Thin Crust Pizza with 100% whole Durum-Iraq or Sonora wheat - 2018

My previous recipe for pizza dough was written in 2014, and on reading it through now in 2018, I see that some improvements can be made.

In order to make the pizza crust really thin, it is necessary to start with a stiff dough. Stiff doughs are the result of reduced water content, so I tried and succeeded with just 50% hydration, with respect to the flour. However, we need to be ready to further reduce or increase the hydration according to the particular batch of whole wheat flour: in this case 100% whole grain, soft white *Sonora* flour or *Durum-Iraq* flour. The key is to make the dough stiff enough initially that it holds its shape well when finally rolled or pressed out to a thickness of about one eighth of an inch as the final pizza dough disk.

Other ingredient changes are to routinely add enzyme active malt flour, optionally add vitamin C, and to increase the amount of Extra Virgin Olive Oil up to 6 per cent or more with respect to the flour.

By now I completely mix the olive oil with the flour using a fork, food processor, or stand mixer with a paddle, before ever adding the liquid ingredients. This is with the idea of coating the bran with oil right at the beginning so that it suspends nicely in the gluten phase rather than in the aqueous phase of the final dough. The main kneading process is delayed until after the first rise. In this way the dough is fully hydrated, enzymic action is well under way, and enough fermentation has occurred to bring the dough to pH 4.

Another difference that I choose when making 100% whole wheat doughs, is to avoid flouring the workbench during kneading or shaping the dough. Instead I work on a smooth clean surface, moisten my hands and sometimes the work surface and make good use of a dough scraper if the dough sticks initially.

The surprise with this dough was that I could also use it for making pre-baked flan cases, as well as focaccia, pie crust and a fine textured closed-pan bread.

Ingredients & method for two thin 8 to 12-inch pizza crusts:

Ingredients	Bakers per Cent	Grams
Stone ground whole wheat flour	100	250
Enzyme active malt flour (optionally with added	1	2.5
vitamin C)*		
Olive oil (extra virgin)	6	15
Salt	1.5	3.8
Water	50 (variable)	125
Sourdough starter*	10	25

^{*}See separate recipes at <u>www.wholegrainconnection.org</u>: Bread improver, enzyme active malt and vitamin C Simple sourdough starter, January 2018

[] In a mixing bowl, measure out the whole wheat flour and the malt. Mix well.
[] Add olive oil to the flour in the mixing bowl. Completely rub the oil into the flour. Use a fork, food processor or a stand mixer with paddle. The result should look like very fine breadcrumbs.
[] Measure out the salt and dissolve it completely in the water. Add the sourdough to the salty water and mix well.
[] Add the water containing salt and sourdough to the flour and oil mixture. Mix well using a wooden spurtle (<i>shaped stick</i>) or in a stand mixer using the paddle. Note that the goal is to thoroughly incorporate the flour and water; it is not necessary to develop the dough at this stage.
[] With moist hands, form the dough into a ball and leave in a covered container, until the pH just drops to approximately pH 4. This takes 6-12 hours at 68 °F (20 °C) or 3-6 hours at 86°F (30°C), according to the temperature of starting ingredients and environment. Generally, a really moist dough would double in volume during this time, whereas this stiff undeveloped dough might never double in volume.
[] Hand-knead on a smooth board using moist or oiled hands, without added flour or knead in a stand mixer using a dough hook. Knead the dough thoroughly until smooth, somewhat elastic and homogeneous. Divide into two equal pieces and form each into a ball and allow them to rest under a cover to prevent drying out, for approximately 15 minutes.
[] To shape the pizza dough disk on a smooth clean surface: Use your fingertips, to work from the center outwards, pressing, pushing and turning over the dough disk until it is 8 to 12-inch in diameter, and thin but with a slightly thickened rim. Or dough pieces can be rolled out to approximately one eighth inch thickness and corresponding diameter. Note that Sonora and Durum-Iraq doughs respond best by pressing into shape rather than stretching; their gluten is mellow and relatively inelastic.
[] Leave the shaped dough pieces to rest between cloths. Allow to rest and rise for 2 hours, more or less according to the temperature between 68 and 86°F ($20-30$ °C). If there is risk that the dough will dry out, add plastic sheets beneath and above the cloths
[] Preheat and equilibrate the oven and pizza stone or tiles at 500°F (260°C) for an hour. Note that if a lower temperature is used the cooking time will be longer than suggested. At higher temperatures the baking time will be shorter. Ideally pizza will be baked in a small purpose-built oven or in a deck oven, at temperatures above 500°F. Home ovens rarely can be heated above 550°F and have a large hot air volume compared with the pizza size, that is difficult to replace after the oven door is opened to insert the pizza.
[] To build the pizza: Lightly coat the bottom of the pizza dough in whole wheat flour. Slide the bottom of the pizza dough piece across a tray of flour. Arrange pizza dough disk on

it difficult to remove the finished pizza from the oven, the pizza can instead be built and baked in an oiled pizza pan. In this case it is not necessary to flour the underside.

Note: If there is a risk that the pizza toppings will overwhelm the crust during baking, so making

an oven peel.

[] Coat the edge of the pizza with olive oil. <i>If desired, dock the dough piece all over the center with a fork, to prevent pocketing</i> . Add pizza toppings*
[] Gently slide and shove the pizza onto the tiles or pizza stone in the oven. Bake for 5-8 minutes.
[] Remove the pizza from the oven on the oven peel. Slide the hot pizza onto a large wooden cutting board. Cut the pizza into segments, ready for serving. Enjoy.
* Simple Margherita pizza topping
Ingredients
Olive oil
Tomato paste or tomato sauce
Mozzarella cheese slices
Oregano or Basil chopped leaves
[] Coat the edge of the pizza with olive oil, and if desired dock the dough piece in the center with a fork, to prevent pocketing
[] Spread tomato paste thinly, starting in the center and leaving a half-inch border around the edge of the pizza. Drizzle olive oil over the tomato paste.
[] Scatter oregano or chopped basil leaves. Gently press the leaves into the tomato paste.
[] Arrange slices of mozzarella cheese above the tomato paste.