Gluten-free Bagels
Created by Matt St. Onge, FSHN graduate student

Ingredients:
½ cup water
2 eggs
3 tablespoons canola oil
½ cup tapioca flour
½ cup arrowroot flour
1½ cups brown rice flour
2¼ teaspoons yeast
3 tablespoons sugar
1 tablespoons baking powder
1 tablespoons nonfat dry milk solids
½ teaspoon salt
2½ teaspoons xanthan gum
2 tablespoons malt extract
Cornmeal, for dusting on baking sheets

Directions:
Make sure all your ingredients are at room temperature.

Warm water in microwave to 120°F measured with a cooking thermometer. Whisk together warmed water and yeast. Set aside to proof (about 10 minutes).

Preheat oven to 200°F and boil 4 cups of water (for Coloradoans and other dry climates). When the oven has preheated, turn the oven off and add the 4 cups of water to an oven-safe dish and place on a bottom rack in the oven.

In a medium bowl add the xanthan gum, baking powder, sugar, dry milk solids and salt. To the bowl in the previous step, add the tapioca, arrowroot and brown rice flours by sifting the flours through a sieve once.

To the proofed yeast, whisk in the room temperature eggs one at a time and add the oil. Add the proofed yeast & egg water to the flour in about 4 increments of mixing by hand using a fork. In a kitchen mixer, add all ingredients to the mixing bowl and mix with the paddle attachment on medium speed. Mix for about 5 minutes as a thick dough will form.
Divide dough ball into 8 equal portions. Flatten each portion into a disk, poke your thumb through center to form a hole and work the edges into a rounded, bagel-type shape. Note: it is easier to oil hands with vegetable oil before shaping dough.

Place the bagels on a cooking tray with parchment paper, cover with a damp towel, and place into the oven for 2+ hours or until the bagels double in size.

Remove bagels from oven and turn oven to 425°F. Place bagels one at a time in the malted boiling water for 20 seconds per side. It is very important that the bagels remain on one side for 20 seconds and flipped.

Place boiled bagels onto a pre-oiled baking sheet with cornmeal sprinkled on surface. At this point add any toppings desired.

Bake bagels for about 10 minutes or until slightly brown on top. Bagels can be flipped over halfway through. Cool on a wire rack and transfer to a zip top bag.

**Yield:** 8 bagels
Adjusted for 5,000 feet—will work from 3,500 -6,500 feet.