

**IMPACT OF NUTRITION ON GROWTH AND DEVELOPMENT
IN EARLY CHILDHOOD PRIMARY EDUCATION
IN RUMURUTI TOWN IN LAIKIPIA
DISTRICT, KENYA**

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**A RESEARCH REPORT PRESENTED TO THE
INSTITUTE OF OPEN DISTANCE LEARNING FOR
PARTIAL FULFILLMENT FOR THE AWARD
DEGREE OF EDUCATION (ECPE)
OF KAMPALA INTERNATIONAL
UNIVERSITY**

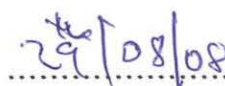
AUGUST 2008

DECLARATION

I George G, Gachara, hereby declare that this report is entirely my own work, except where acknowledged, and that it has not been submitted before to this university or any other university or institution of higher learning for any academic award.



Signature



Date

DEDICATION

This work is dedicated to my beloved family friends, my brother Ludovick and his entire family, and lastly my lovely parents and my dear wife.

Am truly thankful, for every one above I have mentioned for relentless effort made to make sure that I succeed in my Education.

ACKNOWLEDGMENT

Compiling of work of this type would be impossible without assistance from various people .with honour; i would like to put forward all those who morally and financially assisted me to successfully complete this report. My profound gratitude goes to my friend Jairo, and my Dear wife.

I am deeply indebted to my supervisor Mr kimwise Alone lecturer in institute of open and distance learning of Kampala International University., whose inspirations pointed me towards the direction of inquiring into this subject.

I thank all my classmates, friends and colleagues for the encouragement and for academic company during the course of study.

Last but not least, I thank the almighty God through his son Jesus Christ for giving me an a wake mind and body through out the study.

DEFINITION OF TERMS

The following terms have been defined in the context of this research;

Effects: the result that something brings

Development: children gradually growing and becoming strong.

Growth: the development of children

Infection: the act or process of causing or getting a disease

Nutrition: the process in which primary pupils receive food necessary for them to grow healthy.

Malnutrition: a poor condition of health caused by a lack of food or the right food.

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ABSTRACT

The purpose of this study was to determine the impact of nutrition on growth and development in early childhood primary education in Rumuruti primary school laikipia district, Kenya. Specifically the study intended to determine the impact of nutrition of early childhood and primary education pupils in relation to: growth and development School, achievement, Health and Determine the importance of nutrition on early childhood and primary education pupils. Data was collected from teachers using questionnaires while focus group discussions were held with the pupils and interviews were organized to collect data from parents with the parents.

The findings revealed nutrition had an impact on the growth and development of a child and also affected his/her educational achievements and health.

The study recommended that. The government should make sure that it focuses on nutritional and feeding programs in schools.

The parents and the community should be sensitized on the importance of nutrition on early childhood and also taught how to feed their children what is right and important.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter looks at the background of study, the purpose of the study, statement of the problem, research objectives, and research questions; scope of the study and the significance of the study.

1.1 Background of the study

Malnutrition and infection are widespread in almost all developing countries. Among the most common conditions are protein-energy malnutrition (PEM), micronutrient deficiency disorders, helminthic (worm) infection, and upper respiratory illness. These conditions often combine to create negative synergies; thus, for example, PEM and infection frequently co-exist and multiply the ill effects that each would cause the organism if present alone.(Grantham-McGregor, S., C. A. Powell, S.P. Walker and J.H. Himes 1991).

Chronic food deficits affect about 792 million people in the world (FAO 2000), including 20% of the population in developing countries. Worldwide, malnutrition affects one in three people and each of its major forms dwarfs most other diseases globally (WHO, 2000). Malnutrition affects all age groups, but it is especially common among the poor and those with inadequate access to health education and to clean water and good sanitation. More than 70% of children with protein-energy malnutrition live in Asia, 26% live in Africa, and 4% in Latin America and the Caribbean (WHO 2000).

