

Melissa: I am so excited for today's episode! We have a special guest with us today, and we're going to be talking about one of my favorite subjects, especially when it comes to self-sufficiency and health as a true pioneer girl, because I got to say, this is one of those things that I feel the most "Ma Ingalls," or the pioneers of old, is milling your own flour. But there is so much to milling your own flour that I don't think people really realize, so I'm really excited to dive into this today with Paul, who is from Mockmill. So welcome to The Pioneering Today Podcast, Paul.

Paul: Thanks, Melissa. It's really great to be here.

Melissa: I am super, super excited. So I'm going to give a little bit of backstory here. I've been grinding my own flour at home for ... my goodness, five or six years now, since I got my first mill to grind flour at home. Paul and I have a mutual friend, who is actually a grower of Einkorn, and you guys have heard Jade on the podcast before. So Jade contacted me and he said, "Hey, my wife has this new mill, she's madly in love with it. We would love for you to try it out and see what you think about it, because it's actually coming to the US market." And honestly, I'm like, "You know, I've already got a mill." And I'm one of those people that I'm trying really hard not to have 100 different gadgets in my kitchen, in my home, to just really par down to the necessities in the things I use all the time. I was hemming and hawing, like, "I don't really need another grain, though -- mine is working just fine." But he's like, "I think you're really going to be impressed with it." And I said, "Okay, go ahead and send it to me."

So this podcast episode is sponsored by Mockmill. I said, "Go ahead and send it to me, I'll give it a shot. I'll see what I think about it." I got it expecting, "Well, a flour mill is a flour mill, right? It grinds up your flour and it spits it out for you." But I was so impressed when I got the mill and I used it. I love that everything is all together, that it's just one thing. I don't have to hook a whole bunch of things together. And the ability to adjust the grind that baby has, I could not believe how fine I could get it. And there's so much play that I can just dial it in for the exact consistency that I want. And it's a lot quieter than the other mills that I have used. So I have to say, I was highly, highly impressed, and really excited that I went ahead and told Jay to send it, because it is now my new mill. My other mill, I'm going to give it away to somebody, because I am really impressed with the quality of the Mockmill. So I just have to tell you that, that I wasn't sure that I wanted another mill, but now that I have it, I'm like, "Oh my goodness!" It really is an amazing product, you guys did a great job.

Paul: Well, it's really great to hear that; quite frankly, we're bolstered every day by messages like this. People tell us it's a life-changing thing. A man from India called me today, he said, "You can't believe how fantastic this thing is."

Melissa: Yeah, I was really impressed. So, when you think grinding your own flour at home, it sounds cool, right? For me especially, coming at it from a modern-home setting and loving the old-fashioned things at home, and grinding your flour, but really, grinding your own flour at home has big implications for your health, and just a variety of things that you can do within your cooking at home. For those who are more new to the idea of grinding your flour at home, what is the benefit you see the most of grinding your flour at home? And using fresh-ground flour?

Paul: The thing about a kernel of grain, if you just take it in your hand and look at it, it's a little marvel of nature. It's a marvel of nature; there's a life inside there, there's a life in there that will stay viable for years, decades, maybe even centuries. That's how well nature has thought this thing out and packed it -- it's got that little life in there, and it's teeny, teeny, teeny tiny, as a percentage of the whole grain. It's got this great big food pack in there for it, so that when the conditions are created in which it often germinated, that life should be fulfilled, become a plant, there's initial food that plant needs to put its roots out and stuff like that, start finding stuff. That's the biggest part of it, but it's wrapped up in this intricate, totally mysterious packaging, that is what we call the bran, which is a multi-layered, interviewing of tens of thousands of discrete phytochemicals each which has a role in preserving that life over those years, decades, and even centuries. That's a marvel!

The interesting thing is that all those phytochemicals, as they work together in perfect harmony as described by nature, are good for us when we eat them, and so our whole civilization is based on our grinding those things up and eating them, and that's a fact. But the other fact is the moment you open up that package, that really intricate, marvelous package of nature, the goodness that it represents for us is headed downhill. And that's a fact you can't stop. The other thing is that if you disintegrate it, if you take parts out, select, keep this, put that over here, separate this, reduce this, add something here -- you disrupt the perfect natural harmony of that food.

Melissa: That was one of the things, when I first started my real diving into health's journey, looking at our food as every single package that you see on the store shelf, even if it's organic and whole-wheat and whole grinds, when you see that bag, and it says the ingredients listed -- and of course, when you're looking at things like cereal and stuff -- it all says "enriched." Right? You see "enriched with," and they have the list of vitamins that they're enriching things back with. And that's what I discovered, because when you buy flour from the store, no matter what it is, they've had to remove so much of it to make it shelf-stable. But they've removed the parts that are beneficial for us, the vitamins and everything, and so they have to enrich it back with vitamins so that we still have nutrition in there. But because it's not the original nutrition that's in there, it's been put back into it, then our bodies don't absorb that or use that as well, as what you get when it's all left in there, as God created it in its natural form. Well, we've had to add things back to it.

