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# GOOD SPROUT NEWS

"Sprouting Solutions"



Do you know what this is a picture of?
E-Mail your guess to Bob Martinez and the answer will be shared in the next issue!

## GETTING AT THE ROOTS OF HEALTH ENHANCING SPROUTS

A report on the presentation of Dr. Elizabeth Jeffery, University of Illinois at Urbana-Champaign, Professor of Nutritional Toxicology, at this year's ISGA Convention.

By: Bob Rust, ISS & ISGA

r. Jeffery spoke about sprouts that may improve cardiovascular health, and the type of studies necessary to gain a health claim and/or a content claim. In particular, she spoke of alfalfa sprouts: in vitro studies suggest that sprouts saponins, which are soap-like and appear as foam in alfalfa sprout dehulling tanks, may bind cholesterol in the gut and disrupt absorption.

Studies in monkeys looking at the effect of a saponin-rich extract on blood cholesterol showed that LDL-cholesterol, the bad cholesterol, was decreased by saponins.

A study in patients with high blood cholesterol found that feeding 40 grams of roasted alfalfa seeds three times per day decreased cholesterol to normal values – but because these seeds also contain the protease inhibitor conconavalin, such a large dose is considered unsafe. There are no clinical studies on alfalfa sprouts and blood cholesterol.

Dr. Jeffery suggested that studies are needed before a health claim can be made.

Bob Sanderson suggested that seeds and sprouts have very different phytochemical makeups (a characteristic of sprouts that make them so healthful) and one could analyze sprouts for conconavalin as well as analyzing alfalfa sprouts daily during growth to determine when saponins are greatest in the sprout.

Dr. Jeffery then turned to antioxidants and their ability to inhibit oxidation of cholesterol, which is necessary in the progression from aging LDL-cholesterol in blood to plaque in the blood vessel wall. She focused particularly on buckwheat, rich in the flavonoid quercetin and the quercetin-sugar complex, rutin. These rise to optimal levels in the 8 – 10-day sprout, increasing antioxidant capacity.

(Continued on page 5)

# Upcoming Events

Oct. 2010

October 14th -Board of Directors Conference Call



#### Fall 2010

## Annual Membership Renewal Campaign

Contact the office for information on how you can earn some money off your 2011 membership! We also have a new webpage for membership renewals! ISGA is now using PayPal to aid in registration. Visit that site here.



## Spring 2011

#### 2011 ISGA Convention - Las Vegas

If you have a great idea for a speaker or event, or if you are interested in joining the Convention Committee, please email <u>Carlos Gonzalez</u>, chairperson of the Convention Committee.

If you have an event or article that you would like considered for the next newsletter, please e-mail it to <a href="mailto:secretary@isga-sprouts.org">secretary@isga-sprouts.org</a> by October 15, 2010.

#### TRAINING AS AN EFFECTIVE INTERVENTION

Progress Report: Sprout Specific Audit Checklist NCFST Task Force Committe

By Barb Sanderson, Chair

There is quite a bit of talk on the FoodSafe listserve about "Training as an Effective Intervention". Here is a copy of one of the letters, including the listserve address which you can click on to find out about joining the listserve if you are interested:

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From:

<u>foodsafe-list@googlegroups.com</u> On Behalf Of Roy Costa

Sent:

Saturday, August 07, 2010 9:51 PM Subject: RE: [Foodsafe] Training as an effective intervention

I think training and education makes perfect sense, you would think someone who knows the safe method vs. the unsafe method would be less likely to use an unsafe method of food handling. The problem is that training alone does not do much if the work environment does not require that the training actually be implemented. This is the major problem, we can train all we want, but then we send the trainees into unsupervised production environments where managers to not have a plan to follow or any checks and balances or monitoring, and with owners focused on production and then its all for nothing.

I work mostly in the produce sector these days. Training is very ingrained into carrying out the SOP's we require under third party regs, and the audits I do clearly reflect a positive outcome. But then again, a FSMS is required, that is a big difference.

I don't think we can rely on the epi as a good barometer of the effectiveness of interventions, its just not reliable, there are too many confounders in these data.

