

Summit Daily

Rediscovering Milk

Issue

5

Saturday

2 November 2013

TODAY

*United on Nutrition and
Sustainability*

P.2

*Milk Protein and Food
Security*

P.2

*Pursuing Environmental
Sustainability*

Retail Outlet Tour

P.3

*Tackling Food Safety
Challenges*

P.4

Photo Gallery

P.9



IDF World Dairy Summit 2013

Rediscovering Milk

YOKOHAMA
JAPAN

28 October - 1 November 2013
YOKOHAMA, JAPAN



<http://www.WDS2013.com>



The dairy sector is part of the solution to providing sustainable, safe, nutritious and enjoyable diets



United on Nutrition and Sustainability

When it comes to meeting increasing demand for food, nutrition and sustainability have long been two very important, albeit separate, topics of discussion. This is starting to change with an increasing focus on the links between these two fields.

Mary Anne Burkman, Dairy Council of California, US, gave a presentation in Session 3 of the Nutrition and Health conference entitled “Dairy nutrition and sustainability – speaking with one voice”. She explained why it is imperative for the global dairy sector to continue to more strongly examine links between these two fields.

Ms Burkman observed that, “All food production incurs varying environmental costs, but it is important to consider those costs in the context of the nutritional dividends that food provides. We’re in the earliest stages of research which will inform dietary patterns that fulfill nutritional requirements while minimizing the environmental impact related to production, processing and transport.”



Mary Anne Burkman

The prevailing obesity epidemic and issues of hunger and malnutrition across the globe make it vital for future agriculture and food systems to not only deliver more food but also ensure nutritional quality to sustain healthy populations. Dairy foods are packages of essential nutrients. Dairy intake contributes significantly to dietary quality and nutrient adequacy around the world.

The dairy industry should continue its leadership role in two ways. First, it should spearhead research to best define sustainable dietary patterns that provide nutritious, affordable, and culturally appealing dairy products. Second, the industry should continue to adopt practices that optimize natural resource use and reduce environmental impact.

Milk Protein and Food Security

Supplying a growing population with sufficient food is one of the world’s major challenges. Protein quality has become a key talking point in the debate surrounding sustainability and food security. To find out more, we spoke with Prof. Toon van Hooijdonk, Wageningen University, NL, about his presentation during the Nutrition and Health Conference entitled “Milk protein and food security: How cows convert inedible protein into high quality dairy protein”.

Why has the question of protein quality become so important?

The FAO estimated that the demand for milk will grow from the current 700 to over 1000 billion kg in 2050. Efficient use of scarce resources is a crucial factor in evaluating the position of dairy in the human diet. In many parts of the world, the cow is an efficient converter of human-inedible protein resources in nutrient-dense milk containing top-quality proteins. High-quality proteins such as those from dairy effectively supply the amino acids that our diets need and are thus frequently the preferred option for efficient land use.



Prof. Toon van Hooijdonk

How does feed come into the equation?

Much of the ration of a dairy cow consists of resources that humans cannot or do not consume. Ruminants therefore do not directly compete with the human food chain. In fact, they convert human-inedible resources into high-quality human food.

In addition, most grassland is not suitable for growing other crops containing a high portion of potentially human-edible protein such as soy. This is often neglected in the sustainability debate relating to dairy.

What’s next?

Animal proteins play a growing role in food security, and productivity has to increase to minimize environmental impact.

Pursuing Environmental Sustainability

In an effort to reduce the environmental impact of milk and dairy products throughout the global dairy industry, the environment conference focused on two key issues: the challenges and opportunities of footprinting applied to different environmental areas (greenhouse gas (GHG) emissions, water, biodiversity) and the reduction of GHG in processes related to waste management in the dairy sector.

Footprinting

Footprint methodology can be a very valuable tool for the dairy sector to reduce its negative and increase its positive environmental impacts. IDF has worked in recent years to develop a common methodology for carbon and water footprinting for the dairy sector, and opened the session by presenting the progress in its new guidelines.

