

Cosmopolitan Steam buns

100% whole wheat



Cosmopolitan because these buns have been modified greatly from the modern white Chinese version. Enjoy these soft buns fresh at dinner, sliced and toasted for breakfast or as a sandwich bun.

This method is based on various descriptions of Chinese steam buns, either round, or flattened and folded into a semicircular sandwich bun. 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 alternate Chinese semicircular sandwich buns are intended to be filled after they are steam-cooked, with jam or a savory meat sandwich mixture.

In this recipe the idea is to emulate the plain round dinner buns (*mantou*) and sandwich (*bao*) buns originating in Northern China, and to make them with a 100% whole wheat flour. The color and flavor will be determined by the kind of whole wheat used. The anticipated slight sweetness is produced here by using an extra dose of enzyme active malt flour. A small amount of extra virgin oil is included to soften the texture. The whole wheat flour can be from hard red, soft white, cone or durum wheat,

although in any case the protein content should be in the breadmaking range of 12% or greater. For best results, the whole wheat flour should be ground very finely.

Consistent timing for the dough fermentation is strictly 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, which might be a problem during the winter. If the warmth cannot be maintained while working the dough, add an extra hour to the time at the warm temperature. An insufficient fermentation produces a disappointing heavy texture. *Note that, for success, the sourdough starter should be prepared according to the recommended recipe.*

The buns can be vigorously 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 vigorously boiling and be ready to replenish the water in a shallow vessel such as a wok beneath your steamer.

Rest the buns on individual pieces of 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.

Ingredients for 12 small buns

<i>Ingredients</i>	<i>Bakers per cent</i>	<i>Grams</i>
100% whole wheat flour	100	500
Enzyme active malt with vitamin C ¹	1	5
Enzyme active malt (<i>optional extra amount</i>)	4	20
Extra virgin olive oil	4	20
Salt ²	1.5	7.5
Water ³ (<i>active charcoal filtered</i>) at 86°F (30°C)	60 - 70	300 - 350
Whole wheat sourdough starter ⁴	10	50

[] In mixing bowl, mix together flour, and malt. Add oil. Blend all ingredients by hand using a fork, or with a paddle in a stand mixer, or in a food processor with a blade.

¹ Vitamin C is mixed with the malt at the rate of 1.5 grams / 100 grams malt. Experimentally, adding vitamin C at the rate of 100 to 200ppm in total flour gave optimal loaf volume (Lu and Seib 1998). This corresponds to 0.01 to 0.02% vitamin C with respect to flour.

² The amount of salt to add is optional. Most bakers add salt to baked goods at the rate of 2% with respect to the flour. The use of 1.5% salt, which is a benefit for those looking to minimize their sodium intake, is still enough to make a satisfactory dough and give mild flavor.

³ An active charcoal filter can be used to remove anti-bacterial treatment chemicals from tap water. The minerals in most tap water, are beneficial to dough fermentation and should not be removed.

⁴ For success it is necessary to prepare the sourdough as described at:

<http://wholegrainconnection.org/sitebuildercontent/sitebuilderfiles/simplesourdoughstarterjanuary2018.pdf>

Or

<http://wholegrainconnection.org/sitebuildercontent/sitebuilderfiles/tesloafmethodapril2019.pdf>

[] In a separate container, add salt. Add water and dissolve salt. Add sourdough. Mix well and add the aqueous mixture to flour-mixture in mixing bowl. *Use smaller amount of water for first attempt. Note the amount of water used, for future reference. The goal is a medium stiff smooth dough.*

[] Mix well until all ingredients are completely and smoothly incorporated. Compact the dough and leave to ferment in a covered container, at 86°F (30°C) for 3-4 hours.

[] Punch dough down and knead briefly, to finish dough development. Shape into a log. Divide the log of dough into 12 equal sized pieces. Round dough pieces and set them on a moist cloth and cover them with a moist cloth. Rest the dough at 86°F (30°C) for 15-30 minutes.

[] For round buns, round the dough pieces again and place them on individual 3 to 4-inch squares of baking parchment paper and on a moist cloth. Cover with a moist cloth and leave to rise at 86°F (30°C) for 2 hours.

Or alternatively, for semicircular buns, press the dough piece into a circle, a quarter to half inch thick. Fold a 4-inch square of baking parchment paper in half and place it between the folded over semi-circles of dough. Rest each bun on another piece of baking parchment paper and on a moist cloth. Cover with a moist cloth and leave to rise at 86°F (30°C) for 2 hours.

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

[] *Optionally, slash surface of buns.* Remove steamer tray or basket and arrange buns on parchment paper, with enough space to allow steam circulation. Replace steamer tray or basket on steamer.

[] Steam vigorously for 25 minutes or longer. *Buns are done when they no longer retain an indentation and are springy to the touch.* Remove steamer tray or basket from steamer before removing the buns to a cooling rack.

[] Serve fresh buns while warm.

Or,

Allow buns to cool. Store in a closed container at normal room temperature. Slice in half and lightly toast before serving.

