第 1 5 届

國際婦幼營養專題研討會

INTERNATIONAL
SYMPOSIUM ON MATERNAL
& INFANT NUTRITION

論文集 SYMPOSIUM PROCEEDINGS



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Heinz Institute of Nutritional Sciences 13th International Symposium

on

Maternal and Infant Nutrition

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PROCEEDINGS

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November 23 - 24, 2000

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Shanghai Children's Medical Center, Shanghai, China

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PROGRAM

November 23, 2000, Thursday

08: 15-09: 00 Registration (Local) 09: 00-10: 00 Opening Ceremony

Session 1

Moderator: Gu Jingfan Liu Dongsheng

10: 30-11: 00 Definition and Measurement of Child Malnutrition

Prof. Ge Keyou

11: 00-11: 45 Stunting: the Population Perspectives and Implications for Intervention

Dr. Ray Yip

11: 45 - 12: 30 Discussion

12: 30 - 13: 30 Lunch

Session 2

Moderator: G. Harvey Anderson Ge Keyou

13: 30-14: 00 A Longitudinal Study of Growth and Development of Low-Birth-

Weight Infants

Prof. Guo Zhiping

14: 00 - 14: 45 Nutrition, Stunting, Cognition and Behavioral Development: Studies in

the Philippines and Indonesia

Prof. Cecilia A. Florencio

14: 45 - 15: 15 The Effect of Zinc on the Infants' Growth of High - Risk

Prof. Hong Zhaoyi

15: 15 - 15: 30 Break

15: 30 - 16: 00 Influence of Calcium and Vitamin A on Growth of Preschool Children

Ms. Han Junhua

16: 00 - 16: 45 Discussion

18: 00 Supper

November 24, 2000, Friday

Session 3

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Moderator:	Zhang Maoyu Zhou Yunzhen
09: 00-09: 45	Neonatal Nutrition and Behavioral Development
	Dr. G. Harvey Anderson
09: 45 - 10: 15	Evidence of Impact of Breastfeeding on Long Term Health
	Prof. Cai Wei
10: 15-10: 45	Case - Control Study on Intrauterine Growth Retardation and Nutrition
	Status in Late Pregnancy
	Prof. Shao Yufen
10: 45 - 11: 00	Break
11: 00 - 11: 45	Functional Foods: Possible Implications for Infant Development and
	Later Health
	Dr. David L. Yeung
11: 45 - 12: 15	Discussion
12: 30 - 13: 30	Lunch
Session 4	
Session 4 Moderator:	Hong Zhaoyi Su Yixiang
	Hong Zhaoyi Su Yixiang Infant Malnutrition and Studying: Prevalence, Trends and Influencing
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David L. Yeung, Ph. D. President, HINS Inc.

Dr. Song, Dr. Yip, Dr. Gu, Dr. Ge, Mr. Chyi, Ladies and Gentlemen,

On behalf of the Heinz Institute of Nutritional Sciences I welcome you to the 13Th International Symposium on maternal and infant nutrition. The HINS Symposia were started in 1986. The 13th symposium is the Millennium Symposium and it is also the second to be held in Shanghai. The first was in 1988. This year we are fortunate to have the support of Shanghai Second Medical University and Shanghai Children Medical Center.

I understand that again this year we have in attendance representation from most of the provinces and municipalities in China.

The theme of this year's program is "Malnutrition, Stunting and Health". This is a subject of great importance to China as she continues to strengthen her economy. I am pleased to have with us experts from China, UNICEF, Australia, Canada, Malaysia and Philippines to enlighten us on the subject.

Before I step down I would like to thank the members of the organizing and program committees for putting together this important event. They include: Professor Gu Jinfan, Professor Shen Xiaoming, Professor Hong Zhaoyi, Professor Zhang Maoyu, Professor Liu Dongsheng and Ms. Wang Lizhi.

Professor Qian Guanxiang Vice President, Shanghai Second Medical University

Specialists and guests, ladies and gentlemen,

First of all, on behalf of Shanghai Second Medical University I would like to welcome you to the 13th International Symposium on Maternal and Infant Nutrition. Just for your active participation and cooperation, this symposium is held successfully. We also thank specially the friends from far away. Because of their attendance, this symposium becomes much more wonderful.