The endemic nature of malnutrition and infection is probably also at the root of additional health problems that impede learning among school-aged children. Poor vision and auditory impairment, for example, are conditions that directly relate to infection and micronutrient deficiencies. (UNESCO 2000)

Vast numbers of school-aged children in developing countries face major health and nutrition problems that adversely affect their ability to take advantage of the limited

educational opportunities available to them. Many of these children have a history of PEM as well as current nutritional deficiencies including deficits in body stores of iodine, vitamin A and iron. These conditions are exacerbated by helminthic infection which is highly prevalent among school-aged children and particularly inimical to their healthy growth, development and educational progress. Temporary hunger and sensory impairment are also widely prevalent conditions (despite the fact that exact numbers are unknown) that vitiate attempts made by children and their families to reap the benefits of classroom instruction. (FAO 2000)

A World Bank report (2000) warns unless action is taken within the first two years of a child's life to improve nutrition, children will suffer irreparable damage, ultimately adversely affecting the country's economic growth therefore a need for the study.

1.2 Statement of the Problem.

Malnutrition is among the most serious health problems in the world today that has not been taken serious. Most people do not take nutrition as something important yet when a child is well fed he or she will perform well in school. It is the lack of people's attention to children's nutrition and the impact it has on their growth that created a necessity for this study.

1.3 Purpose of the Study

The purpose of the study was to investigate the impact of nutrition on growth and development of early childhood and primary education pupils.

1.4 Objectives of the Study

Specifically this study seeks to;

1. Determine the profile of the respondents in regards to:
 - 1.1 Age
 - 1.2 Gender
 - 1.3 Class

2. To determine the effect of nutrition on early childhood and primary education pupils in relation to:

2.1 Growth and development

2.2 School achievement

2.3 Health

3. Determine the importance of nutrition on early childhood and primary education Pupils.

1.5 Research Questions

1. What is the relationship between nutrition of early childhood and primary education pupils and growth and development?
2. What is the relationship between nutrition of early childhood and primary education pupils and school achievement?
3. What is the relationship between nutrition of early childhood and primary education pupil and their health?
4. What is the importance of nutrition on early childhood and primary pupils?

1.6 Scope of the study

The study was carried in Laikipia west district, Rumuruti division and was limited to Magomano primary school in Kenya.

1.7 Significance of the study

Health and nutrition is very important in the growth and development of children which in turn boost their education and therefore policy makers need to make policies that take into consideration the well being of the children in primary schools by improving their nutrition.

The study will make schools take into consideration the importance of feeding programs and also realize that nutrition is important in the improvement and better performance in class.

Parents will also learn the importance of nutrition and therefore review their feeding habits so as to facilitate the performance of their children in school.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviews literature as an account of the knowledge and ideas that have been established by accredited scholars and experts in the field of nutrition on the development of primary children. It is guided by the objectives of the study outlined in chapter one.

2.1 Impact of nutrition on primary children.

Growth and development

Nutrition is essential for growth and development, health, and well-being. Proper nutrition, health care, and stimulation during the early years improve learning and other abilities. Nutritional Programs facilitate the development of a child in all its dimensions and have considerable long-lasting effects on the child's life. (Levinger beryl 2000)

Poor nutrition during the first 3 years often permanently hampers a child's mental development. Some children start out growing well but over time begin to fall off, both in weight gain and then in height. If the condition progresses, FTT children may become apathetic and irritable and may not reach milestones, such as sitting up or walking at the usual age. It is possible that FTT children don't process needed nutrients as efficiently as non-FTT children and that this results in central nervous system defects, such as hyperactivity and disorders of attention and learning. (Grantham-McGregor 1991).