Paul: Exactly, it's analog to organic farming, where we all understand that we can make plants grow if we only fertilize with NPK, and forget the rest, and don't pay attention to what we plant and whether we rotate. But the fact is when we do that, we get soil that's devoid of anything but NPK. That's why, I hope, one of the big motivations there for homesteading, which I think is a fabulous movement, is there because people realize that they want to grow food in such a way that the soil can sustain that growing indefinitely. Well, this enrichment process is exactly the same thing; they're three of four nutrients that the government says have to be put back into flour when you strip it of its key natural nutrients. But that's three of four, and yet, there's tens of thousands I was talking about earlier -- none of us will never know exactly what role they play. But the one thing we can be certain of is that they're good for us.

So when you mill your own flour, and above all, if you say -- and most people who look at Mockmill flour -- experts say, "Well, we don't even have to sift this." You say, "I'm going to use all of this." Then you're accepting that package that nature has given you verbatim, and you're taking all of this goodness at once, and that is working through your whole organism, your family, as they feed themselves with it. And it goes right down to taking good care of your good bacteria and all the other things that we're learning, which are important.

Melissa: Yeah, I agree. The health implications alone are huge -- and then also though, because health is important -- but taste is also important. In fact, I always joke and say ... well, I joke but it's totally true. But my house, I'm the one that's pushing more of the, "Let's get towards healthier!" Or swapping things out for healthier alternatives. And my family, especially my son and my husband, are like, "Okay. Well, we're game, as long as it tastes as good or better than what you're switching us from." It has to taste as good in my house in order for them to really get on board and actually eat it, because it doesn't really do me a lot of good if I'm making this healthy alternative if they're actually not going to be consuming it. So let's talk about the flavor of fresh flour, and the difference between what you're used to getting at the store, versus when you're grinding it right there at home, on your table, and then using that in your cooking.

Paul: Yeah. Well you know, to do that, I'm lucky I can refer to an expert in the field. There's a baking author who's very well-known, highly respected, and has specialized himself in exactly what whole topic of flavors. His name is Michael Kalanty -- he's written a book, "How to Bake Bread," and now, "How to Bake More Bread." He's come up with these flavor wheels, and as wine tasters talk about the different flavor aspects of wine, he's saying that's how we ought to view bread. Whether it's got a more lactic, cheesy, sour taste to it, or whether it's got a fruit flavor to it. So he really gets into the flavor and the olfactory aspects of baked goods. I approached him some time ago and said, "Your message is absolutely spot-on, but I'd really love to see you take a look at our topic, which is fresh milling, and see what kind of effect it had." So it took a while -- he had to get his book out -- but then he said, "Please, I want to get into this." So we met, agreed to, and he took a mill. And he wrote back to me, he goes, "Paul, it's a whole new day. I can't believe the difference in flavors, the richness, that I have baking myself. I'm gobsmacked."

That's very, very new. And of course, experts like that need time to make their experience, and then put it together, and structure it into a form with which they can distribute this new discovery. But what I think we'll see, coming here in the next few years, are more and more publications and books about this topic. Wow! For 130 years, we've been eating something that's robbed of all the flavor elements, and that's that. When you take that weed germ out, that life out of the grain -- because that's what's going to spoil after you ground stuff up -- and you take that away that bran, because in the modern milling processes, it gives you big pieces that spoil the way the flour breaks up, you're taking all the flavor out of it. That white food that's left over, the food for that plant, it's plant food, and it doesn't have any flavor for human beings in it. And that is what this expert is saying.

The fact is that for almost everybody who bakes with fresh flour for the first time, it's an "aha" moment. Later on, maybe, when we get to some other topics, I'll talk about that, but very, very, very simple. When you grind something up, chemical processes are put in place that are essentially the deconstruction of the molecules that give us aromas. And so oxidation is taking place, and as that takes place, those flavor carriers are just technically disappearing. That's happening from the moment you're milling stuff up. That's why when you do it yourself, and you take your grain, it becomes flour, it goes into your pole, you hydrate it right there. The grain is flour for seconds, and all of a sudden, it's dough; that's just a huge flavor adventure when you work that way.

Melissa: Yeah, and I just try to grind my flour as I eat it. So as I'm getting ready to bake, I don't really grind up extra and store it, because I believe, if I remember reading a statistic right, and I can't remember -- it's been a while since I read it -- but basically, it said within 24 hours of grinding the flour, that it is lost, because of oxidization, as you said. It's lost a really large percentage, like 80 or 90% of the vitamins, and everything has started to oxidize and been lost. 24, 48 hours from when you grind it. Is that accurate?

Paul: You know, I'm really careful about that, because I've never studied cereal science.

Melissa: Oh, okay.

