

Standard Laboratory Operating Procedure #1100 Soy Milk

Laboratory: Biotechnology SLOP prepared by: R. Sanders Location: Food Science Lab Last Revision: 7 June 2015

General: One of the primary benefits of drinking soymilk is that it is lactose free. Many people cannot digest lactose resulting in gastrointestinal problems.

Safety: Safety glasses

Materials: 50 g dried soybeans for each lab station Hot Plate 600 mL Pyrex Beaker Cheesecloth Sugar Handblender

Procedure:

- 1. Weigh out 50 g of dried soybeans per lab station. Rinse the soybeans, then cover with water and allow soybeans to soak overnight.
- 2. Rinse hydrated soybeans and place in 600 mL beaker.
- 3. Add 200 mL of boiling water to the beaker of hydrated soybeans and mix with a handblender until thick paste forms, about 3 to 4 minutes.
- 4. Add an additional 200 mL of boiling water to the soybean paste to create a solution.
- 5. Using a hot plate, heat soybean solution over medium high heat until simmering. Make sure to stir continuously to prevent from scorching.
- 6. Reduce heat and simmer 15 to 20 minutes.
- 7. Filter bean mixture though layered cheesecloth for 5 to 10 minutes. Yield should be about 150 mL of soymilk.
- 8. Optional: add 10 to 20 grams of sugar to taste.
- 9. Refrigerate immediately, keeps up to 3 days.