International Life Sciences Institute-India

ACTIVITIES OVERVIEW 2011 (Website : http://ilsi-india.org)

NUMBER OF PARTICIPANTS IN ILSI-INDIA CONFERENCES: 716 GOVERNMENT (129), INDUSTRY (208), ACADEMIA (331) ,OTHERS (48) SPEAKER: 73 NATIONAL: 58, INTERNATIONAL: 15

CONFERENCE PRESENTATIONS: UPLOADED ON ILSI-INDIA WEBSITE: WWW.ILSI-INDIA.ORG

CONFERENCE ON MICRONUTRIENT FORTIFICATION OF FOODS: SCIENCE, APPLICATION AND MANAGEMENT, JANUARY 7-8, 2011 NEW DELHI

CO-SPONSORS: INDIAN MINISTRY OF FOOD PROCESSING INDUSTRIES, NATIONAL INSTITUTE OF NUTRITION

Examples of successful food fort. programs

Food	Place	Nutrient	% Price Product	% EAR[1]
Salt (10 g day)	Worlwide	Iodine	0.3 %	198 %
Sugar (80 g/day)	Central America	Vitamin A	2.3 %	112 %
Wheat Flour (200 g/day)	Chile, RSA, USA, Canada	Folic Acid	0.05% 0.6 %[2]	88 %

[1] EAR for women of reproductive age
[2] Plus other micronutrients (Complete formula)

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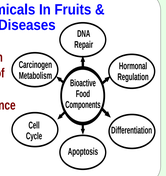
FROM PRESENTATION ON A PERSONAL EVOLUTION: FROM AN UNBELIEVER TO AN ADVOCATOR, BY DR OMAR DARY, FOOD FORTIFICATION SPECIALIST, AZZ/THE USAID MICRONUTRIENT AND CHILD BLINDNESS PROJECT, ACADEMY FOR EDUCATIONAL DEVELOPMENT (AED)

CONFERENCE ON PROCESSED FOODS AND BEVERAGES: BEYOND BASIC NUTRITION: APRIL 29-30, 2011 NEW DELHI

CO-SPONSORS: MINISTRY OF FOOD PROCESSING INDUSTRIES, GOI, DBT, NATIONAL INSTITUTE OF NUTRITION, NATIONAL HORTICULTURE BOARD, PLANNING COMMISSION, ILSI EUROPE, ILSI JAPAN AND ILSI SEA REGION

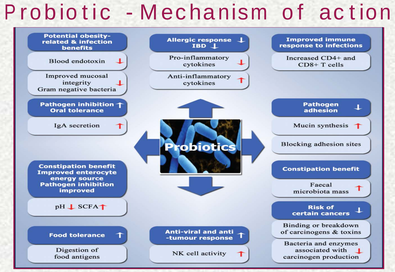
Mechanism By Which Phytochemicals In Fruits & Vegetables May Prevent Diseases

- Antioxidant activity
- Enzyme induction and enhancing detoxification
- Inhibition of enzymes involved in the activation of carcinogens
- Enhancement of immune functions and surveillance
- Regulation of steroid hormone metabolism
- Antibacterial and antiviral effects
- Regulation of estrogen metabolism.
- Prevention of DNA binding



FROM PRESENTATION ON FUNCTIONAL FOODS: FRUITS & VEGETABLES BY DR. R D RAI, DIVISION OF BIOCHEMISTRY, INDIAN AGRICULTURAL RESEARCH INSTITUTE

Probiotic - Mechanism of action

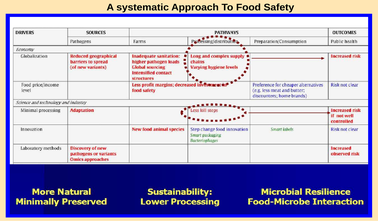


PRESENTATION ON FUNCTIONAL FOODS: PREBIOTICS AND PROBIOTICS BY DR NEERJA HAJELA, HEAD – SCIENCES, YAKULT, YAKULT DANONE INDIA PVT. LTD.

