BioSpectrum
the business of Bio & Health Sciences
ASIA EDITION

Genetically modified food to take-off in 2013

27 December 2012 | Opinion | By Nandita Singh

In 2013, genetically engineered salmon will likely reach food shelves in supermarkets in the US. In a draft environmental assessment, at the fag end of December 2012, the US regulator, Food and Drugs Administration (FDA) stated that the biotech salmon food is as safe as food from conventional Atlantic salmon. While FDA said it would take comments from the public for 60 days before making a final decision on approval, industry watchers expect it to come through, making it the first such approval for transgenic food.

The product, AquAdvantage Atlantic salmon egg, is bio-engineered to produce a fish that can grow to consumption-size in half-the-time the conventional salmon takes. Massachusetts-headquartered, LSE-listed, commercial aquaculture company, AquaBounty Technology came up with this solution of speedy salmon production to meet the global demand for seafood.

A decision in favor of AquAdvantage salmon will open the doors not just for genetically engineered animal food but will also further adoption of genetically modified (GM) food crops stuck at various stages of testing approval across countries even though at the same time this FDA decision will also provide steam to anti-GM movement.

Basically, the resistance to GM food crops is rooted in fears such as that of it being toxic to humans and animals; that it can give rise to super weeds; or the danger of cross-pollination that can impact genetic diversity in ways difficult to imagine. Just how real are these fears? As far as I have read and understood from some of my interactions with eminent scientists - these are all risks that the scientific community needs to be vigilant about and manage.

These are not issues that should obstruct GM food adoption. GM is the hottest crop technology with the potential pretty much of the same level as gene therapy for human ailments. Just imagine altering fruit color, flavor, nutritional value or even just the increase in productivity per acre by ridding the crop of pests without using any pesticide -with such promise, GM food is a worthy pursuit.

So, who should one give weight to - the pro-GM lobby, or the anti-GM activists? Just to break the impasse, it is easy to argue that the best approach is let the consumer decide. That brings "food labeling" into picture. The industry in the developed countries may still be able to comply with labeling rules but what about countries like India, China and the rest of Asia. Is it practical or even realistic to attempt mandatory labeling?

Is it sustainable for small businesses to comply with such regulations? And what about the increase in cost of the end product? Food testing and labeling costs will ultimately be passed onto the end-consumer. Does the consumer really want labeling across all food products processed or farm-fresh?

In California, which could have been the first state in the US to pass a law, in 2012, making labeling mandatory, the "Right to Know" initiative (Proposition 37) failed to garner required votes to pass the bill. I, for one, would really like to know how many people buy from the shelves lined with prohibitively expensive organic food products at supermarkets and what drives them to do so? In fact, what really is organic?

Is it just absence of pesticide residue or something more? My humble opinion is: let science lead the way. I am saying this even though I myself follow with concern the anti-GM reports and case studies. Science is the way out of this impasse. The more we know. The better it is.

Let me also add here that in 2013 among the trends to watch out for: GM food is expected to show positive movement largely on the regulatory front.