

Paul Lebeau on Home Milling, the Grain Revival, and the Mill Man, Wolfgang Mock



Wolfgang Mock's Mockmill is hoping to bring a modern edge to home milling. By developing a new [line of home mills](#), beginning with one that fits onto appliances many home cooks and bakers already own—common stand mixers—Wolfgang Mock aims to make home milling more affordable and accessible to cooks. Paul Lebeau, the company's Managing Director, wants consumers to break away from old habits and adopt the conviction "[that whole, and freshly milled](#), [is] the best way that grains can be consumed."

Food Tank had a chance to talk with Lebeau, who is inspired by founder Wolfgang's dedication to baking and cooking with "just-in-time milled" flour and to giving home bakers and cooks the ability to mill a wide variety of grains as needed, including unique grains such as teff or sorghum, the flours of which are not typically found in stores. A self-proclaimed Milling Missionary, Lebeau discussed the nutritional and sustainability benefits of home-milled grains, the company's growth into the United States market, and how they are building consensus for home milling.

Food Tank (FT): Tell us about the history of the milling technology that is used in Wolfgang Mock's home mills. Why is this history important?

Paul Lebeau (PL): Wolfgang began making mills very early on. He wanted to be able to bake bread, easily and readily, using flour that contained all the goodness and flavor of grains and that had "suffered" as little as possible on its way into his mixing bowl. At the time, there was simply no mill on the market that met his requirements. So he set out, together with his friend Harold, who shared his interest in the matter, to make his own.

For a trained psychologist, learning about what makes a good mill required new thinking. That was more than forty years ago, and Wolfgang has never stopped thinking about it.

First, Wolfgang realized that the job of quickly grinding grain kernels down to beautifully fine flour requires carefully chosen grinding surfaces and the mechanism to bring them very close to one another, without their actually touching. Next, great strength was required to do the grinding. Thirdly, a reasonable and attractive housing for the motor and milling mechanism was needed. Each new generation of mills designed by Wolfgang Mock has represented advancement in one or more of these three areas.

FT: What do you see as the biggest problem with grain produced by industrial mills?

PL: The biggest problem with grain products coming out of most industrial mills is that they must be refined. We believe, with strong scientific backing, that the way to “get the most out of grains” is to consume the *whole* grain.

A kernel of cereal grain is a nutritive treasure chest, loaded with well-balanced, highly complementary macro- and micronutrients. Ingeniously packaged, it can retain all its goodness for years, even decades. But the whole grain, like an apple, starts to lose its goodness the moment it is opened up. Stone-milled flour, then, has a shelf-life of only a few days. The processes of chemical breakdown begin right at the point of milling.

To overcome this problem and deliver long-lasting products, large mills disrupt the natural balance of a grain’s composition, remove certain nutritionally key and truly tasty parts, denature other parts, and re-compose what is left into something they label as 100-percent whole grain.

The fact that the products are truly adulterated is hidden by questionable marketing practices and protective regulatory conventions. And so the biggest resulting problem, as we see it, is that the consumer is left uninformed about the food she or he is eating, and uninformed about the opportunity she or he has to ‘get the most out of grains.’

FT: What are the nutritional benefits of using flour that is freshly milled?

PL: First of all, once a consumer sets about to make her own flour, she gets to choose her grains based on their profiles: nutritive composition, flavor profile, baking characteristics.

Secondly, everything that goes into the mill comes out into the flour bowl, perfectly balanced by nature and including the whole plethora of secondary plant substances (SPS). These SPSs, gaining recognition with advances in analytical methods available to cereal scientists, appear to build a sublime orchestra of complementary micro substances that help the human microbiome regulate our organism.

With these comes a complexity of flavors that is a true reward to the consumer for having found something to eat that is of great benefit to her. That’s what our sense of taste is for, and with grains, it really works. The flavor of grains is contained in its most beneficial parts, the parts that are generally removed in the refining process. Fresh milling leaves all those parts in, and eating food made with flour milled just-in-time is a celebratory taste experience compared to that of eating food made with inert, partial grain products that have been stored for quite a while.

FT: What are the environmental benefits of milling your own grain?

PL: When the individual consumer makes a choice of grains for milling, she can choose locally and organically grown grains that are well adapted to the local climate and terroir and offered by smaller-scale farms and distribution organizations. By encouraging home milling of local and diverse grains, we encourage the return to careful crop rotation that reduces dependency on fertilizers and poisons and helps re-invigorate the soil.

Choosing more locally produced grains also reduces our dependence on transportation of foodstuffs, which is critical in a modern world where the ingredients for grain products

typically travel thousands of miles on their way from farm to our tummies. Consider the report I received from British star baker Tom Herbert, upon his return this spring from teaching bread baking to villagers in Kenya. There, locally-produced grain is shipped to the Ukraine in exchange for white flour. Not only does the native population not benefit from the full goodness of the crops it grows, it remains dependent on the labor and capital of more developed countries while it struggles with underemployment of its own.

FT: Wolfgang Mock was founded in Germany and established itself in the U.S. only a year ago. What kind of success have you had in increasing the awareness of the benefits of home-milled flour in the U.S. in the past year?

