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**Department of Health of Papua New Guinea**  
**UNICEF Papua New Guinea**  
**University of Papua New Guinea**  
**Centers for Disease Control and Prevention**

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**Forward**

**Acknowledgement**

**Message from the Secretary, Department of Health of Papua New Guinea**



# National Nutrition Survey Papua New Guinea, 2005



Department of Health of Papua New Guinea  
UNICEF Papua New Guinea  
University of Papua New Guinea  
US, Centers for Disease Control and Prevention

## FOREWORD

It is with great pleasure that I introduce this report of the PNG National Nutrition Survey 2005. This report confirms that nutrition problems in PNG remain severe. Poor nutrition is one of the most important underlying factors for the high rates of infant, child and maternal morbidity and mortality and low life expectancy in our country.

The country is now faced with the double burden of malnutrition. On the one hand, adoption of modern lifestyle leads to an increase in the prevalence of over-nutrition and obesity (life-style diseases). On the other hand, under nutrition is still prevalent, as evident in high rates of stunting and protein energy malnutrition (PEM), as well as anemia.

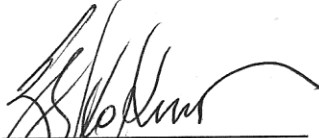
The food consumption patterns have changed over the last few decades, from starchy tubers (sweet potato, yams and taro) to cereals as the main source of energy. This is not only in cities, but also in resource rich rural communities, where there is excess cash in the household and consequently traditional garden foods are replaced by store foods. It is expected that LNG project will accelerate the transition.

The Government is serious in addressing these issues, through the National Strategic Vision 2010-2050 and the National Health Plan 2011-2020. The Goal of the National Strategic Vision is to make PNG a smart, fair and happy country by 2050. Likewise the new National Health Plan 2011-2020 will aim to supplement this vision by improving the health of the population. The survey results provide the country with good baseline data to monitor and evaluate progress towards these goals, as well as for planning, programming, monitoring and evaluation of nutrition interventions at all levels of Government.

I deeply appreciate the support of UNICEF and the United States Centers for Disease Control and Prevention (CDC) for providing overall technical and financial assistance to carry out this important survey. My appreciation also goes to Dr Juergen Erhardt and team for analysis of the dry blood spot samples.

Special thanks are due to Division of Basic Medical Sciences, School of Medicine and Health Sciences at University of Papua New Guinea and the National Nutrition Survey Taskforce in overseeing execution of the Survey. And last but not least, the field workers and communities throughout PNG, for without their support this survey would not have been possible.

I call upon all Government Departments, Churches and Civil Society to take heed of the findings and address the nutrition problems the country is facing. I believe the mental and physical capacities of our population are significantly compromised by poor nutrition.



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Hon. SASA ZIBE, MP  
Minister for Health & HIV/AIDS

## ACKNOWLEDGEMENTS

The Papua New Guinea National Micronutrient Survey 2005 was supported through a cooperative agreement between UNICEF and the Centers for Disease Control and Prevention (CDC). CDC provided technical assistance in planning and training for the survey, and in the analysis of the survey data, as well as technical advice for laboratory analysis and logistics.

A meeting to plan the survey was convened in July 2004 in Port Moresby, Papua New Guinea. Participants included officials from the National Department of Health (NDOH), University of Papua New Guinea (UPNG), CDC, Mahidol University, Thailand and UNICEF PNG. The final plan for the Papua New Guinea National Micronutrient Survey (PNGNMS) was developed through wide consultations with micronutrient stakeholders and experts both in PNG and at CDC.

