



The Public Analyst Service-Resilience Through Food Forensics, Essential Post EU Exit

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Last Presentation at the at the 2016 GC Conference

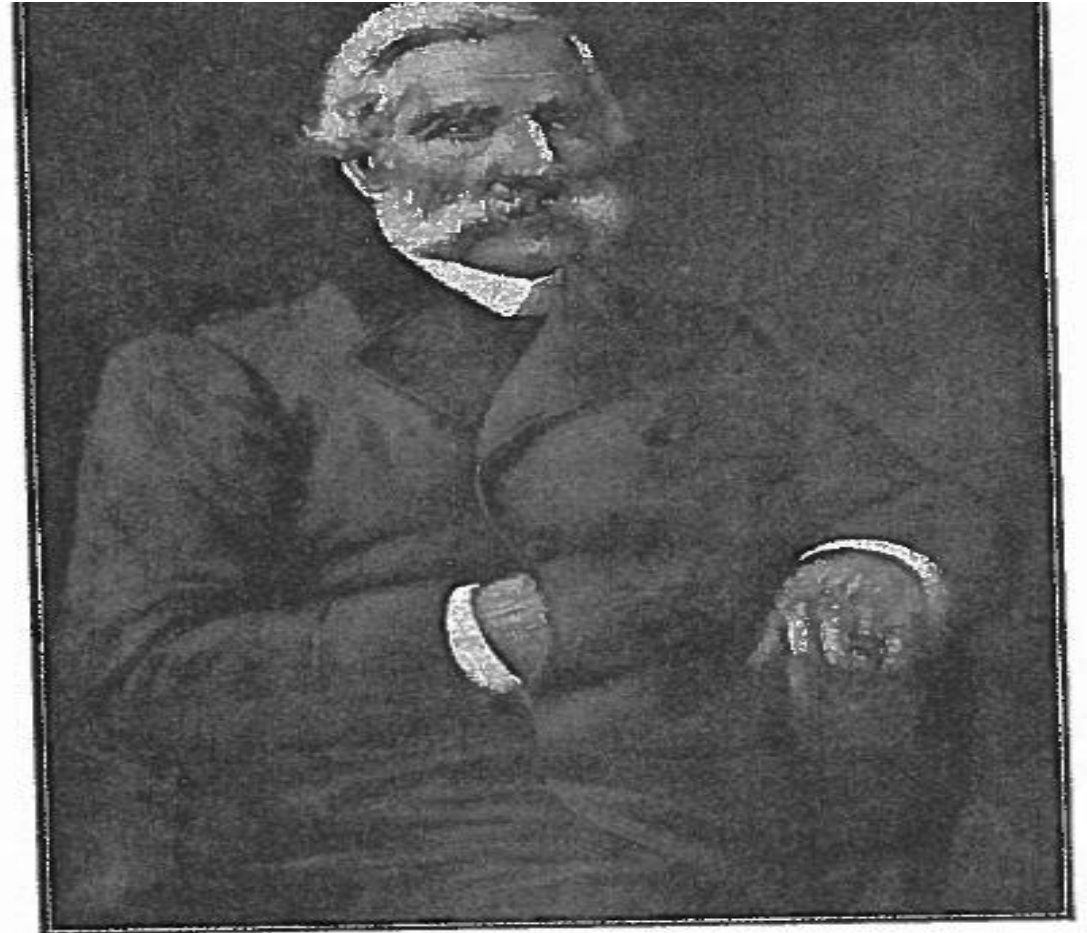


- The title was “The Public Analyst Service-shaping its Future”
- So we will take a look at where we are now two years on
- How we are moving forward
- What resilience (and expertise) the service can offer in terms of food and feed analysis and enforcement as we move forward from 2019.

Brief History



- In the 1800s, The Lancet published articles highlighting grim stories of food adulteration and from this the 'Lancet Analytical Society' was formed which was controlled by Dr Arthur Hill Hassall (Physician) who carried out investigations and is considered to be the first Food Analyst.



