

Medinourish:

Empowering souls of medical students

Fueling future healers with healthy meals-a pathway to a healthier nations' tomorrow.

Students lead a
Healthy Diet
Promotion program in
the Faculty of
Medicine-UOJ

PREPARED BY S. D. Victoria

Contents

1.	Introduction	3
2.	Background	4
3.	Method	5
4.	Results	23
5.	Recommendations	24
6.	Conclusion	24
7.	Annexure	25

1. Introduction

A nutritious diet is essential for living a strong, healthy, and fulfilling life. However, because of their hectic schedules, university students, particularly medical students, are forced to choose between eating at the university canteen or eating out. The luxury of a comfortable, nutritious, and delicious dinner at an affordable price has recently become out of reach for many university students, particularly those living away from home. Furthermore, medical students are preoccupied and disoriented in the world of caring. However, the extent to which they care for themselves is an issue.

With the current economic crisis, meal prices have increased all around the island. That meant our pupils couldn't have their customary lunches at the usual low cost. As a concern, our faculty intended to reduce the pricing of all meals sold at the faculty and hostel canteens to have the least detrimental impact on both students and canteen owners while still offering a nutritious meal. However, the economic crisis has been the driving force behind this project, therefore the Students' Well-Being Committee and Medical Student Union are working hard to provide all medical students with a more complete meal at an affordable price.

Seeing this issue, major 8B from the 43rd batch decided to participate in the continuation of the "Health diet promotion program" to develop a system that distributes nutritious meals to students' meal tables at an affordable price and at any time. This marketing scheme may fuel the bodies of future doctors, allowing the country to rely on them.

2. Background

With skyrocketing prices around the island, our faculty was concerned about the meals of medical students. Therefore a project was initiated to ensure affordable but nutritious meals. With the hope of influencing all the canteens relevant to the medical students, the Students' Wellbeing Centre along with the Medical Students' Union 2022/2023 started working on upgrading the medical hostel canteen according to the canteen guidelines. During this journey, we figured out a lot of other factors that have influenced the downfall and low sales of the medical hostel canteen and a "Healthy Diet Promotion Program" committee started searching for practical solutions with the hope of executing them as soon as possible.

With this economic crisis being the main driving force of this project, The "Healthy Diet Promotion Program" started working on the pertaining issues with the support of our Jaffna Medical Faculty Alumni Association. We had monthly board meetings under the title "Stakeholder meeting- Healthy Diet Promotion Program-Medical Student Faculty of Medicine, University of Jaffna" to discuss pertaining issues at the faculty canteen and hostel canteen where we tried to figure out practical solutions. Afterward, we saw a gradual improvement in our canteen setups. However, the rate of improvement was not speedy enough for the students. In the middle of the project, we started seeing drawbacks with sudden fluctuations in meal prices and students lost hope in our canteen, making the condition worse as a vicious cycle. Due to this major deceleration of progress, Dr. S. Kumaran suggested the above topic as a fieldwork project and the major 8B of 43RD batch took charge of the responsibility.

3. Method

On September 6, 2022, a critical debate was held with a focus on enhancing services at the hostel canteen. The agenda was extensive, with themes such as devising a precise pricing strategy, creating a nutritious food plan, and adopting environmental sustainability measures. On November 15th, a follow-up meeting was organized to discuss changes to the meal serving manner as well as gather student recommendations and complaints. During this debate, a price formula for canteen menus was given, based on student feedback from a Google form, and will be evaluated in a pilot program from November 28th to December 6th. The meeting also addressed complaints about expired dry rations, faulty stoves, and canteen cleanliness.

At the beginning of the project, few issues were identified through Students' Representatives and solutions were suggested. These concerns were addressed through measures such as weekly restocking of perishables and equipment repair. The need for a convenient takeaway packaging approach, as well as improved sanitary standards, was underlined. In response to students outside the hostel, a suggestion was made to use WhatsApp for direct food orders, which evolved into the concept of developing a dedicated app for medical students. Other recommendations included menu adjustments, Shramadana sessions for canteen cleaning, and the expansion of the Student Well-Being Centre's vegetable garden. The iterative nature of these projects was clear, with the next meeting scheduled for December 6th, 2022, with the goal of further refining and implementing the recommended solutions.

