Development and implementation of nutrition strategies to improve the application of a food-based dietary guideline for use by crèche caregivers in Thulamela, Limpopo Province, South Africa

PFANANI CHARLOTTE KWINDA

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DEVELOPMENT AND IMPLEMENTATION OF NUTRITION STRATEGIES TO IMPROVE
THE APPLICATION OF A FOOD-BASED DIETARY GUIDELINE FOR USE BY CRÈCHE
CAREGIVERS IN THULAMELA, LIMPOPO PROVINCE, SOUTH AFRICA

by

PFANANI CHARLOTTE KWINDA

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Supervisor: Mrs HH Van der Spuy
Co-Supervisor: Dr AT Viljoen

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This study is dedicated to my beloved family, my husband Fulufhelo Sydney, my daughters Vele and Phuluso, my son Ramudzuli, my brother Dakalo as well as my entire extended family for their love and support throughout, not forgetting my late mother Matodzi Thifhelimbilu Grace and sister Eunice who regretfully did not live to see the accomplishment of this work which in no small way resulted from their gift of inspiration and many years of love shown to me.
I, Pfanani Charlotte Kwinda hereby declare that the dissertation for a Master of Consumer Science degree at the University of Pretoria hereby submitted by me has not previously been submitted for a degree at this university or any other university and that it is my own work in design and execution and that all reference material contained herein has been acknowledged.

PFANANI CHARLOTTE KWINDA

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ABSTRACT

DEVELOPMENT AND IMPLEMENTATION OF NUTRITION STRATEGIES TO IMPROVE THE APPLICATION OF A FOOD-BASED DIETARY GUIDELINE FOR USE BY CRÈCHE CAREGivers IN THULAMELA, LIMPOPO PROVINCE, SOUTH AFRICA

by

PFANANI CHARLOTTE KWINDA

Supervisor: Mrs HH Van der Spuy
Co-Supervisor: Dr AT Viljoen
Department: Consumer Science
Degree: Masters in Consumer Science

Many of the world’s children, particularly those living in developing countries, subsist on diets that seldom vary and often do not allow for an adequate intake of the complete range of nutrients required for healthy living. Of concern is the absence of regular consumption of fresh vegetables and fruit that provide vitamin A which, if deficient, impairs children’s growth and development. In South Africa about 21% of children under the age of six years attend crèche facilities on a daily basis. The nutritional state of meals provided to children at many crèches tends to lack micronutrients, particularly vitamin A. Vitamin A deficiency is the main nutritional problem facing crèche children in South Africa today. Underlying causes are unsatisfactory diets restricted in variety and minimal knowledge of optimal dietary practices, a situation exacerbated by a high incidence of food insecurity. Limpopo is a province seriously affected by vitamin A deficiency.

A South African study, based on a quantitative research paradigm, was undertaken (April-September 2007) in Thulamela municipality with the aim of developing and implementing nutrition strategies to improve crèche children’s consumption of vitamin A-rich vegetables and fruit, as advocated by an officially recognised food-based dietary guideline. Through convenience sampling, 100 caregivers from 20 crèches in the study area responded to questionnaires and participated in a game. Ongoing observation continued. Information about the participants, their nutrition knowledge and the meals provided was collected following the triple-A cycle approach (assessment, analysis and action). The research process was structured in three phases.
Phase one involved a situational assessment and analysis that provided baseline information. Limitations contributing to the problem under investigation were identified and data showed that the children’s intake of vitamin A from vegetables and fruit at crèches was low. This was found to be due to a lack of knowledge and information about vitamin A, coupled with the unavailability and inaccessibility of food primarily due to non-production and affordability. Food preparation, storage and preservation also posed challenges to caregivers.

Using evidence from documented studies and the findings from phase one, nutrition strategies were developed and implemented in phase two. Caregivers were shown how to increase the availability and use of foods rich in vitamin A and were encouraged to grow, and use, both cultivated and non-cultivated vitamin A-rich vegetables and fruit. Furthermore, the concept of the food-based dietary guideline “eat plenty of vegetables and fruits everyday” was introduced to the caregivers and became part of the developed nutrition strategies.

Follow-up data collected in phase three showed substantial advancement in caregivers’ knowledge and skills. Access, availability and utilisation of vitamin A-rich vegetables and fruit had improved markedly. Flourishing vegetable gardens, planned menus and well prepared meals were concrete evidence, and vegetables and fruit were more frequently served to children. Implementation of the developed nutrition strategies epitomised the envisaged outcome of this study. Based on the research results, important recommendations are made to enhance the appropriate consumption of vegetables and fruit rich in vitamin A, leading to a reduction in disease and death caused by vitamin A deficiency among children.

**KEYWORDS:** nutrition strategies, food-based dietary guideline, vitamin A (beta carotene), nutrition knowledge, food production from gardening, dietary diversity and menu planning.
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