



FOOD PRO

E-News Letter of All India Food Processors' Association
(Established in 1943)

From the President's Desk

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Dear Friends,



The year is about the end and so is my term. I sincerely would like to thank members of AIFPA and well as those within Government and Industry for the support extended to us.

It been a fruitful year in which we have tried to take this great association to greater heights. It's been an year where we have done 9 separate events in the form of National seminars and Workshops in different parts of the country. It was my endeavor to make this association truly a vibrant association throughout India. I am proud of the fact that I was able to attend each of these events held and was able to meet many of you accross India.

While the work continues and a lot needs to be done, AIFPA has played a proactive role this year in matters concerning members as well as Industry with MoFPI, FSSAI, Ministry of Consumer affairs and other central and state government departments. Several such issues and Industry concerns were also voiced through various media establishments. As this association looks forward to its 75th year and associated celebrations, I am happy to leaving a financially stronger and a vibrant Association.

I look forward to your continued support to the incoming President- Dr. S. Jindal who has headed the GST initiative on behalf of Association and Industry as well as to AIFPA Vice Presidents - Mr. Shaminder Pal Singh and Mr. Tom Thomas.

It was an honour to serve you! Wishing you all a happy New year ahead.

With regards,

(Sagar Kurade)

Published by

Up-coming Event

Event : **AAHAR-2017**
Dates : 07-03-2017 to 11-03-2017
Place : Pragati Maidan, New Delhi
For information : Mr. Rameshwar Maurya
Tel:- 011-26510860/26518848
Mobile:- 08744088116
E-mail:- maurya@aifpa.net



Ensymm UG&Co. KG, Germany

Ensymm is a German based premier project consulting company for Life Sciences, serving biotech companies, pharmaceutical industry and food ingredient companies. We provide clients with a variety of business and technology consulting services as well as with specialized teams in various areas of our competence. Ensymm is active in India since 15 years in cooperation with Suman Project Consultants (P) Ltd. Based in New Delhi India.

For Indian industry we specially offer

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| x | Enzymatic applications in Food Industry | x | Viable Projects from food waste |
| x | Chemo-enzymatic extraction of chitosan from crab/shrimp shells. | x | Modern fish breeding farm facilities |
| x | Food supplements e.g. lactase and invertase | x | GMP and HACCP audit and upgrade service |
| x | Sourcing & supply of enzymes & strains | x | Preparation of bankable business plan, gap analysis and project studies sourcing |

Service we have done in India

- x Process upgrade and advisory on biotech projects
- x Preparation of 5 business plans and project studies
- x Supply of lactase and invertase food supplements
- x Invert sugar process upgrade

For more information please visit our website or contact

Germany
E-mail: project_assistant@ensymm.com
Tel: +49- 211 -336-7527
Website: www.ensymm.com/

India
E-mail: SFC@SumanFoodConsultants.com
Tel: +91-11-26313391/9811445569
Website: www.SumanProject.com

Research/Review Articles invited

AIFPA is publishing the bi-monthly Technical Journal, "**Indian Food Packer**" for nearly 70 years now. Apart news items on Regulatory matters, Developments in Food Science and Technology, Food Industry News, New Products & Processes etc., a few Research/Review articles relating to various aspects of Food Science and Technology are published in each issue. At the end of the calendar year, all the Research and Review articles are screened by a Panel of experts and a few articles are chosen for being given **awards** in the form of citation and cash prize which are presented to the Authors at the Annual Conference of the Association every year as a token of recognition.

It is also not out of place to mention here that many scientific workers have in the past obtained their Postgraduate/Doctorate degrees based on the papers published in our Journal. The articles are also abstracted in **Food Science and Technology Abstracts (FSTA)** published in United Kingdom.

Scientists working in various Food Science/Technology colleges, Agriculture Universities and Research Institutions are requested to send Research/Review/General articles for publication in the Journal, "**Indian Food Packer**" on a regular basis, which will be published promptly.

Chief Editor

FSSAI grants industry one year to comply with functional food regulation

A period of one year was permitted by the Food Safety and Standards Authority of India (FSSAI) to the industry for effective compliance with the regulation on food and health supplements, nutraceuticals, food for special dietary uses, foods for special medical purposes, functional foods and novel foods.

This will help in smooth transition to the new regulations. The industry appreciated the decision but laid emphasis on fast-tracking the deliberation of missing ingredients which will have a larger impact on the industry. They have been missed out, despite being safely consumed in the Indian population with no safety concerns reported.

In the deliberations, the facts and evidences over usage of the ingredients or ingredients in the products in India which are missed out from this direction will be displayed before FSSAI's scientific panel.

