

ALPHONSA COLLEGE PALA

Reaccredited (4th cycle) by NAAC with A grade (CGPA 3.24)

ARUNAPURAM P.O., PALA, KOTTAYAM (Dist.) KERALA STATE, INDIA – 686574 **Website: www.alphonsacollege.edu.in**

CRITERIA: 3

3.4 - REPORT OF EXTENSION ACTIVITIES DURING 2023-24





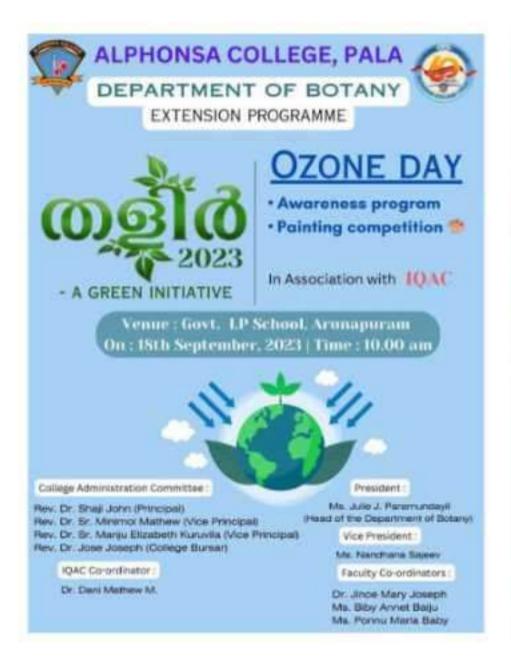
EXTENSION PROGRAMME

DEPARTMENT OF BOTANY

THALIRU 2023 - A Green initiative

Awareness program on Ozone for school children

As part of ozone day, the students of Department of Botany from Alphonsa College Pala conducted an awareness program and painting competition at Government LP school, Arunapuram on 18th September 2023.





Ann Mariya Saji from Third DC Botany, led a seminar highlighting the relevance of ozone day and the significance of ozone layer. Moreover the third DC students performed a skit and an action song. The children had learnt it with immense curiosity and interest. The second DC and first DC students recited poems too. Then a painting competition was held from



11.00 to 11:30 a.m. Almost all children had actively participated in it. Our students too enjoyed the program.





The Principal of Alphonsa College Pala Rev. Dr Shaji John inaugurated the function by delivering the inaugural address. The headmistress of LP school Mrs Daisy delivered the felicitation. At the end of the program our principal handed over a small gift as a token of our love to Mrs Daisy. As a whole the program is a great success.





Extension Programme for school children- Class on Fruit Preservation Techniques

Fruit preservation plays a critical role in addressing issues such as food security, economic stability, and nutritional well-being. It allows for the year-round availability of fruits, minimizes food waste, and supports sustainable and diverse dietary practices. Considering the above factors, we the department of Botany conducted an extension programme with **St Michale's Higher Secondary School Pravithanam** on February 17th 2024. Smt. Julie J Paramundayil, Associate Professor in Botany Alphonsa College Pala, was the resource person. She prepared tomato honey, pineapple preserve and Beetroot lemon squash. Students tasted the items and the programme was very enthusiastic. The students agreed that fruits are caloriedense and contain natural sugars. Choosing whole fruits and incorporating a variety of fluids,



including water, into your hydration routine is a well-rounded approach to staying healthy during the summer.







Tree diversity audit, Digitilization and Carbon sequestration analysis of the campus trees

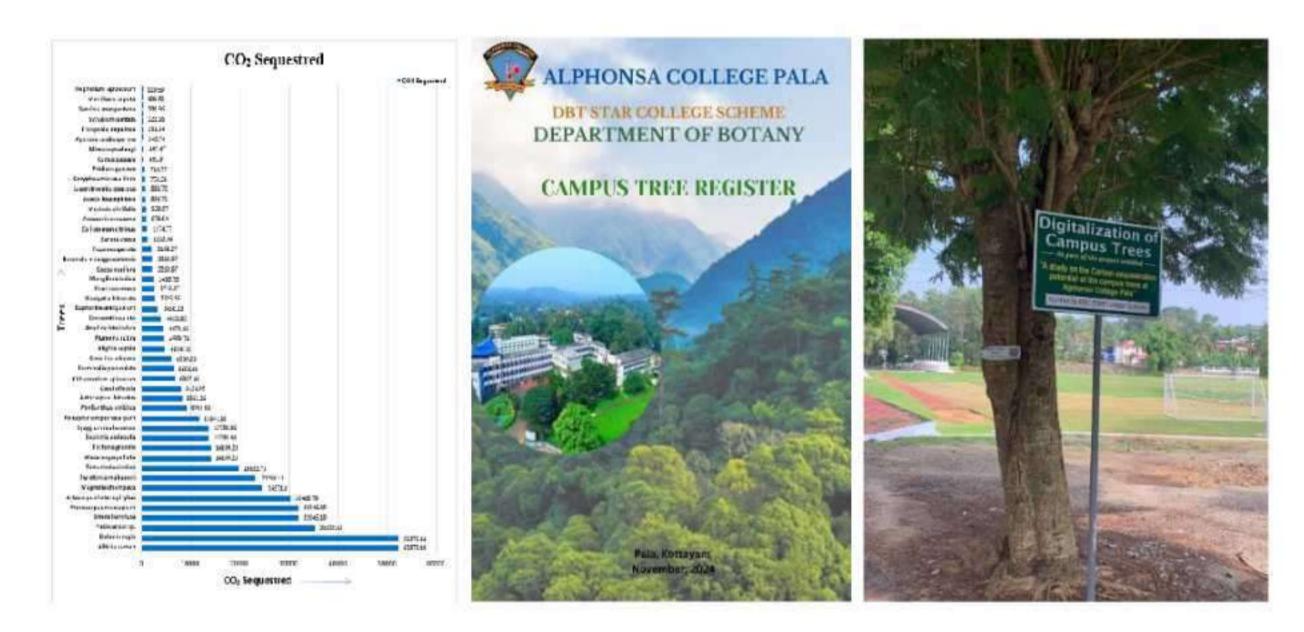
Tree diversity audit and carbon sequestration analysis of the campus trees was done by the botany third year degree students under the guidance of the faculty members of botany Ms.Julie J Paramundayil, Dr.Dani Mathew M, Dr.Jince Mary Joseph and Ms Biby Annet Baiju. Our study extended from 2nd August 2024 to 10th November 2024. We identified 315 trees belonging to 47 species in the campus. Academic environment should be promoted for sustainable development and biodiversity conservation. Trees are an important part of college students' daily lives. Therefore, trees in the campus deserve special attention. Trees acts as a sink for the carbon dioxide to mitigate the global climate change. Carbon sequestration is a mechanism for the removal of carbon from the atmosphere by storing it in the biosphere.