With the development of reforming & opening, the level of people's living becomes higher and higher. So how to dismiss malnutrition and slow – development from the basic is a difficult task of every medical professional, special for the maternal & infant health workers. Therefore, the specialists from domestic and abroad meet in Shanghai, changing experiences, communicating, looking back and imaging future. There are not only famous old specialists, but also vigorous youth in our meeting. I wish each participant could absorb knowledge, stimulating interest, finding inspiration and developing thread from this conference and each other. It can build good basic of our future work.

H. J. Heinz Company has contributed greatly to the nutritional science research and nutritional food as far as long. We express high admire to them. And we must thank H. J. Heinz Company for their hard work preparing this symposium.

Wish the symposium be a great success;

Wish all of you good health.

Thank you.

Madam Song Lanqing Ministry of Public Health

Dr. Ray Yip, Distinguished Specialists and Guests, Ladies and Gentlemen: Good morning!

At the turning points of centuries and with new millennium coming, 13th HINS—China International Symposium on Maternal and Infant Nutrition is held in Shanghai, which is sponsored by Heinz Institute of Nutrition Sciences & Shanghai Second Medical University and contributed by Heinz—UFE Ltd. It is a conference expressing society progress, children first, mother safe, putting person first and contributing love heart. Our participants come from domestic & abroad. We go together for discussing how to improve nutrition of maternal and infant. It will put forward the health condition of them, special in frontier area. Therefore, on behalf of Mininstry of Public Health, I thank for all of your attendance.

The nutrition status of maternal and infant is one of the important data on the development and progress of society and economic, as well as an important aspect reflecting maternal and infant benefit prevention. During 50 years since China was established, special during the twenty years after reforming and opening, under the leading of the Party and government, the nutrition status of children has been improved evidently and people's habitude has made rapid progress. Instead of "East – Asia Patient", Chinese is standing on the east with healthy spirit.

Grow and development of children is a very essential index of infant health and nutrition conditions. Children height and weight in China increased year by year, taking 6 – 7 years old children for example; compared with 1985, the height of urban boy increased 1. 7cm in 1995; the weight increased 1. 16kg. The height and weight of urban girl increased individually 2. 0cm and 1. 28kg. According to rural, boy's height and weight increased 2. 5cm and 0. 99kg; girl's height and weight increased 2. 2cm and 0. 82kg. Compared with ten years between 1975 and 1985, the difference between urban and rural diminished during this ten years (1985 – 1995). All of these data has proved the physique development and nutrition conditions have made rapid progress.

In "1990's National Program for Children Development Plan", there are several important indices: decreasing infant malnutrition, decreasing low – birth – weight, dismissing absence of vitamin A; advocating breastfeed, etc. And the purpose of 2000 is advanced in it, for further realizing the protection and development of children. According to the analysis of

the schema's practice, in these 24 indices, 11 indices can or will turn into the truth, such as decreasing the death ratio of infant (less than 5 years old), the ratio of breastfeed, decreasing low – birth – weight; 4 indices can not put into forth, such as decreasing infant malnutrition, decreasing maternal anemia for absence of Fe, dismissing vitamin A deficiency. The others, including death ratio of pregnant woman & lying – in woman are difficult to resolve, which will be our work's emphasis in the future.

In the aspect of infant nutrition we have done much work. At the early of 1990's, breastfeed was taken to be an important way by WHO & UNICEF, for protecting infant health and improving infant nutrition. They also advocated actively building Love – baby Hospital, and put "ten points" for successful breastfeed. Since 1992, Love – baby Action has been carried out all over our country, while building Love – baby Hospital as the "ten points". Till the end of 1998 the total amount of Love – baby Hospitals was 6743, Love – baby Health Department was 3475. Love – baby Hospitals have been built all over the country, which has increased the breastfeed ratio rapidly.

