



Knowledge Experience Solutions

News from Acumentia Consulting Ltd

Spring 2011

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Welcome to the Summer edition of the newsletter from Acumentia Consulting Ltd.

Acumentia consists of some 40 leading consultants who offer a full range of solutions in technical and business aspects of the food, pharmaceutical and related industries.

Please use the hotlinks (shown in blue) embedded on the pages to get directly to the features that may interest you particularly.

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Medical devices – The truth about going under the knife

What the TV said

The recent Channel 4 Dispatches documentary 'The truth about going under the knife' broadcast on 16th May raised the question as to whether medical devices were adequately regulated in Europe and the US. It was based upon the experience of three medical devices, a DePuy hip prosthesis called the ASR, a Medtronic pacemaker lead, and a cochlear implant. It was claimed that the existing regulations are inadequate and that untried medical devices are being placed on the market. It was also opined that manufacturers were getting their devices CE Marked before FDA approvals, the implication being that the EU was an easy option and represented a lower regulatory barrier.

Regulations are very demanding



Considering the thousands of medical devices that are on the market, to make the sweeping claim that patients were being placed at risk by inadequate regulation does seem to be unsubstantiated. Of course DePuy (part of Johnson & Johnson) and Medtronic are both major medical device companies, and have significant resources at their disposal for product development and testing, but they need not necessarily be representative of the industry as a whole.

What the documentary did not mention is that since the devices were placed on the market, there have been two key changes to EU regulation. Firstly, Directive 2005/50/EC re-classified total joint prostheses (such as DePuy's ASR) as Class III devices, the highest risk category, which makes them subject to an EC Design Examination, a review of the design by a Notified Body, which will include a review of the clinical data for the device. Secondly, Directive 2007/47/EC strengthened the requirements for providing clinical evidence to support the use of medical devices. Under Directive 2007/47/EC all Class IIb implants and Class III devices should have a clinical investigation performed, unless there is a justification not to.

EU and USA have very different systems

The US and the EU operate very different regulatory systems. The European system, the principles of which are being adopted by other countries, such as Australia and Canada, are based on the conformance of the device to principles for safety and efficacy ('Essential Requirements'); many of the devices approved in the US are through predication to similar devices already on the market. The US systems is like setting speed limits, that rather than being based on safety balanced with the need to keep traffic moving, are based on how fast drivers have previously driven without crashing.

The US system is less considered to be less predictable and slower than the European system (Makower 'FDA Impact on US Medical Technology Innovation', Nov 2010). It is therefore no surprise that many manufacturers prefer to place devices on the market in Europe first, as predictability seems a more credible explanation than the assertion that it is because CE Marking is less stringent than FDA approval. In fact for total joint replacements in Europe, it is arguably rather more difficult now in Europe to gain approval, as in the US many of these devices are Class II and may be approved using the predicate route with a 510(k) application, whilst in Europe an EC Design Examination, including a review of clinical data is required.



What happens if they fail in the market?

That medical devices have been placed on the market and subsequently failed is clearly an issue. It is well accepted that quality cannot be inspected into a product, and that it is only through good design and testing practice that the performance of medical devices will be improved. It is therefore the responsibility of manufacturers to ensure the quality of their devices. The regulators have a role in holding manufacturers to account and placing appropriate barriers in place that will protect patients



whilst permitting innovation. Despite the device failures cited in the Dispatches programme, the vast majority of medical devices do perform as intended and major recalls for design issues are a rarity. The regulatory environment in Europe has recently been made more stringent with a greater emphasis placed on the need for clinical data.

Who wants to change the system?

There are a number of voices, including the British Medical Journal, calling for medical devices to be regulated in a similar manner to pharmaceuticals. This may not be feasible as the life-time of some medical devices are measured in decades, whilst pharmaceuticals in general are not prescribed continuously to a patient over the same period of time. Further, many aspects of medical device design are not novel and do not require clinical testing. Moreover the nature of medical devices is such that their performance can be demonstrated using relatively small numbers of devices, whilst pharmaceuticals are more susceptible to differences between patients' physiologies and so require much larger statistical samples to demonstrate their safety and efficacy.

A danger of unnecessary long-term clinical studies to prove devices would be a slowing of the pace of innovation, which would potentially deny patients new treatments. There clearly must be a balance between the benefits of innovation and risk; recent amendments to the regulations for medical devices has moved the balance and requires much greater levels of evidence before their wide-spread use.