This audit was mainly focussed to identify the trees in the campus of Alphonsa College, Pala along with a study on their economic, environmental and aesthetic benefits, to analyse the efficiency of



campus trees in sequestering carbon, to prepare a tree register of the campus and digitilization of the campus trees.

To estimate the biomass of different trees, non-destructive method was used. The amount of carbon dioxide sequestered by selected trees in the campus was calculated. In the campus, *Albizia saman* and *Delonix regia* are found to have the highest carbon sequestration value whereas *Nephelium lappaceum* is found to have the lowest carbon sequestration value.



Carbon sequestration analysis, Tree register and QR coding of campus trees



DEPARTMENT OF ECONOMICS





On December 21, 2023, the students of the Economics Department organized a vibrant Christmas Sale near Room Number 07, radiating festive cheer and community engagement. The event featured an enticing array of offerings, including handmade decors, cute tote bags, Xmas-themed kitchen decors, and delectable food counters. Attendees were further delighted with opportunities for photos with Santa, themed shots, Xmas-themed face painting, and intricate mehndi designs, creating an immersive and enjoyable experience for all

Beyond the festive revelry, the true spirit of giving shone brightly through the benevolent gesture of the Economics Department students. In a heartwarming display of altruism, the proceeds from the sale, amounting to 6000 rupees, were generously donated to local old age homes on December 22, 2023. This act of compassion exemplifies the department's commitment to social responsibility and solidarity with the community's vulnerable members, leaving a lasting impact on both recipients and contributors.













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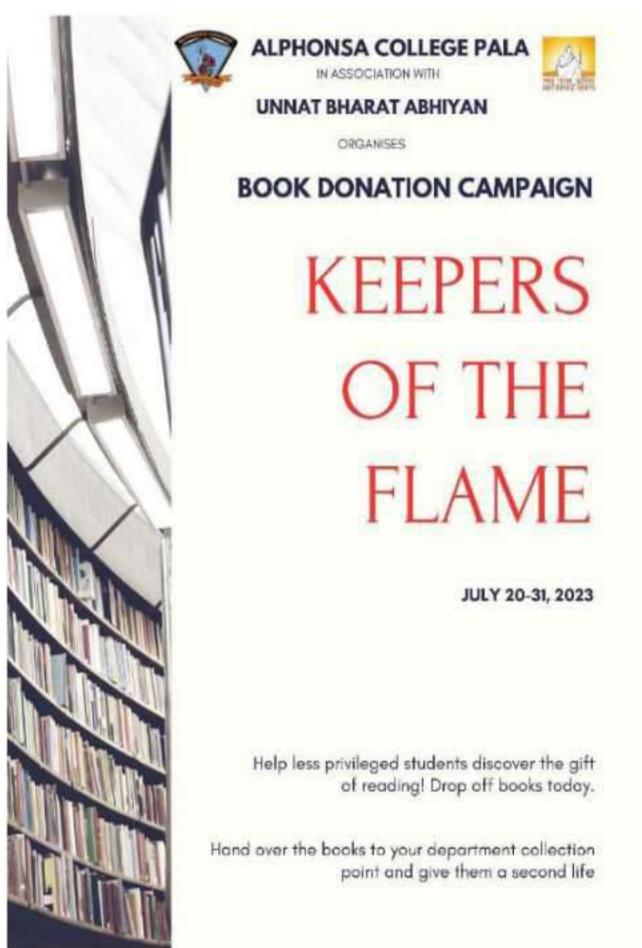




DEPARTMENT OF HISTORY

Extension Activity

The Department of History took part in a book donation campaign 'Keepers of the flame' organised by UBA of Alphonsa college. As they say, "A book is a gift you can open again and again," and the students at our college as well as alumni are determined to share this gift with the broader community. Our alumni of various batches contributed around 42 books to the department which included text books and note books. Moreover, students of III DC and II DC Batches are also willing to share their textbooks with the juniors. 'Keepers of the flame' stands as a shining example of how a college community can come together to make a difference and create a brighter future through the magic of books.









Donation of books to department by the Batch of 2017-2020

ACADEMIC EXTENSION PROGRAMME

Department of History in association with Unnath Bharath Abhiyan of Alphonsa College organised an awareness class on the topic 'Solid Waste Management' for the students of SH girls' high school, Ramapuram on 30th October 2023. Sona Saji, student of III year History was the speaker on the topic. This programme was organised as part of our ongoing efforts to promote environmental consciousness and sustainable practices among students. The initiative aimed to educate students about the importance of proper waste management and encourage responsible waste disposal habits. The class concluded with an open forum where students had the opportunity to ask questions and share their thoughts on solid waste management. The interactive session facilitated a deeper understanding of the topic and clarified any doubts. The awareness class on solid



waste management at SH girls' high school, Ramapuram proved to be a valuable educational experience for students. It is hoped that the knowledge gained during this session will empower students to adopt responsible waste management practices in their daily lives and contribute to a cleaner, healthier environment. Ongoing initiatives and follow-up activities are planned to ensure the sustainability of these efforts.



