

COLLEGE OF HOME SCIENCE NIRMALA NIKETAN RESEARCH UNIT

AFFILIATED TO THE UNIVERSITY OF MUMBAI

NAAC Accredited 'A+' Grade

49, New Marine Lines, Churchgate, Mumbai – 400 020. Phone: 2207 6503 / 2200 7544 **E-mail:** principal@nnchsc.edu.in / research@nnchsc.edu.in **Web:** www.nirmalaniketan.com

कॉलेज ऑफ होम सायन्स निर्मला निकेतन ह्यांचे माफत किचन गार्डन माध्यमातून भाज्यांची लागवड करुन आदिवासी मुलामुलीचं पोषण पातळी वाढवणे

ASSESSMENT REPORT 2024



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प्रकल्प अधिकारी , एकात्मिक आदिवासी विकास प्रकल्प पेण जिल्हा, रायगड तारीख- 25.06.24

संदर्भ- क्र. विकेस-2023-24/ प्र.क्र/ का ३(३) ४९० क्र. विकेस-2023-24/ प्र.क्र/ का ३(३) १४४५

विषय – संदर्भ ७ आणि ८ च्या मुद्दा बद्दल,कामाचा अहवाल १.४.२४ ठाणे कार्यालयाला आणि २.४.२४ पेन पो.ऑफिसला आणि आर्थिक अहवाल मे २०२४ मध्ये सादर करण्यात आला आहे.

आदरणीय मॅडम,

कॉलेज ऑफ होम सायन्स निर्मला निकेतनचा प्रकल्प किचन गार्डनच्या माध्यमातून भाजीपाला लावून आदिवासी मुलांची पोषण पातळी वाढवण्याचा आहे. मार्च 2024 पर्यंतची सद्यस्थिती आणि केलेल्या कामाचे अहवाल आणि आर्थिक अहवाल वरील तारखांना आमचे क्षेत्र अधिकारी श्री. तेजेश डी यांनी तुमच्या पेन पीओ तसेच ठाणे कार्यालयाला पाठवले आहेत.

4.6.24 रोजीच्या तुमच्या पत्राच्या संदर्भात, मुद्दा 7 आणि 8 संदर्भात, आम्ही तुम्हाला कळवू इच्छितो की आम्ही 8 आश्रमशाळांमध्ये पोषण जागरूकता सत्र [Nutritional Awareness Assessment and Training Session], प्रशिक्षण आणि मार्गदर्शन आयोजित केले आहे. लागवडीसाठी जमीन निवडणे, जमीन तयार करणे, पेरणी व पाण्याचे व्यवस्थापन, गवत साफ करणे, कापणी करणे आणि शेवटी कापणी केलेल्या भाजीपाला विद्यार्थ्यांच्या रोजच्या जेवणात वापरणे आदी तपशील ठाणे येथे 1.4.24 रोजी सादर केलेल्या कागदपत्रांमध्ये देण्यात आले आहेत. कार्यालय आणि 2.4.24 पेन पीओ कार्यालयात. चाफेवाडी, पाथरेज, पिंगलास, सावरसाई, वरवणे या ज्या शाळांमध्ये पीक काढणी झाली आहे. पाणी आणि मजुरांच्या कमतरतेमुळे, इतर तीन शाळा, म्हणजे वरसई, भालेवाडी आणि सानेगावमध्ये जमीन तयार करताना आम्हाला पीक वर्ष काढण्यात अडचणी येत होत्या. तथापि, मार्च 2024 पासून या परिस्थितीवर मात करण्यासाठी आम्ही आवश्यक पावले उचलली आहेत.

आम्ही फेब्रुवारी 2023 मध्ये आयोजित केलेल्या पोषण जागृती मोहिमेपासून[Nutritional Awareness Assessment and Training Session] सुरुवात केली. मार्च/एप्रिल 2023 मध्ये आम्ही र्आश्रमशाळांमध्ये चांगल्या खाण्याच्या सवयी आणि जंगलात पिकवलेल्या/देशी भाजीपाल्यांचे पौष्टिक मूल्य यावर एक पुस्तक संकलित केले आणि प्रशिक्षण सत्रे आयोजित केली.

आम्ही डिसेंबर 2023 कर्जतमधील 4 शाळांमध्ये पोषण जागृती मूल्यमापन व प्रशिक्षण सत्र घेण्यात आले. वापरलेली पद्धत मजेदार परस्परसंवादी खेळ होती. तुमच्या संदर्भासाठी तपशीलवार अहवाल जोडला गेला आहे.

