

PRE-LAB 10: FOOD LAB

We are using another new medium this week, XLD. This medium has one selective reagent and three differential tests. To help you interpret the test results, complete the table below. Based on information in the lab and in the [Dehydrated Culture Media link](#), fill in the cells of the table with the result for each test by species. Keep in mind that when you observe the colony on the plate, you are seeing all the results combined.

Table 1: Appearance of *Enterobacteriaceae* on XLD based on individual chemical reactions

Appearance of colonies	Xylose + Phenol Red	Lysine + Phenol Red	Thiosulphate
Positive result			
Negative result			
<i>Salmonella</i>			
<i>E. coli</i>			
<i>Shigella</i>			

Food Lab Worksheet

Sample name:

Create a figure showing a representative plate from each medium tested: one TSA plate, XLD plate, Oxford Agar, and one petri film and any other media used to test pathogens. There are two ways you can choose to do this: **(4 marks)**

- Either make a descriptive legend for the entire set of four images that indicates your sample name and each media type.
- OR label each image with its own legend to indicate the media type.

Table 1: Raw data of colony counts of the sample on selective and non-selective media **(4 marks)**

Dilution Plate	NA plates	PDA-C film	XLD agar		
	Total Aerobic Bacteria	Yeast and mould	<i>Salmonella</i>	<i>Shigella</i>	Other enterics
XLD 10 ⁻¹					
XLD 10 ⁻²					
TSA 10 ^{-*}					
TSA 10 ^{-*}					
Y&M ⁻²		Yeast: Mould:			
Y&M ⁻³		Yeast: Mould:			

Use TNTC as required

* indicates a dilution that you fill in, based on the countable dilutions

Table 2: Total organisms in sample (4 marks)

Organism	CFU/g
Total aerobic bacteria	
Yeast	
Mould	
Pathogen	Presence (+) / Absence (-)
<i>Salmonella</i>	
<i>Shigella</i>	
Other enterics	
<i>Listeria</i>	

