

Technical Committee for Juice and Juice Products

MINUTES FROM THE MEETING HELD June 14, 2011 in Bonita Springs, FL

Attending:

NAME	E-MAIL ADDRESS	ORGANIZATION
Prabhakar Kasturi	Prabhakar_Kasturi@quakeroats.com	Pepsico/Quaker Oats
Allen Mitchell	Allen.mitchell@citrusworld.com	Florida's Natural
Dana Krueger	dkrueger@kfl.com	Krueger Labs
David Cunningham	dcunningham@oceanspray.com	Ocean Spray
David Hammond	DavidHammond@eurofins.com	Eurofins
Filomena Valim	fvalim@citrus.state.fl.us	Florida Dept of Citrus
Karen Barnes	Karen.barnes@rd.nestle.com	Nestle Nutrition / Gerber
Kevin Gaffney	Kevin.gaffney@citrusworld.com	Florida's Natural Growers
Michael McCroan	mmcroan@na.ko.com	The Coca-Cola Company
Dan King	dking@citrus.state.fl.us	Florida Dept of Citrus
Paul Cancalón	pcancalo@citrus.state.fl.us	Florida Dept of Citrus
Shawn Havey	Shavey@clementpappas.com	Clement Pappas & Co.
Mary Grace Sexton	msexton@oijc.com	Orchid Island Juice Co.
Supat (Sam) Sirivicha	supatsirivicha@eurofinsus.com	Eurofins
Ramin Jahromi	Raminjahromi@eurofinsus.com	Eurofins
Cassie Taylor	Cassietaylor@eurofinsus.com	Eurofins
Mikko Hoffsommer	info@gfl-berlin.de	GFL
Antelmo Santos	AFSantos@oceanspray.com	Ocean Spray
Kathy DeBoy	KathyD@prcp.net	Peace River Citrus

Approval of Agenda – The agenda was approved

Approval of Minutes from Fall Meeting in Orlando, FL– Minutes were approved

Membership and Treasurer's Report – Prabhakar Kasturi reported that TCJJP current balance is \$19,516. The membership roster was circulated so that attendees could check their status, and new attendees were encouraged to join the committee for very reasonable membership dues. Travel stipends for presenters at the fall workshop may be possible with the current funds existing in the treasury. Treasurer's report and recommendations were approved.

Elections Update– Slate of officers includes:

Current	Role	Term Expires
Prabhakar Kasturi	Chair	2012
Open	Chair Elect	2014
David Cunningham	Past Chair	2012

Lars Reimann	Treasurer/Secretary	To Be Determined
Supat Sirivicha and Greg Joseph	Board	Sept 2010
Mike McCroan and Karen Barnes	Board	Sept 2011
Shannon Cole and Allen Mitchell	Board	Sept 2011
Kevin Martin	Webmaster	To Be Determined

Action Item:

- David Cunningham is currently seeking nominations and volunteers for the positions of Chair Elect, Chair, and 4 Board Members. Currently, board issues are handled where possible by conference calls/email.
- Election will be handled by email if permissible (David Cunningham to confirm with the by-laws) and results will be announced at the Fall 2011 meeting to be held in conjunction with the JPA meeting in Boston, MA,
- Mikko Hoffsommer suggested adding devising a notification system so that issues may be discussed more frequently with the community at large. Problems can “migrate” quickly in the global juice environment. A suggestion was made to include Blogs or other forum on the website to enable more frequent notification of issues that arise or if the board needs to notify the members of action items. Mike McCroan will confirm with the webmaster.

Food Safety Modernization Act – *Prabhakar Kasturi summarized a presentation from GMA discussing impact to industry from FSMA.*

A. Main Elements of the Law /impose

1. New responsibilities on the food companies-which include
 - mandatory HACCP plans,
 - Supply chain responsibilities,
 - Formalized records maintenance data organization, and access
 - Formalized food defense plan/strategy
2. New controls on imported foods-provisions include
 - Foreign supplier verifications (audits?)
 - General audits possible Auditors to be held to accreditation standards
 - Certification of third party labs
 - Voluntary qualified importer program
3. Enhanced enforcement powers granted to the FDA-including
 - More inspections
 - Mandatory recall authority
 - Suspended registration authority
4. New fee structure has been established for food companies and importers
 - Reimbursements may be required by the FDA for a variety of actions
 - Reinspections (fees may start in 2011)
 - Recalls
 - Export certificates
 - Fast lane of importers

- B. Implementation timeline varies for the different provisions and small and very small businesses will have additional time. Basic timeline includes 18 months for the food safety plants and 24 months for the supplier portion. FDA is writing regulations and seeking public comment

- C. Needed for immediate focus-food safety plans, supply chain management, and records maintenance and access
- D. The floor was opened for comments and questions from the committee
 - Will Juice HaCCP be the models
 - Key will be identification of where the food safety system can fail
 - Microbiological, Mycotoxins, pesticides, heavy metals, unknowns
 - A rapid alert system would be useful
 - Import alerts in the EU include reports of issues found by any member state
 - Major beverage companies are forming steering committees and formalizing plans
 - Identification of the adequacy of testing
 - Best defense is to know a supplier's history
 - Other major juice companies maintain traceability to the processor
 - Strategies include treating unknown materials/suppliers much more carefully
 - Risk benefit analyses should be established data review may be appropriate.
 - Domestic supply may not be as much of a concern as a commodity that is traded globally
 - Extent of the usage of the ingredient
 - Political and trade issues will still remain (Geographical origin)
 - How will this law impact 3rd party and contract laboratories?
 - FDA may pull more samples
 - Will labs be required to be ISO certified to submit streamlined data packet