Thanks to the former Secretary for Health, Dr. Nicholas Mann and the Senior Executive Management (SEM) for the permission to undertake the survey in Papua New Guinea. The National Nutrition Survey Taskforce comprised of people from the Department of Health, the University of PNG and UNICEF under the Chairmanship of Mr Enoch Posanai, Director Health Improvement Branch and currently Executive Manager Public Health, Department of Health. The Taskforce oversaw the execution of the PNG National Nutrition Survey from beginning to end. The local parties involved (Department of Health, University of Papua New Guinea (School of Medicine and Health Sciences) and UNICEF signed a Memorandum of Agreement. Thanks to all members of the Taskforce, who gave their time willingly to conduct the survey. Special thanks are extended to Ms Florence Addo, the PNG Nutrition Survey Manager, who took responsibility of the day-to-day running of the survey.

Thanks to the former Representative of UNICEF in Papua New Guinea, Dr Isye Ndomi, and to the following staff of UNICEF PNG: Lori Calvo, Ebum Ekunwe, Anatoly Aabramov, Clementine Yaman for their support in different capacities. Thanks also to Karen Codling, the Regional Nutrition Specialist at UNICEF East Asia and Pacific Regional Office in Bangkok, Thailand for her technical contributions during the survey.

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Thanks to colleagues at the Global Micronutrient Reference Laboratory in the Division of Laboratory Sciences at CDC who assisted greatly in the execution of the survey: Bridgette Haynes for her participation in planning the laboratory component of the survey, and for training the laboratory technicians in PNG. Additional thanks is extended to Dr Juergen Erhardt and team for analysis of the dry blood spot samples; Professor Lance Hill, UPNG, for the use of the spectrophotometer for the iodine analysis; Dr Bryant Allen, ANU, Australia for allowing to use the information of the Rural Handbook of PNG; and WHO for supporting the printing of this report.

Special thanks also go to the members of the survey field teams for all their hard work and dedication and to the children, women and men of Papua New Guinea who participated in this survey; without their willingness, the survey would not have been possible.

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## MESSAGE FROM SECRETARY

As seen in the acknowledgement section of this report, the execution of the survey has been a tremendous effort by all involved, from Government Departments at all levels, University of Papua New Guinea, development partners, inside and outside the country and last but not least PNG communities.

Field surveyors travelled to all corners of this nation and visited villages so remote, villagers could not remember seeing a health worker.

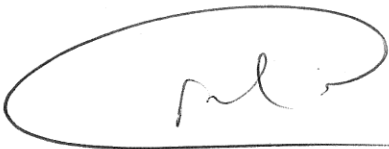
Globally, it is well documented that under-nutrition and vitamin and mineral deficiencies contribute to decreased learning capacity among infants and young children, reduced physical work capacity among adults, and increased morbidity and mortality among affected populations. PNG is no exception. This document provides the evidence that it is time to renew efforts by all to address nutrition issues in PNG. For, if we continue to neglect nutrition, PNG will never become the smart, fair and happy country, as envisaged in the National Strategic Vision 2010-2050.

Good nutrition of mothers and children is critical if we are to have a happy and healthy society. This is especially the case during the first 1,000 days of life from the start of a pregnancy and till the end of the second year. The quality of nutrition during those 1,000 days can help determine whether a mother and child survive pregnancy and whether a child is able to fight common childhood disease, experience enough brain development to go to school and hold a job as an adult, it is therefore important that we understand the determinants of good nutrition in PNG.

This is the first time, since the pioneering nutrition survey expedition by Hipsley and Kirk in 1947, that biochemical indicators are included. Results contained in the report provide a better understanding of nutrition status and micronutrient deficiencies in the regions and nationally.

I challenge each and every one of us to read this document carefully and use the information to draw up policies, guidelines and implement activity plans which would improve the health and nutrition status of all Papua New Guineans. The Department of Health will assist the Provinces in your endeavors to implement guidelines and protocols. The National Strategic Vision and Health Plan will be our guide. Sound monitoring and evaluation procedures must be developed to ensure that evidence is provided for accurate decision making.

I call on all provinces to ensure there is adequate human resource in place to guide and implement strategies that will enable us to be healthy, happy and wise.



**DR CLEMENT MALAU**  
Secretary for Health