



# NEWS FLASH

Vol 3 | December 2009

## Word from Chairman

I am happy to share with you that we have selected 5 research grant winners for the year 2009. The winner announcement was made on Oct 11 in Makassar, in conjunction with the International Symposium on Nutrition.

To improve the quality of the proposals, in 2010, we plan to conduct two batches of proposal writing workshops, whereby candidates will be able to refresh their knowledge and have time to consult areas for improvements with the experts. In addition, we plan to conduct two batches of manuscript writing workshops to help potential authors in submitting their proposals to international journal.

Please read on to learn more about our next year's research projects and our programs for 2010.

*Prof. Dr. Soekirman*

## About Us

The Indonesian Danone Institute is one of the 18 Danone Institutes worldwide, a non-profit organization, established in 2007, independent from Danone business units. The Foundation has a mission of promoting scientific research findings and fieldworks in international scientific communities, as well as supporting the advancement and sharing of knowledge between scientists and professionals in the field of dietetics, nutrition, and health.

## INTERNATIONAL SYMPOSIUM ON NUTRITION

Makassar Oct 10-13, 2009



Danone Institute Indonesia (DII) co-sponsored this symposium, which was organized by Hasanuddin University. The symposium carried the theme "The Development of Nutrition Science for Accelerating Healthy, Educability and Productivity of People" and covered 5 main areas: (1) Nutrition Science Development/History, (2) Food and Nutrition Policy, (2) Community Nutrition, focusing on Vitamin-A, (3) Food Science and Technology, (4) Education, and (5) Clinical and Molecular Nutrition. The symposium was attended by a total of 11 international and 18 national speakers, as well as 700 participants from all over Indonesia.

DII helped in facilitating the participation of Prof. Dr. Emanuel Leblenthal from USA, Director and

Professor of the International Institute of Pediatric Nutrition and Gastroenterology, who talked about History of Evolving Concepts of Nutritional Sciences in Europe; and the attendance of 9 national speakers, in the topics of Policy, and Food Science and Technology. In DII booth, 6 research posters of grantees 2007 and 2008 were exhibited. The team member of our 2007 grantee (Satuman MSi.) disseminated part of their study result " Quercetin Ameliorates Metabolic Syndrome and Improving Insulin Resistance in Diet-induced Obesity Rat Model" through oral presentation. All participants received a meter pen, BMI calculator, as well as information about DII in the form of newsletters and leaflet of expert meeting on Child growth and micronutrient deficiency conducted in 2008.



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## ADOPTION OF THE WHO CHILD GROWTH STANDARDS TO CLASSIFY INDONESIAN CHILDREN UNDER 2 YEARS OF AGE ACCORDING TO NUTRITION STATUS: STRONGER INDICATION FOR NUTRITIONAL INTERVENTION

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### Abstract

#### Background

The National Center for Health Statistics/ World Health Organization (NCHS/WHO) reference is considered unsuitable for assessing the nutritional status

of breastfed children. It is gradually being replaced by the WHO Child Growth Standards in many countries.

#### Objective.

To assess the implications of adopting the WHO Child Growth Standards to classify Indonesian children according to nutrition status.

#### Methods

Data were obtained from two cross-sectional surveys in two districts in Indonesia in 1998. Children under 2 years of age were randomly selected using a two-stage cluster sampling. Z-scores of weight-for-length (WLZ), length-for-age (LAZ), and weight-for-age (WAZ) were calculated based on both the NCHS/WHO reference and the WHO Child Growth Standards. Wasting, stunting, and underweight were defined as z-scores less than -2.0.

#### Results

We included 1,374 children, of whom 693 (50.4%) were male and 681 (49.6%) were female. Almost all of the children had initiated breastfeeding and were still being breastfed when the data were collected. According to the WHO Child Growth Standards, the prevalence of wasting did not change with age, but the prevalence rates of stunting and underweight rose

steadily with age. Although the contribution of wasting to the classification of underweight was relatively constant, the contribution of stunting increased as the children grew.

#### Conclusions

The WHO Child Growth Standards are a better tool for assessing the nutritional status of Indonesian children than the NCHS/WHO reference. However, low WAZ is not a suitable indicator for commencing an extra feeding program, because it reflects stunting instead of wasting. The high prevalence of stunting indicates the need to perform preventive nutritional intervention beginning earlier in life, i.e., in utero.