CONFERENCE ON FOOD SAFETY: SCIENCE, EVIDENCE AND REGULATIONS, COLOMBO, SRI LANKA, MAY 20-21, 2011

CO-SPONSORS: MINISTRY OF HEALTH, SRI LANKA; MINISTRY OF TECHNOLOGY AND RESEARCH, SRI LANKA; INDUSTRIAL TECHNOLOGY INSTITUTE, SRI LANKA ; MEDICAL RESEARCH INSTITUTE, SRI LANKA; SRI LANKA STANDARDS INSTITUTE

A systematic Approach To Food Safety



FROM PRESENTATION ON : MAIN FOOD SAFETY ISSUES/ CHALLENGES – INTERNATIONALLY INCLUDING SAARC BY DR NIMISH SHAH, MEMBER, SCIENTIFIC ADVISORY COMMITTEE ON FOOD SAFETY, ILSI-INDIA

Issuer Currently Under Discussion in CODEX

Issues Currently under Discussion

- Codex Strategic Plan 2014 -19
- Private standards
- Co-hosting of Codex sessions
- Participation of developing countries
- Traceability
- Nanotechnology
- Animal Feeding, Ractopamine

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FROM PRESENTATION ON : WHY IS CODEX SO IMPORTANT INTERNATIONALLY/ FOR COUNTRIES BY MR S DAVE, CHAIR, CODEX ALIMENTARIUS COMMISSION

New Directions For Research On Micronutrient Fortification Of Foods

PRESENTATION ON MICRONUTRIENT DEFICIENCIES: IMPACT ON HEALTH AND NEW DEVELOPMENTS BY DR MICHAEL BRUCE ZIMMERMANN, LABORATORY FOR HUMAN NUTRITION, INSTITUTE OF FOOD SCIENCE AND NUTRITION, SWISS FEDERAL INSTITUTE OF TECHNOLOGY

Reducing mineral (and vitamin?) compounds to nanoscale modifies their functional characteristics and may open up new possibilities in nutrition.

Good micronutrient epidemiology can identify vulnerable populations for targeted fortification .

New methods of characterizing the gut microbiome will provide new insights into the links between micronutrients and health.

Overweight may increase risk for iron deficiency via low-grade inflammation that increases hepcidin and reduces systemic iron availability.

Investments in food fortification and micronutrient research need to move forward in a parallel and complementary fashion:

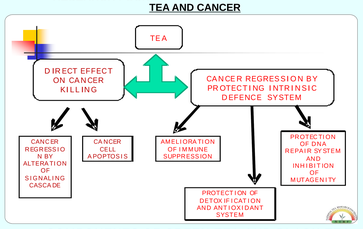
- Identification of new compounds and new vulnerable groups.
- Effectiveness in transition countries with high rates of obesity Safety of iron and gut microflora .

PRESENTATION ON MICRONUTRIENT DEFICIENCIES: IMPACT ON HEALTH ANDNEW DEVELOPMENTS BY DR MICHAEL BRUCE ZIMMERMANN, LABORATORY FOR HUMAN NUTRITION, INSTITUTE OF FOOD SCIENCE AND NUTRITION, SWISS FEDERAL INSTITUTE OF TECHNOLOGY

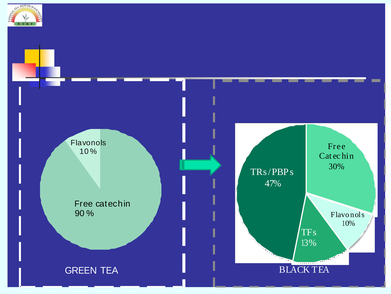
CONFERENCE ON HEALTH AND LONGEVITY THROUGH CHAI: THE WONDER BEVERAGE, OCTOBER 12, 2011, NEW DELHI

CO-SPONSORS: TEA BOARD, INDIAN MINISTRY OF COMMERCE, GOI, NATIONAL INSTITUTE OF NUTRITION, NATIONAL TEA RESEARCH FOUNDATION