DR. ARTHUR HILL HASSALL

Brief History (cont.)



- Reports were published in The Lancet and vendors were 'named and shamed' which had the effect of reducing food adulteration.
- In 1855, a parliamentary committee was set up to further investigate food adulteration.
- 1860- "An Act for the Prevention of the Adulteration of Articles of Food or Drink" was published and it was illegal to sell adulterated food and drink
- Investigation to be carried out by an unbiased authority, complaints assessed and Analysts appointed to do this.
- Chemists carried out systematic studies and set up methods. The Society of Public Analysts was set up applying standards for analytical food chemistry and the training of chemists to carry out the work.
- The Association of Public Analysts set up in 1954.

So where are we now?



- ENGLAND: Four local authority laboratories- Hampshire, Kent, Lancashire and Worcestershire.
- One private laboratory service (Public Analyst Scientific Services) with two sites (Hull and Wolverhampton)
- SCOTLAND: Four local authority laboratories (Aberdeen, Edinburgh, Glasgow and Tayside).
- WALES: One private laboratory service (Minton, Treharne & Davies Ltd, Llanelli, Cardiff and Camarthen)
- Twenty eight (28*) appointed Public Analysts in ten (8) local authority and two (2) private laboratory services- Seventeen (17) in England, four (4) in Wales and seven (7) in Scotland.
- *Four new MChemA holders in the last two years.

UK MAPS



2016



2018



The Local Authority Laboratories



- The four Local Authority Public Analyst Laboratories in England are currently working in partnership.
- Termed ALAPAL (Association of Local Authority Public Analyst Laboratories)



- Meeting the Elliott Review recommendation, accepted by the Government, that “A public sector ‘spine’ to laboratory provision for food testing would create a resilient, competitive service...offering considerable added value..leading to the Service working alongside the private sector provision”.
- Consideration of future discussions with laboratories in Scotland
- Both Private and LA laboratories must and are working together to ensure resilience and capacity

The Guardian-May 2018



- “Food Standards could be put at risk by Brexit if the UK quits the EU without a deal to keep exchanging information on Public Health issues..the UK is part of a framework that ensures the traceability of high risk products and provides rapid access to intelligence. Council regulators need to retain access to such information so they can target their enforcement activity and protect public health” (*The Local Government Association*).

Intel Information



Monthly failed samples intelligence report

August 2017



Food - Retail

Brief description of sample	Nature of failure
Cereal biscuits with vitamins and minerals	Excess acrylamide
Kuli Kuli (peanut based snack)	Aflatoxin
Frozen kaffir lime leaves	Pesticide
Savoury stilton + sweet fig cheese	Low fat & energy declaration
Amaretto flavoured liqueur	Low in alcohol
1 X spring rolls (mixed veg)	Peanut allergen present
Sweet & Sour Chicken- No Egg	Egg allergen present
Sweet & Sour Chicken- No Egg	Non permitted colours present
Lamb Tikka <u>Massala</u>	Peanut allergen
Chicken Korma	Peanut allergen
Chicken Korma	Peanut allergen
Pork sausages	High in salt (37 samples)
Dried anchovies	Expired best before date, high TVB
Shredded squid premium quality	Expired best before date, high TVB
Chicken Tikka <u>Massala</u> - no peanut	Peanut allergen
Lamb and mint sausages with rusk	undeclared allergen- gluten
Kai <u>siam</u> special - chicken with cashew nuts	undeclared allergen - peanut

Food – Import

Green tea	Pesticide
Groundnuts	Aflatoxin
Catfish	Excess <u>nitrofurazone</u>

Assistance with focussed sampling



A Claim For The Good F17L

Hampshire & Kent Scientific Services

A Claim for the Good
Campaign F17L



Kent Scientific Services

A claim for the good
PROJECT PROTOCOL

PROJECT CODE: F17L

Greenstreet berman risk rating: Score = 130 (High Risk)

Hampshire Scientific Service
Hyde Park Road
Southsea
Hampshire
PO5 4LL

Kent Scientific Services
8 Abbey Wood Road
Kings Hill
West Malling
Kent ME19 4YT



Successful prosecution against man who claimed to cure cancer with food.