Pilot Study

Medical Hostel Canteen Faculty of Medicine University of Jaffna

26th of November – 02nd of December

Details	Profit	Loss
26/11/2022		
Expenses (-)		
Rice(20kg)		4,000
Chicken(8kg)		9,600
Cuttlefish(5kg)		8,000
Fish(8kg)		5,600
Yellow dhal(4kg)		1,920
Beetroot (7kg)		3,500
Soya meat (1kg)		1,000
Ponnanganni leaves (10)		1,200
Oil (2 L)		1,300
Chilli powder(1.5 kg)		3,000
Salt (1kg)		60
Coconut (8)		640
Other additives		1,000
Staff daily salary		4,000
Sales (+)		
Full Parcel		
Chicken (15)	3,900	
Fish (15)	3,750	

Cuttlefish (13)	3,900	
Vegetable (4)	720	
Half parcel		
Chicken (28)	6,720	
Fish (16)	3,680	
Cuttlefish (20)	5,600	
Vegetable (13)	2,080	
	30,350	44,820
28/11/2022		
Expenses (-)		
Rice(20kg)		4,000
Chicken(10kg)		12,000
Cuttlefish(6kg)		8,000
Fish(5kg)		5,600
Yellow dhal(4kg)		1,920
Beetroot (7kg)		3,500
Soya meat (1kg)		1,000
Ponnanganni leaves (10)		1,300
Oil (3 L)		1,300
Chilli powder(1.5 kg)		60
Salt (1kg)		3,000
Coconut (8)		640
Onion (3 kg)		720
Curry banana(3kg)		360
Other additives		1,000
Staff daily salary		4,000
Sales (+)		

Full Parcel		
Chicken (20)	5,200	
Fish (12)	3,000	
Cuttlefish (8)	2,400	
Vegetable (13)	2,340	
Half parcel		
Chicken (31)	7,440	
Fish (22)	5,060	
Cuttlefish(15)	4,200	
Vegetable (18)	2,880	
	32,520	48,400
29/11/2022		
Expenses (-)		
Rice(20kg)		4,000
Chicken(10kg)		12,000
Salmon fish(8kg)		5,600
Egg(30)		1,650
Yellow dhal(4kg)		1,680
Ponnanganni leaves (10)		1,300
Oil (2 L)		1,300
Chilli powder(1.5 kg)		3,000
Salt (2 kg)		120
Coconut (8)		640
Onion(3 kg)		750
Other additives		1,000
Staff daily salary		4,000
Sales (+)		
Full Parcel		

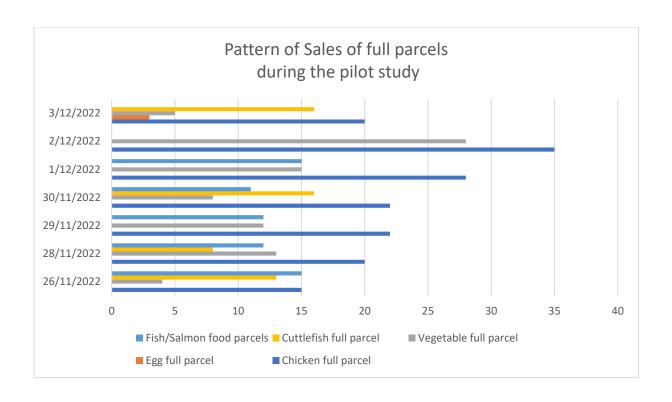
Chicken (22)	5,720	
Salmon Fish (12)	2,880	
Salmon and egg (3)	930	
Chicken and egg (3)	990	
Vegetable (12)	2,160	
Half parcel		
Chicken (33)	7,920	
Salmon Fish (20)	4,400	
Salmon and egg (10)	2,900	
Chicken and egg (10)	3,100	
Vegetable (16)	2,560	
	33,560	26,240
30/11/2022		
Expenses (-)		
Rice(20kg)		4,000
Chicken(8kg)		9,600
Cuttlefish(5kg)		8,500
Fish(6kg)		3,600
Yellow dhal(4kg)		1,680
Curry banana (2kg)		320
Potato(3kg)		660
Tomato(1kg)		400
Cabbage(7kg)		2,720
Oil (3 L)		1,950
Chilli powder(1.5 kg)		3,000
Salt (2kg)		120
Coconut (8)		640
Onion (3 kg)		720
Curry banana(3kg)		320

