

A large, dark silhouette of a woman's profile, facing left, occupies the left side of the cover. It is set against a light blue background.

第 **10** 屆

國際婦幼營養專題研討會

10th
INTERNATIONAL
SYMPOSIUM ON MATERNAL
& INFANT NUTRITION

論文集
SYMPOSIUM
PROCEEDINGS



亨氏營養科學研究所・廣州・中國

HEINZ INSTITUTE OF NUTRITIONAL SCIENCES, GUANGZHOU CHINA

Heinz Institute of Nutritional Sciences

10th International Symposium

on

Maternal and Infant Nutrition

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PROCEEDINGS

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PROGRAM

Tuesday, November 12, 1996

8:15am – 9:00am Registration
9:00am – 10:20am Welcoming and Introduction

Session 1

Moderator: Prof. Ge Keyou
 Dr. Barry M. Popkin
10:20am – 10:50am Population and Its Problem in China
 Mr. Wang Guoqiang
10:50am – 11:20am Changes in the Utilization and Cost of Health
 Services for Chinese Residents in Recent 8 Years
 Prof. Chen Yude
11:20am – 12:05am Nutrition in Transition
 Dr. Barry M. Popkin
12:05am – 12:30am Discussion
12:30am – 1:30pm Lunch

Session 2

Moderator: Prof. Chen Junshi
 Prof. Liu Yi
1:30pm – 2:10pm The Change of Dietary Pattern of Chinese Populations
 Prof. Ge Keyou
2:10pm – 2:45pm Trace Elements in Maternal and Infant Nutrition
 Dr. Kazuo Nomiyama
2:45pm – 3:15pm Major Issues in Maternal and Child Nutrition and the National
 Plans of Action
 Prof. Liu Dongsheng Prof. Chen Junshi

3:15pm – 3:30pm Tea Break
3:30pm – 4:00pm Future Expectation for Agricultural Development in China
 Prof. Mei Fangquan
4:00pm – 4:30pm Prominent Nutritional Problem in Chinese Children and the Policy
 Dr. Yin Shian
4:30pm – 5:00pm Discussion

6:00pm – 7:00pm Supper

Wednesday, November 13, 1996

Session 3

Moderator: Prof. Chen Xiaoshu
 Dr. G. Harvey Anderson

9:00am – 9:45am The Role of Food Industry in Nutrition Transition
 Dr. G. Harvey Anderson

9:45am – 10:15am Effects of City – Modernization on Nutrition, Food
 Hygiene and Health
 Prof. Liu Yi

10:15pm – 10:45pm Development in China as Reflected in Child Well – being
 Information from Chinese Nutritional Surveillance
 Prof. Chang Ying

10:45pm – 11:00pm Tea Break

11:00pm – 11:30pm Obesity, a Serious Problem on the Children's Health
 Prof. Ye Guangjun Dr. Feng Ningping

11:30pm – 12:00pm The Analysis of Children Growth Trend Based on the
 Investigation of the Development of Children Build
 Prof. Liu Lanxiang

12:30pm – 1:30pm Lunch

Session 4

Moderator: Prof. Gu Jingfan
 Dr. Georgia Guldan

1:30pm – 2:00pm Dietary Practice of Pregnant and Lactating Wemen Past
 and Present
 Prof. Pang Wenzhen

2:00pm – 2:30pm Early Breast Development and Nutriment
 Dr. Zheng Deyuan

2:30pm – 3:15pm Improving China's Diet and Health: Some Thoughts about
 Nutrition Education in China
 Dr. Georgia Guldan Ms. Li Ying

3:15pm – 3:30pm Tea Break

3:30pm – 4:00pm Discussion

4:00pm – 5:00pm Closing

6:30pm Banquet

Opening Remarks

David L. Yeung, Ph.D.

