Pictures S3. Laboratory Photos of the authors

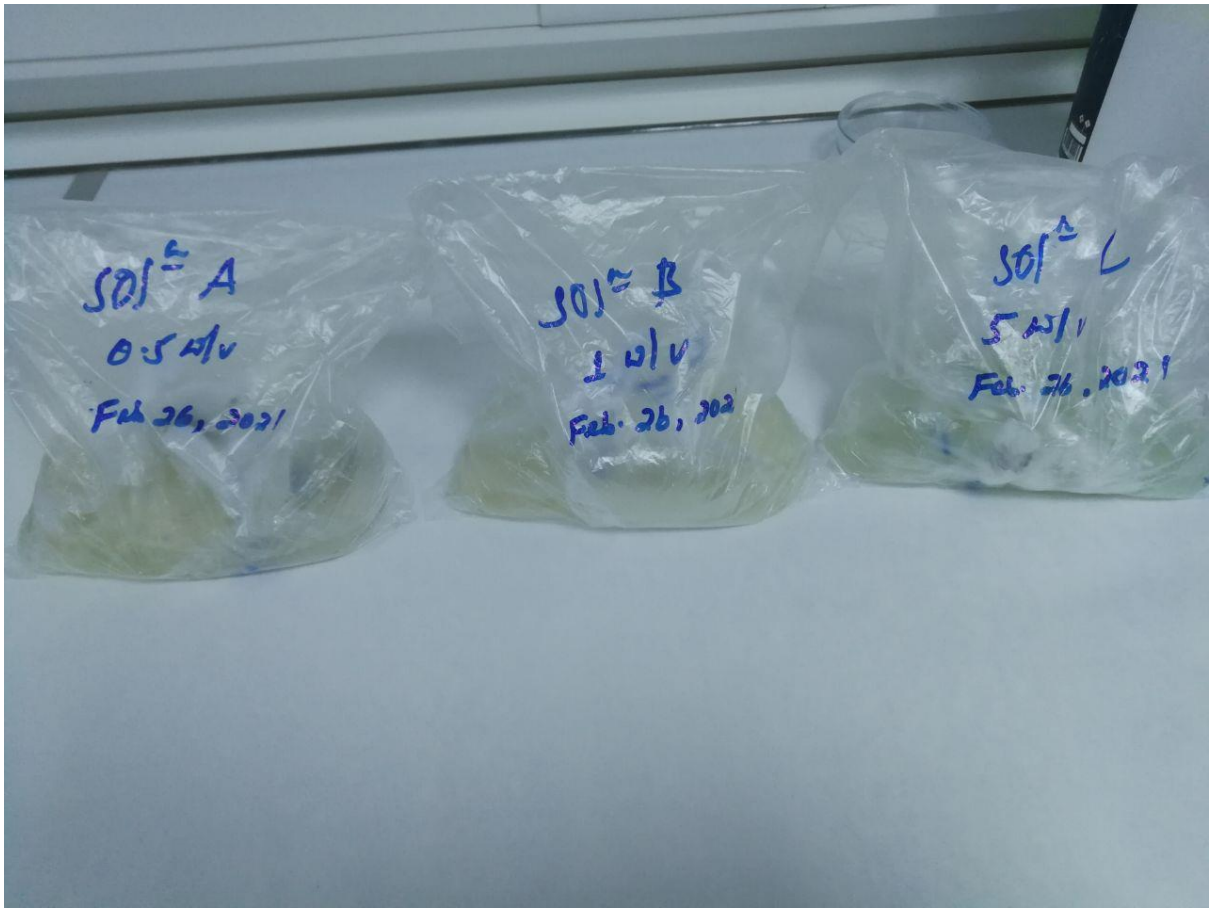
Pic. 1. In the first image, Dr. Wubshet Asnake Metekia meticulously prepares fresh tilapia fish fillets for an experimental study investigating the effects of Spirulina platensis extract on

total coliform bacteria and Staphylococcus aureus. This work is being conducted at the Department of Food Hygiene and Technology at Near East University, demonstrating a commitment to advancing research in food safety and hygiene.