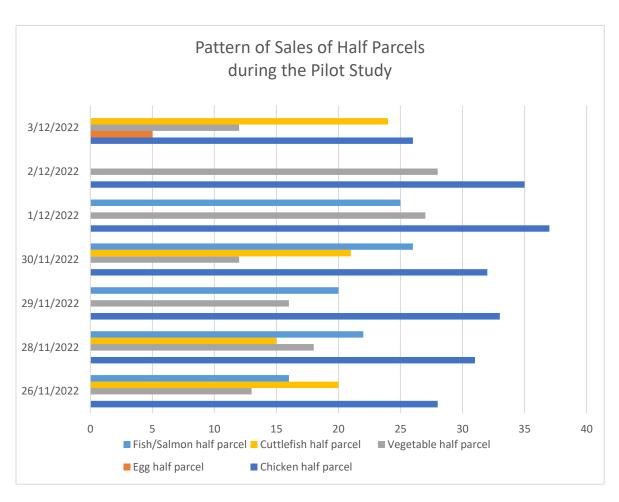
Other additives		1,000
Staff daily salary		4,000
Sales (+)		
Full Parcel		
Chicken (22)	5,720	
Cuttlefish(16)	4,800	
Fish (11)	2,750	
Vegetable (8)	1,440	
Half parcel		
Chicken (32)	7,680	
Cuttlefish (21)	5,880	
Fish (26)	5,980	
Vegetable (12)	1,920	
	36,170	43,230
01/12/2022		
Expenses (-)		
Rice(20kg)		4,000
Salmon fish (8kg)		5,600
Chicken(10kg)		12,000
Yellow dhal(4kg)		1,260
Ponnanganni leaves (10)		1,300
Oil (1.5 L)		975
Chilli powder(1.5 kg)		3,000
Salt (2kg)		120
Coconut (8)		640
Tomato (1 kg)		300
Pumpkin (8 kg)		1,280

	750
	1,000
	4,000
7,280	
2,500	
2,700	
8,800	
5,750	
4,320	
31,350	36,225
	4,000
	12,000
	1,680
	1,300
	975
	3,000
	120
	640
	750
	1,050
	900
	1,680
	2,500 2,700 8,800 5,750 4,320

Papadam (5)		350
Ghee (0.5 L)		400
Other additives		1,000
Staff daily salary		4,000
Sales (+)		
Full Parcel		
Chicken (27)	7,020	
Vegetable (26)	2,880	
Half parcel		
Chicken (35)	8,400	
Vegetable (28)	4,480	
	22,780	33,845
03/12/2022		
Expenses (-)		
Rice(20kg)		4000
Chicken(6kg)		7200
Cuttlefish(7kg)		7700
Eggs(30)		1720
Yellow dhal(4kg)		1680
Oil (1.5 L)		975
Chilli powder(1.5 kg)		3000
Salt (2 kg)		120
Coconut (8)		640
Onion (3 kg)		750
Curry banana(3kg)		480
Chickpea (1.5 kg)		1050
Carrot (3 kg)		1350

Ghee (0.5 L)		400
Brinjal (5 kg)		1300
Other additives		1000
Staff daily salary		4000
Sales (+)		
Full Parcel		
Chicken (20)	5,200	
Cuttlefish (16)	4,800	
Egg (3)	750	
Chicken and egg (4)	1,320	
Vegetable (5)	900	
Half parcel		
Chicken (26)	6,240	
Cuttlefish (24)	6,720	
Egg (5)	1,150	
Chicken and egg (6)	1,860	
Vegetable (12)	1,920	
	30,860	37,365
Net values	217,590	270,125





During the pilot study period, The hostel canteen, while showcasing notable strengths, also faces certain challenges in its operational processes. On the positive side, the canteen excels in providing a diverse range of meal choices for lunch, catering to the varied preferences of its student clientele. Another commendable aspect is the flexibility allowing students to incorporate multiple protein sources in their meal parcels, contributing to a well-rounded and nutritious dining experience. However, several drawbacks were identified during the observation period. Notably, students did not consistently record all meal purchases in the designated log book, posing challenges to accurate record-keeping and inventory management. Additionally, there was a tendency to overestimate the required stock for egg parcels, potentially leading to unnecessary wastage and inefficiencies in inventory control. Financial transparency was also compromised as income from short eats and beverages went undocumented. Furthermore, the observed lack of adjustment in meal preparation according to actual demand highlighted a potential mismatch between supply and student preferences, emphasizing the need for a more responsive approach to enhance the overall efficiency of the canteen operations.