This will include stating the usage of ingredients or ingredients in products, relative global standards where it is allowed and reports from all over the globe to support the safety of the ingredients or ingredients in the products.

FSSAI issues orders to operationalise regulations on nutraceuticals

The Food Safety and Standards Authority of India (FSSAI) has now issued orders to operationalise the regulations on the standards of health supplements, nutraceuticals, foods for special dietary care, foods for medicinal purpose, functional foods and novel foods.

The government stated that since the gazette publication of the final regulations would take some more time (because they are being translated into Hindi), FSSAI has now made these norms as final with immediate effect from November 24, 2016.

Considering the regulations are final, it would facilitate the state food authorities and their teams of inspectors to supervise the food businesses on high priority.

FSSAI to release fortification standards for packaged foods in India

The Food Safety and Standards Authority of India (FSSAI) expressed its intention to release the standards for fortification of packaged foods in the country. FSSAI recently released food fortification standards for raw foods, including milk, salt, rice, wheat and edible oil.

According to FSSAI officials, the work on standards of fortification for packaged foods has started, and in a couple of months, the standards would be released to support the large-scale fortification programme in the country.

An officer said, "Consultations are on with the industry in this regard. FSSAI is also looking into the global norms in respect to fortification."

Pledging his support, Bill Gates, co-chair and trustee, Bill and Melinda Gates Foundation, said, "The government is looking hard at food fortification – not only having standards but making these standards mandatory, starting with Vitamin A for cooking oil."

This was stated during his lecture, which was a part of the National Institution for Transforming India (NITI) Aayog Transforming India lecture series.

Fruit content in carbonated fruit drinks shouldn't exceed 10%, says FSSAI

The Food Safety and Standards Authority of India (FSSAI), in its notification, stated that the fruit content in the carbonated fruit drinks should be between five and 10 per cent. It added that total soluble solids (TSS) - solids that are dissolved within a substance - would not be applicable to the quantity of the fruit declared on the label. Sugar is an example of a TSS.

The FSSAI notification stated, "In the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011, in regulation 2.3, in sub-regulation 2.3.30, relating to carbonated fruit beverages or fruit drinks, after clause 3, the following clause shall be inserted, namely:-

In case the quantity of fruit juice is below 10 per cent. but not less than five per cent. (2.5 per cent. in case of lime or lemon), the product shall be called carbonated beverage with fruit juice and in such cases the requirement of TSS (Total Soluble Solids) shall not apply and the quantity of fruit juice shall be declared on the label.” Earlier, the Indian Beverage Association (IBA) demanded that the threshold limit be set in the range of 3 to 10 per cent.

“Some of the newly launched fizzy drinks like Real Volo, which has claimed to have fruit juice content will have to reformulate their recipes as the notification has stated fruit content below 10 per cent.,” stated Narpinder Singh, former President, headquarters, Association of Food Scientists and Technologists of India [AFST(I)].

The notice was issued in June for the stakeholders' suggestions. A draft was released in August. It was to see whether companies who have more than 10 per cent fruit content will go for reformulation or not.

U.S. organic board removes carrageenan from allowed substances list

The U.S. Dept. of Agriculture's (USDA) National Organic Standards Board (NOSB) has voted to remove carrageenan from a National List of allowed substances in organic food. The USDA's National Organic Program allows for certain synthetic and non-synthetic substances that are not certified organic to be allowed in food labeled “organic” or “made with organic (specific ingredients or food group(s))” if the substances meet certain criteria, such as if the substances cannot be produced from a natural source and there are no organic substitutes. Such substances then appear on a National List.

Carrageenan is a generic term referring to a family of linear polysaccharides that are extracted from species of red seaweeds. An approved food additive by the U.S. Food and Drug Administration (FDA), carrageenan can function as a bulking agent, carrier, emulsifier, gelling agent, glazing agent, humectant, stabilizer, or thickener. It is typically used at a rate ranging from 0.03% to 0.75%, and its most common uses are in dairy products, non-dairy “milk” analogs, meats, and drink mixes. It has been used in food processing for centuries.

During the 2012 sunset review, concerns were raised about whether the manufacturing process to create carrageenan from seaweed might turn it into a synthetic material by the NOSB definition. In addition, public comments at the time indicated considerable controversy surrounding the ingredient's effect on human health.

Since that time, the Handling Subcommittee conducted a limited scope technical report to gain more insight into the effects of the substance on human health. The NOSB concluded that the body of scientific evidence does not support claims of widespread negative human health impacts from consumption of carrageenan in processed foods.

“We recognize that consumer demand to remove carrageenan has already led to the removal of carrageenan from a number of categories of products and that other alternatives could be used to replace carrageenan in additional products,” the review said. “Subcommittee members think that there are alternatives to using carrageenan and recommend removing this material from the National List.”