2.2 School achievement.

A child's school enrollment Attendance and achievement are influenced by a host of variables including the capacity of the child as a biosocial organism to process and respond to stimuli. (Grantham-McGregor et al 1991)

As the quality of biosocial organisms sitting in the classroom improves, so too does the efficiency of the child's learning. (WHO 2000) Nutrition and health problems impinge on the quality of the biochemical organism and impinge the acquisition of skills and abilities needed to progress satisfactorily in the primary education. According to MOEST (2004) by ensuring the health and nutrition of the learners, their minds are receptive in learning.

2.3 Health

Malnutrition poses a serious threat to children's health and development, especially for the youngest children who are in a uniquely vulnerable period of rapid growth and development. Malnutrition among young children is linked with poor health and increased risk of hospitalizations. (Cravioto, J. and Patricia Cravioto 1990)"

Malnutrition in all its forms increases the risk of disease and early death. Protein-energy malnutrition, for example, plays a major role in half of all under-five deaths each year in developing countries (WHO 2000). Severe forms of malnutrition include marasmus (chronic wasting of fat, muscle and other tissues); cretinism and irreversible brain damage due to iodine deficiency; and blindness and increased risk of infection and death from vitamin A deficiency. The state of health is influenced by nutrition, medical care, environmental factors and social economic mental status of the child.

Deficiencies before birth and in the first five or so years of a child's life can cause mental retardation. In particular for this matter young children need plenty of protein which promotes healthy growth; most young people are also active and hence need adequate supplies of energy foods as well as vitamin and minerals to make sure that their body functions normally. (Grantham-McGregor 1991)

2.4 Importance of nutrition on early childhood and primary education pupils.

Recent studies from the nutrition and economics literatures reaffirm the importance of nutrition for the cognitive achievement and school enrollment of children. Nutrition is

also important for development of a country because if the children are healthy they will study well and therefore are future leaders. (Berkeley Seth and dean Johnson 1991)

Nutrition is essential to a child's health. Good nutrition can put a stop to many health problems, including becoming overweight, developing weak bones, and developing diabetes. Giving a child all the foods that have all the important nutrients will help him/her grow to her/his complete potential. A child's body prospers on certain nutrients that work together to promote growth and development. (WHO 2000)

Adequate supplies of food as well as vitamin and minerals make sure that children's body functions well and therefore perform well in school. (Latham M. et al 1991)

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction.

This chapter looks at the research design, population the study, sample population, research instrument, and data collection procedure and data analysis.

3.1 Research Design

This study used a descriptive design. The research drew from both the qualitative and quantitative approaches in order to get a bigger picture both in number and data.

3.2 Population of the study

This study was conducted in Magomano primary school in Rumuruti division, Likipia district, Kenya and this was so because it is where the researcher lives and therefore it was relatively easy to collect data.

3.3. Sample population

The respondents included teachers, pupils and parents. Twenty five Questionnaires were distributed to teachers randomly and ten parents were purposively selected for interview while 25 pupils participated in focus group discussions.

3.4 Research Instruments

Questionnaires were used to extract information from teachers. Focus group discussions were used to get information from pupils and interviews were carried out with the parents. Open ended questionnaires were suitable for investigating deeper the subject matter. It was easier to get information from the parents in interviews than with questionnaires because getting them back was a problem while for the teachers it was easy because they were all in one place and that was the school.

3.5. Data collection procedure

A letter of introduction from the institute of open and distance learning in Kampala International University was obtained to facilitate in the data collection exercise. The letter was handed to the head teacher before Questionnaires were distributed to teachers and focus group discussions carried on with pupils. The parents were interviewed from their homes and the data collected were sorted and categorized after which it was analyzed and discussed. The conclusions and recommendations were made.

3.6. Data analysis

The data was analyzed by use of statistical description methods by use of frequencies ,pie charts, and tables.