The FAO offered a global overview of the livestock sector and their latest analyses on mitigation strategies. According to their results, a 30% reduction of GHG emissions can be achieved. An example of a company using carbon footprint to understand, manage and reduce and communicate its climate impact was presented from Canada. Other inspiring examples included projects for carbon sequestration in Ireland, where the goal is to reach carbon neutrality by 2050, and for improving water quality in New Zealand through fruitful collaboration with local communities and authorities.

Biodiversity is an area in which the dairy sector faces numerous challenges but is also where it is possible to improve its performance. This could be done, for example, through grassland management, as shown by a case study

from Japan, or by establishing or improving landscape agro-ecological structures, as illustrated by a French study. To conclude the session, the report from the Global Dairy Agenda for Action demonstrated the dairy industry's determination to stay engaged and proactive in tackling sustainability challenges.

Waste management to reduce GHG emissions

The session on the reduction of greenhouse gases in – and energy production from – the processes related to waste management in the dairy sector provided participants with examples of cattle manure management, decreasing nitrogen losses, and packaging.

Japanese studies on methane and nitrous oxide emissions from manure management demonstrated great potential for GHG reductions. However, the economic sustainability of biogas energy production might limit the expansion of this methodology, as exemplified by the regulatory and financial challenges in Japan.

Addressing the challenge of nitrogen efficiency in the New Zealand pasture based system showed an inspiring potential of up to a 40% reduction in nitrogen leaching. Beyond farming, the challenges of waste in the dairy production chain also involved both packaging material and manufacturing of dairy products. The role of the packaging industry in addressing these challenges was discussed through examples from Tetra Pak in both emerging economies and developed countries.

Retail Outlet Tour

On the morning of Friday 1 November, 25 delegates took part in a retail outlet tour. The outing was held to coincide with the previous day's Marketing Conference.

The tour was open to all delegates and was free of charge. Participants visited Yokohama Station Takashimaya, the flagship store of a high-end department chain. They also took in a residential Summit Store, a grocery outlet. All on the tour were very impressed with the presentation of merchandise in all floor areas, particularly in the fruit and vegetable and dairy sections.

Delegates from Finland, Israel, Australia, Norway, the United Kingdom, the United States, France, Libya, Belgium and Canada took part in what was a very enjoyable excursion.



Tackling Food Safety Challenges

The Food Safety Conference was opened by Mr Yataro Kokubo, who backgrounded the conference theme. At IDF World Dairy Summit 2012, the Food Safety Conference focused on the dangers of food derived pathogens and other high risks in dairy foods. The organizing committee for WDS 2013 chose to focus on how to evaluate and assess risks across the entire integrated dairy supply chain.

The first keynote speaker, Claus Heggum from Denmark, spoke about the historic trends that have most influenced food safety management and then discussed how the dairy industry might respond to future trends. In his review of historic trends, Mr Heggum examined consumer trends, demographic trends, climate changes, globalization and regulatory changes.

The discussion on consumer trends centered on consumers wanting foods that are fresher and minimally processed or preserved. Another aspect was demand for longer shelf lives. It was noted that many younger consumers have less experience in domestic cooking and often know little about basic hygiene practices. A final trend of concern is the desire of consumers to minimize food waste, with many engaging in such risky behavior as ignoring date codes on foods in their refrigerators.

Turning to the how the dairy industry might tackle food safety challenges, Mr Heggum suggested that it will be very important to improve and extend hazard analysis beyond traditional areas of focus. For example, the industry will need to think more about transfers of pathogens from wildlife. It should also consider the stress-related adaptation of pathogens. Of special concern to nations like Japan is the susceptibility of the elderly to food risks.

The second keynote speaker, Dr Kunio Morita from Japan, provided a very interesting overview of food hazards over the past decade in Japan and reviewed the history of the Japanese dairy industry's adoption of food safety regulations and enforcement.

