



4th International Conference on Biotechnology for the Wellness Industry

WELLNESS FOR HEALTH AND PRODUCTIVITY:
New Trends, Challenges and Opportunity

20TH & 21ST JUNE 2012
RENAISSANCE HOTEL,
KUALA LUMPUR, MALAYSIA



Organised by



Endorsed by



International Collaborator



Supported by



Publisher



WELLNESS 2012 : WELLNESS FOR HEALTH & PRODUCTIVITY

New Trends, Challenges and Opportunity

One of the major issues confronting modern societies is the prevalence of chronic metabolic disorder (CMD) in their adult population. CMD escalates the financial burden and reduces the productivity and quality of life. For example, the incidence of hypertension, the most common sign of metabolic disorders in Malaysia for adult 30 years old and above according to the Ministry of Health is 43% for the year 2006. The trend is expected to increase in the near future despite significant improvement in living standard, advances in medical and health care technologies in the country. The main reason for the observed trend is that there is a widespread discordance between our modern living practices and physiological requirements. Modern living practices impose a higher level of stress in the form of nutrient deficiency by excessive consumption of nutrient depleted foods, excessive physical exertion, sleep deprivation, exposure to endocrine disruptor chemicals & metabolic enzyme inhibitors, mental stress and many others. CMD is in fact an adaptive response by our metabolism in order to maintain cellular homeostasis. As a result, the solution to these health issues demands different approach and healthcare technology.

One of these strategies which is increasingly acknowledged by the healthcare practitioners is known as the wellness approach. The wellness approach to healthy living is a proactive in nature and focuses on health enhancement strategy. Health enhancement strategy promotes the attainment of optimum cellular metabolism by the use of metabolites and nutrients and others for promotion of cellular homeostasis. In general the wellness strategy is intended for the promotion of health in soil, plants, animals and human. Soil health is the foundation of wellness as healthy and productive soil produce healthy plants and crops in turn produced healthy animals for human nutrition. In this regard traditional and modern biotechnology offer a wide range of candidates of natural ingredients and metabolites essential for cellular metabolism. These natural ingredients and metabolites are derived from microbial, algal, plant, animals, and human sources. Most of these natural products are increasingly made available by using innovative bioprocess technologies and available in the form of functional foods, nutraceuticals and cosmeceuticals

There is a tremendous global and local interest for wellness products. In 2010 SRI international reported that global wellness industry was worth USD 1.9 trillion. The wellness sector focuses on providing products and services to a wider community to improve appearance, slow down the effect of ageing and to reduce the risk of developing chronic metabolic diseases.

CONFERENCE OBJECTIVES

This conference serves to provide a platform for people associated with the wellness industry to disseminate knowledge and share ideas. The conference aims to bring academicians, scientists, traditional practitioners, conventional health providers, complementary health providers, decision makers and policy makers forward for sharing of views and experiences. Experts in related fields will be invited to deliver talks. Compilation of all full papers presented in oral presentation and poster presentation will be reviewed by our Scientific Committee and published in the 4th INTERNATIONAL CONFERENCE FOR THE WELLNESS INDUSTRY (4th ICBWI) PROCEEDINGS. UNIVERSITI TEKNOLOGI MALAYSIA.



Forthwith, the conference intends to gather and promote active participation from various related sectors. Effective collaboration and knowledge sharing in the field would be beneficial to the industry.

CONFERENCE TOPICS

Natural Herbal Products

Plants are considered as cell factories producing wide range of plant metabolites and phytochemicals. More than 100,000 plant secondary metabolites have been identified and about 50% had their structure fully elucidated. Plants metabolites and phytochemicals are increasingly used in pharmaceutical, cosmetics, flavours & fragrances, colours, agrochemicals and food ingredients. Currently 25% of active molecules used in pharmaceutical products are derived from plants secondary metabolites.

Scope

- Natural Herbal & Phytochemical Processing
- Products Standardization
- Product Analysis and Optimization
- Bio-Active Compound as Natural Herbal Products
- Phyto-pharmaceutical

Food and Nutraceuticals

Nutraceuticals refer to phytochemicals or active compounds derived from animals, fungi, or insects proven to be effective natural health product, useful in preventing or treating illness, or optimizing body function. Such products may range from isolated nutrients, dietary supplements and specific diets to genetically engineered foods, herbal products, and processed foods such as cereals, soups, and beverages. Numerous nutraceuticals currently are on the market with health-promoting ingredients or natural components for potential human health benefits such as flavonoids, carotenoids, dietary fiber, probiotic and protein.