Roy E Costa, R.S., M.S./M.B.A. Public Health Sanitarian Consultant Environ Health Associates, Inc 1.386.734.5187 <u>www.haccptraining.org</u> <u>www.safefoods.tv</u> <u>rcostat@cfl.rr.com</u>

I have been asking Dr. T.J. Fu if "Effective Training" could be an intervention point on the sprout safety "Risk Management" if there were a way to check out its effectiveness. (There has to be a way to check out all of the interventions). Regular audits are very hit or miss on checking out employee practices and effectiveness of training.

The "Risk Management" idea, as described in last month's newsletter is: "a concept that is being developed by scientists at the NCFST which could allow companies to pick several safety protocols from a menu of possibilities, each of which would carry a certain number of "points", to create a multiple hurdle safety program with a specified number of points. Different areas of the protocols would be mandatory, but the way they were satisfied would have options. For example on the sampling, testing, hold and release program, there might be options for testing protocols between, say, the Biocontrol rapid test method and a PCR system. On the sanitization protocol, we would hope to have two or more options some of which might be stand-alone, others might be combination treatments."

We are now talking about adding a number of new checks on our sprout specific audit checklist for the auditor to work directly with employees to scope out the degree to which employees understand and follow the training they have received. It has come to our attention that lack of following the GMPs may be more of a cause of outbreaks or recalls contaminated seed. I am certain it is more a cause than the statistics we have been given indicate. The focus has been so intensely on seed, even when a number of companies were using the same seed and only one company was implicated in illnesses.

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# Report on the GFSI Focus Day, September 29, 2010 in Chicago, IL, USA

By: Barbara Sanderson, ISGA Member, Member of NCFST Sprout Specific Audit Committee

r. T. J. Fu and I met in Chicago on Wednesday, September 29th at the GFSI Focus Day put on by The Consumer Goods Forum.

As many sprout producers are aware, more and more of our customers are requiring more and more expensive 3rd party audits. The retailers in Europe and the US, responding to the need to standardize these audits, developed an auditing program under the title GFSI (Global Food Safety Initiative.)

A short history of the GFSI is attached. I included the history and sampling of members, even though it reads a bit like the "begats" in the Bible, because I think it explains why we adequately intelligent "little guys" don't quite "get it" when we're trying to bend our companies into the GFSI audit criteria.

One thing that became very apparent in listening to speakers from these companies talk about GFSI is that they really do not understand the perspective of the owner-operated food producer. They think gearing their audits to the small producer means watering down the standards. On the contrary; we are raising their food safety bar by demanding attention to safety details for specific commodities while at the same time keeping all of the important principles and eliminating the morass of details that are irrelevant and often incomprehensible to our single-focus, commodity specific businesses. Some of the Forum leaders seemed to hear me when I said that, and I saw some nods from the peanut gallery as well.

So what did we learn in a day of listening and networking?

Two people whom TJ introduced us to made the biggest impression on me. The first is Kevin Swoffer, Chair of the GFSI Technical Working Groups for the Consumer Goods Forum. I spoke to him about our Sprout Specific Audit, our interest in having it be an approved audit for sprout growers by GFSI and my concern about the thousands of questions that completely bog down a normal Owner operated sprout company. He said, it is not about the questions; it is about the principles. There are certain principles that are important for food safety and the questions are only the auditor's way of discovering if the company being audited is doing business by those principles.

For instance, trace-back. Does the company have a system and a set of records that allows the tracing of each unit of production back to the suppliers of all of the inputs and forward to the customer who has bought their product? If The company can show that they have a system and know how to use it and that it works, then they get checked off on that principle. He assured me that "no trained auditor worth his salt would fail you for not answering all the questions if you have the principle handled".

This was a great relief because the sprout audit does address each of the important principles; and its questions are designed to help the auditor discover that within the specific parameters of a sprout company.

The other person TJ introduced us to is Leme Coetzer, Ph.D, Manager Standards Development for GlobalG.A.P. (one of the 11 schemes

approved by the GFSI). She thought they would be able to work with us on getting our more straightforward and appropriate audit under the GFSI umbrella.

This is only a beginning, but it is a quite promising beginning.

Meanwhile, we are about to present our sprout audit to our expert review panel and will at the same time make it available to everyone in the sprout industry.



