

# Dr Tu Giay (1921-2009 )

## A tribute at 100 years



Figure 3. Lowland integrated farming system



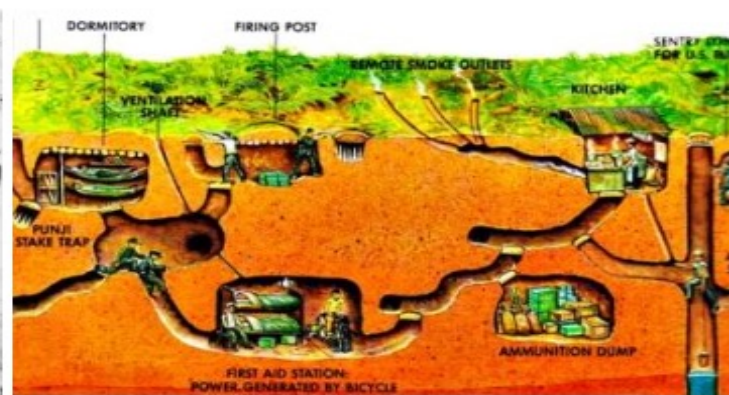
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*Mark Wahlqvist on Tu Giay*

## The nutritionist victor of the Vietnam war



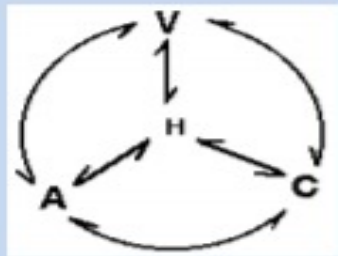
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## Box 1

### VAC ecosystems



*Extracted, adapted and edited from (2).*

The diagram or 'trade mark' for VAC is shown above, left. It is a farming system in which gardening, animal husbandry and water food culture are combined to yield the best lasting, economical results. In English and French, one can say that 'V' may be an abbreviation for vegetation, 'A' for aquaculture, and 'C' for cage for animal husbandry.

VAC gardening is a human ecosystem in which various practices are being combined. It can

The agronomist, physician, nutritionist, socialist, patriot, soldier and scholar Tu Giay (1921-2009) has had a vast impact on world affairs. He is pictured here as a young man on army service in the field, greeted by Ho Chi Minh (above, second from left), and later in his life (above and below). In the wars against the French colonialists and the US invaders, he showed the North Vietnamese armies fighting in jungles and rugged terrain how to protect their health. He devised durable rations for the soldiers, and instructed them how to live off the land and prepare meals safely when in tunnel systems (above). General Vo Nyugen Giap, the supreme commander of the North Vietnamese army, always stated that victory was made possible because of the achievements of Tu Giay. After the war his main commitment was to self-sufficient family and community farming, with the 'VAC' system that integrates human, animal and plant resources, for example with fish in rice ponds (below, left and right). He was the founding director of the Vietnamese National Institute of Nutrition. In Vietnam he is remembered and revered, and remains influential.

Wahlqvist M. Tu Giay. The nutritionist victor of the Vietnam War  
[*Inspiration*] *World Nutrition* July-August 2015, 6, 7-8, 613-622

**ASIA PACIFIC CLINICAL NUTRITION AWARD****To Professor Tu Giay – an eminent Vietnamese nutritionist**

Professor Tu Giay was born in 1921 in Ha Tay province, Vietnam. In 1945, as a young physician, he joined a movement for independence and liberty of the country.

During wartime he worked in the Vietnamese Popular Army as a hygienist-nutritionist. Under his guidance the magazine *Enjoy for life* popularized healthy lifestyle, basic knowledge of hygiene, sound nutrition, control of malaria . . . the most important health problems of the time. He participated in the battle at Dien Bien Phu in 1954.

For a long time he was a teacher, Head of the Department of Hygiene and Epidemiology of the Army College of Medicine. As an experienced and creative teacher, he introduced bio-statistics and applied them to medical research studies. His great interest has been to link knowledge with action.