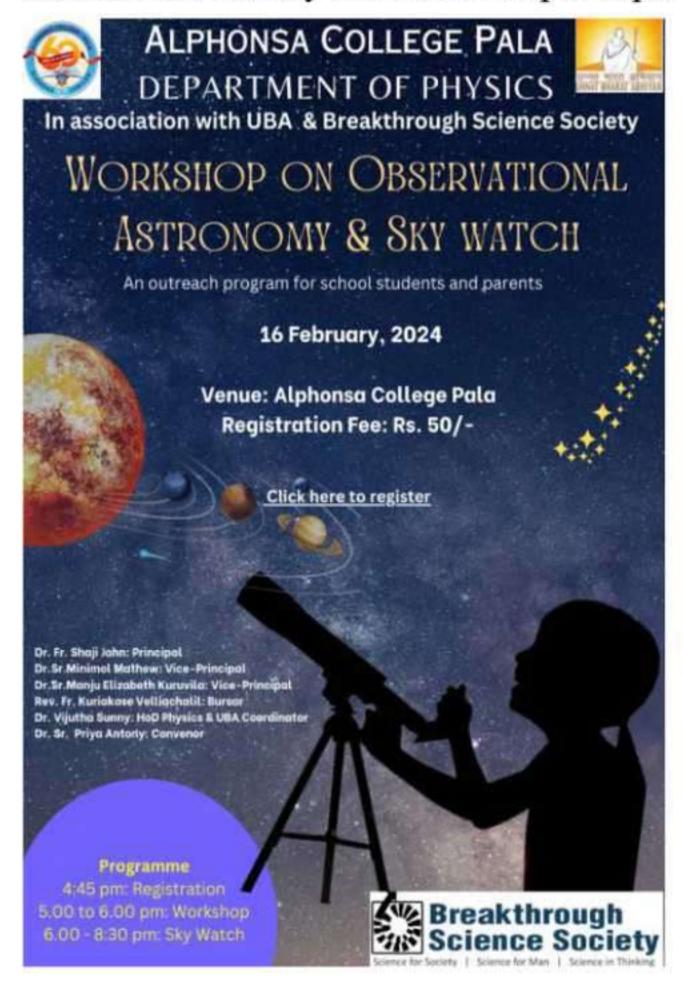


DEPARTMENT OF PHYSICS



Workshop on Observational Astronomy & Sky Watch

Department of Physics at Alphonsa College, Pala, in collaboration with Unnat Bharat Abhiyan (UBA) and Breakthrough Science Society, organized a workshop on Observational Astronomy & Sky Watch on 16 February 2024. The workshop served as an outreach program targeting school students and parents, aiming to foster interest and awareness in astronomy. Participants engaged in hands-on activities and demonstrations, exploring various aspects of observational astronomy, including star gazing, identifying constellations, and understanding celestial phenomena. One hundred and seventy three students participated in the event.







DEPARTMENT OF POLITICS

Extension Activity at G.L.P.S. Arunapuram on 11-10-2023

On the 11th of October, 2023, an extension activity was organized at the Government Lower Primary School (GLPS) Arunapuram. This event was initiated to engage in community service and provide support to the LP (Lower Primary) students. The primary focus of the activity was on cleaning the school premises and conducting interactive classes to entertain and educate the young learners. The classes were designed to be both entertaining and educational, with the goal of making learning an interactive activity for the young learners. Interactive and creative teaching methods, such as games, storytelling, singing songs etc. were used to keep the students engaged and interested in the learning process.





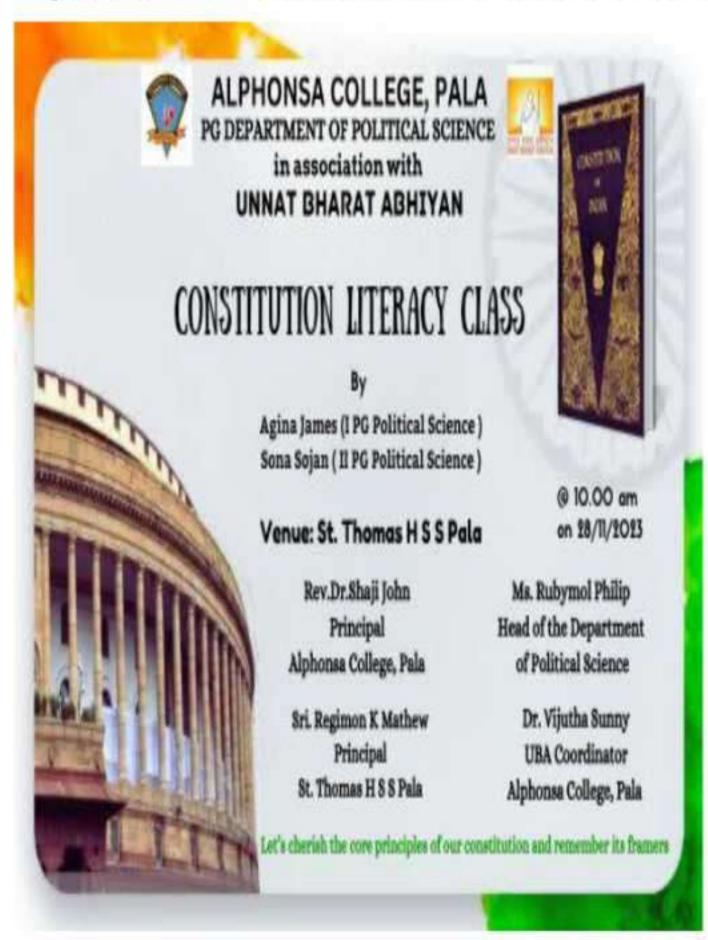
In association with Unnat Bharat Abhiyan, PG Department of Political Science celebrated Children's Day with the students of Government LPS, Arunapuram on 14-11-2023. Sweets were distributed to the students and they performed cultural programmes.