फेब्रुवारी 2024 मध्ये कर्जत आणि पेणमधील 8 शाळांमधील 526 विद्यार्थ्यांच्या नमुन्यासाठी आधारभूत मानववंशीय मूल्यमापन [Baseline Anthropometry Assessment] हाती घेतले आहे. तुमच्या संदर्भासाठी सविस्तर अभ्यास अहवाल जोडला आहे. सहा ते आठ महिन्यांनंतर याची पुनरावृत्ती होईल.

धन्यवाद

डॉ रत्नराजे थार

*Assessment report 2024 [9 pages]

Ratnaraje Than



NIRMALA NIKETAN INSTITUTE'S COLLEGE OF HOME SCIENCE

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<u>कॉलेज ऑफ होम सायन्स निर्मला निकेतन ह्यांचे माफत किचन गार्डन माध्यमातून भाज्यांची लागवड</u> <u>करुन आदिवासी मुलामुलीचं पोषण पातळी वाढवणे</u>

आदिवासी शाळेतील मुलांमध्ये पोषण आणि उत्तम आरोग्याचा प्रचार

Nutritional Awareness Assessment and Training session

INTRODUCTION

The objective of this study is to evaluate the growth of tribal school children, to impart nutrition education in an interactive and fun manner through Nutrition based games to assess the impact of interactive nutrition education. To provide Nutritional Counselling to school children. To evaluate the knowledge of Nutrition through games, Pre & post questionnaire.

OBJECTIVES

- To impart nutrition education in an interactive and fun manner through Nutrition based games
- To assess the impact of interactive nutrition education
- To provide Nutritional Counselling to school children

METHOD AND MATERIAL

Study Design

The study will utilize a pre-post intervention design to assess the impact of interactive nutrition education games on tribal school children aged 11 to 14 years.

Sample Size

The sample size for the study will be 307 participants across four schools in Karjat i.e in Bhalewadi, Chafewadi, Pathrej and Pinglas

Sampling Method



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Random sampling method was employed to select participants from tribal schools in the study area. This sampling method allows for the random selection of participants who meet specific criteria, such as age and school enrolment.

Inclusion Criteria

- Tribal school children aged 11 to 14 years random sampling methodology
- Participants willing to participate in the interactive nutrition education games and assessments.

Exclusion Criteria

- Children outside the age range of 11 to 14 years.
- Participants unwilling or unable to participate in the study activities.

INSTRUMENTS

The instruments used in this study include pre and post questionnaires, and interactive nutrition games.

PROCEDURE

After the pre questionnaire various games were played. These games were designed to educate them about nutrition and its benefits.

The Snake & Ladder game was called Nutri Climb, focusing on different nutrients.

The Memory Game of Food Match and Nutriquest aimed to promote healthy food choices while discouraging junk food consumption.

The Nutri Signal game helped in distinguishing healthy and junk food choices. To provide nutritional counseling to the children, including lectures on macronutrients and micronutrients and their significance for the body. This included showcasing various real foods foods like carrots, gooseberry, and fruits, explaining how they contribute to maintaining



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our body's health and explaining their importance for health, as well as emphasizing the importance of Nutrients.

After playing games post questionnaire was asked about nutrients, healthy vs. junk food, and eating habits.

Dietary Assessment

Dietary questionnaire: It consists of various types of questions based Nutrients, Healthy & junk food ,food habit food choices,. "Knowledge, Attitudes, and Practices" (KAP) This helped in knowing the individual knowledge on nutrition, through fun interactive nutritional educational games.

Creation and Development of Fun Interactive Nutritional Education Games

Engaging children in learning activities is essential for effective education, especially in younger age groups. To achieve this, a variety of interactive nutrition-based games will be developed specifically tailored to the cultural context and comprehension level of the tribal school children. The games will incorporate elements of entertainment while imparting essential knowledge about nutrition, healthy food choices, and the detrimental effects of junk food consumption. Some examples of these games include:

Nutri Climb

This game, inspired by the classic "Snake & Ladder," features a board with nutritional facts and challenges. Players advance by correctly answering questions related to nutrients, healthy food, and dietary habits.

FoodMatch

A memory game where participants match food items with their corresponding nutritional benefits. This game aims to reinforce the association between specific foods and their positive impact on health.

Nutri quest



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An adventure-style game where players embark on a journey to discover and collect healthy food items while avoiding obstacles representing junk food. This game encourages players to make healthy choices and resist unhealthy temptations.