After the war he became Director of the National Research Programme to improve the nutritional status of the Vietnamese people. As a result of these activities the National Institute of Nutrition was established in 1980. He was the founder and the first director of this Institute (1981–93). Under his direction, the Institute has contri-

buted remarkably to the nutrition programme in Vietnam. Professor Tu Giay has been the initiator of the 'VAC' movement (VAC – garden-fish-pond-animal husbandry) now widely accepted and expanded through the whole country. Tu Giay has been a pioneer in primary health care. He has been an active promoter of nutrition knowledge to the people. The socialization of health services has received ardent support from Tu Giay.

He has been an outstanding teacher and researcher as Professor of Hanoi Medical College, Department of Community Nutrition.

He has been awarded many distinctions in Vietnam such as 'People's Doctor', 'Labor medal of 2nd degree' . . . . At 70 years, Tu Giay is still active – creative in his work for nutrition, and for the improvement of the nutritional status of Vietnamese people of Indo China and the Asia Pacific region.

He has survived and transcended the political events of his time in the interests of nutrition science and nutrition-related heart care.

Wahlqvist ML. Asia Pacific Clinical Nutrition Society Award for 1993. *Asia Pacific journal of clinical nutrition* 1994, 3(1);1-2

# Effect of nutrition improvement project on morbidity from infectious diseases in preschool children in Vietnam: comparison with control commune

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## Abstract

**Objective:** To evaluate the effect of a nutrition improvement project based on home garden production and nutrition education on morbidity from acute respiratory infection and diarrhoeal disease in preschool children.

**Design:** The morbidity survey comprised five data collections undertaken by trained interviewers to ascertain the incidence and severity of respiratory infections and the incidence of diarrhoeal disease in children in two communes.

**Setting:** A project commune and a control commune in Vietnam.

**Subjects:** Preschool children to 6 years of age living in the project commune Khai Xuan (average 469 children) and the control commune Ching Cong (average 251 children).

**Main outcome measures:** Differences between the two communes over time in the incidence and severity of respiratory infections and the incidence of diarrhoeal disease.

**Results:** In Khai Xuan there was a significant reduction ( $P < 0.0001$ ) in the incidence of respiratory infections (from 49.5% to 11.2%) and diarrhoeal infections (18.3% to 5.1%); the incidence of pneumonia and severe pneumonia was also significantly reduced ( $P < 0.0001$ ). In Ching Cong there was no significant change in the incidence and severity of respiratory disease nor in the incidence of diarrhoeal disease.

**Conclusions:** These findings emphasise the successful health outcome of a nutrition project based on household food production and nutrition education and the value of evaluating nutrition projects by reference to measurable health outcomes.

programmes, including food supplementation and food aid programmes, have shown that many have little or no impact because of problems encountered in their implementation or in the design of the programmes themselves.<sup>4,5</sup> As noted by Ghassemi, what is strikingly missing in most reports of nutrition programmes is information on morbidity and food intake, simply because the world database on those aspects is so small.<sup>6</sup> A decrease in morbidity from diarrhoeal disease and its effects, however, has been shown to be a characteristic related to the benefit associated with the impact of supplementary feeding in Bogata, Columbia, and in the Institute of Nutrition of Central America and Panama's study in Guatemala, and with high energy intake in a study of infants in poor urban families in Peru.<sup>6</sup>

In recent years there has been much interest in the effect of vitamin A supplementation on morbidity and mortality from infectious diseases, with conclusive evidence that improving the vitamin A status of young children reduces mortality by about 23% but with conflicting evidence in regard to morbidity.<sup>7</sup>

As it is accepted that malnourished children are subject to more frequent and more severe infections,<sup>1</sup> we measured morbidity from respiratory and diarrhoeal infections in young children in a project and a control commune in Vietnam as an evaluation of a functional outcome of a nutrition project.

## Methods

The nutrition improvement project (number GCP/VIE/013/AUL), funded by the Australian government, was implemented in Vietnam from 1991 to the end of 1993 in four communes, which included Khai Xuan in Vinh Phu province.<sup>2</sup> The major components of this project were increased garden production, particularly

English RM, Badcock JC, Giay T, Ngu T, Waters AM, Bennett SA. Effect of nutrition improvement project on morbidity from infectious diseases in preschool children in Vietnam: comparison with control commune. *Bmj*. 1997 Nov 1;315(7116):1122-5.