President – Heinz Institute of Nutritional Sciences

Madam Yu Rumu, Madam Lin Jiamei, Madam Hu Yamei, Madam Wang Fenglan, President Wang Debing, Dr. Ge Keyou, Ms. Shirley Cheung, Honored guests, ladies and gentlemen:

Thank you for being here to help us celebrate the 10th anniversary of the Henz Institute of Nutritional Sciences Symposium in China. As this is the 10th HINS Symposium in China it is appropriate for me to briefly review the accomplishments of HINS in China since its inception.

The concept of an independent Heinz Nutrition Institute started in Canada in 1981 in the form of the Infant Nutrition Institute. In 1986 the Heinz Institute of Nutritional Sciences came into being as a parallel but independent non-profit organization to the Heinz UFE Ltd which manufactures nutritious baby foods in Guangzhou. These two organizations have one common goal and that is to promote the nutritional well-being of infants in China. On the one hand HINS promotes the science of nutrition and on the other hand Heinz UFE promotes the consumption of nutritious baby foods.

HINS is registered as a non-profit organization in the U.S. and operates in the U.S., Canada, Venezuela, China, Thailand, India, Australia, Spain, Portugal, Russia, Hungary, Poland and the Czech Republic. The mission of the Institute “is to advance the knowledge and practice of nutrition with the goal of ensuring the nutritional well-being of emerging generations”.

The accomplishments of HINS in China in the past 10 years include the following:

Publishing of the quarterly newsletter “Heinz Nutrition Information” which is distributed free-of-charge. This is now a bi-monthly publication which summarizes current research reports from different parts of the world. We are grateful to Professor Zhu Shoumin of the Zhijiang Medical University for being the editor-in -chief and to the editorial board for its timely publication.

Supporting special lectures or seminars.

Funding research projects in Beijing, Chengdu and Guangzhou.

Sponsoring an annual symposium which is held in a different location each year in collaboration with a medical/pediatric institution. The proceedings of the symposium are published in Chinese and English for wider dissemination for information.

Facilitating academic exchanges between the Zhong Shan Medical University and the University of Toronto and the Ryerson Polytechnical University in Canada, and between the West China University of Medical Sciences and the Tufts University in the United States.

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I thank all of the HINS consultants and scientific advisory council members for the successful conduct of these activities.

This is the 10th HINS symposium in China and we are honored to celebrate it in Beijing, the Capital of China. The theme is "Effects of Modernization on Health and Nutrition of Mothers and Infants". The objectives are to learn about the socio-economic changes in the recent history of China and how they have impacted the health of mothers and infants; the nutritional well-being, feeding practices and physical and mental development of the young child. The symposium provides us a chance to take stock as to what has occurred in recent years and where might China be heading in terms of food, nutrition and health. At the least the lectures and discussions should provide us with an information base for future evaluation of the progress of nutrition in China.

WELCOMING REMARKS

Madam Yeuk-Mu Yu

The Consultant of Chinese Food Industrial Association

November 12, 1996

Dear leaders, Professors, Scholars and Representatives:

I am very pleased to have this opportunity to attend the 10th International Symposium on Maternal & Infant Nutrition, sponsored by the collaboration of Heinz Institute of Nutritional Sciences and Beijing Medical University. I would like to express my heartily congratulation for the successful Symposium in advance.

I came into contact with HINS as early as my visit to Heinz UFE Food Company in Yantang, Shahe, Guangzhou during its early construction period. I have attended five out of ten HINS International Symposia, two in Beijing, one in Guangzhou, one in Hangzhou, and the other in Shanghai. I enjoyed great benefits of each of them. The symposia are so academically serious with home or abroad scholars staying here and discussing the nutrition project on infants and mothers, hence helpful for collecting useful opinions, sharing informations, and establishing friendly relations.

The shortage of supplementary foods at weaning stage affects China's infants' growth. The range of supplementary foods made by Heinz UFE Ltd. has filled in the gap in this field. The supplementary foods have enjoyed great trusts from customers since they came into market. This is by no means occasional as Heinz nutritious infant cereal products are formulated on the basis of baby nutrition surveys with professional guidance from nutrition experts. They are especially made for Chinese babies.

