CERTIFICATE

This is to certify that the research work presented in this thesis has been carried out independently by

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under the guidance of ***Dr. Vanisha Nambiar***

in pursuit of a PhD Degree in Foods and Nutrition and this is her original work.

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List of Abbreviations

Sr. No.	ABBREVIATION	FULL FORM
1	CDC	Centers for Disease Control and Prevention
2	NHE	Nutrition Health Education
3	NCD	Non-Communicable Diseases
4	PAP	Physical Activity Pattern
5	CQR	Critical Qualitative Research
6	SEM	Socio Ecology Model
7	ASC	Active Sports Club
8	MVPA	Moderate to Vigorous Physical Activity
9	PE	Physical Education
10	PA	Physical Activity
11	MEND	Mind Exercise Nutrition Do
12	KYB	Know Your Body
13	MHHP	Minnesota Heart Health Program
14	CATCH	Children and Adolescent Trial for Cardiovascular Health
15.	TAAG	Trial of Activity for Adolescent Girls
16.	SPARK	Sports, Play and Active Recreation for Kids
17.	LEAP	Lifestyle Education for Active Learning
18.	M-SPAN	Middle School Physical Activity and Nutrition
19.	WHO	World Health Organization
20.	Ht.	Height
21.	Wt.	Weight
22.	BMI	Body Mass index
23.	BAZ	BMI for Age
24.	WC	Waist Circumference

25.	HC	Hip Circumference
26.	WHR	Waist Hip Ratio
27.	WHtR	Waist to Height Ratio
28.	MARG	Medical education for Children/ Adolescents for Realistic Prevention of Obesity and Diabetes and for a Healthy AGing
29.	IOTF	International Obesity Task Force
30.	CSHP	Coordinated School Health Program
31.	CSHA	Coordinated School Health Approach
32.	TBF	Total Body Fat
33.	TC	Total Cholesterol
34.	TG	Triglycerides
35.	TBF	Total Body Fat
36.	BP	Blood Pressure
37.	RWF	Refined Wheat Flour
38.	NCD	Non Communicable Diseases
39.	ECOWAS	Economic Community of West African States
40.	T2DM	Type 2 Diabetes Mellitus
41.	CHD	Coronary Heart Disease
42.	IUGR	Intra-Uterine Growth Retardation
43.	CED	Chronic Energy Deficiency
44.	BCC	Behaviour Change Communication
45.	Hs- CRP	High Sensitivity- C- Reactive Protein
46.	HDL-C	High Density Lipoprotein Cholesterol
47.	LDL-C	Low Density Lipoprotein Cholesterol
48.	SBP	Systolic Blood Pressure
49.	DBP	Diastolic Blood Pressure
50.	NFHS	National Family Health Survey

51.	NHANES	National Health and Nutrition Examination
52.	GSEB	Gujarat Secondary Education Board
53.	CBSE	Central Board of Secondary Education
54.	MIG	Moderate Income Group
55.	HIG	High Income Group
56.	LIG	Low Income Group
57.	MHIG	Middle High Income Group
58.	UN	Under Nourished
59.	HBP	High blood Pressure
60.	DBM	Dual Burden of Malnutrition
61.	FFQ	Food Frequency Questionnaire
62.	PAPS	Physical Activity Pattern Score
63.	K.G.	Kindergarten
64.	CFRS	Canteen Food Rating System
65.	NIN	National Institute of Nutrition
66.	ICMR	Indian Council for Medical Research
67.	BIA	Bioelectrical Impedance Analysis
68.	Hb	Hemoglobin
69.	RBC	Red Blood Cells
70.	PCV	Packed Cell Volume
71.	MCV	Mean Corpuscular Volume
72.	MCH	Mean Corpuscular Hemoglobin
73.	MCHC	Mean Corpuscular Hemoglobin Concentration
74.	WBC	White Blood Cells
75.	TC:HDL-C	Total Cholesterol HDL Cholesterol Ratio
76.	TG:HDL-C	Triglyceride HDL Cholesterol Ratio
77.	VLDL	Very Low Density Lipoprotein

78.	FSI	Fasting Serum Insulin
79.	FPG	Fasting Plasma Glucose
80.	HOMA-IR	Homeostasis Model Assessment
81.	ECLIA	Electro Chemi Luminescence Immuno Assay
82.	NADP	Nicotinamide Adenine Dinucleotide Phosphate
83.	NADPH	Nicotinamide Adenine Dinucleotide Phosphate Hydroxide
84.	PT	Physical Training
85.	CBC	Complete Blood Count
86.	ATP III	Adult Treatment Panel III
87.	CIF	Compromised Immune Function
88.	CNS	Central Nervous System
89.	FAO	Food and Agricultural Organization
90.	VAD	Vitamin A Deficiency
91.	IDD	Iodine Deficiency Disorders
92.	4-AAP	4-Aminoantipyrine
93.	ESPA	N-Ethyl-N-(3-Sulfopropyl)-m-anisidine
94.	AHA	American Heart Association
95.	ADA	American Diabetes Association

REVIEW OF LITERATURE

INTRODUCTION

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PHASE 1b

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PHASE 3

SUMMARY & CONCLUSION

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ANNEXURE

ABSTRACT