Scope

- Nutraceutical Products Research & Development
- Medicinal Properties In Herbs & Spices
- Medicine In Everyday Food
- Foods & Beverages
- Law & Legislation

CONFERENCE TOPICS

Environmental Wellness

Environmental Wellness as part of an overall wellness plan has a huge impact on emotional, physical and spiritual health. Environmental well-being involves living in harmony with the Earth by understanding the impact on the natural world and personal surroundings. It also includes taking action to protect and heal the world. Minimize exposure and production of harmful chemicals; common environmental threats include air pollution, endocrine disruptor chemicals & metabolic inhibitors, excessive noise, water and land pollution, low indoor air quality and other negative environmental factors. Environment management system, environment related design, life-cycle assessment, extended product responsibility, industrial ecology, and related program and techniques are producing innovative and cost-effective approaches to environment performance improvement.

Scope

- Environment Management System
- Environment-related Design
- Soil health and agriculture
- Extended Product Responsibility
- Industrial Ecology

Wellness Business

Wellness businesses are focused on providing products and services for the promotion and enhancement of good health. It emphasises on healthy life style that manage stress, food & nutrition, appropriate exercise and fitness approach and mental health. The sector provides a number of services such as trainings and education program in nutrition, stress management, beauty and body image, prenatal & post care and healthy ageing.

Scope

- Herbal and Nutraceutical Industry
- Stress Management Centre
- Spa and Relaxation Centre
- Fitness Centre
- Weight Management Centre

Biomolecule Discovery

Nature is considered as the unlimited mine for molecules for a wide range of applications. For centuries, molecules derived from animal, plant and microbial cells are the main ingredients in health and wellness products. However, it is assumed that only a small fraction of biomolecules were discovered so far. Thus, huge amounts of research works are still done to discover and to isolate new active metabolites for new applications. Based on the new era of Omic approaches (e.g.: genomic, proteomic, metabolomic, etc...), bioinformatics and high throughput screening (HTS), the discovery of new molecules becomes a less tedious process and fishing new molecules for particular application becomes easier. This resulted in a significant increase in the number of bioactive molecules discovered during the last few years. In parallel to biomolecule discovery, new trends in pre-clinical and clinical trials have been developed and improved to ensure the safety of the new molecules.

Scope

- Products Discovery and Isolation for Wellness Industry
- New Trends In Natural Products Discovery
- Omic approaches for Biomolecules Discovery
- Efficacy and Safety of Novel Biomolecules

Cosmeceutical

Cosmeceuticals represent functional cosmetics and skincare products containing ingredients that influencing the biological function of the skin. Some of the common cosmeceutical contents derived from natural resources such as herbs and enzymes deliver nutrients necessary to improve skin health and appearance. The use of cosmeceuticals has drastically risen in recent years. This significantly increases the role of researches to provide convincing evidences of effectiveness of the ingredients used in cosmeceutical. Areas of research in cosmeceutical ingredients include substances intended to enhance skin function by activating a receptor, altering an enzyme, functioning as a cellular messenger, acting as an antioxidant, or providing anti-inflammatory capabilities, therefore returning the skin structure to a more youthful form. The expectations of living longer and of having years of healthy, active living ahead challenged the industry to shifts in attitudes about health, beauty, and aging in the last decade.

Scope

- Functional Cosmetic & Skincare Products
- Enzyme-base Cosmetics
- Plant-base Cosmetics
- Anti-ageing
- Biotechnology in Cosmeceutical Industry
- GMP

Biofactories, Biopharmaceutical and Bioprocessing

Bioprocessing is one of the oldest businesses in the world, where microbes are widely used for various applications including production of bread, vinegar and different types of fermented food all over the world. Traditionally, microbial cells were the main biofactory for the bioprocessing and production of bioactive metabolites. With better understanding of biochemistry and molecular biology technique new types of biofactories (recombinant biofactories) were developed. Nowadays, living cells from almost all groups are widely used either for the production of bioactive metabolites and biopharmaceuticals or as living cells in the novel applications of tissue engineering, stem cells and gene therapy. The new trend in bioprocess industries is to handle living cells as biofactory to develop the suitable technical/industrial platform according to cGMP regulations.