The subcommittee found that for some uses, particularly in dairy products and non-dairy milk-like beverages, there were suitable alternatives such as gellan gum, xanthan gum, and guar gum. For processed meat, such as sliced sandwich meats, commenters reported both success and lack of success in removing carrageenan. The shelf life of some of these meats is compromised without carrageenan since they don't hold together as well. There are categories of organic products where no substitute has emerged. One key group is in vegetarian/vegan foods where gelatin is not acceptable because it is made from animals.

The NOSB voted 10 to 3, with one abstention, to remove carrageenan from the National List based on the availability of alternatives.

EU to retain grape residue levels

Indian grape exporters are heaving a sigh of relief as the European Union (EU) has agreed to retain the residue levels of chlormequat chloride (CCL), a plant growth regulator at 0.05 ppm (parts per million), for a period of two years. In August this year, the EU had proposed changing the pesticide residue levels in grapes to 0.01 ppm causing unrest among exporters.

According to Jagannath Khapre, President, All India Grape Exporters Association, both the exporters association and the Maharashtra State Grape Growers Association followed up the issue with APEDA on a regular basis and APEDA took up the issue with the Union Commerce Ministry.

A2 protein in milk may boost body's defences against degenerative diseases

A study published in *Nutrition Journal* shows that cow's milk containing only the A2 type of beta-casein protein may increase the antioxidant glutathione (GSH), which may help strengthen the body's disease-fighting power. GSH is a critical part of the body's internal defence system that is responsible for protecting a variety of functions. Most notably, it helps the body to ward off diseases associated with abnormal cell differentiation, such as those that are neurodegenerative or lead to a condition like pancreatitis or cancer.

Curcumin may help treat depression

A study published in the *Journal of Affective Disorders* shows that curcumin, an active ingredient found in turmeric extract, may be used to successfully treat major depressive disorders (MDD) and anxiety.

The randomized, double-blind, placebo-controlled study used *BCM-95* (DolCas Biotech), a high-potency turmeric extract, to study its effects on MDD and anxiety in more than 110 subjects, aged 18–65. Three groups of subjects received twice-daily doses of 250 mg *BCM-95* combined with 30 mg of saffron, or 500 mg and 1,000 mg *BCM-95* alone. The groups were compared to each other, and collectively against a placebo.

The *BCM-95* and *BCM-95*-plus-saffron groups collectively showed decreased depression symptoms at each of the four-week intervals, with little difference found between groups. Although the placebo groups also improved over the first four weeks, those improvements were not maintained throughout the full 12-week study. Measurements of present anxiety and generalized anxiety in the *BCM-95* groups during the 12 weeks decreased by 7 and 6 points, respectively, over the placebo group. Depression treatment responders were qualified by attaining a 50% decrease in their IDS-SR30 score over the 12 weeks of the study.

Interestingly, the atypically depressed subgroups were found to be the most responsive to *BCM-95* treatments over the duration of the study, with a 65% decrease in IDS-SR30 score. Atypical depression has been found to be associated with higher inflammatory markers like C-reactive protein (CRP), IL-6, and tumor necrosis factor- α (TNF- α) of which curcumin, a potent anti-inflammatory, is a known modulator.

Export of rice to USA only from mills registered with NPPO

According to the Plant Protection Advisor, Union Ministry of Agriculture Cooperation and Farmers Welfare, it has been decided that w.e.f. April 01, 2016, export of Rice to USA will be allowed only from Rice Mills / Processing Units registered with NPPO . All Phyto Sanitary Certificate (PSC) issuing authorities have been advised to issue PSCs for export of rice to USA, only to registered Rice Mills / Processing Units.

Gluten-free foods

According to Packaged Facts' new report "Gluten-Free Foods in the U.S.-6th Edition," a number of Americans are buying gluten-free foods simply because the effort contributes to their sense of mental and physical wellness.

Gluten-free foods are gaining popularity partly because manufacturers and marketers are aligning new product developments with other emerging trends in the food and beverage industry. A predominant trend in gluten-free product development reflects the concerns of the clean eating/clean-label movement. Makers of gluten-free bean pasta are standouts in the promise of fewer and simpler ingredients, an attribute that is touted on product packages and on brand websites from the likes of Tolerant Foods, Gold Harbor, Simply 7 Snacks, and Explore Cuisine.

The desire for clean labels, ease of digestion, the need or desire to avoid allergens, compatibility with vegetarian and vegan lifestyles, and concerns about sustainability among the general population are putting the spotlight on plant proteins. Legumes and beans, or pulses, are found in a growing array of gluten-free foods, along with ancient and sprouted grains. Pulse-based ingredients are particularly valuable in improving the nutrient quality of gluten-free products, as they are richer in fiber, protein, and micronutrients than gluten-free staples, rice and tapioca flour. There is a growing market for these ingredients in gluten-free extruded snacks and pasta.