Following several sessions between student representatives and the Student Well-Being Community, it became clear that a few minor issues needed to be addressed in order for this project to run smoothly. The following issues concerning the medical hostel were addressed following an extended discussion on December 13, 2022. The food waste was not properly managed. There was a complaint that a few dogs were luring into the hostel premises and rolling over the garbage cans, causing unnecessary pollution. During the discussion, it became clear that this occurred because the cleanliness of the medical hostel canteen had not been monitored by any committee thus far. As a solution, the former Medical Students' Union president was tasked with keeping the medical hostel clean. Furthermore, it was recommended that garbage be kept on the hostel grounds where dogs could not access it. In addition, our faculty follows the plastic-free policy. As a result, we strictly avoid using polythene sheets when packaging meals. However, putting it into practice has proven difficult. According to student feedback, there appears to be an unwillingness to use lunch boxes to reduce plastic waste. As a result, during the meeting, it was suggested once more to use eco-friendly packaging, such as disposable, biodegradable cardboard

lunch boxes. During the discussion, a minor suggestion was made to improve the hostel canteen's appearance.

Interestingly, the hostel canteen had a significantly low sales rate in comparison to the number of students residing there. When reviewing the student feedback, it was discovered that the majority of the students had multiple complaints, both major and minor. However, the majority of the complaints were about the quality and price of food. We've already begun working on the later issues. In addition, we are willing to resolve minor issues with the canteen. The meal prizes for the hostel canteen meals were finalized, and Mr. S. Jeyakumar was appointed in charge.

Lunch prices (UOJ Canteen Food Prices)

No	Food Name	Half parcel (425g)	Full parcel (700g)
1.	Veg	150	170
2.	Fish	170	190
3.	Chicken	180	200

Lunch prices (Medical Hostel Canteen)

No	Food Name	Half (550 -600 g)	Full (800 -850 g)
1	Veg	160	180
2	Egg	230	250
3	Salmon	220	240
4	Fish	230	250
5	Chicken	240	260
6	Cuttlefish	280	300

Furthermore, it is necessary to collect, analyze, and update student feedback on the hostel canteen. Miss S.D. Victoria was tasked with collecting student feedback on a monthly basis, while Dr. S. Kumaran was tasked with analysing the feedback. Furthermore, students reported difficulties entering their orders into the canteen log book. Some students may forget to preorder meals or alter their plans for lunch or dinner. Students suggested creating an online platform for placing orders. Furthermore, it was requested that the available menu be displayed on a daily basis. As a result, the future plan is to implement and resolve the aforementioned issues as soon as possible.

On February 7, 2023, our dedicated team developed a multifaceted approach to improve the overall dining experience at the hostel canteen. Miss Victoria took the initiative to create a WhatsApp poll with the goal of actively engaging students and gathering valuable feedback on the canteen's current state. Meanwhile, Mr. S. Jeyakumar proposed implementing an environmentally friendly food packaging system to demonstrate a commitment to sustainability. Dr. S. Kumaran was instrumental in the subsequent analysis of the gathered feedback, ensuring a thorough understanding of the students' sentiments. Simultaneously, efforts were made to improve the efficiency of canteen workers, which was spearheaded by an enthusiastic team.

Miss S.D. Victoria brought a cultural perspective to bear, suggesting improvements to the curries served at the hostel canteen that were tailored to the diverse ethnicities of the boarding house residents. This collaborative endeavor demonstrated a comprehensive approach to meeting the needs and preferences of the student community, resulting in a more inclusive and responsive dining environment.

On March 1, 2023, a group of dedicated individuals took on specific responsibilities in a concerted effort to address various aspects of student welfare and improve the overall campus experience. Mr. S. Jeyakumar plays a key role in providing the most recent prize list from the Student Welfare Department, emphasizing the importance of keeping students informed about available incentives. Simultaneously, Miss Victoria is in charge of creating a WhatsApp poll to actively seek and collect student feedback on the hostel canteen, promoting more inclusive decision-making. The Medical Students' Union has been tasked with maintaining the cleanliness of the hostel canteen and its associated premises, with Mr. T. Mathumilan in charge.

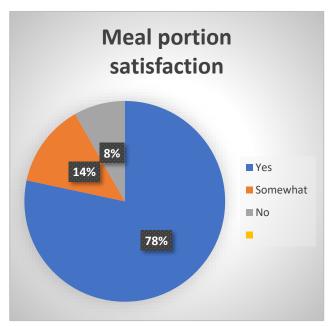
Mr. S. Jeyakumar is also leading the way in promoting sustainability by advocating for an eco-friendly food packaging system. Dr. S. Kumaran analyzes the feedback and provides valuable insights for future improvements. Mr. Baheekaran focuses on the physical infrastructure, taking charge of repairing the fence behind the canteen. Furthermore, Mr. S. Jeyakumar investigates how to expand successful initiatives, such as the eco-friendly food packaging system, to the faculty canteen. This collaborative and diverse effort takes a comprehensive approach to addressing various aspects of student welfare and campus improvement.