CHAPTER FOUR

PRESENTATION INTERPRETATION AND DISCUSSION OF FINDINGS

4.0 Introduction

This chapter gives the presentation; interpretation and discussion of the findings. The results are presented in form of tables, frequency counts and percentage. The focuses was on the effects of nutrition on growth and development in early childhood primary education in laikipia district, Kenya

4.1 Profile of the respondents

Table 1

Profile of the respondents

Respondents	Frequency	Percentage
Sex		
Male	11	55
Female	9	45
Total	20	100
Marital status		
Single	8	40
Married	12	60
Total	20	100
Age		
19-24 yrs	4	20
25-30yrs	10	50
31 and above	6	30
Educational level		
Certificate	6	30
Diploma	9	45
Degree	5	25
Total	20	100

Twenty five (25) questionnaires were distributed to the teachers and 20 were filled and returned .This therefore represents 80% of the total number of questionnaires that were returned.

Table 4.1 illustrates that 11 (55%) of the respondents were male and 9 (45%) were female indicating that the sample for teachers was dominated by males. On the marital status majority of the respondents that is over a half were married while 40 percent indicated that they were single.

The age category of the respondents was divided in three groups that is 19-24 years were only four accounting for 20%, which was the minority group and those of 25-30 were the majority represented by 50% suggesting that the sample was dominated by teachers of the youthful age taking up to 70%

The academic level of the respondents was divided in three categories that is, certificate, diploma and degree. 6 (30%) of the respondents had certificates, 9 (45%) had diplomas and 5 (25%) had degrees. Thus the diploma group was dominant

Interviews were carried out with 10 parents both male and female. Six 6 of the parents were male while four 4 were female which implies that this group too was dominated by the male respondents

Focus group discussions were used to extract data from the pupils. 25 pupils were included in the discussion of which 14 were boys and 11 girls which further indicate the domination of the male gender.

4.3 Growth and development.

The respondents were asked whether they have nutritional programs in the school and their responses are illustrated in table 4.

Table 2**Response on whether there exist nutritional programs in the school.**

Response	Frequency	Percentage
Yes	13	65
No	7	35
Total	20	100

Table 4.2 show that 13 (65%) of the respondents agree that they have nutritional programs in the school and 7 (35%) disagree. According to the parents the school they took their children to had nutritional programs and according to them it is important to take children to schools with nutritional programs because it is a contributing factor to educational achievement. In a focus group discussion with the pupils they also agreed that the school provided them with food at lunch time and porridge at break time and thus this plays a part in their academic performance levels

The respondents were asked to show how nutrition has affected the growth of children