Scope

- Microbial Products Optimization
- Biomanufacturing
- Production of Recombinant Products
- Bioprocess Optimization and Modelling

Functional Food

Functional food is food products that claimed to have health-promoting or disease-preventing property beyond the basic function of nutrition. The general category of functional foods includes processed food, foods fortified with health-promoting additives, vitamin-enriched products and nutrient dense food products. Biologically active components in functional food can play a role in promoting good health or reducing the risk of disease. Examples popular functional food products are fermented drink containing probiotics, Omega-3 enriched eggs and food product fortified with essential nutrients .

Scope

- Functional Food Products Research & Development
- Safety and Efficacy
- Food Quality
- Food Chemistry

Compilation of all full papers presented in oral presentation and poster presentation will be reviewed by our Scientific Committee and published in the 4th INTERNATIONAL CONFERENCE FOR THE WELLNESS INDUSTRY (4th ICBWI) PROCEEDINGS. UNIVERSITI TEKNOLOGI MALAYSIA.

1. Proceeding

Selected abstract for poster and oral presentation will be published in the 4th International Conference on Biotechnology for the Wellness Industry Proceeding subject to the approval from the Scientific and Editorial Committee.

2. Publication in the International Journal of Biotechnology for the Wellness Industries - Lifescience Global

Subject to the approval of the Scientific and Editorial Committee, participants will have an option of having their full paper published in the subjected journal with and additional fee of USD150.00.

3. Submission of Full Paper

Compulsory for participants who opts to publish in the International Journal of Biotechnology for the Wellness Industries - Lifescience Global.

4. Oral & Poster Presentation

4th ICBWI is pleased to announce the paper & poster sessions for participants to share their experiences and work results in the field of Biotechnology and Wellness with other scientists, companies as well as the public. We invite the submission of abstract which report on new scientific developments in all areas of biotechnology for the wellness industry under the following categories:

- A. Natural Herbal Products
- B. Food and Nutraceutical
- C. Funtional Food
- D. Biomolecules Discovery
- E. Biofactories, Bioprocessing & Biobusiness
- F. Wellness Business
- G. Cosmeceutical
- H. Environment Wellness

Abstracts are welcome from all scientists and students from academic and industrial sectors. To represent the highest quality work of each topic, only 20 posters will be accepted in each session. During this event, three main prizes will be awarded for:

- **The Best Abstract with High Scientific Value (Innovation Award)**
- **The Best Poster Presentation (Presentation Award)**
- **The Best Student Abstract (Student Award)**
- **Special Jury Awards (8 awards)***

Each prize winner will receive:

- **Certificate (X1)**
- **RM1000 of Prize Money**
- **Training Voucher of RM500 in one of IBD courses offered**
- **For special jury awards winners will receive plaque and certificates***

IMPORTANT DATES

- **Abstract Submission Dateline - 15 May 2012**
- **Notification of Acceptance - 22 May 2012**
- **Submission of Full Paper - 13 July 2012**
- **Conference Date - 20 – 21 June 2012**

Note : For abstract, full paper and poster guidelines please refer to our website www.ibd.utm.my/wellness2012

TENTATIVE PROGRAM

4th ICBWI . (20 & 21 JUNE 2012 :: RENAISSANCE HOTEL, KL, MALAYSIA)

WHO SHOULD ATTEND

- Biotechnologists
- Complementary Health Providers
- Traditional Practitioners
- Conventional Health Providers
- Academicians
- Scientists
- Decision Makers
- Policy Makers
- People who are interested in wellness
- Management Team who are interested in enhancing productivity of their staff through workplace wellness programmes are also invited.