Worcestershire Public Analyst, Paul Hancock, on behalf of London Borough of Camden Trading Standards, provided analysis and expert opinion to assist in the conviction of Errol Denton.

Mr Denton claimed to be able to cure a number of diseases including cancer, with just a simple blood test and change to diet. Mr Denton also suggested the use of a colloidal silver preparation in his 'treatments', which he claimed to contain 400ppm silver, that actually contained less than 3ppm.

Giving evidence at Blackfriars Crown Court, Mr Hancock provided the court with sufficient information for the jury to convict Mr Denton on a range of offences, resulting in a fine of £2250, costs of £15000 and the placing of a criminal behaviour order.

Successful prosecution after APA Lab finds harmful levels of Hydrogen Peroxide in tooth whitener



A father and son have been jailed for selling unsafe teeth whitening products after being prosecuted by Powys County Council.

John Barry Hargreaves and son Matthew Hargreaves were sentenced to 18 months each at Merthyr Tydfil Crown Court on Friday (16 September). The sentence comes after a three-year nationwide investigation led by the council's Trading Standards Service, with the co-operation of the General Dentist Council (GDC).

The father and son, from Southwood, Mereside, Knutsford, were convicted of running a fraudulent business under Section 9 of the Fraud Act 2006. Between October 2012 and July 2015, they used dishonest practices in making false claims about the teeth whitening products and making false claims about which company was selling the products at events throughout the United Kingdom.

Outcomes-www.publicanalyst.com



Takeaway Owner Jailed for Six Years

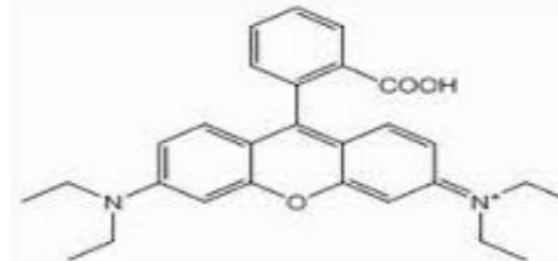


In a landmark verdict Indian takeaway owner Mohammed Zaman who “put profit before safety” was given 6 years for corporate manslaughter due to gross negligence and six food safety act offences following the death of Paul Wilson who was a peanut allergy sufferer.

Mr Zaman, owner of the Indian Garden, in Easingwold, North Yorkshire, was charged following the death of Paul Wilson, who suffered a severe anaphylactic shock at his home in Helperby, near Thirsk, in January 2014.

The meal served to Mr Wilson included a chicken tikka masala the sauce of which was thickened with powdered peanut. Other components of the meal were also contaminated. The evidence of Public Analyst Dr Duncan Campbell who oversaw the analysis of the meal and related samples was agreed by the prosecution. Dr Campbell commended during an interview broadcast on the BBC TV’s regional news programme Look North “To a person with a severe allergy a tiny amount can be fatal – a single peanut is enough to cause a severe reaction in up to 25 people. The sauce of Paul Wilson’s meal was thickened with peanut powder and less than a teaspoonful would have proved fatal.”

Another Prosecution for the use of Rhodamine B in Food



Structure of Rhodamine B

Javid Iqbal the owner of La Jawab, a Luton based business was found guilty of an offence under Regulation 3 of the Food Additives, Flavourings, Enzymes and Extraction Solvents (England) Regulations 2013 by placing food on the market containing Rhodamine B, an unauthorised additive. Iqbal was fined £3,000, ordered to pay £2,200 prosecution costs and to pay £100 victim surcharge at Leeds Magistrates court on 15th December 2015.