Figure 1
The effect of nutrition on growth of children

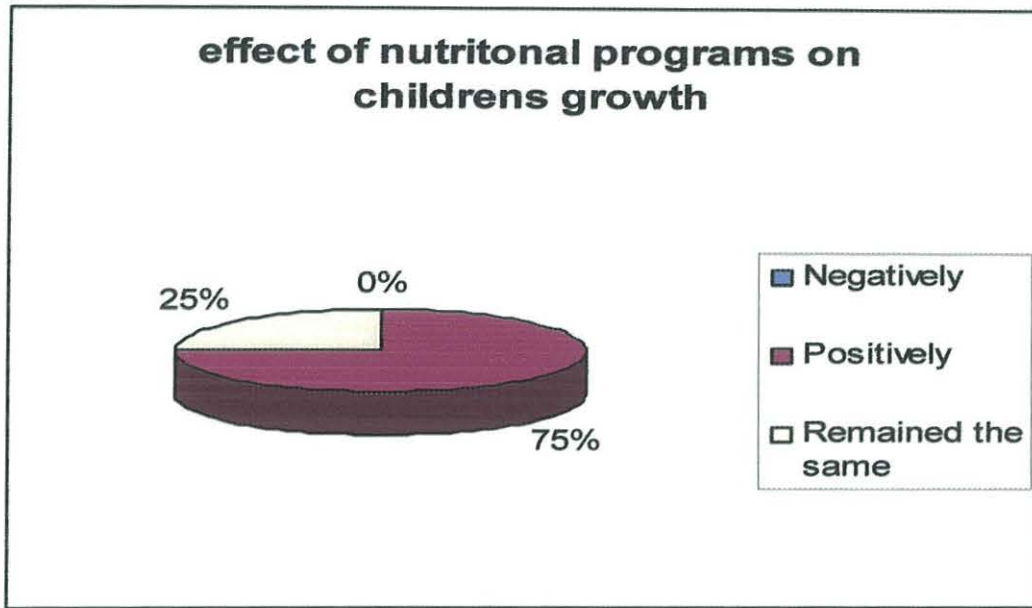


Figure 4.1 Indicates that 15 (75%) of the respondents said that nutrition has positively affected the growth of children and only 5 (25%) said they have remained the same and none of the respondents talked of the negative effect. According to the parents nutritional programs have positively affected their children's growth that is they are healthy and perform well in class. Children to consented to this as they said that when they are well fed they can study well and grasp what the teacher is teaching

The respondents were asked weather they have children with disabilities due to poor nutrition and this was their response

Table 3

Relative frequency on whether the school has children with disabilities due to poor nutrition

Response	Frequency	Percentage
Yes	3	15
No	17	85
Total	20	100

Table 4.2 reveals that only 3 (15%) of the respondents agreed that they have children with disabilities due to poor nutrition while 17 (85%) disagreed. Some parents revealed that they had children who were disabled due to poor nutrition especially those who were not well fed when young. They revealed that some had learning disorders and could not participate well in class. This means that this is an issue of controversy in that well as majority of the teachers disagree with the issue majority of the parents do agree with it and as such it remains an issue of contention.

4.4 School achievement

The respondents were asked whether poor nutrition leads to poor performance of pupils in class and this was their response

Table 4**Nutrition and performance of pupils in class.**

Response	Frequency	Percentage
Strongly agree	10	50
Agree	8	40
Strongly disagree	-	-
Disagree	2	10
Total	20	100

Table 4.3 Show that half of the teachers 10 (50%) strongly agreed that poor nutrition leads to poor performance of pupils in class while only 2 (10%) disagree. The parents agreed that feeding children contributed their academic performance because children who are healthy are capable to concentrate in class which leads to performing well. Such response illustrates the importance of proper and adequate nutrition to the academic performance of children in schools.

The respondents were asked whether children do not concentrate in class because of hunger and poor feeds

Table 5

The effect of hunger on concentrate in class.

Response	Frequency	Percentage
Strongly agree	15	75
Agree	2	10
Strongly disagree	1	5
Disagree	2	10
Total	20	100

Table 4.4 point up that 15(75%) of the respondents strongly agreed that pupils do not concentrate in class because of hunger, and only 1 (5%) strongly disagreed. On the side of the parents, it was stated that children do not concentrate on empty stomach. The pupils revealed that in some cases when the teacher delays them in class and they have to go for lunch they do not concentrate in class. They also revealed that in some cases the food is not prepared in time and therefore they feel bad and some especially those in lower classes start crying.

The respondents were asked whether poor nutrition leads to low enrollment of pupils and this was their response

Table 6**Poor nutrition and enrollment of pupils.**

Response	Frequency	Percentage
Strongly agree	8	40
Agree	6	30
Strongly disagree	2	10
Disagree	4	20
Total	20	100

The table shows that 8 (40%) of the respondents strongly agree that poor nutrition leads to low enrollment of pupils, 6 (30%) agree while 2 (10%) strongly disagree and 4 (20%) disagree. According to the parents children who are not well fed always fall sick and therefore cannot attend school which means that the enrollment is affected. Suggesting that poor nutrition affects enrolment

The respondents were asked weather poor nutrition hinders the achievement of education and this was their response.

Table 4.6

Poor nutrition and achievement in education.

Response	Frequency	Percentage
Strongly agree	11	55
Agree	6	30
Strongly disagree	-	-
Disagree	3	15
Total	20	100

Source Field data

Table 4.6 shows that 11(55%) of the respondents strongly agreed that poor nutrition hinders the achievement of education, 6 (30%) agreed and 3 (15%) disagree.