TEA AND CANCER



COMPONENTS OF GREEN TEA AND BLACK TEA

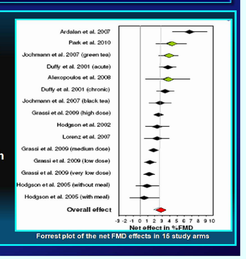


FROM PRESENTATION ON : BROAD COMPOSITIONAL DIFFERENCES AND BENEFITS: FLAVONOIDS, THEANINE, CAFFEINE BY PROF. SANDIPK BANDOPADHYAY, ADVISOR, NATIONAL TEA RESEARCH FOUNDATION

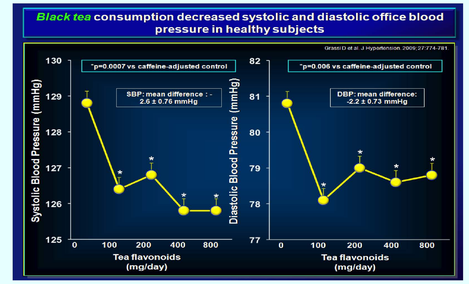
EFFECT OF BLACK TEA AND GREEN TEA CONSUMPTION ON FLOW-MEDIATED DILATION (FMD)

8 out of 9 studies showed an increase in FMD

- 9 studies with 15 study arms
- Average effect on FMD of tea vs. placebo = 2.6% (95% CI: 1.8-3.3%; P-value <0.001)
- Median daily dose = 500 mL of tea (~2-3 cups).
- Significant heterogeneity between studies (Q = 62.1, P-value <0.001; I^2 = 75.8%), which is partly explained by the cuff position



Forrest plot of the net FMD effects in 15 study arms



FROM PRESENTATION ON : TEA AND VASCULAR HEALTH: EVIDENCE EMERGING FROM EPIDEMIOLOGICAL AND FMD STUDIES BY PROF. CLAUDIO FERRI, MD, PROFESSOR OF INTERNAL MEDICINE, UNIVERSITY OF L'AQUILA – SAN SALVATORE HOSPITAL

ILSI-INDIA / IFBIC WORKSHOP AND TRAINING PROGRAM ON DETECTION METHODS FOR GM FOODS / CROPS, NIN, HYDERABAD, NOVEMBER 17-19, 2011

CO-SPONSORS: DEPARTMENT OF BIOTECHNOLOGY, GOI; FOOD SAFETY AND STANDARDS AUTHORITY OF INDIA; INDIAN COUNCIL OF MEDICAL RESEARCH; NIN; CROPLIFE INTERNATIONAL

Transgenic crops developed in public sector in regulatory field trials

Crop	Organisation	Trait
Brinjal	IARI, New Delhi	Insect Resistance
Castor	Directorate of Oilseeds Research (DOR), Rajendranagar, Hyderabad	Insect resistance
Sorghum	National Research Centre for Sorghum (NRCS),Hyderbad	Insect resistance
Groundnut	ICRISAT, Hyderabad	Fungal disease resistance
Potato	Central Potato Research Institute (CPRI), Shimla	Leaf blight disease resistance
Rice	IARI, New Delhi Tamil Nadu Agricultural University Mahyco, Mumbai	Fungal diseases resistance and drought tolerance
Tomato	IARI, New Delhi	Virus disease and

Today Of Transgenic Research in India

Crops 36 Traits 18

Research Institutions	Companies engaged
Universities	50
Research Institutions	45
Companies	140
Total	235

FROM PRESENTATION ON : STATUS OF GM CROPS IN INDIA: RESEARCH & REGULATORY SYSTEM BY DR S R RAO, ADVISOR, DEPARTMENT OFBIOTECHNOLOGY, INDIAN MINISTRY OF SCIENCE & TECHNOLOGY

