



Homemade Mayonnaise Lab

Purpose	To demonstrate how to prepare a permanent emulsion.	
Scientific Explanation	The lecithin in the egg yolk is the emulsifying agent enabling the oil and the water in the vinegar to remain suspended rather than separating.	
Equipment	Supplies	
Blender	1 1/4 c. oil, divided	2 Tbsp. Vinegar
Measuring utensils	1 Tbsp. Dijon mustard	1/4 tsp. salt
	1/4 c. pasteurized egg product (equal to 1 egg)	
	Vegetable dippers or salad greens	
Procedure Steps		
1. In blender container, place 1/4 c. oil, vinegar, Dijon Mustard, salt, and egg product ; process until smooth.		
2. Leaving cover on blender container, remove feed tube cover. With blender running at med.-high speed, slowly pour remaining cup of oil in a steady stream through the cover opening. Process until thick and creamy.		
3. Set a small sample of your mayonnaise to compare with other kitchens and complete data table.		
4. Prepare variations and serve with vegetable dippers or salad greens.		
5. Complete lab processing questions.		

Data Table- Mayo sample texture description

Kitchen #	1	2	3	4	5
texture					

Process Questions

1. Which ingredient allows the permanent emulsion- mayonnaise to form?
2. Why is it important to *slowly* add the oil?