PL: When we started studying the situation in the U.S. in the second half of 2015, we were delighted to discover that a Great Grain Revival is underway there. We had no trouble making contact with the many leaders of that Revival: agricultural scientists, grain growers, small-scale millers, artisan bakers, star chefs, baking teachers, retailers, journalists, bloggers, social networkers, and authors of books on baking and food culture. Many have been highly supportive of our efforts to inform consumers of the life-improving opportunity that home milling represents. And we're delighted to have caught the interest of some of NGOs like Food Tank that are concerned with human nutrition and building a sustainable food system.

We've attended conferences and made regular tours of the U.S. to visit bakers, millers, authors, experts, university Bread Labs, social network friends, retailers, and growers. And our question has been the same: Can, and how can, the expansion of the home milling base be of help to the efforts you are making? Their responses have helped establish our positioning.

Artisanal bakers generally are working with smaller-scale millers from whom they receive regular deliveries of flours that have been freshly stone-milled. They find it advantageous, though, to have at least a minimal capacity to do stone milling of grains in their bakeries. They use this for trials of new grains growers bring in, for developing new recipes, and for minor ingredients that enhance the flavor and nutritive profiles of their breads.

Pastry chefs and kitchen chefs respond with delight to the notion of having small-scale milling capacity. They point out that many of their less-used flours, like rye and millet, go rancid quickly and get thrown away. Keeping whole grains handy for just-in-time milling eliminates the problem. They often note that they can now consider keeping a much wider variety of grains on hand for inclusion in their recipes.

Key authors who have published books calling for a return to simpler, additive-free bread, have thanked us for pointing out how home milling completes the picture when it comes to baking "real bread" that is whole-grain flour, salt, water, naturally fermented. At least one has gone back to make an addendum to his book in a follow-on edition.

Some artisanal millers seem to be troubled by the notion that consumers should grind grains themselves. Most millers, however, point out to us that the biggest part of their work is in arriving at a millable product—and they realize that they are just as happy to sell whole grains as they are to sell flour.

FT: What challenges have you encountered in spreading the benefits of home-milled grain among average consumers and home bakers?

PL: The biggest challenge we sense is in formulating the right call to action. Our culture has become used, for practical and historical reasons, to cooking and baking with products from nondescript grains that have been milled (and usually refined) by someone else, somewhere far away from us, at some unreported time in the often-distant past.

Our message is that breaking that habit is a simple, easy, affordable, enlightening, tasty, rewarding, fun exercise, and is good for the world. We don't want, however, to seem too dogmatic, too negative, too alarmist, too annoying. And we want to become friends with everyone and every enterprise that is out to help people get the most out of grains, to make a genuine contribution to the great effort that is underway in the American Grain Revival.

We do, however, have a selfish sense of urgency. For us to continue our work, we need concerned consumers and home bakers to vote with their credit cards. Our CTA has to be, in practical terms, 'buy a mill!' But we'd prefer to focus on a message of opportunity. We'd prefer to be selling "getting the most out of grains.

FT: How is Wolfgang Mock building consensus for a shift to more home milling?

PL: We've made a great effort over the past year and a half to meet and learn about the participants in the Grain Revival. We've read books by food visionaries and reached out to their authors for advice, trawled the internet for fresh discoveries in the scientific community, located authors and experts who discovered just-in-time milling long ago and love telling about it, established a presence in social networks in order to chat up our topic and find out what resonates.

We've put our first product, a high-quality stone milling attachment for stand mixers like KitchenAid and Kenmore, into the hands of the most discriminating baking experts we could find. Then we've gone back to them for feedback about what just-in-time milling can mean to the baking world. (They love it!) And, of course, we've asked them to speak their mind on the matter of just-in-time milling, whenever possible and in whatever forum is offered them.

For authenticity, we've gone down personally to basics and learned (in Wolfgang's case, re-learned) about baking bread. We recruited Pablo Giet, a passionate experimental baker, to test in our facility the limits of what a professional baker can achieve working with those flours. We've invited star bakers like Mike Zakowski, Magnus Hansson, Tom Herbert, Sasha Born, and Greg Wade to come bake with us, teach us new techniques and give us their input on the difference just-in-time milling makes to them. And we've had a few top bakers tell us—almost with tears in their eyes—that before using our little Mockmill they had spent their decades baking without really understanding what flour is!

Their passion has become our passion—through these leaders we know we're on to something important—and we live it by regularly getting our hands in the dough to bake bread for our families. My family seems proud to proclaim it's being spoiled by the bread I bake every few days, and to miss it when I'm gone.

Finally, we're driving to make home milling simpler, easier, and more affordable. All of our current efforts are based on reducing the cost to the consumer of owning a true stone milling device, made of environmentally responsible materials, that converts grains to flours the world's top experts are proud to bake with. Our little Mockmill for Stand Mixers is amazingly robust, compact, and quiet, and delivers flour of a quality that amazes top bakers and chefs. And it delivers it in true no-muss, no-fuss style straight into the mixer's own bowl! It's by far

the least expensive true stone mill available to consumers today, selling at under US\$200. And it's just a start; we'll soon be announcing two new stand-alone mills, which we hope will get everyone milling their own flour, just-in-time!

<https://foodtank.com/news/2017/05/paul-lebeau-home-milling-grain-revival-mill-man-wolfgang-mock/>