

## Let's Eat! Exploring food science

# Shelf Life Extension and Preservation

1. What is shelf life?
2. What food has the longest shelf life you can think of?

In the space below, list the provided product demos in order from shortest shelf life to longest:

3. How does refrigeration/freezing impact shelf life?
4. Beside each of the foods listed in the space above, use the provided water activity table to estimate the water activity level in those (or similar) products.

### Protocol for shelf-life analysis:

Follow classroom instruction for labeling samples of soy flour, tofu, and soy sauce with the date and storage temperature.

Within your group, you will be treating your 3 additional tofu samples with oven drying and/or salting to alter the available water.

- Dry one sample in an oven
- Coat one sample with salt
- Dry one sample in an oven, then coat with salt

Follow classroom instructions for labeling and storage of test samples.

Record your results on the chart on the following page

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### Shelf Life Analysis

Food Type	Storage Temp	Dried?	Salted?	Dried and salted?	Days until spoiled
Tofu	Room Temperature				
Tofu	Room Temperature	X			
Tofu	Room Temperature		X		
Tofu	Room Temperature			X	
Tofu	Freezer				
Soy sauce	Room Temperature				
Soy flour	Room Temperature				

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