The parents agreed that poor nutrition hindered academic achievement in a way that if pupils cannot concentrate in class then the performance will not be good which leads to repletion and hence school drop out. This means that the goal of government is not realized that is achieving education for all.

The respondents were asked whether children who were fed in the early years perform and learn well in class and this was their response.

Table 7**Feeding and children performance in class**

Response	Frequency	Percentage
Strongly agree	10	50
Agree	5	25
Strongly disagree	1	5
Disagree	4	20
Total	20	100

Source Field data

According to table 4.7 half of the teachers (50%) strongly agree that children who were well fed in early years perform and learn well in class, 5 (25%) agree while only 1 (5%) strongly disagree and 4 (20%) disagree. This illustrates that according to the teachers those children who are well fed the performance will be good compared to those who are poorly fed.

The parents agreed that it was obvious children who were well fed in their early ages grew up to be strong and healthy. They stressed the importance of early childhood feeding and therefore called for parents to make sure they fed their children and right in their early years.

The respondents were asked whether most parents do not know the importance of nutrition on educational outcome and this was their response

Table 8

Parents knowledge on the importance of nutrition on educational outcome.

Response	frequency	Percentage
Strongly agree	9	45
Agree	5	25
Strongly disagree	2	10
Disagree	4	20
Total	20	100

The table show that 9 (45%) of the respondents strongly agree that most parents do not know the importance of nutrition on educational outcome, 5 (25%) agree while 2 (10%) strongly disagree and 4 (20%) agree.

The parents disagreed on the claim that that they don't know the importance of nutrition on academic achievement and revealed that the hindrance to good nutrition was poverty that is some parents do not have enough money to buy what is important for the children.

4.5 Health

The respondents were asked whether they have children who are sick due to malnutrition

Figure 2

Children who are sick due to malnutrition

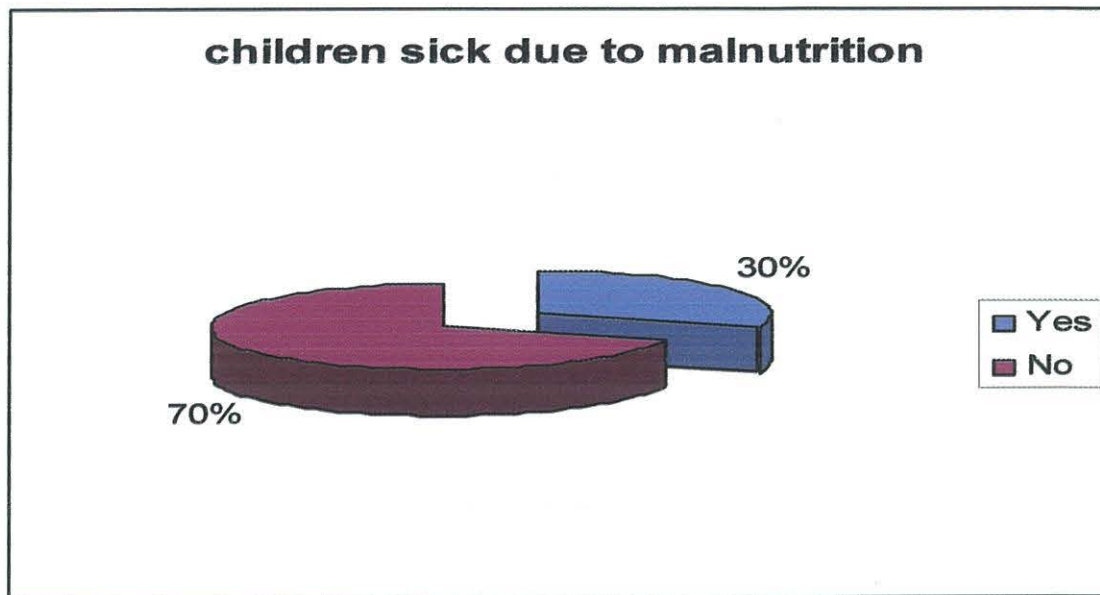


Figure 4.2 show that slightly above a equator of 6 (30%) of the respondents agree that they have children sick due to malnutrition and most respondents 14 (70%) disagree with this. Some parents revealed that they had children who were sick due to malnutrition.