Rhodamine B appears green in powder form but when dissolved in water turns a vivid fluorescent pink colour. It finds many legitimate uses in science and industry. But it is not a permitted food additive in the EU. EFSA consider it to be potentially both carcinogenic and genotoxic.

The issue came to light as part of routine sampling work conducted by Officers from the West Yorkshire Trading Standards Service. They sampled sugar coated fennel seeds from premises in Leeds and Calderdale. Upon testing by the Public Analyst it was discovered that the pink collating on some seeds contained Rhodamine B. Investigations revealed that these had been imported by La Jawab and that no testing had been carried out to ensure their compliance with EU legislation.

Outcomes- www.publicanalyst.com



Landmark Health Claims Prosecution



Heavy penalty after Public Analysts highlight 149 illegal claims.

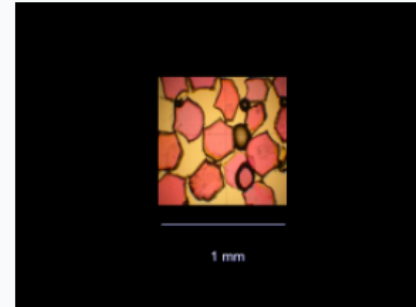
In October this year the company Well-Beeing UK Limited and its sole director Mr Paul Southern pleaded guilty to nine offences under the Nutrition and Health Claim Regulations in relation to the sale of Royal Jelly in a prosecution taken by Trafford Council backed by Public Analysts in Staffordshire and Lancashire.

The prosecution is thought to be the first of its kind in Europe.

Mr Southern received a sentence of 8 months custody suspended for 12 months, plus 250 hours community service for offences. He was also fined £300 fine per offence (£2700) for the Company. Trafford were awarded £800 costs.

The Barrister representing Trafford stated that this was a very harsh sentence. Their [website](#) has links to newspaper reports on the case.

Edible Glitter Trial



The company sold decorative glitter, meant for use on greetings cards, to sugar craft suppliers and cake shops in such a way as to make them believe it was suitable for consumption. The Court heard how cake business were misled into believing the products could be eaten, and the cake business, in turn produced glittered cupcakes coated with these tiny pieces of shredded plastic and sold them to the public.

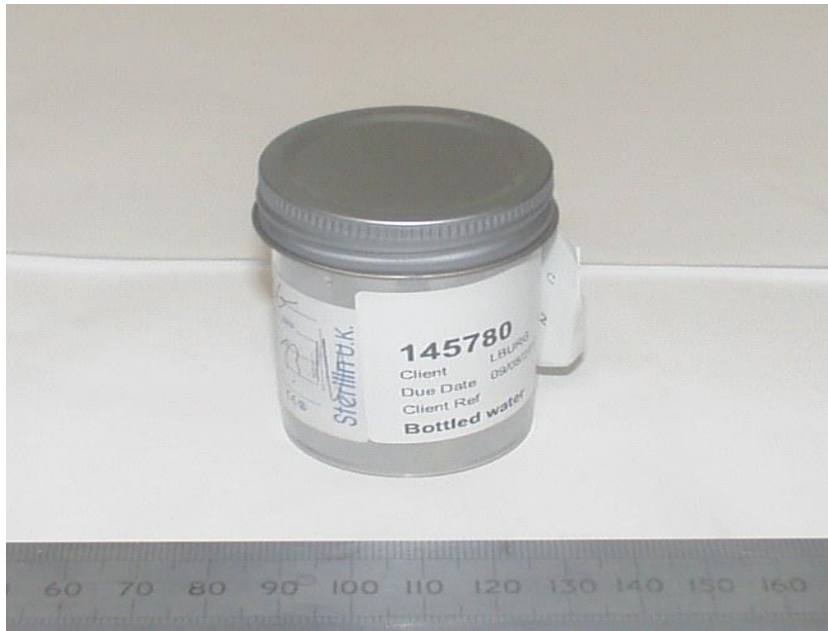
The plastic material used, polyethylene terephthalate is commonly used in mineral water bottles, In this case it was manufactured as craft material, and as such its effect on the human digestive system is unknown. It should NOT be eaten.

