

ETHANOL



Dear Editor,

Let me be the first to congratulate you on your January–February 2007 issue of CEREAL FOODS WORLD. As a former columnist, I was curious to see what direction you might take in your new assignment, but I should not have been concerned. You can be proud of the new format and contents of this introductory issue. The lead article by Sanderson on ethanol and other biofuels was an excellent review of this subject. I recently attended the 2006 European Biofuels Forum, sponsored by World Refining Association. At this conference, which was held in Warsaw, Poland, on 21–22 November of last year, a strong case was made for cellulosic ethanol. Unfortunately, much development work remains to be done on this technology. Still, the discussion of cellulosic ethanol led me to think about furfural. This organic chemical has been manufactured on a large scale since the 1920s from oat hulls and corn cobs. With improvements in this process, product can be generated in high yields from agricultural residues. Could furfural become one of the “other biofuels” that Sanderson envisions for the future?

John E. Stauffer
Stauffer Technology



Dear Editor,

I read with interest Mr. Sanderson’s article on ethanol fuels. I would like to make explicit one thing that should slightly temper public enthusiasm: ethanol provides approximately 75% as much energy per weight as does gasoline. Consider the bottom line of Table 1, where it is predicted that in 2029 132.4 billion gallons of ethanol will provide 74.5% of the demand for gasoline fuel. But those gallons of ethanol are energetically equivalent to just 99.3 billion gallons of gasoline, so the displacement amounts to 55.8%. While this is still significant and well worthwhile pursuing, a certain reticence about the latest panacea to come from chemistry (remember “Better things for better living”?) should obtain.

Clyde E. Stauffer
Technical Foods Consultants



Dear Editor,

Thank you for the recent issue of CEREAL FOODS WORLD Jan.–Feb. 07. Mr. Sanderson’s article on ethanol (p. 5) had good information, but I searched in vain for even a mention of the word “subsidy.” Ethanol is subsidized about \$0.54/gallon. It should be common sense that if anything—not just ethanol—must be subsidized long-term, then the anything is not sustainable and is a failure. The only successful energy solution will be something that can be produced and sold at a profit, unless people wish a return to the Soviet Union. Ethanol has been subsidized for 30 years. With no end in sight for the subsidy, by definition ethanol is a failure and is confiscating taxpayers’ money to fund a corn product that can’t make money. Ditto for gas and oil, nuclear, and coal if they are subsidized, which I think they are. A subsidy is fine for a limited period if progress is shown, but if not, cut the losses and move on to something else. Mr. Sanderson’s article is premature and assumes ethanol can be produced at a profit. If so, please tell us how that will happen and when it will begin and the subsidies will end.

Kirk Dolan
Michigan State University

RESPONSE

Dear Professor Dolan,

Thank you for your comments regarding my article about ethanol.

I did not mention subsidies in my article because the subsidy for ethanol exists in order to stimulate a fledging industry and draw investors. This is not an uncommon practice. As I learned at the Renewable Energy Conference that was held in St. Louis during November of last year, the federal and most state governments are subsidizing many fledging industries that may help provide an answer to this nation’s consumption of offshore petroleum and gas.

If I knew the answer to your question about how and when ethanol would be profitable, I would become the richest man in the world. Asking me to pinpoint when and how profits shall be made on ethanol is similar to asking a biologist twenty years ago at what date the lampreys in Lake Michigan would be eradicated. Should the scientists who were working on the problem have stopped their research because they couldn’t predict when and how the final solution for lamprey eel control would come about? Of course not.

I know I would rather trust the fate of this nation to people who are working on row crop ethanol and cellulosic ethanol and the farmers of America than to those nations from which we import our oil. If this nation must gamble on subsidy in order to move ethanol forward, then I believe it is worth the gamble.

Regarding your statement “It should be common sense that if anything—not just ethanol—must be subsidized long-term, then the anything is not sustainable and is a failure.”

Many industries have either direct or indirect long-term government subsidies. The railroads in the west were subsidized by the federal government in the form of hundreds of thousands of acres of land that was adjacent to their right of ways. It is because of this policy that the railroads were

able to raise the capital needed to connect this country coast to coast.