Paul: So as soon as I state a number, somebody's going to contradict me. He's going to be right, or she's going to know better, so I try to stay with the basic principle fact, and everyone will confirm that. You say, "The moment you grind something up, it's on its way down, in terms of goodness, in terms of nutritive value, and in terms of flavor." For instance, we have discussion, people say, "Oh, well I've read that flour has to be aged, otherwise it won't bake right!" What have I done? I've gone to the cereal scientists who are published, who have 35 years experience and all this, and I say, "Well, what do I say to people? Where does this come from, why is this done?" The answer I get, Melissa, is to say, "Well, that point of view comes from a desire to prioritize consistency." Meaning when you bake with this flour, it's going to give you the same bread every day.

Melissa: Hm.

Paul: You make that your priority? Well, then you want to age the flour, because you want to kill it, basically, down to a level at which the rest of the flour is going to be dead. And you don't get any variations in consistency. If you bake the bread right with flour you've milled just in time, right away -- and we talk about just in time milling -- they said, "There, you're prioritizing flavor, and you're prioritizing nutrition." And you're saying, "Eh, if my corn muffins are a little bit different than they were yesterday, who cares? They still taste good, and they got maximum nutrition."

Melissa: I love that.

Paul: So that's really the answer I give there, is that I don't want to get into specifics and say "X percent" and so forth. I'm just saying fresher is better; I believe that, and I think any honest cereal scientist will tell you that.

Melissa: I completely agree. Which, actually, leads beautifully into my next point, because I have to say, when I first started baking with fresh ground flour, there's some definite pitfalls. There's some things you need to know about altering your recipes; so I know just what I've learned, just from my own experience, because fresh-ground flour acts different, just like you said, then all-purpose flour. So you're taking your regular recipes, which I think you should -- we've got those family favorites that we want to still be using -- but with the fresh-ground flour, it really absorbs moisture different than the regular flour that you're used to getting from the store.

And so I really had to learn, just like you said, to go from how the dough looked and how it felt -- and I did do some moisture with the water, adding a little bit less, or increasing the flour a little bit, and I played with those ratios until I got pretty much a formula for myself when I was adjusting recipes. Like, "Okay, if I'm using the spelter, or the inc, or the hard-white weed, or whatever it was I was using on how to do that ..." But I really had to go by the feel of the flour first, and not by exactly what the recipe said, because it definitely does act different in the recipes, especially when you're talking about dough, more so bread or pie crust, or that type of thing. Cakes and muffins, those are pretty forgiving, but I'd really say when it comes to your breads or things that you're rolling out, dough-wise, there's definitely a bit of a learning curve. Would you agree?

Paul: Well, in part, but that's just because of who I am. The job I have is a job that makes me so happy, because I get to go out and reach out to the absolute top names in this whole field. I get immediate responses on emails from people like Peter Reinhart, or Josey Baker, or Dan Barber -- I'm doing a little name-dropping here. But these are big-name people, and why will they respond? It's because they believe this whole topic is really important. I'm trying to exchange notes with these people who have lived their lives in baking, and I've tried to get into it by doing my own baking, because I believe if you're going to tell a story, you better live that story as well. So I've been baking for about a year and a half, baking bread. When I talk to these people, and this kind of topic comes up, I say, "You know, problem is, I've never baked bread, except with flour I mill myself. And I've never sifted anything that I've milled, and I've never used commercial use!" So I can't really answer the question. I just know what happens when I bake bread.

The funny thing is that only recently, only last week, my last bake before leaving home in Germany, did I have a failure. I said, "This bread failed -- inside it's pudding." And of course, what I'd done was somebody gave me some malted barley that I thought was really cool, and I added about five percent of that, and there's so much enzyme in malted grains that apparently, it puts the whole dough process on turbo charge. And so what I had was some pudding that wouldn't bake up; in the end, I ended up using it as pancake batter, and it was great. But I actually think that you can exaggerate the particular of using fresh flour -- I find it really easy to use. The bread that I make is loved by everybody -- I tend to make a pretty earthy bread. If you use whole grains, the bread that you get is very brown, it can be even darker than that.

Melissa: Mm-hmm (affirmative)-

Paul: I use a lot of rye. And all I'll say is that bread baking is an adventure -- you start out with some basic recipes, maybe you adjust a little bit, or maybe you don't. It's different every

time, you have good bakes and bakes about which you feel less well, but that's part of the adventure that I really enjoy. And the feeling that I can do better at this, I can get better, I can learn, I can try different things, I never bake the same bread twice. I'm always trying some new ingredients. What happens if I put a little [inaudible 00:18:30] in? What happens if I roast some teff up, and mill that into it? That's incredible. What happens if I use my leftover bread crumbs and mill that up into a bread crumb flour, and add that? That causes the dough to absorb more water, but then it makes the bread moisture and gives it a roaster taste. All of this stuff is my personal experience, which makes it difficult for me to answer your question.

Melissa: I completely agree. Whenever you are baking though, you definitely ... I would say recipes are a guideline

Paul: Ha!