Balanced review is required

In preparing clinical data report for a medical device, consideration must be given not only on data that is supportive of the device, but also any contrary findings. The Dispatches programme was one-sided, presenting only evidence that supported their proposition, which is something that medical device manufacturers cannot do.

For more information on medical devices and regulations contact

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Neil Buckley

Cocoa – Source of the world’s most loved flavour

Following his much-read and appreciated article on chocolate manufacture in the last newsletter, Graham Godfrey has kindly supplied this article on cocoa.

Introduction

Cocoa bean is the basis for the world's most loved flavour – chocolate – so its origins and a bit about its science is not only interesting but also has some general lessons on the importance of understanding traditional methods of primary crop treatment. The ways in which many crops are harvested and treated immediately post-harvest is often important to their value and utility and is equally often poorly understood.



Cocoa beans

This article focuses on flavour (and almost equally the reasons for some of the off-flavours) of Cocoa, but a related and interesting issue is the ability of the Cocoa to become red in tone when treated with alkali. This is important for industries which use Cocoa in bakery and beverage products and they in turn are important in absorbing the excess Cocoa powder arising from Chocolate production. Chocolate contains proportionately much more Cocoa fat than do Cocoa beans. Furthermore, the anthocyanins in Cocoa which give this “red potential” have recently become the focus of attention as potentially beneficial antioxidants and Chocolate products using this as a basis for health claims are starting to appear.



Growing Cocoa trees

The Cocoa tree converts a huge amount of energy from sunlight to chemical energy in the form of fat, each tree producing about a Kilogramme of cocoa butter in a typical season. For this reason it only grows well between the tropics and in environments where there is high rainfall and suitable soil quality. The trees are relatively small (up to about 3m high) and the flowers and therefore the pods grow directly on the trunk of the trees, with pods taking about three months to mature.

As a result of the climate in which it thrives Cocoa is vulnerable to insect and biological attack. The crop has to be monitored and sprayed regularly against pests, raising the cost of production for farmers and plantations, yet Cocoa still suffers from higher losses from disease and infestation than almost any other crop. Partly as a result of this but also because of labour costs, Cocoa production has become uneconomic in some areas which were previously major producers – for example Brazil was for many years a major producer and now imports most of its Cocoa because of disease. Organic Cocoa production on a large scale is a real challenge and although good plantation husbandry can help there is really no “organic” answer to the major diseases.



Flowers with young pod



Cocoa pods on a tree

Geographical areas for Cocoa

Cocoa originated in South America but is now grown throughout the tropical regions, with the largest tonnages coming from West Africa. Whilst good quality “bulk” Cocos are produced in Ghana, Nigeria and Cote d’Ivoire smaller tonnages of Cocos with unusual flavour profiles due to unusual primary processing techniques are produced in South America and some other locations. These are most often used in blends of beans which characterise the flavour of some branded products although “origin” chocolates have recently become more common.

The commercial base of Cocoa for Europe has always been West Africa, where particularly in Ghana and Nigeria it is essentially a social crop – harvesting and processing methods are determined by the social life of the village.

Processing

Traditional processes in those countries have given rise to the European preferred Ghana/Nigeria flavour completely by accident; if someone had first cultivated and grown Cocoa on estates in the Far East, then the preferred flavour of Cocoa and Chocolate in Europe would be quite different. For similar reasons, Cocos from South America have long been used in North America and have influenced what is perceived as “typical” flavour in that location. Surprisingly, the differences in flavour profiles from different locations are not caused mainly by fundamental differences in the bean on the tree (although there are some differences between Criollo and Forestaro Cocos). Rather, Cocoa flavour is heavily influenced by the way in which the Cocoa is harvested and subsequently processed to produce dry bean. This gives an interesting insight into how important primary processing is to the quality of many crops. Tea, coffee and vanilla are amongst other well-known crops where primary processing has a critical effect on flavour.



Traditional cocoa fermentatio

Taking Cocoa from the tree and simply drying it will give a product with little if any Cocoa flavour; it has to be fermented to develop the familiar flavour of Cocoa. In addition to fermentation, there are several other steps in the processing of raw Cocoa which influence both the strength and the character of the flavour of the end product.



When split, cocoa pods contain about 60 raw beans which are surrounded by a sugary pulp. Fermentation by natural yeasts removes this and produces heat and acid within the bean, developing flavour and killing the bean. The bean is then dried to produce a stable product.

