Whole Grain Connection Newsletter
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In praise of stone-millwrights
You realize of course that it is impossible to produce pleasing 100% whole wheat flour with the complex roller milling system used in all the major flour mills in the Western world; the method is instead specific for the production of refined flour. Some millers purport to use roller mills for 100% whole grain flour making, but either the key refining step of moistening the grain is omitted, or the distinctly wet fractions from the grain are dried and processed before the fractions are recombined. Either way the method makes no sense for producing 100% whole wheat flour.

The simple and economical method of stone milling wheat in a single pass to 100% whole wheat flour, has not been practiced as the primary method for well over a hundred years. Where? Oh! Where? is the flood of inventors and investors with a mind to instate the production of 100% whole wheat flour with stone mills, now that we know for sure that this is the flour we need and want?

Instead, there are just a few enterprising and visionary engineers who are modernizing the simple and totally effective stone milling process. They have realized that we live in a new age of electric motors; they use electrically powered tools to rapidly carve and sharpen the stones; they make the stones smaller for effective small-scale milling; they know that large stones will absorb larger amounts of the frictional heat produced and can be turned slower; and are therefore useful for larger production. All sizes of stones can be made to produce fresh and beautifully fine 100% whole grain flour. There is no excuse remaining to continue making refined wheat flour for our most basic food, which is bread.

Four modern stone-millwrights have, by their sheer tenacity and conviction of the need for really fine 100% whole wheat flour for our bread, provided us with truly usable stone mills. No doubt there are others who should be mentioned, but William Calloway Meadows, Roger Jansen, Wolfgang Mock and Andrew Heyn come to mind especially.

William Calloway Meadows invented his stone mill in 1901, in North Carolina; it was small, the granite stones were hung vertically and it was portable. By now in 2018 the granite stones of Meadows mills are housed in an iron casing and are powered with electric motors. Thanks to the Finley and Hege families these highly effective mills are still being produced. Meadows Mills

Roger Jansen gained his early inspiration by working at the Meadows Mill company, in North Carolina, but eventually he was alarmed that Meadows was practically the only producer of stone mills in the entire USA. To this day Roger and his two sons are producing alternative, artisan crafted stone mills of medium size, generally for small bakeries. The mills have horizontal granite stones, and are driven with an electric motor. Jansen Grist Mills

Wolfgang Mock in Germany has been designing his mills especially for household use, for several decades, and takes advantage of the very modern cast corundum stones, which can be made small. The advantage of these stones for home use, is that they can be used for a long time without losing their sharpness. Recently Wolfgang has designed some new mills using these same stones, that are set to revolutionize home milling. His new Mock mills are

compact and yet are very effective, easily portable, easy to use and produce enough 100% whole wheat flour for a large loaf in just a few minutes. Wolfgang Mock Mills

Andrew Heyn is a baker in Vermont, who has understood the extreme need for the production of electrically driven stone mills, for installation in bakeries. Now after just a few years at the task Andrew is successfully building horizontal granite stone grist mills, with a larger diameter suitable for bakeries, and with a slower speed of revolution than is generally used for the smaller diameter mills. He is considerate of the modern need for cleanliness, and encases the stones in stainless steel. Last year, he built mills in 17 bakeries. New American Stone Mills

Surely there is a huge need that cannot be filled by just these few entrepreneurs.

We have reached a tipping point where everyone now knows that eating grains 100% whole will keep them in better health. Never before in our history, have we had the knowledge to appreciate this to the full. The time is now to study the task of stone milling grains and to produce stone mills for every household and every bakery. There should be enough home and bakery milling capacity to give us all the chance to eat our grains 100% whole, in our daily bread.

Barley for bread
In Roman times in Italy, barley was the mainstay of the diet and it was mostly eaten as polenta, or porridge, as we would say in the English language. The Roman gladiators, for example, were known for their strength and also for their diet based on barley.

Barley today is most usually grown for making beer, or for animal feed, and as such is generally the type that keeps its husk around the grain, even during threshing. The husk is considered useful when filtering beer, and for some animals the husk is an expected component of their diet. However, for people, this barley-for-beer is unsuitable as food unless the husk is removed. Therefore, for barley soups, barley porridge and barley flour, the husk from this type of barley, is removed by pearling. Unfortunately, the pearling process also removes much of the bran layer and the germ. As a result, there is consequent loss of exactly the vitamins and minerals that are needed to properly assimilate and obtain energy from the barley carbohydrates.

I have seen some earnest bakers, who are new to making whole grain products, fail to realize that barley for beer retains the husk and is unsuitable for human food, unless the husk has been removed. People cannot digest the husk material; it can be irritating to our digestive tract, and is to be avoided. In contrast, the bran is very soft and resilient and is the wanted dietary fiber from whole grains.

The barley type to seek out for making porridge, for addition to bread, to mill for making flatbreads, and for making malt for bread, is “hull-less barley”. In this case, the whole grain threshes free from its husk and it retains the bran and germ. Fortunately, some farmers are again growing “hull-less barley”, and they are growing some interesting heritage varieties to look for, as well as some modern varieties.

Please pass the word along, that the barley to use for whole grain milling and baking should be the hull-less type!

A frequently asked question!

Q. How is it that refined and sifted flours are blamed for causing obesity, whereas the whole grain flour prevents obesity?
A. The whole grain flour retains vitamins and minerals that are vital for the conversion of carbohydrate to energy. If these vitamins and minerals are absent, or in short supply then the carbohydrate is partly deposited as fat instead of generating the expected energy. Here's a research paper on "The malnutrition of obesity".