Melissa: They've got the basis there. But yeah, you really do learn to go ... and I know when you're starting out brand new, if you're really just starting out to baking bread and to cooking things from scratch, that can kind of feel frustrating. You're like, "Well I don't know what it's supposed to feel like when it's right!" But you do get it with practice. And we're going to have some tips, so if that's you, we're going to have some tips, some guise and some things, to definitely help you down that path much faster, so you can reach that part. But yeah, you get to a point where you know what that dough is supposed to feel like, or it's supposed to look like, and then you put it in. And that's a beauty, when you actually reach that point, and you're like, "Okay, this is awesome." And it really is. It's a self-perpetuating cycle. You get excited and you're like, "Okay, well now I want to try this. Well now I want to do this." And so you just keep going down and down, and trying different things, and learning more and more.

Paul: Yeah.

Melissa: Which is really exciting.

Paul: But I would like to offer one little anecdote. I feel a lucky guy; I'm visiting here in Houston, Texas, visiting my mother, and this morning, I took some grains I brought along from visiting a fantastic place up near Philadelphia the day before yesterday, which is Castle Valley Mill, if anybody has a chance to look that up. And they have some great grains, and so they gave me some to bring home, and I had fresh corn and some of their wheat. So I proposed to my sisters that we make the family's traditional cornbread, that we ate every Friday when we were growing up -- I come from a big family. All we did was replace one for one, the white flour that is in my mom's recipe, with 100% freshly-milled wheat, and the corn with 100% freshly-milled corn, the cornmeal, one for one. And everything was left as it was before, and afterwards, we said, "Well, what do we think?" Everybody said, "Oh, it definitely has more taste and more flavor. The cornbread's a little darker in color, it's a little mustard-y, kind of caramel, versus that really yellow color that you often get from cornbread." But texture, absolutely fine.

So that was just one-to-one, and that's what we recommend that people do when they start off fresh-milling. Just take it one for one and see what happens! It's going to be edible, it's going to be good, and then look at how you may like to adjust it.

Melissa: Great, now we've been talking a lot about flour and wheat. But I do have listeners who are gluten-free, or who are gluten-sensitive, and so they're moving away from using your regular wheat so much. Which brings me to the point that I want to talk about, because a whole mill, we typically think of grinding flour with it, which is one of its purposes. But it can really do a lot more, specifically this mill; we were talking a little bit, right before we started recording. You were mentioning some things that I haven't even done yet, I didn't even think about doing. So let's talk a little bit about how much versatility that you have on grinding things at home -- you're not just regulated to flour, though that's beautiful and there's so many options that we've got. So I'd love for you to tell me a little bit about what you were sharing with me earlier, on the other things that you can use the mill for. And should be using it for.

Paul: Yeah, we tend to call this a grain mill. And I think that's a bit of a mistake. We'll keep thinking about it at work. What I think we should say is, "What we've got here is a stone food mill." That's it. And just to think about this, I'll tell you that this will do a great job of milling anything that's not principally oily, or principally moist.

So think about that. What's oily and what's moist? Well, flax seed, sesame seed, poppy seeds; that kind of stuff is oily. And what happens if you try to mill that is that an oily film forms on the stones, and then there's no friction. So it can't mill, so it just stops. You get a little bit of gunk, and then nothing more happens. That's what happens if you try to mill something that's oily. Something that's moist, something that's got high water content in it, it'll also form a film on your mill. Which is not the end of the world, you just clean it out. And sometimes, you can clean it out by just milling something dry, and just cleans everything out. That's not a problem. But when you're thinking about, "What can I mill?" Just ask yourself, "Is it principally oily? Or is it principally moist?" And if not, you can probably mill it.

So you go from grains, any kinds of grains, and as you mentioned, what's really important, all those gluten free, what I call grain-substitutes. That's kind of putting it down, and that's not very nice, but a grain, by definition, has gluten in it, so the other stuff that doesn't -- all of your millets, for instance, which are wonderful foods, and there are big movements going on in the United States about bringing millet back in as a food. It's not bird's feed -- it's a wonderful food. The greatest thing in the world is first cereal for your baby. If you give freshly milled, organically grown millet to your baby, that's so much better than anything that Dr. Gerber has to offer. The list is very, very long that we're able to offer to people, the stuff we've tested. Very often they come and ask, "Well, what about this?" And you can say right off the hand, "Well, of course." Goes through grains, pulses, which are in beans or peas, and spices. And anything in between! So we have users who dehydrate their own vegetables, above all root-type vegetables, like sweet potatoes. You can take sweet potatoes and dehydrate them into dry chips, and drop them in the mill. They make a sweet potato flour, which is a bread addition. It's wonderful -- that's just one example.

More classically, if you're cooking at home -- and that's the beauty of the Mockmill, it's just standing there, and it's ready at attention -- you can take your whole spices that you're going to use for tonight's cooking, toss them into the mill, out it comes. Toss in a little bit of rice behind it, that chases it, cleans it out, so nothing tastes like the spices when you mill it afterwards, and you got this nice spiced rice flour that you toss in your food as you go about seasoning your food. It's amazing what that does for the flavor of your cooking.

