SCIENCE FROM HOME





Chocolate Chirp Cookies Recipe

Crickets have been a staple of the human diet for centuries. Recently, because of their easy raising and high protein content, they have become more popular in the U.S. as an alternative protein source. Cricket flour or roasted crickets can easily be purchased online and can make many snacks much more interesting and delicious. During Bug Fest, we often serve chocolate chirp cookies. This year we thought we'd let everyone try the recipe for themselves.

Know before you begin

- This activity can be done inside in a kitchen
- · Adult supervision is recommended
- Please choose a safe space for this activity
- Crickets can be an allergen for people with seafood allergies

Materials

- An oven, mixing bowls, a whisk or a mixer, baking sheet(s), and kitchen measuring tools
- 1 cup and 2 tbsp flour
- 1/2 tsp baking soda
- 1 stick of softened unsalted butter
- 1/2 cup sugar
- 1/2 cup packed brown sugar
- 1 large egg
- 1/4 tsp salt
- 1 1/2 tsp vanilla extract
- 1 cup chocolate chips
- 3/4 cups roasted crickets (these can be purchased online from various sites, see helpful hints from Chef Zack for advice)

Instructions

- Preheat the oven to 375 degrees F.
- Mix flour and baking soda, set aside.
- Combine butter and the two sugars, whisk until well blended and fluffy.
- Add the egg, salt and vanilla and blend well.



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- Stir In the flour mixture until that is also blended in.
- Add chocolate chips, making sure they are well distributed in the dough.
- Add crickets to the dough; be sure they are also well distributed. Option 1, see below.
- Use a heaping tsp to scoop batter onto a baking sheet 2 inches away from each other. Add 2-4 crickets to each cookie. Option 2, see below.
- Bake 8-10 minutes, rotate sheet halfway if desired.
- Let them cool and enjoy!

Helpful Hints from Chef Zack

- If you are using crickets that have not already been roasted:
 - o I use fresh crickets that are 5 weeks old (industry will label them that way OR as "pre-wing" OR as "3/4 inch.") since they are nearly adult size but still wingless.
 - o Freeze crickets upon receipt. When you are ready to cook them, various methods can be used to knock legs and antennae off frozen crickets. These parts are edible, but they can make for a messy kitchen and make the crickets harder to eat.
 - Knock off legs and antennae. For this we often use a slotted colander. Frozen
 crickets thaw and get soft very quickly, so leg/antenna removal must be kind of
 speedy. Post-roast, this is not an issue.
 - Roast on a pan (no treatment of the pan is needed) for about 30 min at 350 degrees
 F. Crickets should be dry and crunchy, but not charred. Roasted crickets will keep in a freezer for a very long time.
- The two different ways to add crickets:
 - Option 1: If you want a highly cricket-y cookie, mix crickets into the dough.
 However, people may not see the crickets they are going to eat when looking at a cookie.
 - Option 2: Add the crickets after the dough is mixed and scooped onto the baking sheet. Push two, three or even four crickets (depends on cookie size) into the into the dough. This takes more time, but people can see the crickets in the baked cookies.