#### A Short History of GFSI

The Consumer Goods Forum (CGF), a global, parity-based industry network, driven by its members, was created in June 2009 by the merger of CIES - The Food Business Forum, the Global Commerce Initiative (GCI) and the Global CEO Forum. The Consumer Goods Forum is governed by its Board of Directors, which includes 50 manufacturer and retailer CEOs and Chairmen. It has over 650 Members, representing 70 countries on over 3 continents.

CIES was founded in 1953 at a congress held by international retail association AIDA in Belgium. The objective was to create a body to represent food retail chains, which at that time had no association of their own. The new association was named Comité International d'Entreprises à Succursales (CIES – International Committee of Food Retail Chains) and was headed by Henry Toulouse, founder of AIDA and Chairman of the regional food store chain Docks de France.

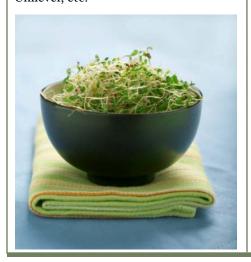
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In April 2000, a group of international retailer CEO's identified the need to enhance food safety, ensure consumer protection and to strengthen consumer confidence. As a response, the Global Food Safety Initiative (GFSI) was launched at the CIES Annual Executive Congress in Dublin, Ireland. This group has been collaborating with key food safety stakeholders over the past 10 years to manage the GFSI; creating and upgrading a guidance document to promote the unification of food safety management schemes through a benchmarking process, to improve cost efficiency throughout the food supply chain via the common acceptance of GFSI recognized schemes by global retailers.

Retailer Members Include: Aeon, Ahold, Boots, Carrefour, Dairy Farm, Delhaize Group, Exito, Fair Price, Hit, ICA, Izumiya, Jeronimo Martins, Kroger, Metro Group, Migros, Supervalu, PAM, PicknPay, Sobeys, Tesco, Waitrose, Walmart, Wegmans, Woolworths, etc.

# Manufacturing members include: Ajinomoto, Barilla, Belersdorf, Grupo Bimbo, Campbells, Coca Cola, Danone, General Mills, Henkel, Heineken, Johnson & Johnson, KAO, Kellogg's, Kirin, Kraft foods, L'Oreal, Nestle, P&G, Del Monte, Pepsico, SaraLee, SC Johnson, Smucker's, Unilever, etc.



# Congratulations! AquaFuchsia Foods!



Congratulations to Mrs. Jessie Taras and **AquaFuchsia Foods Inc.** after being awarded 2nd place Regional & 3rd place National Bronze Category at the 2010 National Order for Agricultural Merit Competition.

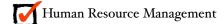
This year's National Order for Agricultural Merit Competition held by the Quebec Ministry of Agriculture in Montérégie resulted in triumph for one ISGA Grower. This friendly competition is designed to "recognize the expertise and the work done by agricultural professionals" as well as "encourage the development of a dynamic and innovative food industry."

Simply by entering the competition, each organization is opening their operation to scrutinization by a team of judges focused on:

Management of the Production System (Crop or Livestock)



Management of Financial





In October, AquaFuchsia Foods, along with all the other winners from this competition, will be officially recognized in a ceremony at the Legislative Council Chamber of the Parliament Building in Quebec City.

Warm wishes to all of the management and staff who are responsible for this great achievement and on behalf of the entire ISGA we say "Congratulations on a job well done!"

Information obtained from press release and the Quebec Ministry of Agriculture website.

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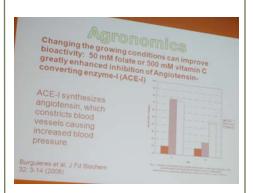
A study in cholesterol-fed hamsters shows that buckwheat sprouts are able to normalize cholesterol levels without decreasing HDL-cholesterol, the good cholesterol. An epidemiological study carried out in Inner Mongolia finds that individuals eating buckwheat flour show a small but significant decrease in risk for high blood pressure than a second community that has a diet based on corn rather than buckwheat.

However, Dr. Jeffery pointed out that epidemiological studies, even though they are based on people rather than laboratory animals, are not sufficient evidence upon which to base a health claim. A clinical study is required.