Flavour from Africa and the Far East

The process used in West Africa for converting wet raw bean into dry Cocoa was never established deliberately, it arose from a convenient and socially orientated method of processing which suited the environment in Ghana. In other countries where Cocoa is grown in a different environment apparently slight variations to this process have significant effects on flavour. A major study in the Far East allowed some of these factors to be identified: West Africa Smallholder Far Eastern Plantation Pods picked individually when fully ripe. Fully ripe pods result in better flavour. Pods of a range of ripeness picked on a campaign basis. Pods stored until sufficient to split and make up a ferment. This storage period has a significant effect on flavour. Pods are all split immediately. The quantity involved appears to make storage impractical. Beans are fermented for about 5 days in small heaps. Beans are fermented in boxes for longer periods and frequently develop off flavours. Fermented beans are dried in the sun with frequent agitation. This process takes several days. Beans are dried quickly using hot air. Difference in drying has critical effects on quality.



Cocoa beans in the pod

West Africa Smallholder

Far Eastern Plantation

Pods picked individually when fully ripe.
Fully ripe pods result in better flavour.

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Beans are dried quickly using hot air.
Difference in drying has critical effects on quality.



Fermented wet bean



Traditional sun drying

Although a number of stages of the process are important, drying is the most readily explained. One of the most significant problems experienced with Coconuts is excessive acidity and extended fermentation is one of the ways in which an attempt is made to reduce this (others include pressing and washing raw bean to reduce the amount of pulp). However, when a freshly fermented Cocoa bean is cut open it contains a strongly acidic purple coloured liquid, and longer fermentation does nothing to reduce this acidity. Rather it is removal of the acid in the drying process which controls final acidity.

Drying – sun or hot air

The essential difference between sun drying and hot air drying is that in sun drying the shell of the bean remains hydrated until late in the process, whereas with artificial drying the shell is dehydrated rapidly. Retaining hydration of the shell has two important effects. First the liquid phase inside the bean migrates to the surface by liquid phase diffusion which means that non-volatile compounds such as acids are rapidly removed from the bean. If the shell dries rapidly, vapour phase diffusion




takes place and consequently acids are not removed from the bean and the resulting Cocoa will be acidic. Another important effect is that the hydrated shell will delay the ingress of air into the bean until late in the drying process thus reducing the degree of oxidation of the anthocyanins.

These and other insights have allowed “West African” flavour Cocoa to be produced in other locations, particularly the Far East, but in most situations commercial factors have prevented the practice from being widely adopted. However the science and technology behind the work is of value not just in the context of cocoa but also in demonstrating the importance of a proper understanding of the science behind traditional primary processing techniques

For the future

It would be regrettable if the diversity of cocoa and other similar crops were to be lost and that is extremely unlikely given the fractured and localised nature of Cocoa production, even within individual countries. Cocoas with different flavour characteristics have an important place in confectionery as they allow companies to produce products which are unique to them, in the same way that different coffees and teas give important individual identities to brands and products. Another benefit of understanding these and other primary processing techniques more thoroughly is the ability to eliminate flavours agreed to be undesirable and to switch major production centres long term in the event of disease, pests, political instability or even climate change significantly reducing the ability of one area to produce major tonnages in the traditional manner.

Note: The work in the Far East referred to is reported fully in a paper “Improvement of Malaysian Cocoa Bean Flavour by Modification of Harvesting, Fermentation and Drying Methods” – Duncan, Godfrey, Yap, Pettipher, and Tharumarajah published in “The Planter”, Kuala Lumpur, 1989

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Graham Godfrey

Romania – The sky’s the limit

Pioneering work in Romania

This is an account of Acumentia’s pioneering work in Romania’s food sector to develop profitable business of benefit to all concerned. Contacts made and experiences gained enable Acumentia to offer a unique platform of support from which clients at either end of the supply chain can create new business opportunities. Contact Alan.Robertshaw@Acumentia.com for intimate details.

Land of opportunity



Romania’s position in Europe

Romania is home to 22 million EU citizens, with an economy one tenth of the UK’s. It has a noble history, of which it is justifiably proud, and the people are steadily regaining their natural talent for business and pleasure after two generations of totalitarian rule ended in 1989. The future is very bright for Romanians and for anyone else willing to engage with the process and steer a way through the challenges, of which there are many.

