## Pizza Dough and Pre-baked Crust

Leavened with whole wheat barm (malt sourdough)

Classical pizza is baked in a very hot oven, at temperatures not easily managed in most home ovens, usually above 450°F (232°C). Such high temperatures are achievable in small outdoor pizza ovens. The alternative in a home oven is to thoroughly pre-heat a baking stone in place, at the oven maximum temperature ahead of baking the pizza. This is demanding of the oven and uses an inordinate amount of energy. Even then the final pizza can emerge with the rim and topping fully baked but the center of the crust insufficiently baked.

One solution is to prebake the pizza crust, and afterwards to bake the topped pizza using the oven top heat (broiler). Indeed, I've met several people who purchase flat breads such as naan or prebaked pizza crusts. On pizza night with toppings premade they prepare the pizza and bake it with a flourish; there are no worries of too cool an oven or maneuvering pizza on soft dough into a very hot oven and onto a very hot bakestone.

The wheat used for pizza in Naples is likely the local durum wheat, and yes, they can make their pizza with whole wheat flour. I've been to Naples and been served their delicious whole wheat pizza!

For this recipe, I suggest using finely ground whole durum flour such as *Hourani Durum-Iraq or Blue Beard*, or a whole white wheat flour such as *Sonora*, *Wit Wolkoring*, *India-Jammu* or *Chiddam Blanc de Mars*. Home milling very hard wheat such as durum or even hard white *India-Jammu* to a fine whole wheat flour, is best accomplished in a home micronizing mill; there is a risk of grittiness if the grain is especially dry and hard when directly stone milled.

The barm (malt sourdough) certainly develops acidity, but the malt imparts some sweetness and flavor complexity to the crust rather than an outright sour flavor.

Please note that the mature malt sourdough starter used in this recipe is always matured until there is no further gaseous fermentation and the acidity is at a maximum. In this way, only the most acid tolerant of yeast varieties are consistently present in saturation quantities. Other starters not brought to maturity in this way, may not give satisfactory results. It is also important when using large amounts of enzyme active malt in a dough, to allow a total fermentation time that is sufficiently long for enough acidity to develop to counteract the effects of the malt enzymes before baking. A recipe for this type of malt sourdough starter can be found at <u>www.wholegrainconnection.org</u>. The direct link is:

http://www.wholegrainconnection.org/sitebuildercontent/sitebuilderfiles/3simplemaltsourdoughstarter.pdf

Ingredients	Amount (grams)	Bakers percent
Whole wheat flour (durum or white wheat)	250	100
Malt (wheat or hull-less barley malt)	12.5	5
Extra virgin olive oil	15	6
Fine sea salt	3.8	1.5
Water (Charcoal filtered) at 86°F (30°C)	150 - 187.5	60 - 75
Mature malt sourdough starter	25	10

*Amounts are for one 12-inch (30 cm) diameter pizza crust. 4-8 servings Each serving contains 34-68 grams wholegrain and 3-6 grams dietary fiber* 

[] In main mixing bowl, mix whole wheat flour and malt.

[] Use a fork to finely work olive oil into the flour.

[] In a separate jug or bowl dissolve salt in water and add sourdough starter; mix well and add to main mixing bowl. *Begin with the lower amount of water for the dough.* 

[] Mix until all the ingredients are evenly incorporated. Knead the formed dough for a few minutes until a smooth dough ball forms. *Dough should be medium stiff.* 

[] Press the dough down into a bowl or box with lid and leave to ferment and rise at 86°F (30°C) for 4 hours. *Dough should be puffy at the end of this time but may not rise to double the original volume.* 

[] Water-moistened hands, a clean board and a dough scraper are all that you will need to handle the dough. Do not sprinkle flour.

Punch dough down on a smooth surface. Knead briefly. Form into a ball. Cover with inverted bowl or moist cloth. Rest the dough for 15-30 minutes at warm ambient temperature.

[] Prepare a 12-inch (30 cm) square of baking parchment or a silicone baking mat. Place the dough ball in the center of the parchment paper. Using moistened fingertips, gently press and pull the dough ball into a disk approximately twelve inches (30 cm) in diameter and a quarter inch (0.5 cm) thick, leaving a rim approximately half an inch wide and thick (1 cm).

[] Dock the dough all over the center with a fork, keeping a half inch (1cm) rim undocked.

[] Transfer dough on parchment paper to perforated or plain sheet pan. Allow to rise for 2 hours at 86°F (30°C) with steam or humidity. *During this final rise time, if steam or humidity is unavailable, cover with parchment paper and a moist cloth. Remove the cloth and paper cover before baking!* 



[] Bake with 100% steam at 212°F (100°C) for 30 minutes. When fully baked the crust should be springy to the touch.



[] After baking remove the paper and allow the pizza crust to cool to room temperature on a rack. Store pizza crust up to 2 days wrapped in fresh paper towels, in a closed container at cool room temperature.

*Making pizza with a simple tomato and mozzarella cheese topping and a pre-baked crust.* 

Ingredients	
Pre-baked pizza crust	
Olive oil	
Tomato paste	
Oregano (dried)	
Salt and black pepper	
Mozarella cheese (low moisture, grated)	

[] Preheat oven to 425°F (218°C) using both the convection fan and the top heater. *This is possible in a combi-oven, otherwise simply preheat oven to* 425°F (218°C) or use broiler.

[] Arrange pizza crust on a baking sheet pan.

[] Brush olive oil on the pizza rim.

[] Except for the rim, spread tomato paste all over the pizza crust.

[] Sprinkle oregano, salt and black pepper to taste, on the tomato paste.

[] Add grated mozzarella cheese on top of the tomato paste.

[] Drizzle a small amount of olive oil over the entire pizza.



[] Bake on the sheet pan at 425°F (218°C) using both the convection fan and the top heater if possible, or under a broiler. Bake time will be 7 - 10 minutes, until cheese melts and bubbles and pizza rim browns somewhat.

[] Briefly transfer pizza to a cooling rack before serving on a wooden cutting board.

