimed that the bread keeps well. The customer complained that this wasn't true.

All of the bread had already been eaten!

**Jarkko:** What would you consider the perfect bread?

**Julle:** WARM, FRESH BREAD with a thick, hearty crust. The crust is the tastiest part of a bread. A strong crust also helps the bread stay fresh longer.

It feels great to hear the children praise the bread spontaneously!

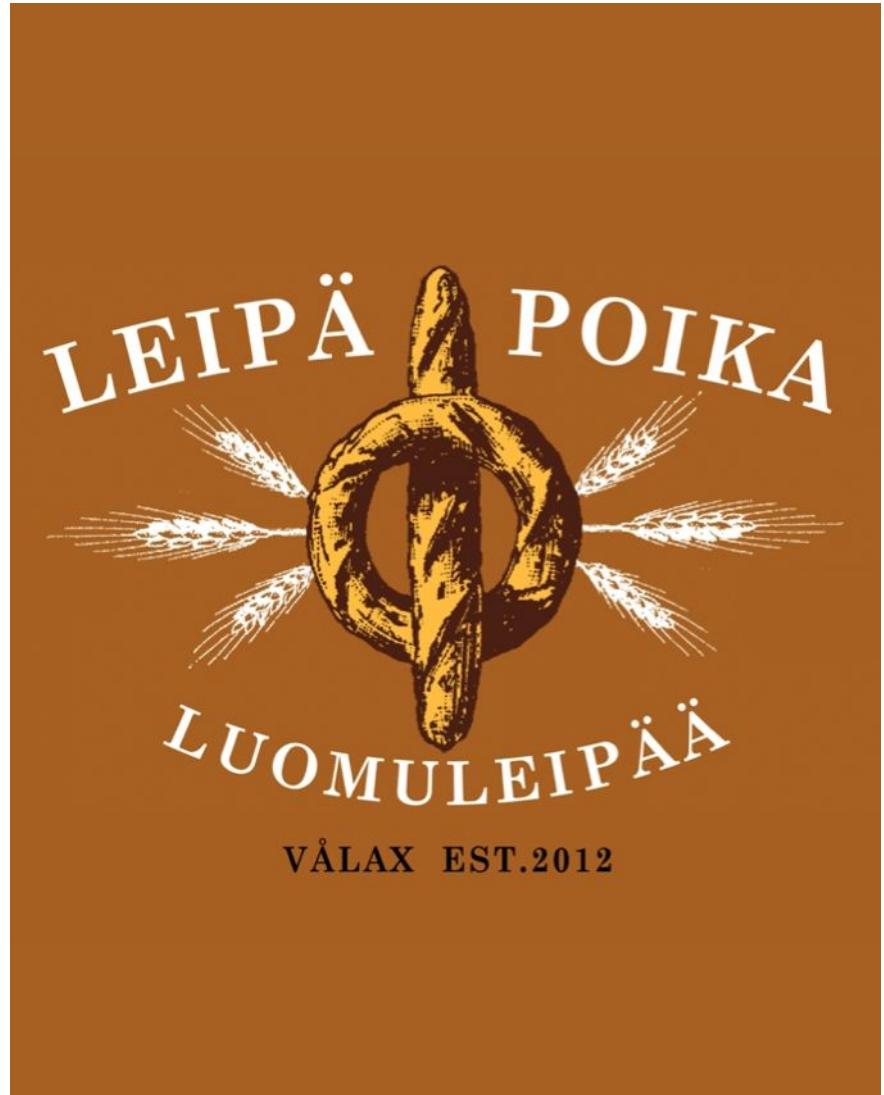
**Johanna:** THE BEST BREAD must also be beautiful. It is bread that is good on the day it was baked but that builds a deeper and wider taste on the days following the bake.

It also feels great when you hear that people come back for the bread that was "so good!"

**Jarkko:** Finally, is there something you would still like to say to our readers?

**Leipä & Poika:** IF YOU CAN'T FIND good bread in the store, try to make it yourself. It is not complicated.

All you need is water, salt, flour, and time!





YOU HAVE JUST finished reading the fifth issue of Bread, the first one in 2013. I hope you found entertainment, inspiration, and information on these pages.

I wanted to take this last page to thank everyone who has been involved in making this magazine come true—the people interviewed on the pages above as well as the photographers who have made their art available for projects such as this one. And you, the subscriber, who have given me the permission to explore the world of baking and share my findings with you.

THANK YOU, and happy baking! The journey continues in the next issue, in our kitchens, and [on Facebook](#) in between issues.

—Jarkko

## NEXT ISSUE

A close-up photograph of several stacks of flatbreads, likely pita or naan, arranged on a dark surface. The breads are golden-brown with visible charred spots. In the foreground, a single flatbread with a circular hole in the center lies next to a metal skewer.

While the bread we love and mostly make is round and high, most of the world knows a different kind of bread. Flatbreads come in many forms and shapes, soft and dry, big and small.

In the next issue of BREAD, we will dig in the world of flatbreads, by baking and exploring bakeries around the world.

The issue comes out on April 24th.

IF YOU ENJOYED THE MAGAZINE,  
[SHARE IT](#) WITH PEOPLE YOU LIKE!

# PHOTO CREDITS

Cover: [Thomas Angermann](#) (CC BY-SA 2.0)

Page 2: Jeremy Shapiro, Jonas Rieback (Used with permission)

Page 3: A scene from JIRO DREAMS OF SUSHI, a Magnolia Pictures release.

Photo courtesy of Magnolia Pictures.

Page 4: [Skånska Matupplevelser](#) (CC BY-ND 2.0)

Page 6: [Nina Matthews Photography](#) (CC BY 2.0)

Page 7: [mt23](#) (CC BY-SA 2.0)

Page 9: [ernie.else](#) (CC BY-ND 2.0)

Pages 11, 13: Jarkko Laine

Page 15: [Isobelh](#) (CC BY 2.0)

Pages 16-20: Jeremy Shapiro (Used with permission)

Page 21: [Ralf Daily](#) (CC BY 2.0)

Page 23: [Chloé Chevalier](#) (CC BY-ND 2.0)

Page 24: [Mirko Tobias Schaefer](#) (CC BY 2.0)

Page 25: Jeremy Bollman (Used with permission)

Page 25: Jonas Rieback (Used with permission)

Page 26: Nurhasanah Johari (Used with permission)

Page 29: [Alejandro Erickson](#) (CC BY 2.0)

Page 31: Tuomas Sarparanta, Restaurant Day (Press photo)

Page 32: [Fang Guo](#) (CC BY-ND 2.0)

Page 34: Roy Bäckström, Restaurant Day (Press photo)

Page 36: [Michele Ursino](#) (CC BY 2.0)

Pages 37-44: Jason Raducha (Used with permission)

Page 45: [Mattie Hagedorn](#) (CC BY-SA 2.0)

Pages 46-49: Jarkko Laine

Page 51: [Mattie Hagedorn](#) (CC BY-SA 2.0)

Pages 53, 54: Jarkko Laine

Page 55: [Mattie Hagedorn](#) (CC BY-SA 2.0)

Pages 57-63: Leipä&Poika (Press photos)

Page 64: [Umair Mohsin](#) (CC BY 2.0)