Dr Morita began by reminding the audience of the biological and chemical hazards of concern to the food supply chain. He spent some time discussing chemical hazards, with a focus on radioactive materials. Dr Morita strongly assured the non-Japanese conference attendees that the Fukushima nuclear accident has not endangered the dairy supply. The current national standard of a maximum tolerance of 50 Bq/Kg in milk is many times above the current presence in milk of less than 1 Bq/Kg.

The presentation included a review of all outbreaks of food borne illnesses in Japan between 2003 and 2012. During this time, there were just over 13,000 incidents and just over 275,000 cases. Within this total, dairy accounted for a very tiny number of cases and no deaths. The greatest number of incidents and cases has been traced to raw and processed vegetables.

An important part of the presentation was a review of the history of milk hygiene regulations over the past two centuries. It was fascinating to learn that for many years the police department (as a part of the Ministry of Internal Affairs) was responsible for most aspects of regulating and inspecting the dairy supply chain. It was not until after World War II that the newly created Ministry of Health and Welfare took over these responsibilities.

Dr Morita ended his presentation by examining what might be the three most important future challenges. The first is to predict the emergence of new types of infectious disease. The second is to implement in Japan the CODEX General Principles of Food Hygiene throughout the entire supply chain. The third is to inform consumers about probiotics in dairy products.

Thanks to Our Contributors

The editorial team is grateful to the numerous people who helped put this newsletter together.

We would particularly like to acknowledge the following article contributors:

- **Cary Frye**, Vice President of Regulatory Affairs for the International Dairy Foods Association
- **Vivien P. Godfrey**, Chief Executive Officer of the Milk Processor Education Program
- **Jamie Jonker**, Vice President, Scientific & Regulatory Affairs at National Milk Producers Federation
- **Claire Phoenix**, Director and Editor of Beverage Innovation at FoodBev Media
- **Richard Walton, Ph.D.**, Manager, R&D Support Center 1, Research Planning Department, R&D Division, Meiji Co., Ltd.
- **Bob Yonkers**, Vice President and Chief Economist of the International Dairy Foods Association

LEADING THE WAY IN DAIRY INNOVATION.

With more than 3,500 natural components, milk is one of nature's richest sources of nutrition.

We have a proud heritage of dairy innovation firsts, and are committed to continued development of new products and technologies that meet the needs of customers and consumers everywhere, every day.

All because we're "Dairy for life".

fonterra.com



Dairy for life



Australia's First Choice Dairy Foods Company

オーストラリアで最初に選ばれる乳食品メーカー



MURRAY GOULBURN CO-OPERATIVE CO. LIMITED



The world leader of yeast novel technology

ABCA c/o Associated British Foods Japan Limited

Room 707, Bellza Roppongi,
4-1-9 Roppongi, Minato-ku, Tokyo
106-0032, Japan
Tel: +813 3568 8120
Fax: +813 3568 8124

Email: contact@abfoods.jp

www.abcpasia.com

カラダにピース
CALPIS

カルピス(株)特選バター



カルピス株式会社

DNP

Universal Design
for the consumers
Symphony of Function
for the products
Ecology
for the earth

**USE·FULL®
Packaging**

USE·FULL is the guiding principle
in our design of packages.

TATUA

Your partner in specialised high-quality dairy ingredients and food products



www.tatua.com

The TATUA Co-operative Dairy Company Limited ©
TATUA Japan Company Limited

FOSS

Milk and dairy analysis



www.foss.dk

Gilva

今日からあなたも、よく増える人。

おなかのビフィズス菌が
よく増える!

朝食 **ヨーグルト Bifix**

Pack The Fresh Taste

Paper pack is a renewable container



TOHEI-PAK

Hokuetsu Package Co.,Ltd.
<http://www.hokuetsu-package.co.jp/>

MASTER THE SECRETS OF GLASS AND ADVANCE INTO NEW FIELDS



since 1819
ISHIZUKA
ISHIZUKA GLASS CO., LTD.