Reviewing the past, ten years' efforts of HINS has yielded abundant harvests, and looking forward to the future, the prospects are even better.

I hope HINS and nutrition experts will progress hand in hand and make greater contributions to people's health.

WELCOMING REMARKS

Madam Wang Fenglan

The Director of Department of Maternal and Infant Health

Ministry of Public Health, People's Republic of China

November 12, 1996

Dear Professors, Scholars and Representatives:

It's a great challenge to me, as a successor to Director Lin Jiamei. Indeed, we are currently facing various problems and have a lot of work to do. I would like to extend my heartfelt thanks and high respect to all specialists and Heinz – UFE Ltd. present here for their concern and support to the cause of maternal and infant nutrition and health.

Just as you know, China is a country of big children population. The number of Children under the age of 5 in China is 22 percent of that in the world. China is also a developing country. The development, taken as a whole, is rapid over the years, particularly in 1990s. After 1990 World Summit Conference on World Children, the State Council's Women and Children Work Committee was set up. Chinese Government has made solemn commitments: Up to 2000 compared with 1990, infant mortality will be reduced by 1/3; pregnant woman mortality will be reduced by 50 %; Severe and moderate malnutrition of children under the age of 5 will be reduced by 1/3; and the mortality of children under 5 will be reduced by 1/3, etc. Seven major figures altogether with the work of the State Council Women and Children Work Committee, the Chinese Government has made great efforts to the cause of women and children health in China.

By 1995, we have mostly achieved Mid-term goals promised to East Asia and Pacific Region, that is, we have realized the Mid-term goals with only half of the timeframe.

It is well-known to all that Heinz-UFE Ltd. has made fruitful contributions to the woman and infant nutrition and health.

Finally, have a nice stay during the meeting and wish the Symposium success.

Population and its Problems in China

Wang Guoqiang

(Resume)

Mr. Wang Guoqiang was born in 1955, Shanghai and graduated from Dept. of Pharmacy, Beijing College of Traditional Chinese Medicine. He once worked at Dept. of Drug Administration and the General Office of the Ministry of Public Health, and Bureau of National Medicine and Drug Administration, and had one year research experience in Dept. of Demographics of Japan National Public Health College. He is now the director of Dept. of Regulation and Law of the National Committee of Family Planning, vice-chief editor of "Annual of Chinese Family Planning" and standing member of editorial board of "China Family Planning Science", and also member of 42nd session of Japan Demographics Society and member of 55th session of Japan Nationality Hygiene Society, publishing many papers concerning demographics and family planning both in China and Japan.

(Abstract)

The paper presented the latest demographic data in China. The Chinese population, and its structure, distribution, quality and mean life expectancy were analyzed. Current major population problems which China is facing were put forward and the political measurements were also proposed.

Population is one of China's basic starting points to be considered in developing its economy. Population is a key problem to China's survival and development, failure or success in modernization, and coordinated growth in social economy, natural resources and environment. While developing its economy, China sets it a national policy to carry out family planning, control population growth and enhance population quality. With over 20 years' efforts, China has made remarkable achievements in reducing birth and mortality rate and enhancing population quality. The population growth rate has decreased to advanced countries' level. The population age structure has turned from young to adult, and is turning to old. City pop-

ulation reproduction has changed to modern type — — — low birthrate, low mortality rate and low natural growth rate, while most rural areas are in the process of such change.

I . CHINA'S POPULATION — — — — Current Situation

According to 1995 population census, China's total population has reached 1 211 210 000, 22% of the world's total, nearly total of all advanced countries, of which 51.03% are men, and 48.97% are women. Of China's total population, women and children account for 66% (children between 0 — 14 years of age total 343,000,000), rural population accounts for 72% and urban population 28%. The Han nationality population accounts for 91.02% and minority nationalities 8.98%. There are 320 million families with an average size of 3.7 persons. The medium of age of the whole population is 25.

