Food From Scratch

Everything is possible

Food glorious food. By opening our minds and natures to the primal requirement for sustenance rather than succumbing to the interpretation that has been learned and habituated, much can be achieved. Removing the taboos as to what constitutes a meal and which sorts of proteins, etcetera, can be considered palatable, a whole plethora of possibilities presents itself. Happily, there are people, organisations, institutes, labs and the like, who are assuming the burden of discovery and experimentation, making it their sole purpose to see that the gazillions of culinary options are thoroughly explored, with every intention of sorting out global health and the environment in the process.

PATRIZIA COGGIOLA

Chefs that become ambassadors of biodiversity, farms that serve as open source labs, independent food research centres driven by anthropological investigations, companies that invest in alternative philosophical theories… In the most innovative kitchens around the world, something very extraordinary is taking place. And it's more focused on the humus in the wood than on the balance of a dish.

There is a global culinary revolution taking place. Professionals are involved in a new legacy, a kind of spiritual uprising that wants to subvert the supply chain of global mass production. It's a radical approach in which the sciences, such as botany and zoology, psychology and entomology, are matched with the skills of chefs and farmers looking for more sustainable, reliable ways of eating – and preserving – nature. While much of the dialogue in recent years has been on maintaining adequate resources, the aim now is to regenerate ecosystems, revitalise economies, and enhance a new cultural food consciousness. Literally from scratch.

It turns out that the 'food tastes better if you know a little bit about where it came from and who produced it' philosophy was not enough. It's more about responsible eating habits: the Pandora's box of the global supply chain was opened by Slow Food, and the teaching efforts of Carlo Petrini, who defends biodiversity and promotes sustainable models of agriculture and local food independence, have fertilised minds and souls. Food can be the answer to the world's most pressing questions regarding health, environment, education, and economics. Small teams around the world, driven by a chef's intuition and curiosity coupled with a scientist's methodology, are pursuing new paths.

Once upon a time, research was driven only by academic laboratories and the results aseptically transferred to the trade. Now universities, too, are get-

COOK ME - BLACK BILE, 2011
Biotechnologies can give detailed insight into our metabolic processes and introduce new interactions within our body. In this project, these interactions are proposed as a new form of cooking, guided by one's personal metabolism.
Cook Me - Black Bile is a recipe for controlling the feeling of melancholy. Using synthetic biology, bespoke yeasts are designed to measure chemicals in the blood and alter levels of serotonin accordingly, making one feel less or more melancholic. To achieve this, the dish is cooked from a leech that has first fed itself on the body. An instrument especially designed for this recipe allows the leech to first feed on the forearm. A blood mousse is then made from the parasite's body. The blood mousse is accompanied by an oyster mushroom, a redcurrant sauce, and blood sorrel.
The recipe is inspired by Hippocrates' Four Humours theory, which sees the body as an entity comprised of four basic substances: yellow bile, blood, phlegm, and black bile. That theory inspired bloodletting: a common medical practice aimed at restoring both physical and mental health by bringing these bodily fluids back into balance. Each substance is linked to a specific temperament: black bile, the fictional one of these four fluids, evokes the humour of melancholy. This work examines the space between ancient beliefs and future unknowns, between nonsense and science, the kitchen and the pharmacy.
The project was commissioned by Z33 in Hasselt, Belgium for the exhibition Alter Nature: The Unnatural Animal.

Recipe inspired by René Redzepi

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ting down-to-earth. The University of Gastronomic Science (located south of Turin), founded on Slow Food and specialising in the scientific exploration of gastronomy, has since 2004 linked innovation and research by the scientific world with the traditional knowledge of farmers and food producers. And the Sustainable Food Project at Yale University has been managing an organic farm since 2005, running programmes that support academic inquiry related to food and agriculture.

THE JOYS OF BEING UNORTHODOX

Ferran Adrià was the first to show just how a chef's curiosity and culinary passion can be suitable to conducting highly scientific research. By the 1990s, he had broken the glass ceiling that had kept all non-French cuisine away from the food cognoscenti and, via the experiments in his legendary laboratory kitchen at elBulli on the Spanish Costa Brava, the apprentice chefs learned that their rôle can take a kaleidoscope of directions. Adrià has transcended the world of gastronomy, throwing away the orthodox cookery books. He and his team created new cooking concepts and methods that went beyond taste sensations and merged cuisine with conceptual art. In total, the elBulli team invented 1,846 dishes, leading the culinary revolution and inspiring a generation of chefs, including Heston Blumenthal, René Redzepi, Joan Roca, Andoni Aduriz, and Massimo Bottura. His encyclopaedic spirit is now being celebrated in a retrospective in London, the first exhibition ever dedicated to a chef. It comes two years after elBulli closed its doors to the public, following the decision to transform the restaurant into a foundation for culinary research that from 2015 onwards will safeguard its legacy. A second project is Bullipedia, a creative archive that will categorise this body culinary history knowledge and devise a new kind of coding that gives structure to the DNA of cooking.

