MAKEAWARE x Spearhead

To test the efficacy of antibiotics on specific bacteria, scientists in the laboratory position antibiotic pills in a transparent lidded dish (called Petri) covered by bacteria. After some cultivation hours, it is possible to observe the efficacy of antibiotics that prevent bacteria growing. The higher the antibiotic efficacy, the less the bacteria spread, leaving an empty space around the pill. On the other hand, the smaller that area, the higher the resistance development. The use and misuse of antibiotics is one of the leading causes of resistance development. Consuming antibiotics responsibly helps preserve their efficacy.

https://github.com/zumatt/diplab

DipLab – Digital Petry Laboratory

/Patient ‘s Dossier

Patient code: 19293

Age: 16

Disease: Food Poisoning

Bacterium: Salmonella enteritidis

Drug allergies: ⊘ Ampicillin
⊘ Cefadroxil

Medical history:
16-year-old diagnosed with food poisoning, Salmonella enetritidis confirmed. Allergic to Ampicillin, Cefadroxil. Symptoms: severe abdominal pain, vomiting, diarrhea,fever. Suspected ingestion of contaminated food. No prior history of similar illness. Immediate need for antibiogram to identify effective antibiotics.

Lab signature: _____

Bacterium: Salmonella enteritidis

Acronym	Zone Diameter Breakpoints (mm)		Antibiotic name	Diameter size (mm)	Diameter category (Sensitive/Resistant)
	Sensitive ≥	Resistant <			
AM10	14	14	Ampicillin		
PP30	20	20	Piperacillin		
PV10	15	15	Mecillinam		
CD30	12	12	Cefadroxil		
CX30	14	14	Cefalexin		
CF5	17	17	Ce*fi*xime		
CM5	20	17	Cefotaxime		
CT30	19	19	Cefoxitin		
CP10	21	21	Cefpodoxime		
CZ10	22	19	Ceftazidime		
CXO30	19	19	Cefuroxime		
IP10	22	19	Imipenem		
AK30	18	18	Amikacin		
GT10	17	17	Gentamicin		
TY10	16	16	Tobramycin		