**Key words:** Children, Indonesia, malnutrition, nutritional program, WHO Child Growth Standards

## SCOPE OF RESEARCH

- Nutrigenomic
- Dietetic and Clinical Nutrition
- Community & Public Health Nutrition
- Food Security and Policy

## MAIN PROGRAMS

DOCTORATE RESEARCH GRANT

INSTITUTIONAL RESEARCH GRANT

PUBLICATION GRANT

Details of each program, including eligibility, condition of the grant, prerequisite, what to submit, selection mechanism, and proposal format to be seen in :

[www.danonenutrindo.org](http://www.danonenutrindo.org)

## Recent Publication in International Journal

HUMAN LACTATION 2009;  
25 : 64-72

## TORBANGUN (*Coleus amboinicus* Lour): A BATAKNESE TRADITIONAL CUISINE PERCEIVED AS LACTAGOGUE BY BATAKNESE LACTATING WOMEN IN SIMALUNGUN, NORTH SUMATERA, INDONESIA

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### Abstract

Torbangun (*Coleus amboinicus* Lour) has been used as a breast milk stimulant (a lactagogue) by Bataknese people in Indonesia for hundreds of years. However, the traditional use of torbangun is not well documented, and scientific evidence is limited to establish coleus as a lactagogue. This Focus Group Discussion (FGD) study was conducted to gather information regarding the practice and cultural beliefs related to the traditional use of torbangun as a lactagogue. The main findings of this investigation were:

- (1) torbangun, which is considered nourishing, is usually given to the mother for one month after giving birth in order to restore her state of balance;
- (2) in the Bataknese culture, torbangun is perceived to serve several purposes which include enhancing breast milk production and acting as a uterine cleansing agent; and
- (3) the tradition has been practiced for hundreds of years, and its adherence is still strong.

**Key Words:** *Coleus amboinicus* Lour, torbangun, Bataknese Simalungun, traditional cuisine, Indonesia

# International Conference on Nutrition

Bangkok October 4-9, 2009



The Congress is a four-yearly scientific event organized by International Union of Nutritional Sciences (IUNS) and attended by more than 4000 participants from 106 countries. The theme of the congress was 'Nutrition Security for All'. The Foundation was actively participated in the Congress, namely oral & poster presentations, Danone Institute International booth, 7th Danone International Prize for Nutrition ceremony, and dinner with Key Opinion Leaders. Prof. Soekirman presented papers in two topics: (1) "Diverse Perspectives on the Case for Food Fortification" (Cori H, Chavasit V, Freire W, Soekirman, Solomons NW) in session From Biological Efficacy to Program Effectiveness (The case of food fortification); and (2) "Community Nutrition Support and Capacity Development in Indonesia" (Soekirman) in session Asia Highlights. Dr. Atmarita presented a paper on "The emergence of combined stunting and obesity as a nutritional threat to child development in Indonesia" (Atmarita, Soendoro T, Jahari A, Tilden R) in session Obesity and Chronic Diseases. Furthermore, a total of 16 posters originated from 7 Scientific Members, 2007 research grantee, and the secretariat were presented. The titles of the posters were included in vol. 2 of the newsletter.

The following balance diet messages were promoted around Makassar during the International Symposium on Nutrition :

1. ASI eksklusif = gizi seimbang
2. Gizi seimbang untuk hidup sehat
3. Gizi seimbang mencerdaskan anak
4. Gizi seimbang menjamin kehamilan sehat
5. Gizi seimbang menjamin produksi ASI
6. Gizi seimbang syarat olahraga berprestasi
7. Gizi seimbang mempercepat penyembuhan penyakit
8. Aneka ragam makanan = gizi seimbang
9. Gizi seimbang = mempertahankan berat badan ideal
10. Gizi seimbang meningkatkan produktivitas kerja

## RESEARCH GRANT WINNERS

A total of 32 proposals from 21 institutions (44% doctorate) were received this year. From 6 proposals that passed the screening processes by Scientific Members and External reviewers, all 6 were called for presentation. We are proud to introduce to you the 5 research grant winners.



**Marudut Sitompul, BS, MPS**

**Institution:**

Health Polytechnic Jakarta; doctorate student at Bogor Agriculture University.

**Research title:**

Efficacy of Multiple-Micronutrient in Sprinkles to Improve Iron Status of Adolescent Girls.



**Endang Purwani, Ir., MSi.**

**Institution:**

Indonesian Center for Agricultural Postharvest Research & Development, Bogor; doctorate student at Bogor Agriculture University.