China's population distribution is by no means even. About 94% of the total huddle in East China, which in area makes up 46%, especially the well developed southeast part with better natural environments. About 20.3% of the total live in places 500 meters above the sea level. Many inland mountains, hills and basins are not suitable for human life. Humid and semihumid areas, suitable for human life, make up only 47%, while arid and semi-arid areas, unsuitable for human life, are 53%. In the year 1995, population density averaged 118 persons per square kilometers. Nine provinces including Sichuan, Henan, Shandong, Jiangsu, Guangdong, Hebei, Hunan, Hubei and Anhui, all have a population of over 60 million each.

China's population birth rate has shown an impressing decline since 1970s. Population birth rate and natural growth rate have decreased respectively from 1970's 33.4% and 25.83% to 1995's 17.12% and 10.55%. Gross birth rate has decreased from 1970's birth rate, some experts assume that for the past 20 years there have been almost 0.3 billion people not born due to China's family planning policy and its rapid development in economy and health care service. Currently, China's birth and mortality rates are far lower than other developing countries. Gross birth rates in some big cities like Shanghai, Beijing have decreased to below 1.5, some places have even shown negative growth in registered population. Totally, China has 0.33 billion women of child-bearing age, of which 0.237 billion are married. 1994's statistics show that women's average age for first marriage is 22.73, and contraception practice rate in married child-bearing women is as high as 83%. In 1995, 49.06 million married couples were willing to have one child for their whole lives, about 21% of the total married couples.

China's population quality has improved with rigid control over hasty growth. Average life span of China's population has reached 68.55 years of age (men 66.84 years and women 70.47 years). China is one of the countries whose population life spans have been rapidly lengthened. In 1995, mortality rate of infants and that of children below 5 years old was 36.5% and 44.5% respectively; the mortality rate of lying-in women has decreased to 61.9

per 100 000 persons; the newborns planned immunization rate was 85%. China's medical and health care service is the best compared with other developing countries, and China is wiping out disparities between itself and well developed countries. In 1994 students at different levels totaled 0.27 billion. Enrolment ratio of school aged children was 98.4%. Primary education has been popularized in parts of China, whose population makes up 91% of the country's total. By 1995, the illiteracy and half illiteracy ratio for people of 15 years old or above has decreased to 12.01%.

II . CHINA'S POPULATION - - - - PROBLEMS

Population problems are population phenomena. It refers to disharmonies between economic development and population quantity, quality and structure. The disharmonies appear in different forms at different populations and different time. Though remarkable achievements have been made by China in population control, no one can say population problems have been settled. On the contrary, the situation is still very grim and the task of population control is even more arduous. Generally, China's population problems include the following aspects:

I). Population growth remains very great in number. Although China is one of the low birth rate countries and its gross birth rate is even lower than the substitution level, over 20 million babies are born every year, more than Australia's total population. The annual net population growth is around 13 million, twice more than Hongkong's population. The experts assume that China's population growth can not be steady until 2040s when its population reaches 1.6 billion. That is to say, within the next half century, China's population will be in "low in growth rate, big in growth amount" situation, leading to a great growth in its total population. Undoubtedly, this situation will bring along great stress on social economy, employment, education, housing, medical and health care, social welfares and improvement of people's living standard.

II) Stress on employment grows due to sharp rise in labor aged population. The continuous development of national economy and improvement of people's living standard are based on plenty of employment opportunities. Now and for the next a few years, the absolute number of labor aged population, as well as its ratio to total population, is inclined to grow rapidly due to the baby boom in 1960s. Around 20 million people enter labor age every year and ask for employment. By 2010, labor aged population will increase to 0.925 billion. Surplus labor force can be favourable to a country's economy growth. However, in the case of low productivity and frail economic base, it can be harmful. It is estimated that there is a surplus labor force of 120 million in rural areas, and 30 million in cities. It is going to be a hard job to relieve employment stress because it may threaten social stability and do harm to economic growth.