Many children nutrition projects were performed in China. For example: supported by UNICEF, Ministry of Public Health committed Capital Infant Research Institute to make investigation of vitamin A deficiency, maternal anemia and low – birth – weight; committed Medical Sciences Dept. of Beijing University to research infant nutrition behavior; also obtained many experiences from feeding children vitamin A in 40 fortification programs. I wouldn't like to talk more on it, as the specialists will deliver speech on many aspects of nutrition in this symposium. So we can communicate each other. All the things will play good role on putting forward children health and improving infant nutrition.

At the same time of summarization, we should clearly realize there are many difficulties and challenges in the fields of infant nutrition. It developed unbalance among different areas. There still exist differences in improving nutrition between urban and rural, south and north, inland and frontier. We need to try our best to research problems, respect science, according to the actual condition, and find practical ways. So I put forward several fields of research for your reference, which I hope will lead more good ideas.

1. China is the country that has owned the most Love – baby Hospitals in the world. Strengthen Love – baby Hospital, carry out WHO code seriously and reinforce the work of community breastfeed supporting team, which make Love – baby Hospital develop continuously and steadily, not only in quantity, but also in quality.

2. Direction of breastfeed and adding complementary food for country infant

In rural, especially in frontier area, breastfeeding is the main method of infant feeding. But late feeding, not eating breast – milk and unscientific feeding means are very popular problems. So our work's emphasis is still on education and changing feeding habits according to the new feeding methods.

Adding supplementary food is the important step during children's growth and development.

But while feeding, some children are fed supplementary food at unreasonable time; some children are fed supplementary food in single variety; and some children are fed supplementary food as the same as what adults eat. Therefore the urgent task of children health case is to strengthen the direction for infant nutrition and adding supplementary food.

- 3. Obesity and feeding behavior of urban children
- 4. The vitamin and microelement deficiency problem of children
- 5. The maternal anemia problem

This conference is a symposium, as well as a mobilization meeting. Through communication, the opinion can be unified so that we try hard to improve the maternal and infant nutrition together, especially for promoting maternal & infant nutrition and health in frontier. Let us contribute a wonderful "century gift" to Chinese woman and children by our excellent work and spirit. Making the life of woman and children in 21century better and happier is our same purpose.

At last I wish that the symposium be a great success and all of you work favorably & good health.

Thank you.

Madam Yu Ruomu The Chinese Famous Nutritionist

Chairman, distinguished leaders and specialists,

I am very pleased to know that the 13th International Symposium on Maternal and Infant Nutrition will be held in Nov. 23, in Shanghai. And I am very interested in the topic "Malnutrition, Stunting and Health". It is a pity that I can not join this meeting, so I want to express my congratulation via this letter and wish the symposium be a great success. Wish HINS and Heinz – UFE Ltd. would continue their contributions for the project on Chinese children's nutrition & health.

Yu Ruomu 2000. 11. 19

Definition and Measurement of Child Malnutrition

Keyou Ge and Suying Chang

Institute of Nutrition and Food Hygiene

Chinese Academy of Preventive Medicine

Resume

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Sex: Male

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Nationality: Chinese

Field of activities: Nutrition

Education:

1953 – 1958 School of Medicine, Beijing Medical College, Bachelor of Medicine
 1962 – 1964 Beijing Union Medical College, post – graduate Training on Nutrition Pathology, Medical Doctor.
 1980 – 1981 Post – doctoral Fellow, Department of Nutrition, Massachusetts Institute of Technology, Boston, and Institute of Human Nutrition, Columbia University, New York.

Employment and responsibility:

1990 - Director, Institute of Nutrition and Food Hygiene, Chinese Academy of Preventive Medicine

1987 – 1990 Senior Officer, Department of Food Policy and Nutrition, Food and A-griculture Organization of the United Nations

1986 – 1987 Deputy Director, Institute of Nutrition and Food Hygiene, CAMP

1984 – 1985 Chief, Department of Nutrition, Institute of Health Beijing

1982 – 1984 Deputy Chief, Department of Nutrition, Institute of Health, Beijing

Professional societies of membership:

Member of Scientific Committee of Endemic Diseases in Northern China, from 1979 – 1987, Ministry of Public Health, China

Council member, Chinese Cereals and Oils Association, from 1985 -

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