The common diseases named were kwashiorkor, marasmas, dysentery and diarrhea. The teachers revealed that the schools had clinics where the children go treatment and such children are fed well to gain their health .They revealed that in order to prevent the diseases the children were fed well. According to the teachers the diseases have affected the performance of the children because they miss classes to go for treatment and therefore perform poorly.

The respondents were asked how important nutrition is on early childhood and primary education and this was their response.

The important of nutrition on early childhood and primary education.

Response	Frequency	Percentage
Very important	6	30
Important	9	45
Not important	5	25
Total	20	100

Table 4.10 show that 6 (30%) of the respondents said that nutrition is very important on early childhood and primary education while close to a half of the respondents 9 (45%) said is important and only a equator 5 (25%) said it is not important.

The parents consented to those that agreed that nutrition was very important and therefore generally majority of all the respondents recognized the importance of nutrition to early childhood and primary education.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0. Introduction

The major purpose of the study was to establish the effects of nutrition on growth and development in early childhood primary education. This chapter focuses on the summary of the findings, conclusions and recommendations. Finally the chapter ends with suggestions for further research.

5.1. Summary

The first objective was to determine the effect of nutrition on early childhood primary education in regards to growth and development. The study revealed that the school had feeding programs that is (65%) of the respondents agreed that they have nutritional programs in the school. They also agreed that nutrition is very important in the growth and development of children and this is supported by Levinger Beryl (2000) that nutritional programs facilitate the growth of a child in all dimensions and have considerable long lasting effects on a child's life.

The second objective focused on poor nutrition and school achievement and 50% of the respondents strongly agreed that poor nutrition leads to poor performance of pupils in class. According to Grantham McGregor (1991) school attendance and achievement are affected by a host of variables including the capacity of a child as a biosocial organism to process and respond to stimuli. The study also revealed that children from poor families did not perform well in class because of hunger and therefore did not perform well and this is supported by FAO (2000) hunger hinders school achievement.

The third objective focused on nutrition and the health of the pupils. 30% of the respondents agreed that they had children who were sick due to malnutrition. According to WHO (2000) malnutrition in all its forms increases the risk of disease and early death.

Finally the study focused on the importance of nutrition and 30% of the respondents said that nutrition is very important on early childhood and primary education. According to Berkeley Seth and Dean Johnson (1991) nutrition is important for a development of a country because if children are healthy they study well and become future leaders.

5.2 Conclusion

The main purpose of the study was to determine the effects of nutrition on growth and development in early childhood primary education

It was established that nutrition was very important to the growth and development of a child and that poor nutrition led to diseases.

Poor nutrition leads to poor performance in class and children who are hungry cannot concentrate in class. The study also revealed that poor nutrition affected the enrollment of pupils.

The study found out that poor nutrition led to diseases and therefore because of diseases children do not perform well in school.

The study also found out that nutrition was very important and that for a country to develop it had to focus on nutritional programs.

5.3. Recommendations

The government should make sure that it focuses on nutritional and feeding programs in schools so as to improve on the performance of early childhood and primary school pupils.

The parents and the community should be sensitized on the importance of nutrition on early childhood and also taught how to feed their children what is right and important. Parents should make sure that they provide food for their children as they go to school so that they do not go hungry and fail to concentrate in class.

A topic or subject on nutrition should be taught to the pupils so that as they grow up they know the importance of nutrition.

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APPENDIXES

Appendix A: Time Frame

The researcher spent a period of 4 months to complete this research. In the first month the researcher wrote his proposal and submitted it for approval. In the same month the researcher got an introduction letter from the university, which authorizes him to go to the field.

