

Steam Buns - whole wheat malt sourdough buns



These buns are cosmopolitan having been modified greatly from modern Chinese versions. Enjoy these soft buns fresh for dinner, sliced and toasted for breakfast or as sandwich buns.

The steaming method is based on various descriptions for Chinese steam buns, either round, or flattened and folded into a sandwich. In China round buns are often filled before steaming, with a sweet bean paste or meat and vegetable filling. Here the round buns are not filled. The alternative Chinese folded sandwich buns are intended to be filled after they are steam-cooked, with jam or a savory mixture.

Here I emulate the plain round dinner buns (*mantou*) and folded sandwich buns (*bao*) originating in Northern China and make them with 100% whole wheat flour. However, this recipe also makes up well in the style of American sandwich buns. The color and flavor will be determined by the kind of whole wheat used. The very soft texture and slight sweetness are produced by using a generous amount of enzyme active malt flour added to a porridge made with some of the whole wheat flour. Actually, the method is comparable with making a mash to brew beer. For best results, the whole wheat flour should be ground very finely. Preferably, whole wheat flour should be freshly milled in a stone mill or impact mill, from dry grain.

Consistent timing for the dough fermentation is linked to the temperature. It is recommended that a constant temperature cabinet or box, set at 86°F (30°C) is used to keep the dough warm during the fermentation. To stay on schedule, the dough should not be allowed to cool excessively while hand-working the dough, which might be a problem during the winter. If the warmth cannot be maintained, add extra time for the fermentation. An insufficient fermentation to produce enough acidity, may result in a disappointing heavy texture and excessive sweetness. *Note that, for success, the mature sourdough starter should be prepared according to the accompanying recipe for simple whole wheat malt sourdough.*

The buns can be steamed in a vegetable steaming basket or in one of the beautifully crafted bamboo steamers atop a wok or wide pan of boiling water. *A caveat is to know how fast water evaporates when boiling to produce a good supply of steam. Be ready to replenish the water, perhaps at half time for the steaming, especially if a shallow vessel such as a wok is the water source beneath your steamer.*

Rest the buns on individual pieces of baking parchment paper during the steaming. Manage all manipulations of the buns, **after** removing the steamer basket from the steam source.

Know when buns are cooked by the observation that they spring back from touching when done; an indentation remains when the buns are not yet cooked through. This is only a partially reliable test; finished buns should not be mushy in texture! In my experience they need to be steamed for an hour or more to be fully

cooked. Eventually the timing is dependent on the vigor of the steam source and the bun size and shape.

Steam cooking buns makes them extra soft. The starting dough is therefore made fairly stiff.

The same basic dough recipe for *pain de mie* and *basket loaves* is used here.

Method

Amounts are for 8 buns, to be steamed in a 12 inch bamboo steamer with two layers (internal diameter is 10 inches).

Total whole wheat flour basis for bakers per cent: 417 grams

Step I. Sweet malt porridge preparation

<i>Ingredients</i>	<i>Amount in grams</i>	<i>Bakers percent*</i>
Whole wheat flour	42	10
Water at ambient temperature	167	40
Wheat malt (enzyme active)	21	5

[] In a saucepan, mix whole wheat flour and cold water to a smooth slurry. While stirring, heat to boiling, and continue cooking for a minute longer. *Notice that the mixture thickens to an evenly smooth porridge.*

[] When the porridge has cooled to less than 104°F (40°C) beat in all the enzyme active malt flour. Cover with lid and set aside for one hour at 86°F(30°C). *The mixture should thin somewhat and become distinctly sweet tasting.*

Step II. Mixing the dough

<i>Ingredients</i>	<i>Amount in grams</i>	<i>Bakers percent</i>
Whole wheat flour	375	90
Salt	6.3	1.5
Water	104 - 146**	25 - 35**
Simple whole wheat sourdough starter	42	10

*** Suggested total hydration is 65 -75%, including 40% in the porridge and 25 – 35% more in final dough. Begin by using the smaller amount of water, adding more later if dough is too stiff. Use an amount of water to make a medium stiff dough that will be self-supporting. Steaming will add moisture.*

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

[] In a separate jug or bowl combine water and sourdough starter; add this mixture to main mixing bowl.

[] Add all of the sweet porridge from Step I, to the main mixing bowl.

[] Mix the dough for 5-10 minutes, until all the ingredients are evenly incorporated. *Final dough should be medium stiff, yet smooth. Add 5-10% more water if dough is too 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. Total fermentation time from mixing until baking, needs to be long enough for sufficient acidity to develop to deactivate the malt alpha-amylase. Heaviness and too much sweetness in the finished buns may result, if fermentation time is too short.*

Step III shaping and final rise

Water moistened hands, a clean board and a dough scraper are all that is needed to handle the dough. Do not sprinkle flour.

[] Punch dough down and knead briefly. Shape into a ball. Divide the dough into 8 equal sized pieces, preferably by weight. Knead and round dough pieces and cover them with a moist cloth. Rest the dough at 86°F (30°C) for 15-30 minutes.

Shaping styles

[] *Dimpled American Sandwich Buns:* Place a dough ball on a 4 inch square of baking parchment paper. Using fingertips press the dough piece into a 4 inch diameter disk, quarter to half an inch thick. Arrange on a baking sheet or board. Cover with a sheet of parchment paper and a moist cloth and leave to rise at 86°F (30°C) for 2 hours. Immediately before steaming, thumb press an indentation in the center of each bun.

[] *Bagel style buns:* Make a thumb hole in the center of a dough ball. Enlarge the hole and gently stretch the circle of dough until it has an outside diameter of 4 inches. Rest each bun on a 4 inch square of baking parchment paper and on a baking sheet or board. Cover with parchment paper and a moist cloth and leave to rise at 86°F (30°C) for 2 hours.

[] *Round Mantou Buns,* round the dough pieces again and place them on individual 4-inch squares of baking parchment paper on a baking sheet or board. Cover with a sheet of parchment paper and a moist cloth and leave to rise at 86°F (30°C) for 2 hours. *Optionally, slash the top of each bun before steaming.*

[] *Folded sandwich buns Bao,* roll-out the dough piece into an oval, 4 x 8 inches and less than a quarter inch thick. Fold a 4 x 8 inch piece of baking parchment paper in half and place it between the folds of the dough. Rest each bun on a 4 inch square of baking parchment paper and on a baking sheet or board. Cover with parchment paper and a moist cloth and leave to rise at 86°F (30°C) for 2 hours.

Step IV. Steaming buns

[] Bring water to a boil below steamer. Check water level frequently and replenish water when needed throughout cooking time.

[] Remove tray or basket from steamer and arrange buns plus parchment paper on the steamer tray, with enough space to allow steam circulation. Replace steamer tray or basket on steamer with lid.

[] Steam for 60 minutes or longer, as needed. Remove steamer tray or basket from steamer before removing the buns to a cooling rack. Immediately remove the parchment paper from each bun.

[] Wait an hour or more before serving freshly made steamed buns.

Allow buns to cool before storing in a closed container at normal room temperature, possibly up to 4 days. Slice in half and toast or toast whole, before serving.