Nutri Signal

A game focused on distinguishing between healthy and junk food options. Children will learn to identify foods that should be consumed regularly, occasionally, or avoided altogether based on their nutritional value.

These games are designed to be both entertaining and educational, fostering an enjoyable learning experience for the children.

OUTCOME

It was anticipated that the interactive nutrition education program will lead to significant a improvement in the participants' knowledge assessment of nutrients, healthy eating habits, and identification of junk food. By engaging children in fun and interactive learning activities, the program aims to promote positive changes in dietary behaviour and foster healthier lifestyles among Ashram-shalla children.

Analysis of the KAP

Nutrition knowledge vis-à-vis nutrition awareness fun interactive game sessions

Sr.no	Question	Right answer	Pre test		Post test		
		should be					
			(n)	%	(n)	%	
1.	Do you think maggie is a junk	Yes	52	16.9	307	100	
	food						
2.	Carrot has which vitamin?	Vitamin A	2	0.7	236	76.9	



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3.	Sunshine Vitamin is essential	Our bone Strong	10	3.3	307	100
	for keeping?					
4.	Good source of protein?	Meat + Egg	12	3.9	307	100
5.	Which food should be avoid to keep ourself healthy?	Unhealthy food	18	5.9	307	100
6.	Milk is a good source of calcium?	yes	25	8.9	307	100
7.	Gooseberry is a very good source of?	Vitamin C	2	0.7	307	100
8.	Rich source of Iron	Liver and Meat	17	5.5	307	100
9.	Is healthy food expensive?	No	26	8.5	307	100
10.	Do you think what you eat is healthy?	No	70	22.8	307	100
		Average score percentage (%) of Right Answer		7.71		97.69





The Nutrition Awareness Assessment program was highly successful, and will now be conducted in the Pen Ashram School in July/August 2024

Baseline Anthropometric Assessement

School wise data distribution:



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Date collection year* Height for Age (IAP) Crosstabulation

Count

School name	Height for Age (IAP) Percentiles							
		3	10	25	50	75	95	
Bhalewadi	Dec-23	14	22	10	10	0		56
Chafewadi	Dec-23	2	6	20	24	15	3	70
Pathrej	Feb-24	5	4	3	2	1	0	15
Pinglas	Feb-24	14	7	4	1			26
Sanegaon	Feb-24	11	3	2	2	2		20
Savarsai	Feb-24	76	5					81
Varsai	Feb-24	43	26	23	5	2		99
Varwane	Feb-24	72	41	33	9	4		159
	Total	237	114	95	53	24	3	526
	%	45.1	21.7	18.1	10.1	4.6		100.0

Date collection time * Weight for Age (IAP)

Crosstabulation

Count

Count	T.									1
School name		Weight for Age (IAP) Percentiles								Total
		3	10	25	50	75	90	95	97	
Bhalewadi	Dec-23	7	26	15	7	1				56
Chafewadi	Dec-23	1	10	24	26	7		2		70
Pathrej	Feb-24	7	4	3	0	1				15
Pinglas	Feb-24	12	11	3						26
Sanegaon	Feb-24	13	3	2	2					20
Savarsai	Feb-24	34	21	10	12	2	1		1	81
Varsai	Feb-24	67	23	6	1		2			99
Varwane	Feb-24	95	31	24	4	4	1			159
	Total	236	129	87	52	15	4	2	1	526
	%	44.9	24.5	16.5	9.9	2.9	0.8	0.4	0.2	100.0



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Date collection time * BMI for age (IAP) Crosstabulation

Count

School name		BMI for age (IAP) Percentiles											
		3	5	10	25	50	75	95	99	100			
Bhalewadi	Dec-23	3		7	27	16	3						
Chafewadi	Dec-23	1		12	15	21	18	2	1				
Pathrej	Feb-24	3	2	7	2	0	1						
Pinglas	Feb-24	3	7	7	5	2	2						
Sanegaon	Feb-24	5	4	4	6	1							
Savarsai	Feb-24	8	1	10	14	13	9			26			
Varsai	Feb-24	42	21	20	9	5				2			
Varwane	Feb-24	71	15	33	25	8	5			2			
	Total	136	50	100	103	66	38	2	1	30			
	%	25.9	9.5	19.0	19.6	12.5	7.2	0.4	0.2	5.7			

The Anthropometric Assessment will now be conducted again in the Karjat and Pen Ashram schools in six to eight months.