【Tokyo Branch】 Ishizuka Building, 2-1-5 HigashiNihonbashi, Chuo-ku, Tokyo 103-0004 Japan
phone: 03-5823-5381

www.milkland-hokkaido.com

Drink! Hokkaido milk!

ITOCHU

TOTAL PLANT ENGINEERING



<http://www.iwai.co.jp>



私たちはECO30をテーマに省エネ・省資源の食品製造プラントをご提案しています。

岩井機械工業株式会社
IWAI KIKAI KOGYO CO., LTD.

【本社】 〒144-0033 東京都大田区東糀谷3-17-10
TEL.03-3744-1117 FAX.03-3743-5030

● Kyoto to the world

Providing high-quality products and services

We engineer and design completely automated and customized solutions to realize a wide variety of assembly and packaging solutions.

Top position

Be the leader in packaging and assembly automation field.

Originality

Utilize our unique capacity and experiences to be an integrated automation machine manufacturer.

Global position

We have built a global presence.

SYSTEM ENGINEERING
KYOTO SEISAKUSHO CO.,LTD.

<http://www.kyotoss.co.jp>



The Dairy, Meat and Processed Meat
Expert. Providing Solutions Only
a Specialty Trading Company Can.

Lacto Japan Co., Ltd.

3rd Floor Neo Kawai Bldg.,
4-8-15 Nihonbashi Honcho,
Chuo-ku, Tokyo, 103-0023 Japan

TEL: 03-6214-3831 FAX: 03-6214-3721
URL: <http://www.lactojapan.com>



Lacto Japan



愛される、おせっかい焼きに。

ここまでやってくれて、
ほんとに
良かったと
言ってもらえるような、
気配りのある
ビジネスこそ。
—— わたしたちの原点。

www.mitsubishi-corp.com



三井物産株式会社

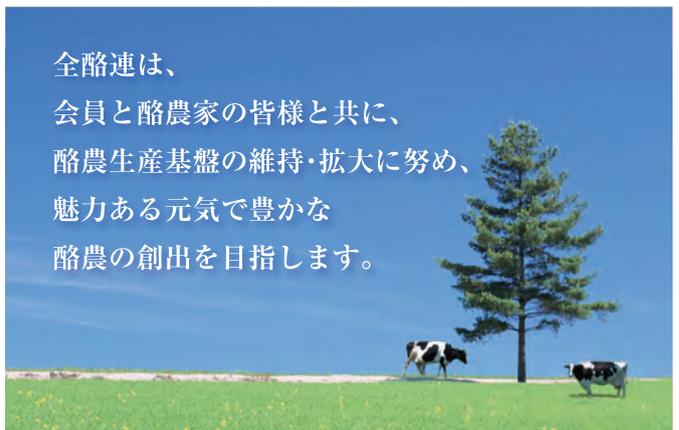
食品原料部 乳製品室



MITSUI & CO., LTD.

Dairy Products Department

全酪連は、
会員と酪農家の皆様と共に、
酪農生産基盤の維持・拡大に努め、
魅力ある元気で豊かな
酪農の創出を目指します。



全国酪農業協同組合連合会 (全酪連)

Nippon Paper Industries' Paper-Pak Div. provides environmentally friendly paper based packaging as a system with three trustworthy pillars of liquid paper packaging, filling machine and maintenance.

Eco-friendly Paper Packaging



Packaging

Filling Machine

Maintenance



NIPPON PAPER INDUSTRIES CO., LTD. Paper-Pak Div.
4-6 Kandasurugadai, Chiyoda-ku, Tokyo, 101-0062, Japan
Phone +81-3-6665-5555 Fax +81-3-6665-0350 <http://www.nipponpaper-pak.com>



●食品事業



●包装資材事業

Filling

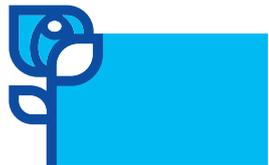
●充填包装機器事業



Shikoku Kakoki Co., Ltd.