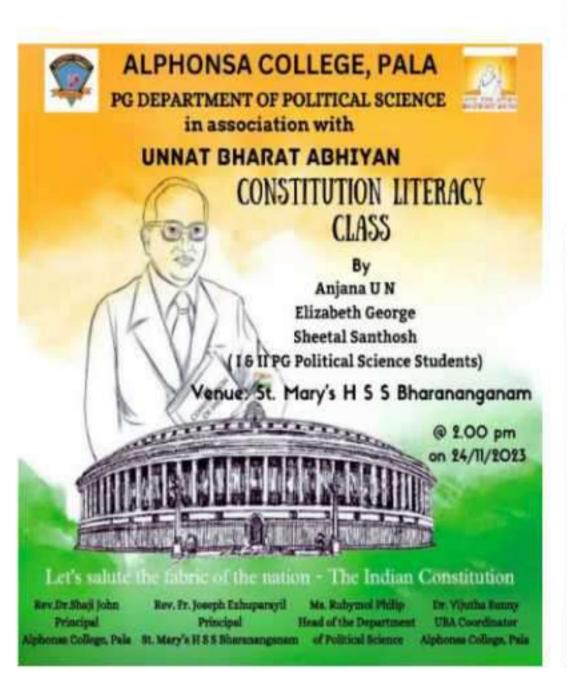
Constitution Literacy Programme

In association with Unnat Bharat Abhiyan, PG Department of Political Science organised a Constitution Literacy Programme at St. Mary's H.S.S. Bharananganam on 24-11-2023 and at St. Thomas H.S.S Pala on 28-11-2023 respectively. The major objective of the programme was to sensitise young generation on the importance of Indian Constitution - the fundamental law of the land. Anjana U.N and Seethal Santhosh (IMA Politics) and Elizabeth George (II MA Politics) conducted the classes for the Plus one and Plus Two students of St. Mary's H.S.S. Bharananganam and Agina James (IMA Politics) and Sona Sojan (II MA Politics) handled classes at St. Thomas H.S.S Pala.













DEPARTMENT OF CLINICAL NUTRITION AND DIETETICS

EXTENSION ACTIVITIES REPORT (2023-24)

The PG Department of Clinical Nutrition and Dietetics undertook a series of programmes aimed at assessing nutritional status, providing nutrition education and developing cost-effective recipes across various age groups. The programmes were executed by teams of 5 to 6 students, focusing on different target populations including pre-schoolers, post-menopausal women, elderly, adults, geriatric groups, school-going students and adolescent girls.

The assessment encompassed anthropometric, biochemical, clinical and dietary assessment methods. The data collected were compiled and compared with the standards. This process helped identify areas of concern and formulate targeted interventions.

Nutrition education sessions were conducted with the primary goal of raising awareness among the target groups regarding the importance of nutrition. Visual aids such as posters, charts, models, and pamphlets were extensively used to facilitate effective communication. The approach involved pre-session and post-session questionnaires to gauge the impact of the education sessions on participants' understanding and behaviors related to nutrition.

Cost-effective recipes were developed for various age groups to fulfil their nutritional needs without compromising affordability.

OUTCOMES

- Nutritional status assessment successfully identified areas of concern and formulated targeted interventions. This led to improvements in the nutritional status of various age groups
- 2. On evaluating both the questionnaires, it became clear that common misconceptions were addressed, resulting in a positive impact from the awareness session.
- Cost effective recipes ensured that the nutritional needs were met without financial barriers.
 This promoted access to nutritious food options and encouraged individuals to make healthier dietary choices.

The students of B.Sc. second year have done the nutritional status assessment of school going children (6-9 years) in Ashramam Government LP School, Puliyannoor, Pala, on 6th November 2023. Data collected using anthropometric methods were compiled and compared with the standards and Nutritional deficiencies were identified. A nutrition education programme was conducted based on the findings. Effective nutrition education programs in schools can significantly contribute to the development of healthier lifestyles for children, leading to better health outcomes and improved quality of life







NUTRITIONAL STATUS ASSESSMENT OF SCHOOL GOING CHILDREN

The 2nd year B.Sc. students have done the Nutritional status assessment of Pre-school children (3-5years) in Lalam SSA Anganwadi of Pala Municipality, on 10nd November, 2023. Data collected using anthropometric methods were compiled and compared with the standards and Nutritional deficiencies were identified. A nutrition education programme was conducted for their mothers based on the observations. Effective nutrition education programs for pre-schoolers, often integrated with playful and engaging activities, can significantly contribute to their physical, cognitive, and emotional development.





NUTRITIONAL STATUS ASSESSMENT OF PRE-SCHOOL CHILDREN

The students of PG second year have done the Nutritional status assessment of Pre-school children (3-5years) in Lalam SSA Anganwadi of Pala Municipality on 10th October 2023. Data collected using anthropometric methods were compiled and compared with the standards and Nutritional deficiencies were identified. A nutrition education programme was conducted for their mothers based on the observations. Effective nutrition education programs for pre-schoolers, often integrated with playful and engaging activities, can significantly contribute to their physical, cognitive, and emotional development.









NUTRITIONAL STATUS ASSESSMENT OF PRE-SCHOOL CHILDREN

The second year B.Sc. students have done the Nutritional status assessment of Adolescent girls (19-23 years) at Alphonsa College, Pala. Data collected using anthropometric methods were compiled and compared with the standards and Nutritional deficiencies were identified. A nutrition education programme was conducted based on the observations. Nutrition education programs for adolescent girls are crucial in supporting their physical, cognitive, and emotional development, empowering them to lead healthier and more productive lives.



NUTRITIONAL STATUS ASSESSMENT OF ADOLESCENT GIRLS

The students of PG second year have done the Nutritional status assessment of Adolescent girls at St. Mary's School, Pala on 20th October,2023 Data collected using anthropometric methods were compiled and compared with the standards and Nutritional deficiencies were identified. A nutrition education programme was conducted based on the observations. Nutrition education programs for adolescent girls are crucial in supporting their physical, cognitive, and emotional development, empowering them to lead healthier and more productive lives.