Wednesday, 20 June, 2012	
8:00 am to 09:00 am	Registration and Reception
9:00 am to 09:10 am	Welcoming speech
9:10 am to 10:00 am	<u>Keynote Address:</u> New Trend and Opportunities in Wellness Industry
10.00 am to 10:30 am	Refreshment
10:30 am to 11:30 am	Opening Ceremonies by the Minister of Higher Education (MOHE)
11:30 am to 12:30 pm	<u>Plenary 1</u> Topic : Tropical and Sahara Herbal Products Speakers : Prof. Ramlan Aziz (Universiti Teknologi Malaysia, Malaysia) Prof. Mansour Al Said (King Saud University, Saudi Arabia)
12:30 pm to 14:00 pm	Lunch /Poster Sessions
14:00 pm to 14:45 pm	<u>Plenary 2</u> Topic : Development of Cosmeceuticals from Malaysia Tropical Plants : Current Outcomes and Future Works Speaker: Prof Dr Chang Seo Park (Dongguk University, South Korea)
14.50 pm - 17.30 pm	SESSION 1 Track A1: Natural Herbal Products Track B1: Food and Nutraceutical Track C1: Cosmeceuticals
20:00 pm - 22.00pm	GALA DINNER Award Presentation, Cultural Show and Lucky Draw
Thursday, 21 June, 2012	
9.00 am to 10:00 am	<u>Plenary 3</u> Topic : 3D Fluorescent Cell Assays for High-Throughput Screening of Herbal Medicines Speaker: Prof. S. T. Yang (OHIO State University, USA)
10.00 am to 10.30 am	Refreshment
10.30am - 12.30pm	SESSION 2 Track A2: Biomolecule Discovery Track B2: Biofactories, Bioprocessing and Biobusiness Track C2: Environmental wellness
12.30 pm to 14.00 pm	Lunch/Poster Sessions
14.00 pm to 14:45 pm	<u>Plenary 4</u> Topic: Health an Wellness Business Opportunities Speaker: Dr. George Sakellaris (Bionian, EU, Greece)
14:50 pm to 16:30 pm	SESSION 3 Track D1: Wellness Industry, Policies, Regulatory
16.30 pm to 17:15 pm	<u>Plenary 5</u> Topic: Nutritional Therapy for Reversing Chronic Health Disorders Speaker: Dato' Steve Yap (DSY Wellness Centre, Malaysia)
17:15 pm	Closing Ceremony

CONFERENCE REGISTRATION

NAME:

COMPANY:

ADDRESS:
.....

TOWN / CITY: POSTCODE:

STATE: COUNTRY:

TEL: FAX:

EMAIL: WEBSITE:

CONTACT PERSON:

JOB TITLE:

CONFERENCE

+ Poster presentation (based on selected abstracts)

+ Oral presentation (based on selected abstracts)

CONFERENCE FEE

CATEGORY	MALAYSIANS		INTERNATIONAL	
	Normal RM	Early Birds RM	Normal USD	Early Birds USD
Standard Rate	750	700	450	400
Students	500	450	350	300

*Early bird discount is for bookings and payments received before **15 May 2012.***

Fees is inclusive of: Conference Proceeding, Refreshments, Lunch & Gala Dinner

For further information and registration please contact :

· CONFERENCE SECRETARIAT;
· Institute of Bioproduct Development
· Universiti Teknologi Malaysia
· 81310 Johor Bahru, Johor

· T: +607-553 6474
· F: +607-554 9293

· **Liyana**
· T: +607-553 6485
· E: liyana@ibd.utm.my

· **Haini**
· T: +607-553 6474
· E: haini@ibd.utm.my

www.wellnessasia.com.my
www.ibd.utm.my/wellness2012

Contact us

CONFERENCE SECRETARIAT

Institute of Bioproduct Development,
Universiti Teknologi Malaysia
81310 UTM Johor Bahru,
Johor, Malaysia
T: +607-553 6474
F: +607-554 9293

Liyana

T: +607-553 6485
E: liyana@ibd.utm.my

Haini

T: +607-553 6474
E: haini@ibd.utm.my



■ **LOCATION**

**RENAISSANCE HOTEL,
KUALA LUMPUR**

In the heart of the Golden Triangle, a short stroll from Petronas Twin Towers, shopping and nightlife, sits one of the five-star hotels in Kuala Lumpur - the Renaissance - which features two wings and a state-of-the-art convention centre. Experience the grandeur of this Kuala Lumpur hotel's amenities, which are as bountiful as the vitality of Malaysia's capital.