The appeal of ancient & sprouted grains is much like that of pulses. For food processors, these ingredients provide whole food, plant-based protein sources that enhance appearance, deliver unique tastes and textures, pack a nutritional wallop, and invite variety and innovation. A number of ancient grains are gluten-free, as are sprouted ingredients made from gluten-free ancient grains, nuts, seeds and beans.

USDA approves two varieties of GE potatoes

According to the *Idaho Statesman*, the U.S. Dept. of Agriculture (USDA) has approved commercial planting of two types of potatoes that are genetically engineered to resist late blight—the pathogen that caused the Irish potato famine. The approval covers J.R. Simplot's *Ranger Russet* and *Atlantic* varieties of the company's second generation of *Innate* potatoes.

The company says the potatoes will also have reduced bruising and black spots, enhanced storage capacity, and a reduced amount of acrylamide—a chemical created when potatoes are cooked at high temperatures that's a potential carcinogen. The potatoes next must clear a voluntary review process through the U.S. Food and Drug Administration (FDA) as well as get the go ahead from the U.S. Environmental Protection Agency (EPA). The company says it expects those approvals in January 2017 with the potatoes entering the market next spring.

The two varieties join a third variety with the same traits called the Russet Burbank that has already attained approval from the USDA and FDA, with EPA approval also expected in January.

The company's second generation of *Innate* potatoes follows the first generation that has been selling to consumers for more than a year. Those potatoes, marketed under the *White Russet* label, have reduced bruising and reduced potential carcinogens when cooked, but not resistance to late blight or enhanced cold storage.

PepsiCo to reduce added sugars

PepsiCo announced that it will significantly reduce added sugar across its global beverage portfolio, pledging that two-thirds of its beverages will contain 100 calories or fewer from added sugar per 12 oz serving by 2025. In addition, the company has pledged by 2025 to limit saturated fat to 1.1 g per 100 calories in three-quarters of its global foods portfolio and not to exceed 1.3 mg of sodium per calorie in three-quarters of its portfolio. The announcement comes as part of PepsiCo's new sustainability agenda, which aims to create a healthier relationship between people and food.

The agenda centers around three pillars of sustainable growth that focus on products, the planet, and people, including the farmers and communities PepsiCo works with globally. Goals include a 20% reduction in greenhouse gas emissions across the company's value chain, including its agricultural supply, by 2030 and a 15% improvement in water efficiency of its direct agricultural supply chain in high water-risk areas by 2025. The company will also expand its Sustainable Farming Initiative to approximately 7 million acres by 2025.

“To succeed in today's volatile and changing world, corporations must do three things exceedingly well: focus on delivering strong financial performance, do it in a way that is sustainable over time, and be responsive to the needs of society,” says PepsiCo chairman and CEO Indra Nooyi.

Grape seed pomace may enhance the antioxidant capacity of coffee

A study published in the *Journal of Food Science* shows that coffee containing a small amount of grape seed pomace is acceptable to consumers and may potentially function as an antioxidant. The researchers wanted to determine if Chardonnay grape seed pomace (GSP), a waste stream of wine production, could be used as a functional ingredient in brewed coffee.

Researchers conducted two consumer panels to assess the acceptance of coffee at coffee replacement (w/w) values of 0% (control), 6.25%, 12.50%, 18.75%, or 25% GSP. The first consumer panel assessed the coffee samples served “black.” The second panel assessed the coffee samples with sweeteners, milk, and cream options available.

Consumer sensory evaluation involved evaluating the five treatments individually for acceptance of appearance, aroma, taste/ flavor, and overall acceptance using a 9-point hedonic scale. A check-all-that-apply questionnaire surveyed the sensory attributes describing aroma, appearance, and taste/ flavor of the samples. Oxygen radical absorbance capacity was used to measure the effects of antioxidant levels in GSP coffee samples.

The researchers found that GSP could be added at 6.25% replacement without significantly affecting the overall consumer acceptance of coffee compared to the control (0% GSP). Above 6.25% GSP supplementation, the coffee beverage was described as more tan, milky, watery/dilute, and mild, and was generally less accepted by the consumers. GSP also increased the antioxidant capacity of the coffee compared to the control (0% GSP), with no significant differences among replacement values.

The researchers concluded that the results may be “useful in the development of a new coffee beverage, in addition to developing other avenues for use of grape seed pomace.” They noted that further in vivo investigation may substantiate the free-radical scavenging capacity of GSP coffee and its potential health benefits.