CONDUCT OF SURVEY





NUTRITIONAL STATUS ASSESSMENT OF ADOLESCENT GIRLS

Eating disorders have a significant health concern among college students due to academic pressure, social influences and lifestyle changes. A KAP was done among college students by III DC students. It was aimed on Knowledge, Attitude and Practice on eating disorders among college students (18-20yrs). A questionnaire was administered to the students to assess the knowledge, attitude and practice on eating disorders using KAP scale. The collected data revealed the dietary patterns which indicates the presence of eating disorders among the students. Following this assessment an educational intervention was provided to address and improve their understanding of healthy eating habits and risks associated with eating disorders.















3.5 Conduct of study and nutrition education

To collect data for the current study, a survey was carried out among the college students. A well designed questionnaire was created and distributed to students enrolled in a class of Alphonsa college, Pala, who were willing to participate in the study.

The purpose of the study was explained to the students. After getting their consent to cooperate with the study, printed copies of questionnaires were distributed to them. With the aid of printed forms or copies, a well prepared questionnaire that adheres to the KAP scale was created and distributed in class. It enables students of different religions, localities and students who have opted for different backgrounds of education to produce a greater and a variety of responses. Theaim of the questionnaire was to assess student's knowledge, attitudes, and practices on millet

consumption. The result of this evaluation gave an idea on how much exposure millet has acquired. As a result, an additional awareness class was established to enhance student's understanding of millets, and questions were asked at the end of the session to gauge their comprehension. Plates 6 and 7 show taking nutrition education on millets.



Plate 6 shows taking nutrition education educationon millets.



Plate 7 shows taking nutrition on millets.

3.6 Data Analysis

The fundamental objective of data analysis is to examine the results of the and arrange a disorganised dataset into a clear, coherent format that facilitates decision-







NUTRITION EDUCATION FOR ADOLESCENT GIRLS

An assessment on nutritional status among late adolescent girls (18-21 years) with polycystic ovarian disease (PCOD) was done by the final year degree students. This included measurements like weight, height, BMI, and waist circumference to evaluate body composition and obesity levels. The findings highlighted significant associations between nutrition, obesity, and PCOD symptoms, underscoring the importance of targeted dietary interventions and awareness programs to improve management strategies for PCOD in this age group.







CONDUCT OF SURVEY

Knowledge, Attitude and practice towards millet consumption and its impact on nutritional education among college students (18-23yrs) was done. A questionnaire was administered to the students to assess the knowledge, attitude and practice on millet consumption using KAP scale. The collected data revealed the dietary patterns which indicates the attitude of the students towards millet consumption. Following this assessment an educational intervention was also provided by introducing various millet varieties and improved their understanding of the benefits of millet consumption.

Evaluating knowledge, attitude, and practice of dietary fiber consumption was done among the college students. A questionnaire was administered to the students to assess the knowledge, attitude and practice on the consumption of fiber using KAP scale. The collected data revealed a lack of interest towards fiber consumption. Following this assessment, an educational intervention was provided to address and improve their understanding of healthy eating habits and benefits of fiber.





Plate 4 - Distribution of questionnaire to students

17



Plate 5 - Collection of data

3.5 Data analysis

The data collected were tabulated and analysed. We have collected 30 samples from the students through questionnaire. An analysis was then made based on their knowledge, attitude and practice on dietary fibre. Plate 6 shows educational awareness on dietary fibre giving to students.

KAP ASSESSMENT

Nutritional status assessment of adults was done by the students of 2nd year B.Sc. Assessment was done on the basis of anthropometric assessment methods. Data collected using anthropometric assessment methods were compiled and compared with the standards. Dietary habits and' practices of the subjects were also studied and Nutritional deficiencies were identified. A nutrition education programme was conducted based on the observations Effective nutrition education programs for adults can empower them to make informed food choices, adopt healthier lifestyles, and significantly improve their health outcomes, both immediately and in the long term.







NUTRITIONAL STATUS ASSESSMENT OF ADULTS

Nutritional status assessment of elderly men in Osanam Old Age Home, Chethimattom was done by the UG second year students on 8th November 2023. Assessment was done on the basis of anthropometric assessment methods. Data collected using anthropometric assessment methods were compiled and compared with the standards. Dietary habits and practices of the subjects were also studied and Nutritional deficiencies were identified. A nutrition education programme was conducted based on the observations. Effective nutrition education programs for elderly men can significantly enhance their quality of life, helping them to maintain independence, improve health outcomes, and enjoy a better overall sense of well-being.





NUTRITIONAL STATUS ASSESSMENT OF ELDERLY MEN





NUTRITION EDUCATION FOR ELDERLY MEN

A comprehensive assessment of the nutritional status and education levels among post-menopausal women (45-55 years) in the Arunapuram locality. Anthropometric measurements such as weight, height, BMI, and waist circumference were recorded to evaluate body composition and potential obesity prevalence. Biochemical analyses focused on key markers like calcium levels, vitamin D, and lipid profiles to assess nutritional adequacy and risks associated with post-menopausal health. Clinical assessments examined health parameters including bone density, blood pressure, and prevalence of chronic conditions like osteoporosis and cardiovascular disease. Additionally, dietary assessments explored eating habits, nutrient intake, and adherence to recommended dietary guidelines for post-menopausal women. Following the assessment nutritional education were given to improve dietary habits and promote optimal health outcomes during the post-menopausal stage.







NUTRITIONAL ASSESSMENT AND EDUCATION

A variety of recipes specifically designed to combat iron deficiency anemia (IDA) were formulated and introduced for adolescent girls aged 18-20 years. These recipes focused on incorporating iron-rich ingredients such as leafy greens, legumes, lean meats, and fortified cereals, ensuring they are both nutritious and appealing. Educational materials and recipe booklets were also distributed to reinforce the message and encourage healthy eating habits among young girls.