Then you go into all of the gluten-free stuff -- so we already mentioned millet, but you have amaranth under the millets, you have teff, you have sorghum. Sorghum makes some really, really nice flour; sorghum pancakes are delicious. When you start to look at the nutrition profile of these foods, and the ease of cultivating them on your own, it gets really interesting. Then all of the stuff you can buy -- amaranth, buckwheat, whether hulled or still in its hulls, I understand when it's still in its hulls, you have to then sift it, because some of these whole pieces will come to the mill really big, and they don't digest well at all. They're certainly not welcome in a textural way, in your food, but used as a strainer, and strain those things out, and you get the smaller bits of the hull to have bioavailable nutrients in them, that also give a lot of flavor to buckwheat flour.

The list just goes on and on, all the things you can mill; I will say that when you mill some of these things, the flavor story really picks up meaning, particularly with spices. So if you compare a cup of freshly milled peppercorns, with any kind of pre-milled pepper that you have, the difference is night and day. I had the experience yesterday, and one of the finest restaurants in Houston, the cook, his eyes were like silver dollars in size when he smelled the difference between what he was using every day, pre-milled, and what we just fresh stone-milled in his kitchen.

Melissa: I love that! See, and I didn't even think of using it for spices, because it's my grain mill, so that's what I typically do. And I'm really glad, because I was going to ask you about if that flavor, if you use it to grind spices and then you go to do your flour, if they were going to cross-contaminate. But you just put a little bit of rice through there, obviously dried, and it really cleans the stone mill stones out enough that you don't catch that flavor, then, when you go and grill.

Paul: And since I've come to demo this in every restaurant I go to, it's for chefs. They're trained to taste stuff, that's their job, and what I generally do is I'll put that handful of rice in the mill afterwards, as it's come out, you can see black specks, pepper, as it comes out. Then it slowly becomes snow white, and then I say, "Here, take a pinch of the rice, please, from the top of the little pile that's formed now. And tell me whether you can taste any pepper." And they just look at me and they say, "Nope, can't."

Melissa: Awesome.

Paul: Yeah.

Melissa: So I got to ask you this one, and only because yesterday, I was baking, actually. I don't generally buy powdered sugar; I just have regular sugar on the raw that still has some



molasses in it, it's caramel-y in color, and I love the flavor it gives. It's less processed, so it is still sugar. So I was making a maple glaze, actually, to go over some pumpkin muffins, and I needed powdered sugar, I needed it to be finer. So I've done it with an Emersion Blender, or my regular blender, to grind up those into a finer sugar. Could you put that through the Mockmill to get really fine confectioner sugar?

Paul: Well I'm glad you asked that, because somebody came up and asked us recently. We tried it out, and there was joy, and then somebody said, "Wait a minute." And we had to try it again, and there was ... what do you say when joy comes down to reality? Another word in German. What we haven't mentioned here is that Mockmill means a couple of different things. The Mockmill name was invented for a stone milling attachment that goes on a van mixer, like Kenmore Kitchen-Aid, Stan Mixer. And that's a beautiful little tool that we have that's perfect for smaller households, and people that have space problems, and people already own a Kitchen-Aid, or not making big amounts of flour at once. Somebody asked a question, somebody said, "Let's go out and try it." So got a scoop of organically ground cane sugar, and light-brown stuff, nice and dry and crystalline. So the wet compact stuff didn't work at all, but the dry crystalline stuff went through there, and gave me some beautiful confectioner sugar. "Wow! Joy!" Right? And then somebody says, "Yeah, but try it on the big Mockmill now." I said, "Oh, that'll really work well."

Melissa: That's the thinking, yes.

Paul: Quite the opposite.

Melissa: Did it get too hot?

Paul: Yeah, what happens is the standalone Mockmills are direct-driven by an electric motor, whereas the Kitchen-Aid attachment by a much slower-moving hub mechanism, transmission, that actually slows down whatever's being turned, because you don't want a meat grinder or a pasta attachment turning as fast as an electric motor in the Kitchen-Aid turns. The stone-milling attachment turns very slowly, therefore it did a good job on the sugar, but when you get up to the fast, to the 1300 RPM of the Mockmill, which also, quite frankly, gives it its higher throughput, it basically just forms caramel, a hard caramel glaze on the stone. So it took me five or ten minutes to get that off afterwards. So I'm afraid if you want to do that, for homesteaders, I really got to recommend the standalone mills, because they're just that much better if you're doing a lot of baking and cooking. But if you want to do some special things, the little Mockmill is wonderful if you've already got a Kitchen-Aid for some special chores. And it's one of the two things, and this is one of them, that it actually does better than its big brother.

Melissa: I'm so glad I asked, because I was really going to try it, and I'm very relieved that I saved myself 10 to 15 minutes of cleaning.

Paul: You did, you did. You'll be glad.

Melissa: Very good!

