



Transgenic sushi is an unusual biotech teaching tool.

## NUTRITION

# Chew on this

**Anthony King** savours a surreally varied show on food, from glowing sushi to 1,001 uses for a pig carcass.

**F**ifty billion chickens are heading to the slaughter at any one time on Earth. What humans eat determines which crops are grown and which animals are reared, with big implications for science, agriculture, the environment and society.

*Edible*, an exhibition at Dublin's Science Gallery, probes our cultivation and consumption choices and their effects in the contexts of time, place, technology and taste. There are serious messages, but much of what is on offer has a zany flavour.

The increasingly globalized agricultural system gets more than a look-in. Artist Christien Meindertsma's photobook on 'pig parts' is a compelling graphic exploration of the afterlife of a pig carcass. For *PIG 05049* (the number denotes the animal's ear tag), Meindertsma spent three years tracing the products derived from a single animal raised in the Netherlands to build a visual chronicle of the carcass's incredible global journey.

The pig's skin was used for tattoos, chewing gum, injectable collagen, safety gloves and cheesecake, while its bones went into paper, X-ray films, book covers and train brakes. Cigarettes, cooked ham, mink feed and photodynamic therapy accounted for some of its blood, and its gelatine eased cordite into bullets. Meindertsma dissects the pig all over again, depicting the products to scale.

Humanity's over-

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**EDIBLE: The Taste of Things to Come**  
Science Gallery, Trinity College Dublin.  
Until 5 April 2012.

50% of what we eat. The exhibition's curators, Cat Kramer and Zack Denfeld — artists with the mobile research institute the Center for Genomic Gastronomy — point out that new crops could gain dominance within a century: "The future of food is much more complex than we can predict," they write.

One aspect of that complexity is the need to maintain species diversity as insurance in case of disease; the Food and Agriculture Organization of the United Nations in Rome estimates that crop genetic diversity has fallen by 75% since 1900. *The Edible Heritage Lab* features 12 historically and scientifically important varieties of potato. Part of a haul collected by the Irish Seed Savers Association, which champions non-commercial Irish heritage varieties, they include the lumpier potato, which succumbed to successive attacks by the fungal blight *Phytophthora infestans* in the mid-nineteenth century, triggering the great Irish potato famine.

Close by, a stuffed grey squirrel illustrates the question of whether we should eat invasive species. A recipe for Guinness and grey squirrel stew is provided for the brave. Insects give more food for thought; eaten over much of the world, they are seen

reliance on a handful of crops is explored in an infographic revealing how rice, wheat, maize (corn) and potatoes make up

by many as a part of future food security. *Insects Au Gratin* by designer Susana Soares and her colleagues consists of three-dimensional sculptural shapes printed using milled insect flour. Crickets, we're told, are more efficient than cattle in converting vegetation to protein: 100 kilograms of feed produces 40 kg of the insects, but only 10 kg of beef.

Given the current fashion for foodyism and molecular gastronomy, the science of taste inevitably plays its part. You can learn whether you are a supertaster by gauging the bitterness of a disc infused with bitter compounds, or pinpoint where particular taste buds are concentrated by sprinkling droplets of five solutions onto your tongue.

But with taste, the proof of the pudding is obviously in the eating. A ticketed 'curated dinner' — a molecular-gastronomy evocation of the spirit of Dublin — by chef-for-the-night Pete Williams proved a sensory treat. The recipes, by local company Designgoat, featured a contemporary take on the traditional Irish coddle, involving a poached pork-mousse sausage with a mashed-potato gel, set carrot foam and a bacon and pork sausage broth in a test tube.

The diners themselves learned to whip up a gin and tonic with a difference. Spheres of cucumber, lime juice and salt were mixed with sodium alginate and sodium citrate, then set in a bath of calcium chloride. The resulting chewable spheres went into the drinks.

Back at the exhibition, a "mutagenic mist" reminds the audience that radiation has been used since the mid-twentieth century to induce mutations in crops. The mist, a palate-cleansing puff of peppermint oil, is made from a varietal approved in the 1970s and bred for disease resistance. Most peppermint oil consumed today is from this variety.

Elsewhere, you can watch *The Glowing Sushi Cooking Show*, a video of Kramer and

**"The future of food is much more complex than we can predict."**

Denfeld creating an even more startling treat: transgenic, bioluminescent zebrafish sushi. It is an intriguing way to absorb cutting-edge biotechnology. "This will be fun at parties," quips Denfeld.

There is much more to this feast, from smog tasting to the fun inflated-stomach sculpture *Gas Bag* by artists Andy Best and Merja Puustinen. *Edible* offers a menu of appetizing morsels on the evolution of gastronomy and its influence on our ecological, technological, commercial and political world — something to chew on even if you're not yet ready to snack on a cricket. ■

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