Plate 6: Dates pudding



Plate 8: Spinach Halwa



Plate7: Ragi cutlet

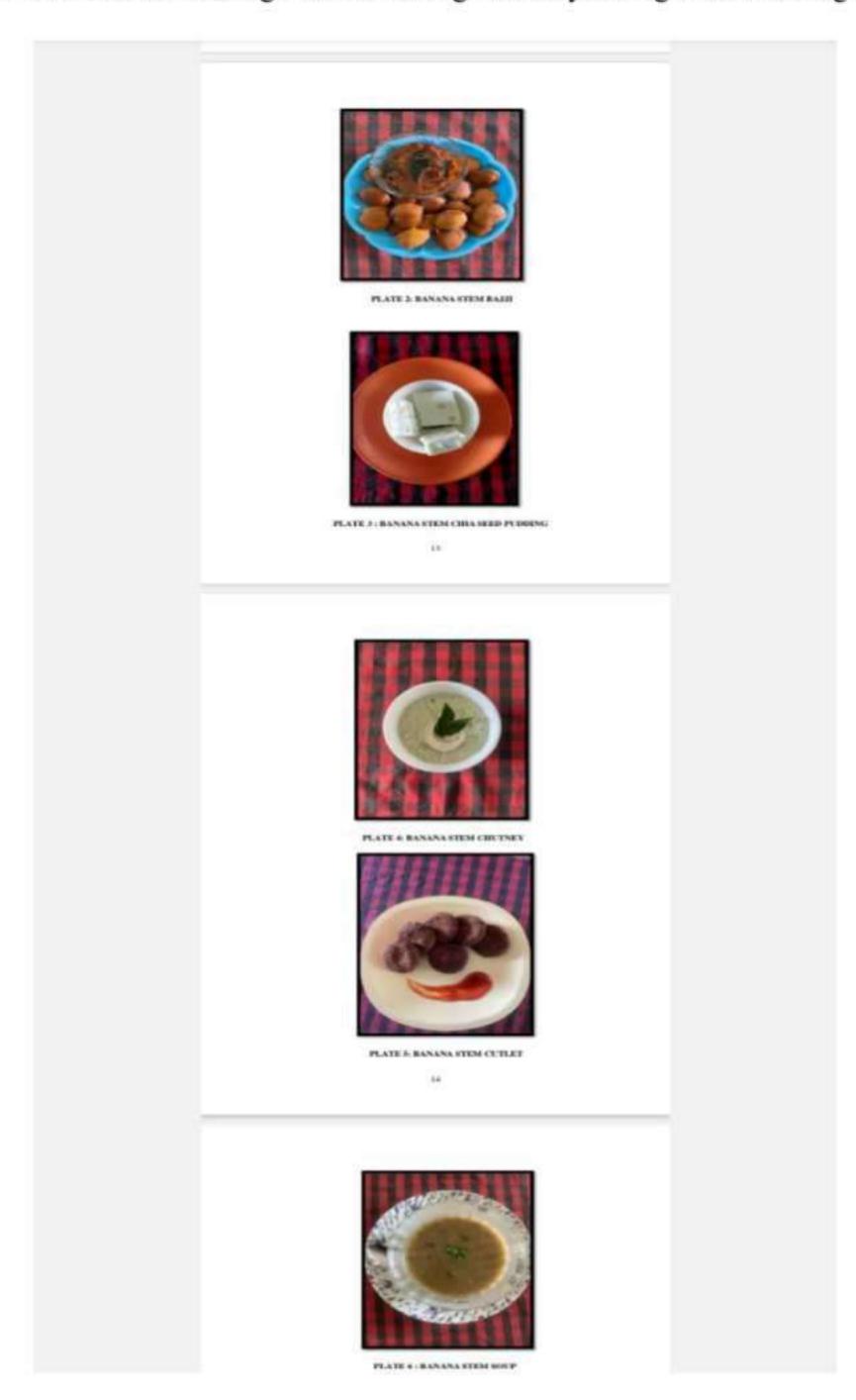


Plate 9: Sesame seed manchow soup



DEVELOPMENT OF IRON RICH RECIPES

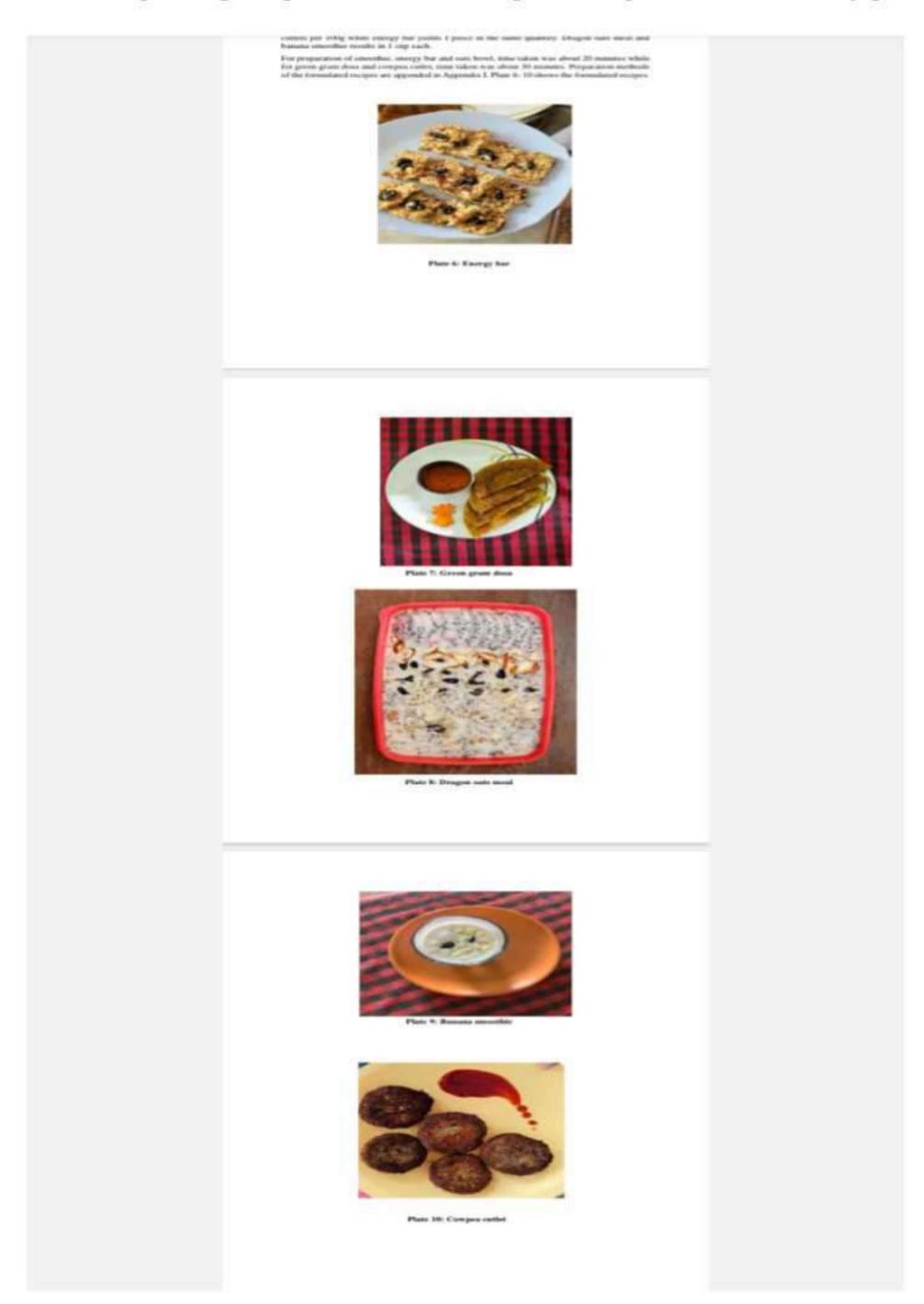
A variety of recipes were prepared using the novel ingredient banana stem and introduced for adolescent girls aged 18-20 years. Nutritive value and cost of the formulated recipe was calculated and popularized among adolescent girls. Sensory valuation was also done to identify the acceptability among the group. Educational materials and recipe booklets were also distributed to reinforce the message and encourage healthy eating habits among young girls.