Support from the EU, plus capital investment from elsewhere, have made improvements possible to the Romanian infrastructure, though more are needed. Spontaneous effort from within to bring standards of living closer to those in western Europe have made positive headway and the results can be seen in increased international trade, notwithstanding current global economic conditions. The re-emergence of a middle class makes the domestic market increasingly valuable. Romania’s benign climate, its spectacular geography and its resources of crude oil and fertile land will go a long way towards optimising its share of global wealth. German, Italian, Hungarian and Austrian trade dominates the import/export markets, where bioscience businesses play their part. The contribution from other nations remains modest and balanced mostly in favour of Romania. However, nothing stands still and, with so much continuing need for the country to rationalise and modernise its productive capacity and open new markets, opportunities are legion. That’s where Acumentia is doing its bit.



Alan Robertshaw with UK Trade Mission at the Royal Palace in Bucharest

Acumentia's work with individual companies

All business involves trade and, to release the energies that consultancy can bring, Acumentia in Romania has sought out individual companies with good products to sell. By linking these companies with the markets they wish to develop we have been able to establish the rapport essential to creating new, more profitable products and healthy, on-going business. We've also brought suppliers of materials and equipment together with Romanian companies, stimulating growth all round. Here are two examples.

Wine from the Carpathian foothills

Post-communist reform gave land back to private smallholders whose families originally owned it. In the Carpathian foothills to the North East of Romania this has often meant a small vineyard, plus the space to subsist on simple fare. It only works well for those who are happy with subsisting, and not many are, so they seek ways of making better economic use of their property.



Laurentiu Teodorescu, a Bucharest architect with one such smallholding, approached Acumentia for help with upgrading the product of his Roman-origin vines and selling it onto the global market. Roman or not, the wine, as made, was really only palatable to the local village folk and so work began, knowing that wine from other regions of the country enjoy good popularity around Europe.

At Laurentiu's vineyard in NE Romania

Acumentia is fortunate in having its own wine marketing expert in Roddy Kane (Roddy.Kane@Acumentia.com) and, with Laurentiu's newly-created company, we prepared a business plan involving capital investment, support from other growers in the area, selecting the best grape varieties, building new premises and installing new equipment. We are now 3 years into the project and progress has been right on target. We expect the first fully commercial vintage of a "point of difference" classic from the 2012 season's harvest to tackle the competitive UK market. We shall later tackle the Russian market, for which the more established Romanian wines have long been a favourite.

Fruit and vegetable products to the world

Romania is a net exporter of fresh fruit and vegetables and is largely self-sufficient in products manufactured from these sources. However, the manufacturing sector is dominated by small, old and inefficient canning plants. The sector serves the domestic market well but is shrinking as public taste veers towards more sophisticated, imported products. The retail sector itself has fast become dominated by companies shifting towards higher profit-margin goods and, as in Western Europe, it means steadily less shelf space available for traditional canned products.



Mostly Romanian-grown



Retail Power – One of 80 French Carrefour stores in Romania

Art and agriculture in Bucharest

Good advice from Acumentia

How to handle this? Acumentia first engaged with the Romanian Ministry of Agriculture and the country's fruit and vegetable manufacturing industry body "Romconserv", both of whom were well aware of the problems and eager to find positive ways forward once EU membership became a reality in January 2007.

Three companies emerged wanting to understand West European expectations well enough to make good investment decisions. Acumentia was able to help them all and is now in process of helping them further on:

- Factory certification to international quality standards
- Development of product ranges
- Marketing and Sales to the Retail and Food Service Trades

We acknowledge invaluable support in our early endeavours from various sources, not the least of which are:

- UK Trade and Investment www.ukti.gov.uk and the British Embassy staff in [Bucharest www.fco.gov.uk](http://Bucharest.fco.gov.uk)
- The British Romanian Chamber of Commerce, www.bbrc.co.uk
- Jon Cernivcean at the Romanian Embassy, London.

Watch out for news of Acumentia's activities in Bulgaria and in the Baltic States.

Contact Alan.Robertshaw@Acumentia.com. Alan is a member of the Acumentia Business Development Team 

The taste of success – Sensory evaluation

What is sensory evaluation?

Sensory evaluation is a scientific discipline which uses people's perceptions to understand, develop, and optimise products. The core concept behind sensory evaluation is that the sensory attributes of a product, the appearance, the feel or texture, the sound, the smell, and the taste and flavour, can be measured, monitored, and designed. These sensory properties are important because although branding and packaging may motivate consumers to try a new product for the first time, the actual performance against expectations will govern whether they decide to buy it again.