<http://www.shikoku-kakoki.com/>

Takanashi



タカナシ乳業

Takanashi Milk Products Co., Ltd.

www.takanashi-milk.co.jp



FINE'TE

FINE TECHNOLOGY

YASUDA LTD.



 yotsuba

Yotsuba Milk Products Co., Ltd. is a company established by dairy farmers in Hokkaido.



OGAWA
Flavors & Fragrances



小川香料株式会社

本社: 〒103-0023
東京都中央区日本橋本町4-1-11
TEL: 03-3270-1720

<http://www.ogawa.net/>

**FOOD
CREATOR®**

**Creator of
"Delicious"**

San-Ei Gen F.F.I., Inc.

Headquarter Osaka, Japan
Tel. +81 6 6333 0931 Fax +81 6 6333 0935
<http://www.saneigenff.co.jp>



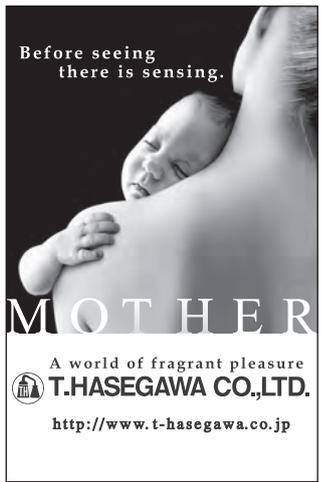
塩野香料株式会社

香造力

<http://www.soda.co.jp>



美味しさの生命を吹き込む
曾田香料株式会社
SODA AROMATIC Co., Ltd.



Before seeing
there is sensing.

MOTHER

A world of fragrant pleasure
T.HASEGAWA CO.,LTD.

<http://www.t-hasegawa.co.jp>

TAKASAGO Vanilla
From Madagascar



La Vanille T

TAKASAGO
高砂香料工業株式会社
www.takasago.com

**Let's
make it
a reality**

Changing the world
with printing technologies

TOPPAN

<http://www.toppan.co.jp/english/>

**祝ワールドデリー
サミット2013**



酪農家の新聞……
全酪協会の「全酪新報」
毎月1日・10日・20日発行
一般社団法人 **全国酪農協会**
THE DAIRY FARMERS ASSOCIATION OF JAPAN
<http://www.rakunou.org>



公益財団法人
日本乳業技術協会

Photo Gallery

Animal Health and Welfare



Dairy Farming



Nutrition and Health



Marketing



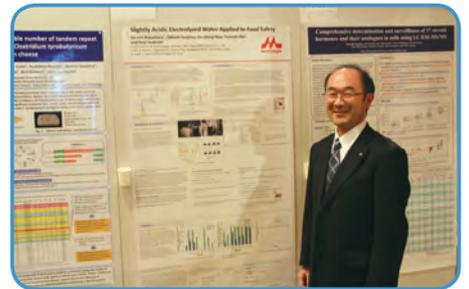
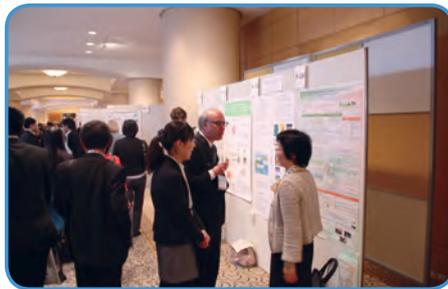
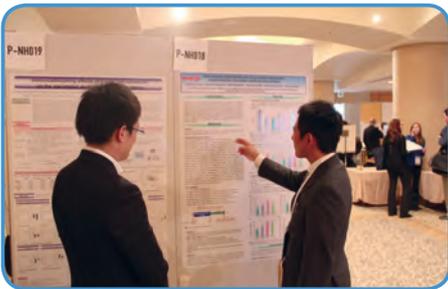
Environment



Food Safety



Poster Session



Gala Dinner