In the second month, he proceeded to pilot the instruments and also got used to the place where was going to gather his Data.

In the third month and fourth month, the researcher mailed the questionnaires at the same time he received respondent's feedback, Data analysis, preparation of final report, Editing of the report and then submission of the report for the defence.

Appendix B

BUDGET

The estimated budget for the entire research is as follows;

Activities	cost (ug shs)
Transport	60,000
Typing	20,000
Cyber services	20,000
Telecommunication	20,000
Photocopy	10,000
Printing	40,000
Binding	12,000
Total	182,000

APPENDIX C:
RESEARCH INSTRUMENTS.
QUESTIONNAIRE FOR STUDENTS

I am a student of Kampala international university pursuing a Bachelor degree of Education (ECPE) , carrying out a research to establish the impact of impact of nutrition on growth and development in early childhood primary education in Rumuruti town in laikipia district, Kenya

The study is entirely meant for academic purpose; therefore, feel free to avail all relevant information since the information got shall be treated with ultimate confidentiality.

Thank you so much for your maximum co-operation.

TICK where appropriate.

Personal information

Age

19-24yrs ☐

25-30yrs

31 and above ☐

Sex

Female ☐ Male ☐

Marital status

Single ☐ Married ☐

Educational level

Certificate ☐

College ☐

University ☐

Growth and development

1. Do you have nutritional programs in the school?

Yes ☐

No ☐

2. How has nutrition affected the growth of the children?

It has affected them negatively ☐

It has affected them positively ☐

They have remained the same ☐

3. Expand on the answer you have given above.....
.....
.....

4. Do you have children with disabilities due to poor nutrition?

Yes ☐

No ☐

School achievement

Below are statements on school achievement and nutrition. Please tick the one you most agree with.

5. Poor nutrition leads to poor performance of pupils in class

STRONGLY AGREE

☐

AGREE

☐

STRONGLY DISAGREE ☐ DISAGREE ☐

6. Children do not concentrate in class because of hunger

STRONGLY AGREE ☐ AGREE ☐

STRONGLY DISAGREE ☐ DISAGREE ☐

7. Poor nutrition leads to low enrollment of pupils

STRONGLY AGREE ☐ AGREE ☐

STRONGLY DISAGREE ☐ DISAGREE ☐

8. Because of poor nutrition pupils miss classes

STRONGLY AGREE ☐ AGREE ☐

STRONGLY DISAGREE ☐ DISAGREE ☐

9. Poor nutrition hinders the achievement of education

STRONGLY AGREE ☐ AGREE ☐

STRONGLY DISAGREE ☐ DISAGREE ☐

10. Children who were well fed in the early years perform and learn well in class.

STRONGLY AGREE ☐ AGREE ☐

STRONGLY DISAGREE ☐ DISAGREE ☐

11. Most parents do not know the importance of nutrition on educational outcome.

STRONGLY AGREE ☐ AGREE ☐

STRONGLY DISAGREE ☐ DISAGREE ☐

12. Children from poor families do not perform well in school because they do not have what to eat

STRONGLY AGREE ☐

AGREE ☐

STRONGLY DISAGREE ☐

DISAGREE ☐

Health

13. Do you have children who are sick due to malnutrition?

Yes ☐

No ☐

14. Please name the common diseases in your school related to malnutrition.....

15. How do you treat them

16. How do you prevent them.....

17. How have the diseases affected the performance of the children?

.....
.....

Importance of nutrition on early childhood and primary education pupils.

18. How important is nutrition on early childhood and primary education.

Very important ☐

Important ☐

19. Give ways in which nutrition is important to early childhood and primary education.....

APPENDIX D

FOCUS GROUP DISCUSSION GUIDE FOR THE PUPILS

1. Do you have feeding programs in your school
2. How have they been important to your growth
3. How have they helped in your school achievements
4. Do your parents pack for you food.