Human panels are essential

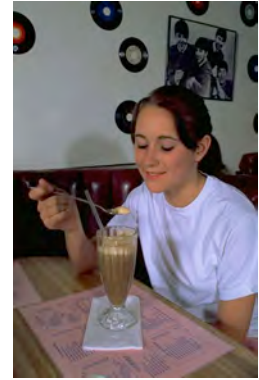
Human panels are ideal tools to help with the process of developing products with optimal sensory properties. People can be as sensitive as analytical instruments – for example we can detect some odour compounds down to parts per billion levels. Individuals can be trained to evaluate stimuli following a given procedure and produce reliable feedback. Carefully designed experiments can also allow product developers to understand consumer liking and acceptance of products without bias from branding or packaging.

Sensory evaluation has become an important tool for food and drink manufacturers, as well as flavour and ingredient suppliers. Non-food applications for sensory evaluation are also developing, including personal-care products, home-care products and clothing. There are even sensory analysts now working to support the automotive and telecommunications industries.



Experts or consumers

In sensory evaluations two types of assessors are used: selected assessors who carry out objective/ analytical evaluations and consumers who give hedonic feedback which is collected in a controlled and objective mode. Assessors for objective evaluations are usually screened for sensory acuity, familiarised with test methods, and trained to recognise, describe and reliably report on particular perceptions. Consumers are chosen for their demographic characteristics and/or product usage trends, and are usually only familiarised with test procedures.



Sensory analysts believe that the best way to receive objective feedback about sensory attributes of products is from a trained panel, while the best way to understand liking of these attributes is from obtaining feedback from unbiased consumers. Trained panellists can no longer give spontaneous acceptance information as they will be affected by their extensive experience, while untrained consumers often cannot communicate reliable/consensual information about sensory attributes of products, although they usually know what they do and don't like. Combining information from the two is the best way forward to developing product insight.

Core methods

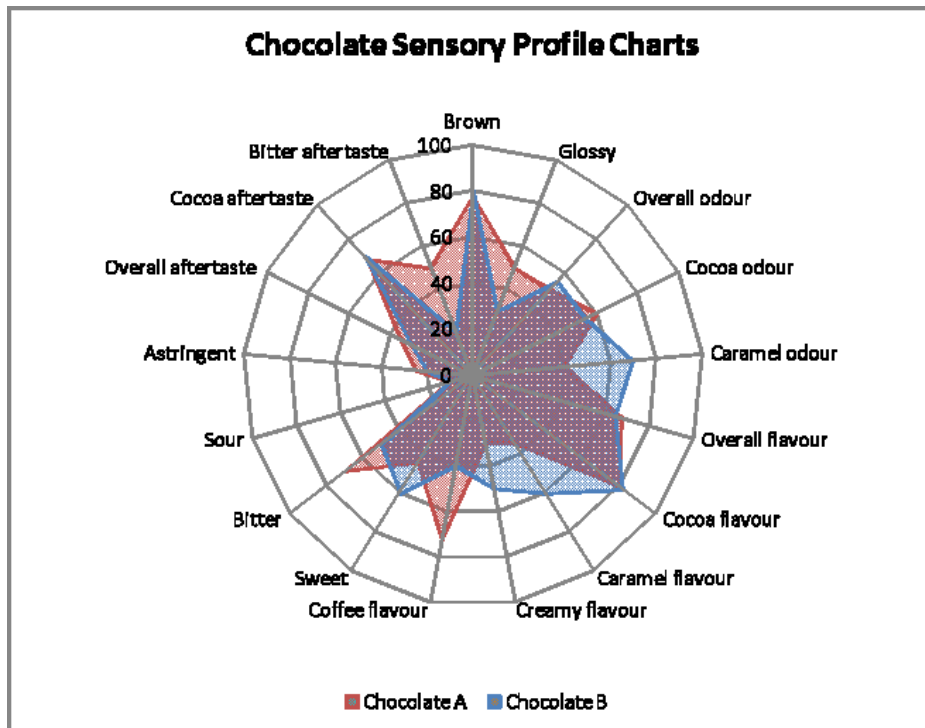
Three key types of tests provide the basis for most sensory evaluation projects:

Is there a difference?

Objective panels can participate in tests that provide information about whether there is difference between two products. These tests are called discrimination tests and are often carried out to aid in reformulations and for quality control type applications. Sensory discrimination tests have been adapted from psychophysical methods, and use statistical and perceptual models to determine whether a perceivable difference exists or not.

What is it like?