**Research title:**

Study on Resistant Starch Type 3 Derived from Rice and Sago, as Functional Food Ingredient with Capability to Prevent Colorectal Cancer (year 2)



**Oeke Yunita, S.Si., Pharm., Apoteker, M.Si.**

**Institution:**

Surabaya University; doctorate student at Airlangga University.

**Research title:**

Metabolic and DNA Fingerprinting of Sauropus Androgynus, in Food, Foodstuff and Food Supplement, as Lactagogum for Increasing Human Breast Milk Production.



**Judiono, MPS**

**Institution:**

Health Polytechnic Bandung, doctorate student at Diponegoro University, Semarang.

**Research title:**

The Role of Plain Kefir Probiotic on Glicemic Status and Antioxidants, Immune Response of Hyperglycemia Wistar Rat & Patient of Type II Diabetes Mellitus.



**Sri Sumarmi, SKM., MSi.**

**Institution:**

Airlangga University, Surabaya; doctorate student at Gadjah Mada University, Yogyakarta

**Research title:**

Preconceptual Supplementation of Iron, Zinc & Vitamin A to Combat Anemia & Reduce Risk of Pregnancy Complication



International Symposium on Nutrition and 6th Asia Pacific Clinical Nutrition Society Conference, Hotel Sahid Makassar 10-13 October 2009.

**ASI eksklusif = Gizi Seimbang**



## EXPERT MEETING ON CHILD GROWTH AND MICRONUTRIENT DEFICIENCIES- NEW INITIATIVES FOR DEVELOPING COUNTRIES TO ACHIEVE MILLENNIUM DEVELOPMENT GOALS: EXECUTIVE SUMMARY REPORT

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<sup>9</sup>Indonesian Coalition Fortification, Jakarta, Indonesia

### Abstract

Undernutrition in early childhood has long-term physical and intellectual consequences. Improving child growth should start before the age of two years and be an integrated effort between all sectors, covering all aspects such as diet and nutrient intake, disease reduction, optimum child care, and improved environmental sanitation. To discuss these issues, the Indonesian Danone Institute Foundation organized an expert meeting on Child Growth

and Micronutrient Deficiencies: New Initiatives for Developing Countries to Achieve Millennium Development Goals. The objective of the meeting was to have a retrospective view on child growth: lessons learned from programs to overcome under-nutrition in the developed countries and to relate the situation to the Indonesian context, as well as to discuss implications for future programs. Recommendations derived from the meeting include focus intervention on the window of opportunity group, re-activation of the Integrated Health Post at the village level, improvement of infant and young child feeding, expand food fortification intervention programs, strengthen supplementation programs with multi-micronutrient, and strengthening public and private partnership on food related programs.

**Keywords :** child, growth, micronutrient, deficiency, Indonesia

*Do you Know that ...  
We are going to conduct*

Workshop on Proposal Writing

Batch 1 : Feb 15-16, 2010 (tentative)

Batch 2 : Aug 5-6, 2010

Workshop on Manuscript writing

Batch 1 : Feb 17, 2010 (tentative)

Batch 2 : Aug 7, 2010

for further info,  
please visit our website

## DANONE INTERNATIONAL PRIZE FOR NUTRITION

The 7<sup>th</sup> Danone International Prize for Nutrition was rewarded on October 6<sup>th</sup> 2009, at the occasion of International Conference on Nutrition, Bangkok, to Professor Johan Auwerx from the Federal Polytechnic School of Lausanne, Switzerland.

He is awarded for his discoveries concerning the mechanisms by which certain foods "communicate" with the cells by issuing them with orders in similar fashion to hormones. This important discovery paves the way for new preventive and therapeutic strategies to combat obesity and cardiometabolic diseases, such as type 2 diabetes and hypertension. Prof. Auwerx received Euro 120,000.



### Scientific Members of the Indonesian Danone Institute Foundation

Prof. Soekirman, SKM, MPS-ID, Ph.D (KFI) | dr. Endang L. Achadi, MPH, Dr.PH. (UI) | Prof. Dr. dr. Abdul Razak Thaha, MSc. (UNHAS) | Prof. dr. Hamam Hadi, MS., ScD. (UGM) | Prof. Ir. Hardinsyah, MS, Ph.D (IPB) | Idrus Jus'at, MSc., Ph.D (UIEU) | Atmarita, MPH., Dr.PH. (MoH) | Ir. Drajat Martianto, MS., PhD (IPB)