EdAble Art Ltd ignored repeated advice from its local Trading Standards department in Durham and continued to misleadingly market the glitter as edible. The Court heard that the name of the business was derived from the names of three animated mice characters called Ed, Able and Art!

Offences were brought under the Food Safety Act 1990 for supplying a food not of the nature demanded in that it consisted of polyester plastic film, the Food Additives (England) Regulations 2009 for supplying a non-approved Food Additive, The General Food Regulations 2004 for failure to supply information to the local authority and the Companies Act 2006 for failure to disclose company information. The defended case took three days to hear due to the number of witnesses and the complex legal arguments involved. As well as giving crucial expert evidence Public Analyst Chris Hunt guided the prosecution solicitor through the complex legal issues involved.



- Support to the Public and business



Training- for future resilience



- Our Training Officer (Michael Walker) facilitates and organises the Reading Training course as well as organising other training events for Public Analysts and trainees in partnership with our training committee.
- Training guides and resources are made available on the APA website to assist MChemA students to progress.
- Still a considerable number of MChemA trainees active. One at the final part C stage in 2018 and at least three sitting the part B.
- But, with lab closures, the pool to draw from is greatly reduced raising concerns.

But on further positive notes....



- The APA Educational Trust continues to support the continuing professional development of members (and have funded the attendance of Public Analysts to this event again) and financially supports the MChemA trainees at events wherever possible.
- The APA is still liaising with the Institute of Food Science and Technology through joint members allowing Public Analysts and trainees to attend food business visits.
- The National reference Laboratories also continue to support the Public Analyst Laboratories (Official Control Laboratories) through workshops and training days at no charge. They have also assisted OCLs with method development ensuring they are sufficiently robust to meet legal requirements.
- DEFRA continue to support training through knowledge transfer events with no charge to the laboratories and the FSA will continue part funding of the Reading residential allowing time for alternative sources of funding to be sought.

Changes to the profession



- Articles amended to permit scientific staff in National Reference laboratories and food examiners becoming members of the Association of Public Analysts.
- Articles also amended to permit non-scientific senior staff in Official Control laboratories becoming members of the Association of Public Analysts
- This will hopefully allow an even closer working relationship between OCLs and NRLs to ensure further resilience with regard to food and feed safety as we move forward.
- Extension of the membership further?

Post Brexit and effects on the service?



- Questions will be asked:
- Is there resilience in the service to meet the demands post Brexit
- Is there laboratory capacity?
- Too many unknowns?
- There is a need to prepare. One outcome is likely to be pressures at ports of entry and increased stop and check. Possibly also transshipment of goods through the UK before movement into the EU or vice versa during any transition period.
- Risk based interception of samples. Use of AEO status to move goods.
- The FSA will be reviewing the Official Control Laboratory network. This needs to take place quickly!
- Both the public and private sector laboratories should be engaged in any discussions
- Working relationship between OCLs and NRLs to ensure food and feed safety from 2019 and beyond-method development, trial and validation.
-



So the future?



- The Public Analyst Service has the experience, equipment and robust forensic methodology in place. Referee cases inevitably agree with enforcement results.
- Public Laboratories have to work together but there must be support to allow this to flourish.
- A close working partnership with the private sector laboratories is essential to ensure a wide scope of Accredited testing is available for enforcement purposes
- Regulating our Future – impact on enforcement? Closer working with the the commercial sector to including methodology review and focus of testing.

Final Thoughts



- There is a good system in place which does not need to be changed but requires funding
- Surveillance of the food and feed industry cannot be carried out without taking samples.
- Tools in place to ensure continued information exchange and risk assessment post Brexit
- Hold and support what enforcement capacity we have and move on. We can't afford to lose further lab capacity and continue to ensure scientific resilience.

THANK YOU



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