GROUP PHOTOGRAPH OF TRAINEES AND RESOURCE PERSONS

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ILSI-India

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- Ministry of Food Processing Industries • Ministry of Food Processing Industries
- Department of Biotechnology • Ministry of Health • Ministry of Science & Technology
- Department of Drinking Water Supply • Ministry of Rural Development • Ministry of Water Resources
- Ministry of Women and Child Development, Ministry of Human Resource Development • Agriculture and Processed Food Products Export Development Authority • National Horticulture Mission (NHM), Ministry of Agriculture

Partners in Activities

Research Institutes

- Indian Council of Medical Research, New Delhi
- National Institute of Nutrition, Hyderabad
- National AIDS Research Institute
- Industrial Toxicology Research Center, Lucknow
- Post Graduate Institute of Medical Education and Research, Chandigarh
- Medical Research Institute, Colombo
- Industrial Technology Institute, Colombo
- National Dairy Research Institute
- Defense Food & Research Laboratory
- Indian Academy of Pediatrics – Nutri Chapter
- National AIDS Control Organization
- All India Institute of Medical Science, New Delhi
- Center for DNA Fingerprinting and Diagnostics, Hyderabad
- Department of Food Technology and Quality Control, Kathmandu
- National Aids Research Institute
- Indian Academy of Pediatrics
- Institute Nuclear Medicine Allied Sciences (INMAS)

International Organizations

- GAIN •FAO • UNICEF • WHO India Office and SEARO • USAID India
- UN World Food Program
- International Commission for Microbiological Specifications for Foods
- National Institute of Health (NIH),USA • OLDWAYS, USA

Industry

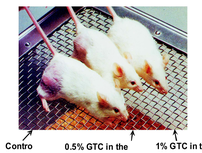
- Food Industry • Beverage Industry • Food Additive Manufacturers
- Biotech Industry • Pharmaceutical Industry • Self Care Industry
- Chambers of Commerce and Industries

ILSI – INDIA COUNTRY COMMITTEES IN SOUTH ASIA (SAARC REGION)

Others

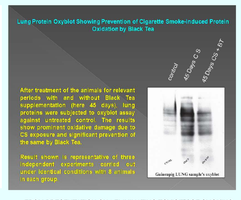
- Academia • NGOs • State Governments
- Government in SAARC Region

SUPPRESSION OF TUMOR GROWTH BY FEEDING TEA CATECHINS



Control 0.5% GTC in the diet 1% GTC in the diet

Fig. 4 Suppression of The Tumor Growth by Feeding Tea Catechins



FROM PRESENTATION ON : ELUCIDATION OF PHYSIOLOGICAL FUNCTIONS OF TEA CATECHINS AND THEIR MULTIPLE PRACTICAL APPLICATIONS BY DR YUKIHIKO HARA PRESIDENT, TEA SOLUTIONS AND VISITING PROFESSOR OF SCHOOL OF FOOD AND NUTRITIONAL SCIENCE, UNIVERSITY OF SHIZUOKA

FROM PRESENTATION ON : ELIMINATING TOXICITY OF SMOKING THROUGH TEA BY DR KOUSTUBH PANDA, ADVISER, SCIENCE & TECHNOLOGY, GOVT. OF WEST BENGAL

RESEARCH PROJECTS • PROJECT ON FORTIFICATION OF SCHOOL MID DAY MEAL IN INDIA SPONSORS: ILSI-INDIA, ILSI RF AND ILSI JAPAN CHP, NATIONAL INSTITUTE OF NUTRITION, ST. JOHN RESEARCH INSTITUTE • RESEARCH STUDY ON FORTIFICATION OF MILK WITH VITAMIN D SPONSORS: ILSI-INDIA, DSM NUTRITIONALS (INDIA) LTD.

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Contact Person: Ms Rekha Sinha, Executive Director, ILSI-India, First Floor, Y 40 B, Hauz Khas, New Delhi-110016, Telefax: 91-11-26523477 & 91-11-26968752, Email: rsinha@ilsi-india.o