NOVEL RECIPES USING BANANA STEM



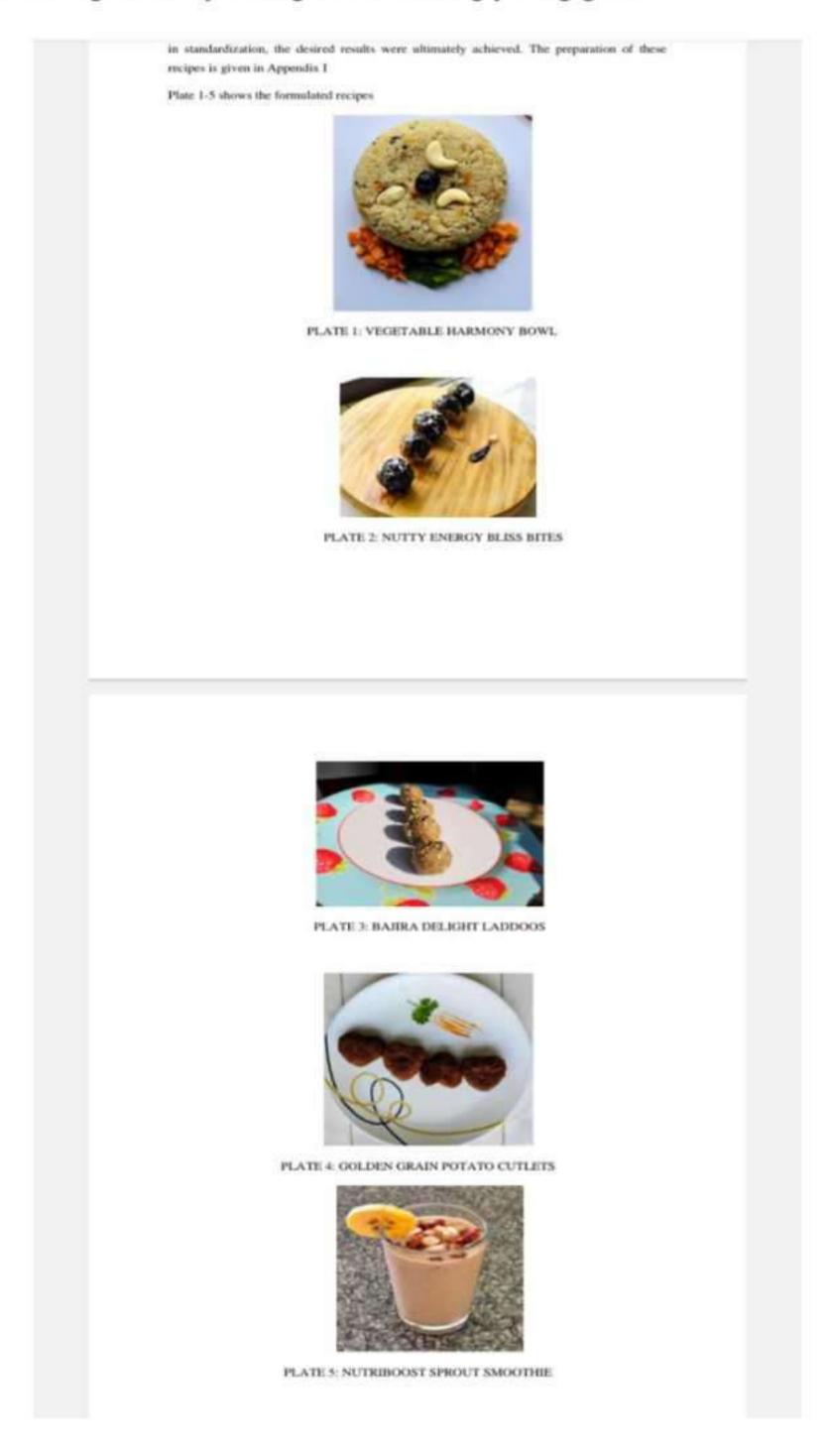
The formulation and promotion of energy-dense recipes specifically targeted for athletes, with a focus on optimizing performance and recovery through nutrition was done. It delves into the development of recipes rich in complex carbohydrates, proteins, and healthy fats, essential for meeting the high energy demands of athletic training. Formulated recipes aimed to support athletes in achieving their peak performance while promoting sustainable dietary practices.