Pic. 2. In the second and third image, Dr. Wubshet Asnake Metekia is actively engaged in sampling procedures as part of his ongoing research at the Department of Food Hygiene and

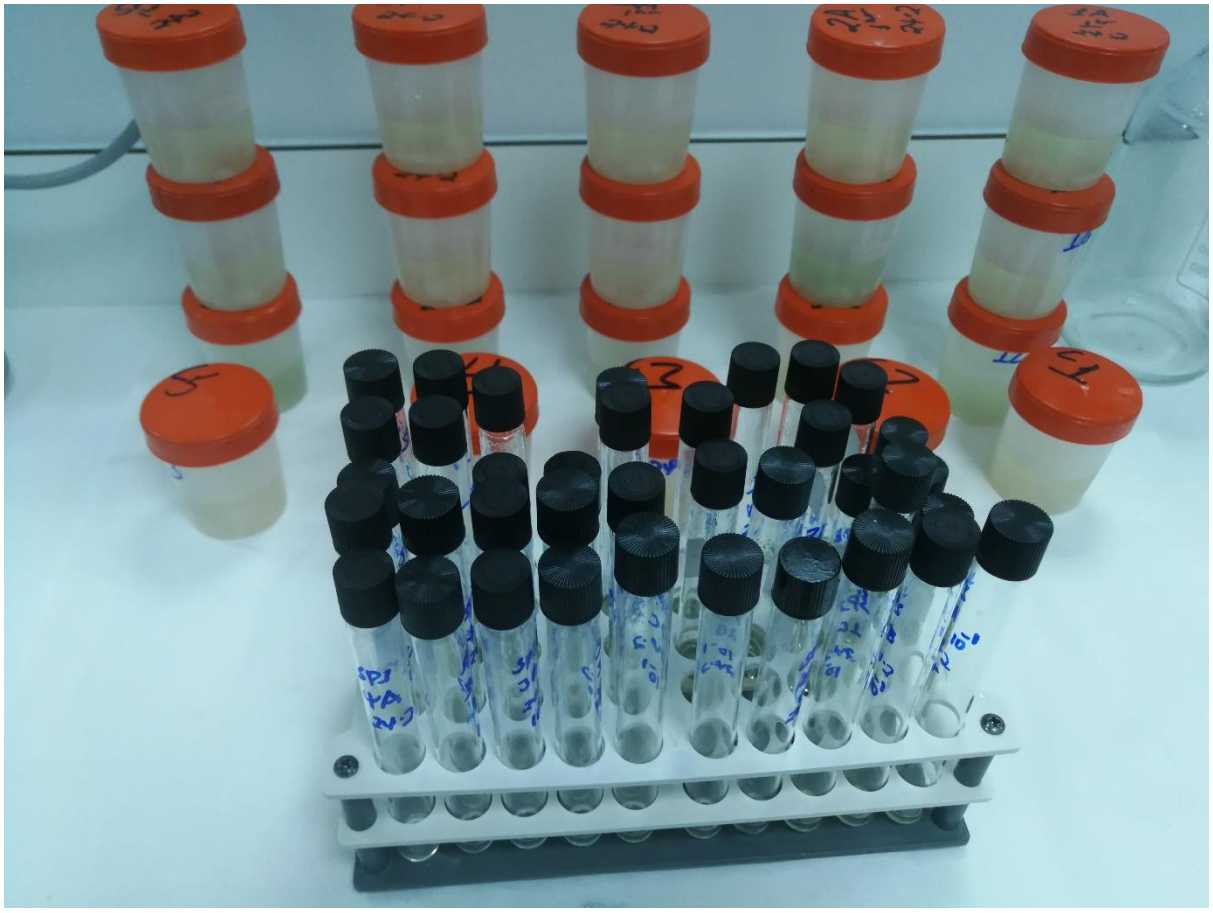
Technology at Near East University. This hands-on activity reflects his dedication to ensuring the accuracy and reliability of data in his study on the effects of Spirulina platensis extract on total coliform bacteria and Staphylococcus aureus in tilapia fish fillets. The meticulous sampling process is crucial for understanding microbial safety in food products.

Pic. 3. Assoc. Prof. Dr. Beyza Hatice Ulusoy from the Food Hygiene and Technology Department at Near East University is seen applying spirulina extract onto the fish fillets.