Using descriptive techniques, small panels of trained assessors qualitatively and quantitatively describe products. The process usually involves presentation of a range of samples from the product 'universe', development of an agreed product vocabulary, and rating of products of interest with respect to the agreed product descriptors. The outcome is product profiles and comparisons of these. Applications of descriptive techniques include benchmarking, market evaluations, and new product development.



Chocolate A is glossier and has a more bitter and coffee and a less sweet character than Chocolate B. Chocolate B is sweeter and has a more caramel/creamy character than Chocolate A.



Do you like it?

Consumer sensory assessment is used to obtain preference or liking scores of unbranded products. These liking scores can be combined with descriptive data to gain an understanding of key preference drivers and/or to define consumer segments based on sensory preferences. Preference modelling can be a powerful tool for product development and marketing or promotion.

Hot topics

Several interesting areas involving sensory evaluation are receiving a lot of attention at the moment:

- Multisensory branding (e.g. as discussed in Brand Sense by Martin Lindstrom) has become a new goal for engaging consumers. Sensory evaluation can help to understand and develop sensory touch points across modalities that ensure the product will stand out against competitors.
- Sensory evaluation is a key tool in developing successful 'healthy' food reformulations. Many reduced calorie, sugar, fat and/or salt products never have a chance because their sensory profiles are so far from what is expected. Using sensory evaluation to understand ingredient and product profile and performance can help create a healthy and good tasting offering.

Conclusions

Sensory evaluation is an important tool within the product development/consumer insight chain. Successful companies are using sensory techniques for a range of applications and across many sectors. Only by implementing sensory evaluation in conjunction with a range of other tools (e.g. market research, analytical testing, etc.) does a company gain real insight and understanding of a product and its target consumers.

About Carol Raithatha


Carol Raithatha is the director of Carol Raithatha Limited, a UK-based consultancy specialising in sensory evaluation, consumer research, and food and drink research (www.carolraithatha.co.uk). Project types are varied and can include development of procedures and guidelines, concept and new product development, quality issues and management systems, and desk and business to business research. Carol applies a range of sensory, consumer and market research techniques, as well as relevant marketing and management models when applicable.

Workshop on sensory aspects and techniques in 'healthy' food reformulation

Carol Raithatha Limited will be running a targeted workshop for sensory and consumer professionals on July 15 at SCI in London. The workshop will examine sensory aspects and techniques within the context of healthy food reformulations



(such as fat, sugar, and salt reduction). What are the sensory aspects of new ingredients? What are some of the relevant sensory techniques and when are they applicable? What is the latest thinking on background issues such as taste perception, genetics, etc.?

For more information please see <http://www.carolraithatha.co.uk/Sensory%20Aspects%20and%20Techniques%20in%20'Healthy'%20Food%20Reformulation.pdf> or contact Carol.Raithatha@Acumentia.com 

Carol Raithatha

Biomass alternatives for fuel – Scotch whisky initiative

Bill Crosson reports from Glasgow.

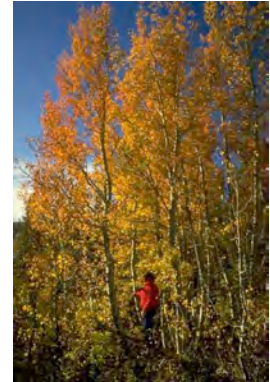
Collaborative meeting on biomass-based alternatives to conventional fuels

On 25th February, The Institute of Brewing and Distilling (IBD) Scottish section organised an interesting seminar on biomass-based alternatives to conventional fuel sources, supported by the Scotch Whisky Association, Scottish Enterprise, Scottish Funding Council, Heriot-Watt University, and the Environmental Sustainability KTN.



Overview

Rebecca Carr from the Forestry Commission opened the session with an overview of the availability of woody biomass in Scotland and its main use as a source of heat. She outlined policy and sustainability criteria and gave an indication that the resource was estimated at 7million Oven-Dried-Tons (ODT) in 2008. She broke down the sources and indicated an under-utilisation of current resource but raised the questions of whether fuel use was the best option, and if so are we using it efficiently. Demand at 2.9 m ODT is rising but there is a disparity between what is in development and what is proposed. There is a compromise to be made between sustainability and competition for resource.