Updates and Issues – *Prabhakar Kasturi opened the floor for a discussion*

- A. Import/re-label/export to gain a customs advantage continues to be a problem for/in some countries
- B. Mikko Hoffsommer discussed www.safefoodonline.com (.org?) a mechanism used among European nations to share food safety information
- C. David Cunningham presented a forum currently used where individuals or organizations can subscribe to a notification service. The contact information follows. Jack Cooper of the Food Industry Environmental Network, LLC -- www.fien.com -- 33 Falling Creek Court, Silver Spring, Maryland 20904 -- Cell Phone: 30 384 8287 -- E-Mail: JLC@fien.com.
- D. How do we predict the next “melamine” and what are some issues
 1. Buyers may see it first so be skeptical
 2. Speed of addressing issues is pivotal
 3. Think like a “crook” was a recommendation
 4. ITX (photo initiator?)
 5. DEHP (Diethyl hexyl phthalate)
 6. Plasticizers
 7. Methanol produced by the “hand of man” is an issue for California

Citrus Juice Clinical Studies – *Paul Cancalon gave an overview of studies ongoing at the Florida Department of Citrus:*

- A. Fruit juice research strategy is to fill in the gaps of the juice health puzzle and to develop industry-wide projects to pool efforts and funds and minimize duplications

B. Definitions presented:

1. **Double Blind:** an experimental procedure in which neither the subjects of the experiment nor the persons administering the experiment know the critical aspects of the experiment.
2. **Crossover studies** include participants performing both sides of the study (placebo and active) with a clean-out time between the tests.
3. **Main study** is a clinical study that may last up to 2 years
4. **Satellite studies:** short (8 to 10 week) analytical studies that make use of the biological material provided by the main study.

C. Specific studies discussed were:

1. **Effects of the consumption of orange juice on vascular protection.**

- *OJ and CVD Satellite Study 1:* Why some patients get more benefits from OJ than others?
- *OJ and CVD Satellite Study 2:* 12 patients from OJ 6 with high and 6 with low benefit of the orange juice consumption.
- *OJ and CVD Satellite Study 3:* Determination of cellular and molecular mechanisms of orange juice polyphenols in human monocytes (D. Milenkovich)

2. **Effects of grapefruit juice consumption on vascular and bone functions. A 6-month human cross-over study (2-year study)**

- *Grapefruit Satellite Study 1:* Analyze plasma and urine samples from 12 selected volunteers, 6 with high and 6 with low benefit of the grapefruit juice consumption
- *Grapefruit Satellite Study 2:* Analyze Weight changes and modification of the fat/muscle distribution

3. **Orange Juice Mood and Cognition**

- *(Part I)* The impact of long-term hesperidin-rich orange juice consumption on neuro-cognitive performance
- *(Part II)* The impact of hesperidin-rich orange juice on mood and recovery from neuro-cognitive fatigue using fMRI.
- *Possible Satellite Study:* The impact of hesperidin-rich orange juice on mood and neuro-cognitive performance on school children.

4. **The effects of orange juice on insulin sensitivity and plasma lipids. A 12-week parallel human study (Women)**

- *Satellite Study* Insulin Sensitivity in Overweight Men
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Differences in the Furanocoumarin Composition and Drug Interaction Potential of Pummelos and Grapefruits– *Paul Cancelon gave an update on grapefruit studies that are ongoing with the Florida Department of Citrus:*

- A. Cytochrome P450 enzymes play a major role in the detoxification of some carcinogens, insecticides, petroleum products, and drugs.
- B. Grapefruit has been associated with drug interactions and furanocoumarins appear to be implicated. Theory is these compounds interact with the Cytochrome P450 enzymes.
- C. The furanocoumarin content of grapefruit and pummelos can vary quantitatively and qualitatively.
 1. Java Pink pummelo contains Furanocoumarins at least an order of magnitude higher than any other grapefruit or pummelos.

2. Hirado Buntan pummelo and some of its progenies with Hudson grapefruit contain only 2 unusual Furanocoumarins.
 3. Low acid pummelos and grapefruits and particularly the Low Acid Foster grapefruit have only traces of Furanocoumarins.
 4. Buntan pummelo and some of its Hudson progenies as well as the low acid pummelos and grapefruits have shown minimal drug interaction potential with the cytochrome P450, CYP3A4 in vitro.
- D. Efforts are being made to identify the gene(s) responsible for the furanocoumarin biosynthesis.
E. Debittering does not remove the Furanocoumarins

Update on the Interventions by European Food Safety Agency– *Paul Cancalon*

- A. Regulatory agencies have intervened on health claims permissible from foods
 1. Antioxidants have been under scrutiny
 2. Short Term Acute Inflammation leads to cure
 3. Long Term (low-grade) Chronic Inflammation is at the Origin of many Diseases
- B. To better express the health potentials of fruit juices, the term “Antioxidant could be replaced by *Anti-Inflammatory Polyphenols (Phytochemicals?)*
- C. Is it Semantics?

Next Meeting– *Save the Dates!*

November 15, PM

TCJJP Fall Meeting in conjunction with JPA
Omni Parker House Hotel
60 School St,
Boston, MA 02108
(617) 227-8600

November 14 – 15, 2011

JPA Meeting
Omni Parker House Hotel

Nov. 16 and 17th

TCJJP Workshop
Waters Atrium, Milford, MA
Registration Fee: \$300 Members, \$400 Non-members
8:30 – 5:00 PM
Sponsors:
TCJJP and Waters Corp.

The TCJJP workshop will focus on the advanced juice chemistry and analyses. We are currently finalizing the agenda and are seeking ideas for topics of interest.

Respectfully submitted,

Karen W. Barnes

TCJJP Board Member
Nestlé Nutrition R&D