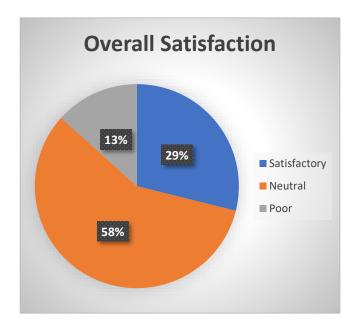
At this point, student feedback was critical for elevating and improving the respective canteens.

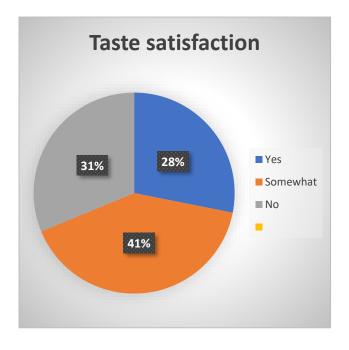
The summary of students' perspectives, gathered via a Google form distributed on December 5, 2022, reveals several key findings. Students preferred a lower price for the current portion sizes, indicating a desire for greater affordability. Dissatisfaction with vegetarian meals was high, indicating a need for improvement in this category. The data revealed a concerning trend, with only 50% of responding students entering their purchases into the logbook during the pilot study, indicating a potential lapse in record-keeping.

A request for more variety in short eats was common, indicating a desire for a larger selection. Gender equality emerged as an issue, highlighting potential disparities in the canteen experience. Furthermore, the feedback emphasized a strong need to improve the taste of meals, indicating a critical area for improvement from the student's perspective.Later, Miss S.D. Victoria recirculated several Google forms while also conducting WhatsApp polls among the 42nd and 43rd batches to obtain quantitative feedback on the problems they had with the existing canteens, and the results are shown below.









On August 8, 2023, a pivotal moment occurred when we collectively defined a set of goals to guide our project endeavors. First and foremost, we aimed to investigate the factors that drive students to seek out alternative food sources, to compile a comprehensive report that sheds light on the widespread trend of canteen underutilization. Another key goal was to write and submit a letter to the Secretary of the Northern Doctors' Forum urging him to maintain the trees he generously donated. We were committed to ensuring the safety of newly planted plants with guard cages as part of the eco-friendly project, which began on July 18, 2023. As part of our environmental initiatives, we decided to remove grass from the organic garden and strategically relocate the colored code dustbin set to a more accessible location near the faculty entrance, resulting in a cleaner and more organized waste disposal system. Taking security precautions, we planned to install notices indicating active surveillance cameras in designated waste disposal areas and collaborate with the security guard to photograph individuals disposing of waste without proper separation. Simultaneously, we looked for new planting locations within the Faculty premises to improve the greenery on campus. Regular daily inspections were planned to monitor and assess the overall condition of the Faculty premises, ensuring a safe environment. Concluding our goals, we were determined to put in place measures to improve the efficiency of services at the hostel canteen, fostering an environment conducive to both sustainability and improved student wellbeing.

With time and the hectic schedules of the stakeholders, our healthy diet program had a setback in achieving its aims and took a silent vacation.

Due to the significant slowdown in development, Dr. S. Kumaran proposed the aforesaid issue as a fieldwork project, and the major 8B of the 43RD batch accepted responsibility.

First, we discussed which topic to select from the given suggestions for the Field Health Program among our group members. Later, we got to know that our supervisor was Dr. S. Kumaran. In the initial phase of our project, we had the privilege of meeting Dr. S. Kumaran to lay the groundwork for our upcoming endeavors. Together, we meticulously planned the project's trajectory, outlining key milestones and objectives on 07/07/2023.

Following this, our team delved into the comprehensive task of starting to create a proposal on the 20th of July 2023 and its accompanying presentation on the 21st of July 2023. The

culmination of our efforts was a well-crafted project presentation, where we shared our vision and plans with stakeholders.

We hold a Zoom meeting on the 15th of August 2023 with Dr. S. Kumaran, serving as a platform for refining and rectifying our implementation plan. Regular updates were provided, ensuring transparency and alignment with our mentor's expectations.