The U.S. airlines are subsidized because among other things the government bears the burden of the cost of the airports and the air control systems. Most rail and bus commuter systems are subsidized in the United States.

Higher education at state institutions, NASA, and many other industries and institutions that are either for profit or not for profit are subsidized by the government. Sometimes, subsidies may be a bad thing. However, I believe most would agree that a service, institution, an industry, or a product is not necessarily bad just because it is partially subsidized by the government or that it should be eliminated just because it is subsidized.

Sincerely,
Keith W. Sanderson
USA Energy Independence

Both Prof. Dolan and Mr. Sanderson offer important and differing perspectives on the issue of biofuels subsidization. Those of us that labor in the fields of the U.S. food and agriculture industries already enjoy considerable benefits from direct or indirect government subsidization, be it in the form of USDA research grants, university extension programs, water projects, price supports, commodity marketing order, or trade credits, and other export initiatives. Similarly, some might argue that the petroleum industry enjoys heavy subsidization in the form of military expenditures directed toward the protection of world petroleum supply lines. The degree to which government subsidization is warranted for biofuels will continue to be a contentious issue worthy of debate as various industry interests compete for limited resources, be it for federal monies or arable land.

Daniel Best
Executive Editor
CEREAL FOODS WORLD



DIETARY FIBER



Dear Editor,

For the Perspective article appearing in this issue of CEREAL FOODS WORLD (p. 112), I have tried to accurately research the actions, views, and recommendations of the group of experts (GROUP) that proposed the dietary fiber definition at the Food and Agricultural Organization–World Health Organization Scientific Update on Carbohydrates in Human Nutrition.

Dietary fiber (DF) is an interesting category of nutrients, and it is still a lively topic for further scientific research, discussions, and consumer education. Although, there remains some confusion and differences in opinions about a definition for DF, these issues will be resolved in national and international open forms; transparency is the key.

Secrecy in the actions and recommendations of the GROUP represent what is possibly most deplored in policy decisions, whether in science or government. While it appears that the FAO/WHO acted appropriately to establish the Expert Committee on Carbohydrate Nutrition, one or more of the 11 experts attempted to redirect their assigned mission without consulting the FAO/WHO.

According to reports that I received, nearly every Codex member nation and delegate to the 2006 Codex meeting acted with surprise upon hearing about the GROUP's recommendations and the manner in which these recommendations were introduced.

It is difficult to evaluate the GROUP's opinions and recommendations because the promised reviews have not been published. However, these same ideas and recommendations have been introduced and rejected over the past 20 years.

The GROUP provides inordinate discussion in promoting their nonstandardized method for nonstarch polysaccharides (NSP), while simultaneously criticizing and dismissing all AOAC International standardized and approved methods for the measurement of DF. Thus, it is difficult to understand a possible oversight by the WHO/FAO in their selection of one or more expert committee members. Who would benefit the most if this method for NSP was to be adopted, the analyst or the consumer?

During an approximated 10-year period, 1988–1998, the method for NSP proposed by the GROUP was evaluated by AOAC International and AACC International members and found repeatedly lacking in standard protocol and reproducibility within and among laboratories.

While the opinions and recommendations of the GROUP might deserve further review in the scientific and regulatory communities, the approach and lack of transparency associated with the GROUP's actions will surely deserve equal review.

Although the final consensus by Codex and others interested in this debate has not been reached, this debate was actually created by the GROUP. And while I have gained in knowledge researching this topic and addressing the GROUP's ideas and opinion, I think I agree with many colleagues and organizations that this has been a redundant debate of a nonissue—a waste of valuable time. It should never have happened.

Dennis T. Gordon
Professor Emeritus, North Dakota State University

CEREAL FOODS WORLD welcomes letters from our readers. If you would like to submit a letter, please include your name, affiliation, and relevant contact information. Send correspondence to mhudson@scisoc.org, or fax to +1.651.454.0766, or mail to Matt Hudson, CEREAL FOODS WORLD, 3340 Pilot Knob Road, St. Paul, MN 55121 U.S.A. Submitted letters will become property of AACC International and may be edited to fit our format.