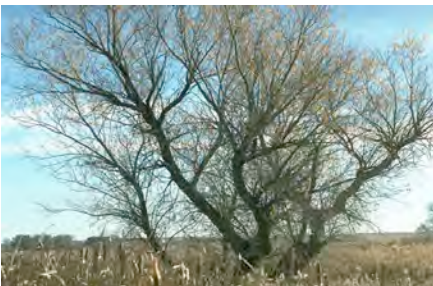
Synergies

Nigel Holmes from International Synergies talked about the variety of options covering arboricultural arisings and symbiotic industrial arrangements where one company uses the spent material from another industry, for example the use of spent grain and pot ale from the whisky industry for agricultural purposes. Avoidance of useful material going to landfill was the main theme. He said that we must use resources once we have them, but it's not easy and successes are limited in matching heat providers with heat users.

Case study at Edrington

Graham MacWilliam from Edrington Distillers outlined Rothes Distillers' experience explaining how they had offset the use of electricity by the use of their biomass and how they had decoupled from fluctuations in energy cost by following this route producing predictability in energy costs and reduced emissions. He also outlined their experience with anaerobic digestion and the multiple challenges it produced including planning permissions, funding and the regulatory definition of "waste".

Boiler options



Marcel Rossler and Joe O'Carroll from Schmidt AG and Hardware Options covered the types of facilities currently available for boilers and some of the considerations to be made when thinking about fuel systems, such as site, shape of heat load and fuel type options. It was emphasised that the whole system had to be considered and it had to be integrated into the operation properly. Biomass boilers have a slightly slow response time and are designed to work at 50 to 100% capacity. They are best at dealing with base loads with supplementary systems to deal with peak demands if required.

Regulatory and legal aspects

Eric McRory from SEPA covered some of the regulatory aspects and outlined the need to talk early to planning officials and take their concerns into consideration. He reviewed mixed technologies and emphasised compliance with the terms of any permit and control of emissions. Approval is always site-specific. What is done, how much is done and why it is done impact on any decision and a justification for the scheme must be supplied.



Finally, Laura Tavish from Davidson Chalmers covered some of the legal aspects and emphasised the need for specialist legal advice when considering projects. Biomass is legally complex and while there are fiscal incentives, quick action may be needed to make the best of them.

Bill Crosson

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Health from food – Progress and prospects



Lindsey Bagley



Dave Baines

On 5 May Acumentia jointly presented a sell-out conference with Thames Valley Innovation and Growth Ltd in Reading entitled **Health from food – Progress and prospects**. The paradigm for the meeting was Hippocrates's quote "Let food be thy medicine". Research conducted among food scientists has shown that there is more to the foods we eat than was understood just a couple decades ago. The medical benefits of various foods and food components should not be a surprise to us as many therapeutic compounds were first identified from botanical studies. However 'functional foods' in today's market place have carved out a solid market share as consumers see that diet, and in particular natural extracts, can provide positive health benefits.

The Acumentia speakers were Lindsey Bagley on **Ingredients for Health** and Dave Baines on **The Taste Factor**.

Prof Bob Rastall, Head of Department, Food & Nutritional Sciences, University of Reading gave an overview of the development of a novel galacto-oligosaccharide prebiotic ingredient from the initial concept through to its implementation as a consumer product. He evaluated the science behind its health attributes and looked to the future of prebiotic food ingredients in a difficult regulatory environment.

For more details contact Lindsey.Bagley@Acumentia.com.

Lindsey is a member of the Acumentia Business Development Group. 

IFST/SFDF/REHIS – Symposium in Dundee

In spite of the bad weather for the second year in a row, the symposium on May 24th went ahead and had an excellent turn out. Over 90 people were in attendance from a wide variety of interests and the organisers were delighted with the enthusiasm shown for this event. Acumentia's Bill Crosson was the driving force behind the meeting. It was the 9th year that this joint symposium has been held and it is a tribute to the co-operation and sharing of interests and objectives of the different organisations involved that makes it such a success.

This year's topic was Your food – Your health – Your industry: Working together for change. As the title suggests, it is only through working together in pursuit of a common goal that success can be achieved. Professor Graeme Millar chaired the event and presentations came from Fergus Millan of the Scottish Government, Owen Warnock from Eversheds LLP commenting on Labelling, Jane Landon DCE of the National Heart Forum, Melanie Leech from the Food and Drink Federation, Dr Sue Gatenby from PepsiCo Europe, Calum MacGregor of Robert Wiseman Dairies, Dr Dominic King, co-author of MINDSPACE, Professor Alan Miller from Heriot-Watt University and Sandy McDougall from the Food Standards Agency Scotland.

Presentations

The presentations can be followed in detail at www.sfdf.org.uk under the heading of the 2011 Conference. For those of you who are interested in the idea of influencing consumers or population groups, take a look at the presentation by Dr Dominic King outlining what can be achieved by the "nudge" approach. It is an excellent and fascinating insight into what we are, or could be, subjected to.