Paul: Alone those lines, just because you're talking about that, you can try different things. Somebody called me and said, "Can you do mustard seeds?" "I don't know, I'll have to try that." I look up mustard seeds. It's 31% fat. I go, "Not so sure this is going to work." But then I recalled having some experience in the last two years I thought was not so bad. So I went ahead and tried. And I was able to set the mill at a point where it gave me continuous flow of a fairly course, but nice, mustard mask, oily mask that was coming out. And that was good. I said, "Well, this is actually quite good, because people like to make their own mustard."

Melissa: Yeah.

Paul: And of course, I had to open up the Mill afterwards, and it was just really a big mess, because this is oily stuff. And so it was funny, but it seems like the hard shell on the mustard did the scrapping off of the stone as it moved so that it could keep milling the next seeds that were arriving. It took me about five minutes with a Popsicle stick, or something like that, to dig all that stuff out of the milling chamber. And out of the groove in the stones, and to put that down, I kept that for making mustard as part of the product that had come out. Closed the mill out, and then I got some camote, which is a nice, hard weed. And I started milling that at a really course setting, and I just took a half a cup of camote, and I put it through there on the course setting, and it was coming out in big chunks, carrying out mustard bits with it.

So I kept putting it back in over and over again to the mill, about five or six times, until I felt comfortable that most of the mustard had cleaned out. Then I put it through on fine, and then chased it with ... I guess it was making bread about it, a kilo of camote. And what I got at the end was this really wonderful, 100% whole wheat camote, and camote really makes nice bread. It was a perfect sandwich loaf with just a hint of mustard taste in it, so just perfect so savory sandwiches. This is an adventures that you go on with a tool like this.

Melissa: And it's so funny, because when you were saying that, I'm like, "Oh! Mustard with rye?" That's exactly what I was thinking. I'm like, "Yeah, the flour, if you were worried about cross-contamination, whatever you put through there next, just make sure it's going to pair well with it." And then you're getting a really added benefit there.

Paul: The important thing is to use some kind of dry grain when you're finished. And to mill that coarsely, because what happens is those coarse bits, they go through a lot of ... there's a lot of forces at work at a mill like that. And they're like little bullets that's shooting back and forth against the stone's walls, and knocking all the bits of food that might be hanging around there, out. So it's very, very simple; if you'd like to make a steamed loaf in July, and you know that your flax seeds, or your sesame seeds, are going to be more flavorful, more bioavailable, if they're ground, well just mix them in with your recipe with half of the grain that you're going to use. Mill them together -- you'll get a nice lipid flower out of that, and then mill the other half of the grains immediately after that. On a fine setting, your mill's going to be whistle-clean. So indeed, even though the mill's not made, and there's tools that are made for milling seeds, and if you want to have oily seed paste, well then you get a tool like that. But for this purpose, it

works really, really well if you just think about it, and use your imagination together with the tool.

Melissa: I like that you said that you can still do it, just mix it in with the grains that you're going to plant that aren't as oily, and that are more dry. You can still do it together to get those benefits into the flour, without the big mess and having to take it apart and have it gum up, and have to clean it. So, that's a really great little work around there.

Paul: By the way, that taking it apart and cleaning it out, is really ... quite literally, it's a five-minute job. It's a very, very, very quick job; the neat thing about these tools, the way both can see them, is they need no tools. It's a very, very, very easy thing to do, and there's mills in which you can't even look at the inside of the milling chamber. It has to be sent off to a factory if, for any reason, inspection is desired -- you don't know what's going on in there. Whereas here, you can very, very quickly take a look. "Is my mill nice and clean inside? Great." That's a small advantage. And it's important, as far as we're concerned.

Melissa: It is, because I have other mills where you can not see inside the unit at all. So if you do make a mistake, you have to send it off. Yeah, you can't look at it at all, so I actually think that's a really big advantage, to have the ability to go in and clean it if you need to, just to be able to look and say, "Okay, well this is what's really going on." I think that's great. Let's talk about how to get the Mockmill, because the Mockmill is relatively new, right?

Paul: It's actually a brand new product. And it has a story behind it. People said at the beginning, "Mockmill, that's a funny name. Does it mean fake mill or something?" It's a creation of Wolfgang Mock, who is my partner, and our company's called Wolfgang Mock Incorporated in the United States. And Wolfgang is really, really well known in the home-milling circles, because he's an absolute pioneer in that area, especially in Europe. He's a psychologist who was working building autism centers in his late 20's, early 30's, back in the beginning of the 80's, who got the bug when somebody gave him a loaf of bread for his birthday, that they made themselves from freshly-milled flour. And Wolfgang said, "Silly gift!" And then he bit into it, and he said, "This is amazing, I've never had bread before in my life." And he couldn't find a mill that he liked. So he decided to design a mill, and people liked it so well, they asked him to build one for them too.

And slowly, over the years, he became less of a psychologist and more of a mill builder. And so there are really well-known and highly respected stone mills under three of four brands out there that are really Wolfgang Mock. They even got his name in them; if you see "WO" as part of the name of a mill, or "MO" as part of the name of a mill, he designed that mill. And the designs haven't changed since he's been part of those companies, even though he's left one of them 15, 20 years ago. That's how important his touch is in mill design; the Mockmill is Wolfgang's swan song. He wants to get everybody milling, and that has been his drive for all these decades -- he doesn't want to give up, and one of the problems has been that the mills were too expensive, costing 200 or 500 dollars. Or they were, in reality, when you looked at the business, the

production wasn't scalable. You wouldn't be able to provide everybody a mill who really wanted one.