Our proposal was then submitted on the 31st of August 2023, marking a significant milestone in the project's progression. Subsequent meetings with Dr. S. Kumaran allowed us to keep him abreast of our ongoing progress and seek valuable guidance.

To enhance our project's nutritional aspects, we had an over-the-phone conversation with Miss Yalini Shanmuganathan. Her insights proved invaluable in formulating relevant interview questions, which were subsequently translated for the upcoming fieldwork.

The launch of our fieldwork subtask plan, complete with deadlines, marked a pivotal moment. We meticulously crafted a healthy diet guideline tailored to meet the needs of a majority of medical students, including detailed meal planning for breakfast, lunch, and dinner. A menu card was designed, and the fieldwork plan was communicated to the Medical Students' Union.

Securing consent from the faculty canteen and obtaining approval for our project required careful coordination, we reached out to the Department of Agriculture to secure permission to conduct interviews at the Ammachchi Food Centre on the 09th of January 2024.

The interview process at Ammachchi Food Centre was executed seamlessly, leading to the formulation of a comprehensive interview report. Miss Yalini Shanmuganathan played a crucial role in providing insights for our final board meeting, where solutions to challenges at the faculty canteen were collectively brainstormed.

This collaborative effort laid the foundation for our fieldwork final report, which underwent thorough preparation and finalization. Content creation for the final presentation ensued, culminating in a comprehensive showcase of our suggested solutions during the Board meeting with stakeholders.

Then, the Medical Students' Union requested a meeting with our team to see our progress and discuss the points to be presented at the Board meeting. This meeting was enlightening as it enabled us to see several other minute issues that we were not aware of.

During the meeting, several other aspects of the canteens were revealed, and open communication between the stakeholders and students made it easier for us to determine the best solution for the majority of the problems that have been consistently emerging at the faculty and hostel canteen; management.

4. Results

By introducing a system that offers affordable, nutritious meals in both the hostel and faculty canteen, we hoped to introduce a system to create easy access to healthy food. This not only fosters a good dietary pattern among medical students but also works towards reducing their risk of non-communicable diseases at a younger age.

By the end of our healthy diet promotion program, most of the issues about the faculty and hostel canteen had been resolved through discussions and unwavering support along with keen supervision.

With the board meeting arranged for the fieldwork of major 8B of the 43rd batch, we came to realize that the Medical Students' Union struggled to find a suitable tenant for the canteens and they were functioning without an agreement due to the observation period demanded by the administrative authorities. Furthermore, on their part they pointed out the strong need for behavioral changes in medical students; especially the attitude towards dining to reduce half of the existing problems within the canteen. Furthermore, the stakeholders revealed that they have reduced the prices of meals as much as possible by creating horizontal links between farmers and other wholesalers.

At the end of the project, we realized that our faculty and hostel canteen require a good manager to be recruited and supervised by the Medical Students' Union to manage the economic crisis with daily updates on the fluctuation of food prices and help customer and employee satisfaction through marketing strategies. We all agreed to the idea of recruiting a manager oriented towards welfare of the society as a part of the Students' Wellbeing Centre with the financial support of the Medical Students' Union after they start to receive a relatively constant income. We believe that a good manager could help us in aspects that we as medical students are not expertised.

The ultimate goal is to cultivate a healthier generation of doctors who, having embraced a nutritious lifestyle themselves, can serve as role models for their future patients and provide valuable advice on dietary patterns.

5. Recommendations

After the project, we realized that our faculty and hostel canteens require competent managers to be recruited and supervised by the Medical Students' Union to manage the economic crisis with daily updates on food price fluctuations and to help customer and employee satisfaction through marketing strategies. We all agreed on the idea of hiring a manager dedicated to societal welfare as part of the Students' Wellbeing Centre, with financial support from the Medical Students' Union, once they begin to receive a relatively consistent income. We believe that a good manager can assist us in areas where we, as medical students, are not experts.

6. Conclusion

The entire procedure was quite difficult because this was a novel system that needed to be put into place. We think that with time, we can improve the surroundings and satisfy people's cravings and empty bellies. With the help of our project, it will eventually be feasible to tailor the options in the canteen so that students of all ethnicities can enjoy and satisfy their demands in a less demanding manner while meeting their daily nutritional requirements. In addition, we anticipate receiving more direction and assistance from pertinent parties to advance the project.

As we set an example for other university canteens, we believe that the information gathered by this project will be helpfully used to empower and nourish the medical students of the Jaffna Medical Faculty.

7. Annexure



























