



# Municipality of Anchorage

## Department of Health and Human Services

825 L Street, Anchorage, Alaska 99501  
907-343-4200 | [www.muni.org/food](http://www.muni.org/food)



## COTTAGE FOOD PRODUCT TESTING

*Food sold under a cottage food variance per AMC 16.60*

### WHY ARE FOODS REQUIRED TO BE TESTED?

Documentation demonstrating product safety is required to be provided with the permit application and upon request. You must demonstrate that either pH, water activity, or both are sufficient to prevent dangerous bacteria from growing. Please see the [Approved Cottage Food List](#) for information regarding what type of testing is required for the type of product you are making.

### I WANT TO SELL BAKED GOODS. DO I NEED TO GET A WATER ACTIVITY OR PH TEST?

If your baked goods are non-potentially hazardous/do not require time and temperature control for safety (i.e. no cream cheese frosting, custards, meringues, etc.) then the only documentation that you will need to provide are the product ingredients along with how the product is prepared and packaged. If you have any questions about whether or not your goods are non-potentially hazardous, feel free to contact our office.

### WHAT KIND OF TESTING DO I NEED TO DO?

For products like salsas, pickled vegetables and fermented foods a pH test result of 4.6 or below is needed. For products like dehydrated foods a water activity test result of 0.88 or below is required.

### WHAT ARE PH AND WATER ACTIVITY?

The pH is a scientific measure of how “acidic” or “basic” a substance is. Scientists measure pH on a scale of 0 to 14. A lower value on the pH scale indicates the substance is more acidic whereas a higher value indicates the substance is more basic. Foods like water and milk are considered “neutral” with a pH value of about 7.0. Lemonade and vinegar are acidic with a pH between 2 and 4. Materials like laundry detergent and ammonia are “basic” with pH values of 11-12. Food products at a pH of 4.6 or lower will control the growth of dangerous bacteria which can cause Botulism.

Water activity is measured by how tightly bound the water is in the food product. Water activity is measured on a scale from 0 (bone dry) to 1.0 (pure water). Most food products have a water activity in the range of 0.2 for very dry foods to 0.99 for moist, fresh foods. Water activity is not the same thing as moisture content, however. While moist foods are likely to have greater water activity than dry foods, this is not always true. Water activity is important because it can be used to predict the growth of harmful bacteria, yeasts and molds. Food products with low water activity will last longer on the shelf because they do not provide a good environment for pathogens to grow.

Some foods may not require refrigeration because they have a combination of low water activity and an acidic pH. Testing product for water activity and pH allows producers to decide whether their product requires refrigeration or not.

### WHERE CAN I GET MY PRODUCT TESTED?

Any number of Food Labs would be able to test your product. You can check around locally to see if anyone can provide that service. Otherwise Alaska DEC Environmental Laboratory Services or Cooperative Extension Services can provide pH and water activity testing at a minimal cost.

Although, use of an approved lab is preferred for reliability, you can purchase your own water activity and/or pH meter to test your product. For additional information on pH meters, see our Using a pH Meter handout.

### **HOW MUCH DOES IT COST TO GET MY PRODUCT TESTED?**

Testing costs may vary depending on where you get your product tested. Water activity and pH testing done through the [Alaska DEC Environmental Laboratory Services](#) (a pH test is \$20 and water activity is \$10 per sample) or [Cooperative Extension Services](#) (pH test is \$15 and water activity is \$15 per sample).

### **HOW DO I SEND SAMPLES TO THE ALASKA DEC ENVIRONMENTAL LAB?**

1. First download a [Sample Submission Form](#) from the laboratory [website](#). Fill out the form with your personal contact information including an email address and information about the product.
2. Carefully package and seal your product to prevent drying or leaking in shipping. The laboratory needs 8 ounces of product to test for both pH and water activity.
3. Place a form of payment, the completed [Sample Submission Form](#) in the package with the product and ship to:

Alaska State Environmental Health Laboratory  
5251 Dr. Martin Luther King, Jr. Avenue Anchorage, AK 99507-1293  
(907) 375-8231  
<http://dec.alaska.gov/eh/lab/index.htm>

Call (907)375-8231, or email [DEC.EH-Lab-ShippingReceiving@alaska.gov](mailto:DEC.EH-Lab-ShippingReceiving@alaska.gov) to let them know you have shipped your package. You can expect results via email 5-10 business days after the package is received by the laboratory. If you need quicker results, let the lab know and they will expedite as quickly as they can!

### **DO I NEED TO PROVIDE THE MUNICIPALITY WITH A COPY OF MY TEST RESULTS?**

Yes – at the time of application. Any new products added to your offerings that require testing shall be submitted to the municipality for review and updating your application file. You need to keep copies of testing with you so you can demonstrate that the products are safe.

### **I WANT TO SELL MY PRODUCT AT THIS WEEK'S FARMER'S MARKET. THERE ISN'T TIME TO GET MY PRODUCT TESTED – DOES THAT MEAN I CAN'T SELL?**

You need to have proof that the product you are selling is safe. Until you have that documentation your product is not considered safe.

### ***Contact the Cooperative Extension for questions on water activity or pH:***

308 Tanana Loop, Room 101 P.O. Box 756180  
Fairbanks, Alaska 99775-6180  
(907)474-5211  
[cesweb@alaska.edu](mailto:cesweb@alaska.edu), <http://www.uaf.edu/ces/>