And so he's always been working a way to do this, but do this with highly environmentally conscious viewpoint. In other words, let's not make anything out of plastics, at least not our petroleum plastics, so he came up with a concept to use bio plastics to make molded casing for the type of mill he'd been building for all these decades. Improving the inside design, the milling design, in any way he could think of, and then incasing it in something that would be highly economical, be environmentally friendly, and be scalable in production. That's what the Mockmill 100 and Mockmill 200 are; they're the realization of this 40 year old drive of his to make the mill that everybody can afford. Think of the Model T Ford. Henry Ford said, "If I want people driving cars, I'm going to build cars that are affordable by the people that make the cars." And this is what the Mockmill should be -- it is brand new, but it's a brand new realization of a very, very old traditional, of a man who, I think, values are very much in line with most of the people who are listening today.

Melissa: I own a different mill, and I had used one even prior to that before I got my first mill, when I first thinking about wanting to grind my own flour, and researching it. I had a friend who had a mill who said, "Well hey, why don't you borrow mine and make sure you actually like the fresh-ground flour before you invest in one?" Because home mills can be an investment; they're typically not a \$50 item that you're going to go and get, at least I've never seen one that's going to last, to do a good job for that price. And so I used two different home mills before, and then like I said, I didn't really think I needed another one. And then I got the Mockmill -- the design and the functionality of it are so much improved. It really is a big difference, and it's ease of use, but more importantly, on how well it actually grinds the flour, when I can adjust the grind. When you have that much control ... and it's not just a little bit! You can really go coarse, to really, really fine. Like 50 points in between. I'm excited about this, and I've been even grinding more flour lately, so I can play with it.

Paul: We're getting used to getting really good feedback. We wouldn't like to let it go to our heads, because we have a huge, huge job to do that has a lot to do with getting people excited about doing their own milling. I take this product, or send this product, to mills, to people who have these huge machines, enormous stones, and are really giving their whole lives to building back an infrastructure that has been lost. They look at the product coming out, and they're just amazed, they're going, "Wow, we can't get flour this fine out of our mill! We have to sift it a bunch to get it this fine, which we don't want to do, because then it loses that goodness." Or they say, "There's a lot of things that we want to be milled that are too small to make it sense our big mills. But this is perfect, and it makes it possible for then delivery small quantities too." So this is a home mill. It's designed for home use, the Mockmill 100, Mockmill 200. Even in small industrial settings like that, there's a big interest in them, because it is really a step forward in stone mill. When you look at mills for homes, you ought to ask one question. "Is it a stone mill, or is it some other kind of mill?" Because there's steel burr mills, and there are impact meals -- that's the kind that you can't look inside.

Melissa: Mm-hmm (affirmative)-

Paul: And they're different, and Mockmill is not categorically less expensive than burr mills, steel burr mills, or impact mills, maybe. But then you're comparing apples to oranges, because this is a miller's mill; in fact, what happens, if you buy this, you start to use it, is very, very easy to use. Plug it in, and you're making flour in two minutes. But on the other hand, as you mentioned, you can get into it and start learning how to use this tool, and all of a sudden, you're a miller -- you're an honest to goodness miller. And I would put forward that you're not a miller if you're working with an impact mill that's got a closed chamber, and five or six setting, and that's it. That's not to say that a mill like that won't make flour that you can use it well, and maybe it makes flour faster than the Mockmill makes it. But in my view, I think an easily defensible statement to say that's in no way nearly as veritable a tool, and as professional a tool, is what we're proposing.

We're so hyper active right now, with all the different things we're doing, because this message is new. The fact is that five generations ago, our ancestors delegated something to industry that we firmly believe should never have been delegated to industry. And we're actually, as a Time company, working hard to figure out how we can join in with all the people who are trying to get that reversed, because there are people like Jay who are out there. Jay brought einkorn back from Europe, and einkorn is a magic word -- all the bakers want to have it, but he's been really one of the few key figures in getting that grain reintroduced to our country. But there's many, many more I mentioned -- the camote people, the test people, there's the teff program going on in California. There's the California Grains Campaign; in Washington state, there's a lot going on, Oregon ... in fact, every state seems to have a grain revival program. So we're working hard to reach out to all those and to say, "How can building the home milling infrastructure be of help to these programs that are ..." Gosh! They want to save our country, yeah? And they say they can really help a lot, because our products then become available to people, whereas for us to get them available through the traditional channels, it's just going to take too long. We'll never get started.