Finally, Dr. Jeffery spoke of nutrient density – a measure of how many nutrients there are per gram of food product. She described the fact that there are a number of procedures that growers can consider to enhance nutrient density during sprouts growing, such as increased salinity, folate or vitamin C. The actually treatment varies with the sprout variety.

A content claim is often expected to be supported by common knowledge: thus a statement about content of vitamin C might enhance sales because the consumer already knows that vitamin C is healthful.

Health claims acknowledged by the USDA for fruits and vegetables and heart health are based on presence of antioxidant vitamins, stanols, sterols and fiber.



Looking over the national nutrient database, one finds that among the many vegetables bearing descriptions of their content of nutrients, there are very few sprouts. Dr. Jeffery will make an effort to speak to the USDA scientists who populate that database and ask if they would consider analyzing the nutrients in several sprouts species, if ISGA were to organize sending of samples.

Click here to see the complete presentation of <u>"Roots of Health</u> <u>Enhancing Sprouts"</u> by Dr. Elizabeth <u>Jeffery</u>

## Sliced Pork Rolls with Bean Sprouts

10 slices - Thinly sliced pork

300 g - Bean Sprouts

10 pcs - Green Asparagus

1 pk - Broccoli Sprouts

1 cup - Hot Water

Salt and pepper to taste

=Sauce=

## Mayonnaise & mustard

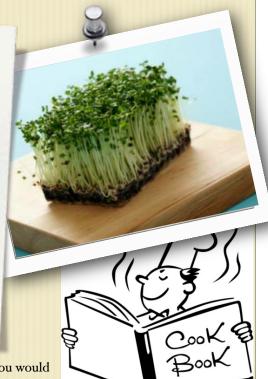
Lay pork on cutting board and add salt and pepper. Place broccoli sprouts on the pork. Place bean sprouts on the broccoli sprouts and add salt and pepper. Roll pork around sprouts. Put 1

#### FROM THE SPROUT COOKBOOK:



cup hot water in a steamer. Arrange rolls and fresh asparagus in the steamer. Place lid and cook for 3 minutes. Mix a 1/4 cup mayonnaise and 2 tablespoons mustard for sauce.

MAKES 10 PIECES



This recipe was submitted by Mrs. Sumiyo Kawakami. If you have a recipe that you would like to add to the cookbook, please submit it to <a href="Bob Martinez">Bob Martinez</a>.

#### ISGA WANTS TO HEAR FROM YOU!

Calling all members! We want to hear what your company is doing these days. In the coming months we will be ramping up our yearly membership campaign and with that comes a new membership directory. This year, the office has decided to include a picture and brief description of what you are doing in the

sprout world! So send us a quick blurb and a photo of yourself, your mascot, our logo or your sprouting headquarters.

Please e-mail your information to <u>Bob</u> <u>Martinez</u>. Also, company's with a website should let us know so we can link to it from the ISGA website!



#### LINK TO THE PRESENTATIONS FROM CONVENTION

#### Day 1 Talks

Food Safety Australia Slides - Amanda Hill

ISGA Sprout Task Force - Armand Paradis

ISGA Safety Seed - Benjamin

Sprouts and the Obesity Epidemic - James Galloway

Japan Safety Slides - Latiful Bari

**Determination of Pesticides Residues in Food - Canping PAN** 

Sprout Audit Checklist (Second Draft)

Tangential Flow Filtration Paper - K. Warriner

Bacteriophage Research Paper - K. Warriner

Bacteriophage Sprouts - K. Warriner

Sanitizer Research Paper - K. Warriner

<u>Pathogen Distribution in Mung Bean Beds Paper - K.</u>

**Warriner** 

Risk Management - Richard Whiting

#### Day 2 Talks

Health Promoting Foods - Britt Burton-Freeman

**Health Benefits of Sprouts ISGA Flyer** 

Roots of Health Enhancing Sprouts - Elizabeth Jeffery

Talk and Recipes - Sumiyo Kawakami

**Branding Plan and Process - Paul Pliakas** 

Recipe Book - Sumiyo Kawakami

\*\*\*If you have trouble opening any of the above links, please e-mail Rich Wolfe for the member username and password.



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