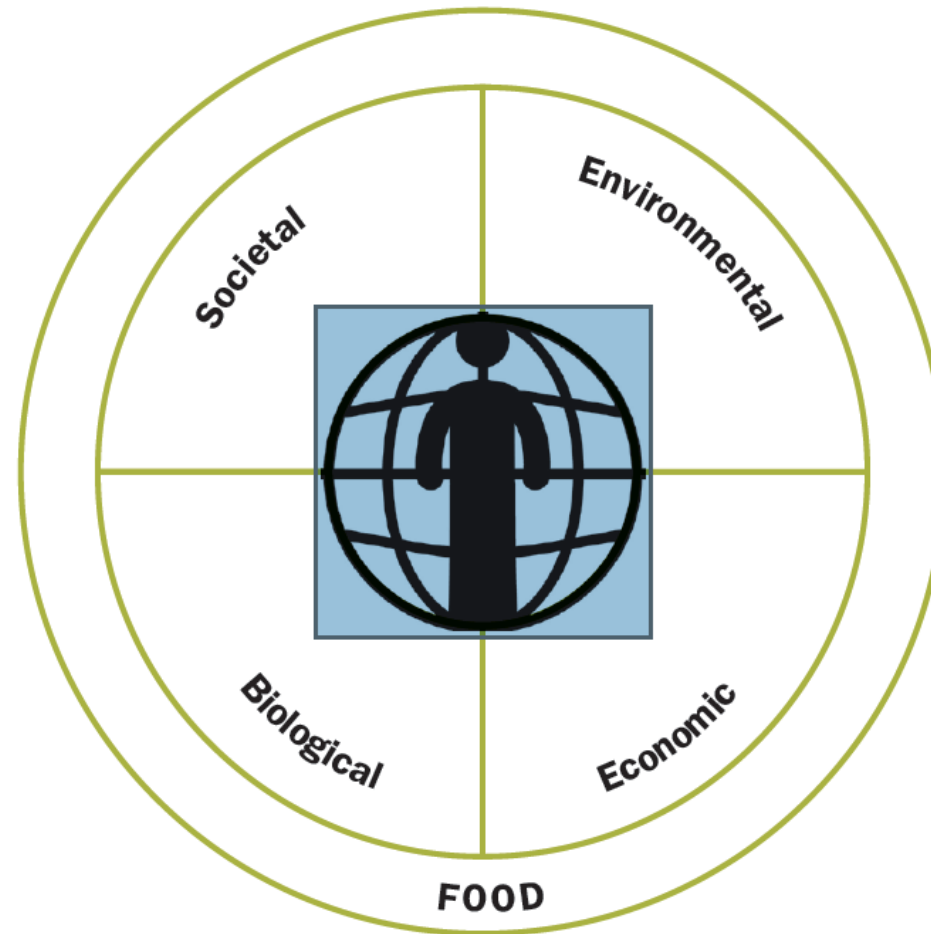


Figure 1.1: Dimensions of human nutrition



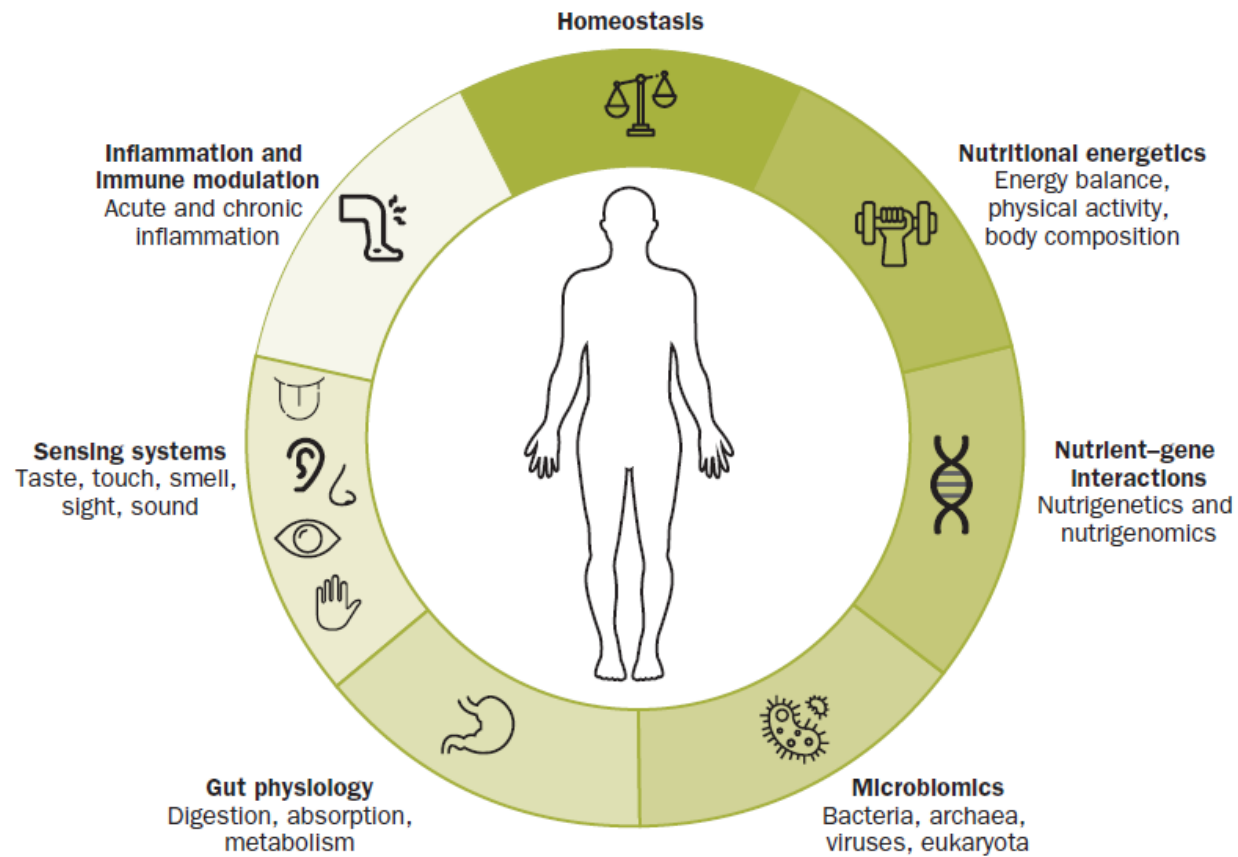


Figure 7.A: Fields of nutritional biology



# He & we are socioecological beings

## *Manifestations of Ecosystem Dysequilibrium*

### Ecosystem Health Disorders [EHDs]

#### ***For example:***

- **Energy Dysregulation & Compositional Disorders**
- **Food Intake Quality Disorders**, eg biodiversity, ultra-processing, endocrine
- **Sensory input disorders**
- **Microbiomic** eg gut, neuroregulatory ,reproductive , metabolic
- **Biorhythm disorders**, eg. sleep, eating patterns
- **Contaminant disorders**, eg. plastics, endocrine disruptors

Wahlqvist ML. Ecosystem Health Disorders-changing perspectives in clinical medicine and nutrition. Asia Pacific journal of clinical nutrition. 2014 Mar;23(1):1-5.

## **‘The Peoples’ Doctor’**

**My first meeting** with Tu Giay left a profound and lasting impression. He greeted me as if I were a long standing friend, even though Australia, from where I had come to visit him, had been at war with Vietnam for some years.

Later he was **our house-guest in Melbourne** reminiscing about childhood in Asia with my elderly Chinese mother-in-law. He bore only respect and affection, no malice. I see his face and bearing, gentle, pensive, faintly smiling. **He is an enduring presence and force for good.** He made a lasting impression on many people who spent time with him

Tu Giay received **many awards, prizes and tributes awards at home and abroad.**

But his life, work and place in history need to be constantly remembered, understood and followed.

**In his 68th year in 1989 he was named on behalf of the nation of Vietnam**

**‘The Peoples’ Doctor**

***Planetary Habitability, Livelihood Sustainability, Mutual Respect & Equity***  
**were his credos**