DEVELOPMENT OF ENERGY RICH RECIPES



A variety of millet-based recipes were formulated and introduced among adolescent girls aged 18-20 years. Nutritive value and cost of the formulated recipe was calculated and popularized among adolescent girls. Sensory valuation was also done to identify the acceptability among the group. Educational materials and recipe booklets were also distributed to reinforce the message and encourage healthy eating habits among young girls.



MILLET BASED RECIPES



A variety of recipes were prepared using banana blossoms and introduced among adults. Nutritive value and cost of the formulated recipe was calculated and popularized among adults. Sensory valuation was also done to identify the acceptability among the group. Educational materials and recipe booklets were also distributed to reinforce the message and encourage healthy eating habits among adults.



BANANA BLOSSOM PUDDING

A variety of recipes were prepared using nutmeg and introduced for women. Nutritive value and cost of the formulated recipe was calculated and popularized among women. Sensory valuation was also done to identify the acceptability among the group. Educational materials and recipe booklets were also distributed to reinforce the message and encourage healthy eating habits among women.





DEVELOPMENT OF NUTMEG BASED RECIPES

A variety of recipes were prepared horse gram introduced for middle aged. Nutritive value and cost of the formulated recipe was calculated and popularized among middle aged. Sensory valuation was also done to identify the acceptability among the group. Educational materials and recipe booklets were also distributed to reinforce the message and encourage healthy eating habits among middle aged.





HORSE GRAM RECIPES

A variety of recipes were prepared using chia seeds and introduced for elderly. Nutritive value and cost of the formulated recipe was calculated and popularized among elderly. Sensory valuation was also done to identify the acceptability among the group. Educational materials and recipe booklets were also distributed to reinforce the message and encourage healthy eating habits among elderly.



CHIASEED RECIPES

A variety of recipes were prepared using green fig and introduced for pre - schoolers. Nutritive value and cost of the formulated recipe was calculated and popularized among mothers. Sensory valuation was also done to identify the acceptability among the group. Educational



materials and recipe booklets were also distributed to reinforce the message and encourage healthy eating habits among pre- schoolers







RECIPES BASED ON GREEN FIG

Swapral

Swapna George Head, Department of Clinical Nutrition and Dietetics Alphonsa College, Pala

ALPHONSA COLLEGE, PALA

DEPARTMENT OF MATHEMATICS

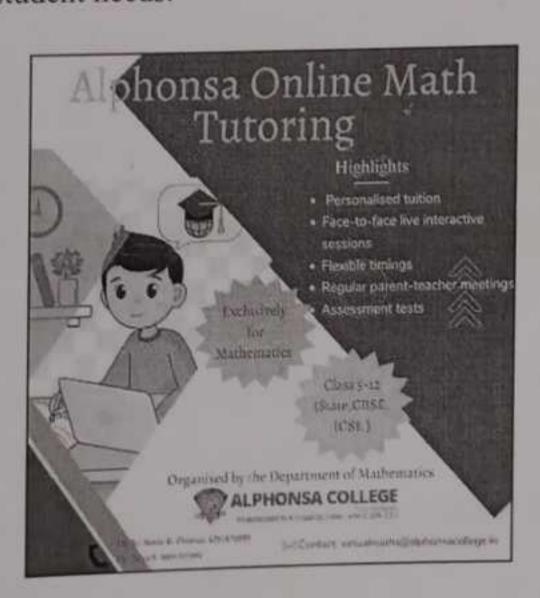
COMMUNITY EXTENSION ACTIVITIES 2023-2024

Alphonsa Online Math Tutoring Programme

In the academic year 2023-24, the Department of Mathematics launched the Alphonsa Online Math Tutoring program, aiming to provide accessible and effective mathematics instruction to students. The initiative garnered positive feedback from participants, who noted significant improvements in their understanding of mathematical concepts and academic performance. Notably, three students who engaged with our tutors reported marked progress in key subjects, highlighting the program's impact on individual learning outcomes.

Despite facing challenges such as maintaining engagement and resolving technical issues inherent in online learning platforms, the tutoring sessions made a clear contribution to overall academic improvement. Moving forward, the program intends to enhance engagement strategies, strengthen technical infrastructure, and expand its repository of learning materials to better cater to diverse student needs.





Sl No	Tutor	Beneficiary
1	Akhila M Anil (III DC Mathematics)	Ann Maria Shibu (+2 student, St Mary's HSS, Pala)
2	Kalyani A Pillai (III DC Mathematics)	
3	Aparna Mohan (II DC Mathematics)	Binu Tom (IGNOU student, MA Psychology)







Anti-drug day: -mime at St. Pious orphanage children

Mathematics department students presented an anti-drug mime on 30/6/ 2023 to St. Pious orphanage children under the age of 15 as a new opportunity to showcase their abilities to a wider audience than only fellow students. Mime acts provide an opportunity to introduce children of St. Pious orphanage to the topic of drug abuse in a child-friendly and age-appropriate manner.





Free Tuition at St Pious Orphanage, pala

To reinforce its dedication to serving the community, the department organised complimentary tuition classes for the residents of St. Pious Orphanage in Pala. The initiative saw active participation from students, particularly benefiting those in Class X and Plus One, who took part in the program.