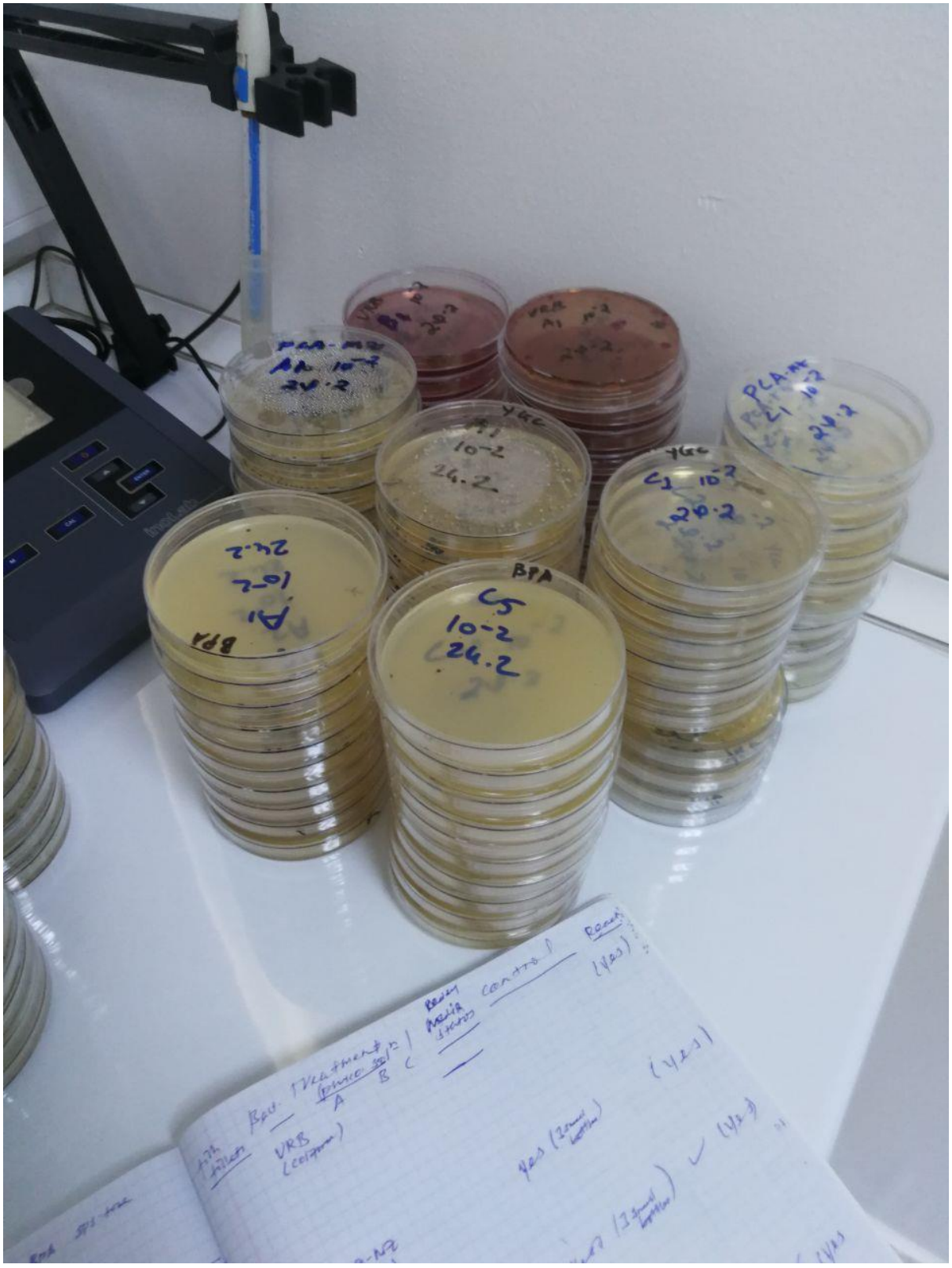
Pic. 4. In this fourth image, we see the sampled tilapia fish that have been treated with different extracted Spirulina solutions labeled as EA, EB, and EC. These treatments are part of Dr. Wubshet Asnake Metekia's and Assoc. Prof. Dr. Beyza Hatice Ulusoy research to evaluate the effects of Spirulina platensis extract on the microbial quality of fish fillets. Each solution contains varying concentrations or formulations of Spirulina extract (0.5, 1 & 5% (w/v) respectively, which is known for its potential antimicrobial properties.

The fish samples are prepared for analysis, and the treatment with Spirulina extracts aims to assess their effectiveness in reducing or inhibiting the growth of bacteria such as total coliforms and Staphylococcus aureus. This stage is crucial for understanding how natural extracts can enhance food safety and quality in sea food products. The results from these treatments will provide insights into the potential application of Spirulina in improving the microbial safety of fish fillets.



Pic. 5. In this fifth images, we see a collection of prepared samples that are ready for bacterial seeding. This stage is critical in microbiological research, as it involves inoculating the samples with specific bacteria to observe their growth and behaviours under controlled conditions. The setup includes various media and conditions designed to facilitate the growth of total coliform bacteria and Staphylococcus aureus, which are key focus areas in Dr. Wubshet Asnake Metekia's research on the effects of *Spirulina platensis* extract on tilapia fish fillets. Proper preparation and handling of these samples are essential for obtaining valid and reliable results in the study of microbial safety in food.

Pic. 6. Bacterial Seeding of Total Coliforms and *Staphylococcus aureus* on Petri Dishes by Dr. Wubshet Asnake Metekia at the Department of Food Hygiene and Technology, Near East University, Turkey.



Pic. 7. illustrate the enumerated total coliforms and *Staphylococcus aureus*