Where there's a will, there's a way

Some pictures of the event are included for those who want to see just how strong the wind was during the day. The poor weather also forced some of the speakers who had missed their travel connections to make their presentations over the internet on Skype. This produced some interesting problems for the organisers but only went to prove that success can be achieved if there is a will to succeed. Those who were there had an excellent day and enjoyed the networking opportunity. Have a look at what happened and make your plans to be there for next year's event.

For more information email Bill.Crosson@Acumentia.com 

Conference on global food supply chain – A public health perspective



First announcement of the conference

Acumentia and the Royal Society for Public Health jointly announce a conference they have organised for 30th November at 28 Portland Place, London.

This conference, the first in a series on the viability of the global food supply chain addresses issues requiring solutions now. Speakers are internationally prominent in their own fields and influential in the overall debate, and delegates from all points in the supply chain will benefit from the meeting's clear messages for strategic planning.

Programme

The conference will cover:

- Local production vs. import of food in the context of energy, trade and consumer sensitivity
- Concentration of power among global manufacturers, shippers and retailers.
- Limits governing consumer ability to influence food supplies.

The Chair will be Professor Richard Parish, Chief Executive, RSPH, and the topics and invited speakers are as follows:

- A government minister – Realpolitic
- John Parker, Globalisation Editor, The Economist, London – Global trading in food commodities
- Christine Farnish, Chair, Consumer Focus and Prof. Chris Ritson, University of Newcastle and adviser to the government – Consumer choice: Who leads? What follows? Ethical constraints
- A senior speaker from Nestlé UK – Manufacturing: benefits and challenges of size
- François Bertreau, President Director General, Norbert Dentressangle SA – Logistics in retail


There will be a discussion forum at the end of the afternoon.

The delegate fee is £250 + VAT. Applications for places can be made on www.rsph.org.uk or by contacting Alan.Robertshaw@Acumentia.com.

Promotional opportunities

Opportunities remain for commercial sponsorship at the event, for example, sponsoring the delegate packs, refreshments, etc; there will be opportunity for sponsors to display posters and commercial materials. Please discuss with Alan Robertshaw.

Further conferences in the Annual Global Food Supply Chain series will include up-to-the minute assessments of:

- Climatic and demographic influences
- Natural catastrophes and political conflicts
- Economic distortions and world trade anomalies
- Growing needs of emerging economies 




Alan Robertshaw



IPC 2011 conference – Pen & Tec Consulting contribution

The International Scientific Conference on Probiotics and Prebiotics – IPC2011 was held June 14-16, in the university city of Kosice, Slovakia. IPC2011 was the next event in the successful conference series focusing on probiotics that has taken place in 2000, 2004, 2008, and 2010. The scientific programme focused on current advances in the research, production and use of probiotics and prebiotics with particular focus on their role in maintaining health and preventing diseases. Acumentia member Pen & Tec was one of the sponsors of the Conference <http://www.probiotic-conference.net/Conference>


Pen & Tec Consulting were also in attendance at the latest Vitafoods 2011 Conference in Geneva, connecting and keeping up to date with latest academic and commercial research & product development information, essential in food regulatory affairs. <http://www.vitafoods.eu.com/>

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Dr Elinor McCartney of Pen & Tec

Global Harmonization Initiative – update and newsletter

The Global Harmonization Initiative, which seeks to make food importing and exporting easier across the world, and to reduce waste, has published its second newsletter at http://www.globalharmonization.net/newsletter_issue_2. 

Acumentia Annual conference – Oxford in September



Acumentia’s annual conference in Oxford on 7-8th September will follow the themes of scientific excellence and the consultant-client relationship. We welcome new applications for membership from consultants in the bioscience sector, and invite offers from potential speakers interested to meet and interact with our members. 



Acumentia Consulting Ltd is a collaborative, multidisciplinary association of 40 senior bioscience consultants who share common business strategies and ethics, working to a stated Code of Practice. The members' business skills cover a very wide range of activities which are detailed on the website www.Acumentia.com. Building on 16 years' experience of operating as a consultants' network, Acumentia calls on a large number of experienced people with a great breadth of in-depth knowledge, to work with clients as solo consultants or teams. All members have their own industrial and academic networks, which together make up a network of networks.

This is the thirteenth in a series of newsletters keeping you up to date with developments at Acumentia.

Your feedback would be greatly appreciated!

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