Melissa: I think that there's so much of the movement right now, especially with home canning. Just doing a lot of these things at home, that have been commercialized, and we're in danger of these skill sets truly being lost. Because in main society, in mainstream society, a lot of them have been lost; you've got generations that don't know how to do it. Their mom didn't do it, maybe grandma or great-grandma did it, but in just a couple generations, it's been lost. So they're looking for people to teach them, because they don't know within their own realm of people that are close to them and knowing it, and I look at this as really the same thing. So you've got this movement, and it's encompassing grinding your own flour, growing your own food. The farm to table, and then just taking it that much step further, if you're going to be growing it yourself, or you can get it from a local grainery, these people who are bringing back all of these things, instead of just the top 5 flours or 5 grains, or strains of different things. We're bringing it so much more diversity and history, and we're bringing it back -- we really are preserving something that is in danger of being lost. And I think it's incredible to be a part of that movement on so many different fronts. But it brightened here with this one too, with your grains and milling.

Paul: I feel really privileged to get to share this time this morning, our story, with your listeners, because they're the people who have recognized that there's all types of stuff that's been automated, to our detriment. We got to go back and say, "Well, automation is fine and good. But what should we better do ourselves?" I think at the level of food, the answer is, "Well, frankly, just about everything. What we hoped to offer is the means to do some really important food reduction, just in time, the way it needs to be done, with incredibly, highly professional quality, that preserves all the goodness of the food. It's food the way nature intended to be." My interpretation is that's what the homesteading movement is about.

Melissa: Mm-hmm (affirmative)-

Paul: We hope that our offering will be seen as a measure of support for that movement. We absolutely welcome anybody in that movement to take a look at our website, see how we live over here, and what we're about as a company. Give us feedback. Is this important, what we're doing? How can we pass the message better if you think it is? What kind of things can we be doing better? We'd love to hear that. We'd love to be part of that homesteading movement.

Melissa: Thank you so much, Paul. I learned quite a bit today, and I thought that I had a good grasp on grain milling and all the things you could do with milling at home. But I've really learned a lot! And I really have enjoyed getting to share this message with you, and I've learned things to do. And now, I'm inspired and I want to go and get some different types of millet to start incorporating into my flours and bread. Thank you so much for, first off, for you guys getting this mill designed and putting it on, to taking a part of this movement. And thank you for spending the time with us here today, I've really enjoyed it. Thank you.

Paul: It's been a huge pleasure for me, Melissa. So thank you for inviting me.

I'm an affiliate for Mockmill, you can read our full [affiliate disclosure here](#).

## **How to Grind Flour at Home**

[The Mockmill](#) really makes this quick work. You simply flip the switch, pour your grains into the hopper, and watch it shoot out into the bowl. Literally, it only takes a minute or two. Easy, peasy.

What really set the Mockmill apart for me was the ability to adjust the grain to the exact setting I want and need. The other mills I use only have three settings. With the Mockmill I can adjust it to exactly what I need and want, from course for cracked grains to very fine pastry flour, with up to 20 different settings if need be. (I confess, I've mainly been using it on super fine for baking, but a girl wants options)

## **Where to Buy Your Grain Mill**

I don't know about you, but I've never seen a grain mill sitting on the shelves next to the slow cookers (let's hope that changes, and you and I, we're the ones leading the much needed change, woot, woot!)

For a limited time, [you can order the Mockmill](#) and get FREE shipping, plus some special bonus offers. You get two guides from Mockmill, the first is the Farm Directly and Milling Guide that **contains easy links to the websites and Amazon.com listings of small family farmers who will gratefully ship their grains direct to your door**, the second is the Mockmill Recipe Guide, filled with **time-saving central bank of recipes** from every corner of online universe, The Mockmill® Recipe Guide is a lovingly curated plethora of baking ideas for new bakers, expert bakers, and anyone and everyone inbetween, including sourdough!

Get ready to discover flavor-filled favorites from some of today's top food and healthy-eating bloggers... all the way through to professional artisan chefs who've discovered the taste-infusion fresh flour makes to breads and baked goods.

Hold up, I know that **when you first start baking with fresh ground flour, you've got to make some adjustments to your favorite recipes**. If you've been using store bought flour, you can't just take 1 cup of fresh ground flour and use it in place of all-purpose flour and get the same bread or cookies.

There's a learning curve... ask me how many loaves of bread turned out rock hard when I first started. But you my friend, you don't have to suffer through those mistakes, because **I'm sharing the tips I've learned to use fresh ground flour to convert your favorite recipes and get delicious food, every time.**



And when you purchase the Mockmill, I'm giving you **access to my mini e-course Baking with Fresh Ground Flour and my e-book Fresh Ground Flour Baking Guide & Favorite Recipes**, valued at over \$60!

You can have home milled flour in your kitchen and the bonuses with these 3 easy steps.

1. Order [your Mockmill here](#) to get free shipping, the Farm Directly and Milling Guide and the Mockmill Recipe Guide.
2. Have your Mockmill Receipt number and [fill out this form](#) to get special access to my Fresh Ground Flour mini e-course and Fresh Ground Flour Baking Guide & Favorite Recipes.
3. Begin creating the freshest flour you've ever had to bake wonderful foods for your family.