Alex Atalà, founder of D.O.M. in Sao Paulo (1999), one of the most brilliant chefs at the moment and part of the second generation of renovators, is rediscovering through contemporary reinterpretation the diverse culinary heritage of Brazilian gastronomy. "Betting on the identity of Brazilian products involves providing a new source of income to communities in my country, and actively contributing to environmental protection. The foie gras is not worth more the manioc." Among this chef's investigations is the cooking of insects and the "dynamic flavours" generated from putrefaction.

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FERRAN ADRIA - SOMERSET HOUSE, 2013
Photo © Sam Mellish

THE SEEDS, 2006
Photo © Francesc Guillamet

SLOW FOOD, LENTINI (3)

FAR AND WIDE

Professional avant-garde meetings, like MAD, founded by multi-starred René Redzepi in Copenhagen, indicate that the modern chef is faced with challenges and responsibilities that go far beyond supplying simple sustenance for the duration of a single meal. It is about "studying food through an interdisciplinary approach, to increase the industry's general awareness", according to the organisers of MAD. "We wanted to better understand how the food we choose to cook can make us more mature chefs, how we might affect agriculture for the better." MAD took place for the third time in August in Copenhagen, whereby it explored the literal and metaphorical meanings of 'guts'.

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Cook it Raw is another experience coming out of Noma's entourage, run by a volcanic Italian communicator, Alessandro Porcelli, formerly of Noma and now consultant to the Danish and Swedish governments. This crucial food community-building event is a kind of nomadic focus group involving a dozen of the most influential emerging chefs in the world. "During these events chefs explore some of the most intriguing destinations on Earth, from Lapland to Japan to South Carolina (in October), and take time to experiment in a way that is not easily possible in their home kitchens." As Porcelli explains, "chefs are united not only by their prominence, but by their dedication, eagerness to learn, and willingness to take risks. They build friendships and collaborations, a spirit that was inconceivable 10 years ago."

The Raw community is being built by leveraging modern social networks: a weekly Twitter debate on Fridays; a community profile blog powered by Tumblr where top-tier chefs, producers, and artisans share their personal achievements as arbiters of sustainability. "Chefs can be the ambassadors of sustainable new roads, the point of connection with academics; they can make use of this bio-diverse universe. The future is going to be about small organic farming, against industrial farming and big moneymaking ventures by government and financial institutions. This is the path to our survival."

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INORI (PRAYER) BY YOSHIHIRO NARISAWA (1)

SEAN BROCK IN JAPAN (2)

COOK IT RAW: MASSIMO BOTTURA, PETTER NILSSON, MAGNUS NILSSON AND FREDERIK ANDERSON, LAPLAND (3)

RENÉ REDZEPI (4)
Photo: Peter Brinch

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INSECTS, NORDIC FOOD LAB (1/2)

SLOW FOOD (3)

SLOW FOOD, SEDNE (4)

This non-profit, independent gastronomic research institution, founded in 2008, had the mission of "delineating the edible and inedible". From the outset, in order to create a Nordic vocabulary of flavours, they had to collaborate with farmers and botanists and develop a new vernacular. "One of the things you find here is an extremely collaborative environment of food innovators", says Ben Reade, the new head of the Nordic Food Lab and former student of the Slow Food University of Gastronomic Science. "In the old regime, chefs would keep their recipes to themselves, protecting tricks and techniques." Ben's personal belief is that there is a great world of controlled rot and decay just about to be unleashed on modern diners. "The Nordic movement is redirecting everybody's attention to nature." Recent experiments range from a tasty symbiotic culture of bacteria, to experiments in food decay, to wood sap, to the nutritional value of insects, thus going back to a forgotten part of our evolutionary heritage. That is why, inside the lab, on a whittled liquorice root brushed with honey and infused with juniper wood, one can find frozen ants, freeze-dried fruits, seeds, and toasted crushed grains studded with small aromatic leaves and flowers, composing a chimp stick.

And Nordic Food Lab is not alone in this search for expanding the borders of the edible and non-edible realm. Forager is a small rural enterprise engaged in gathering and supplying wild food, one of the most innovative food businesses in the UK. The produce consists of the leaves, stems, roots, flowers, seeds, and fruits of wild plants. Some of the plants have been in the soil since the last ice age; some have escaped cultivation; several are parent plants of one or more cultivated vegetables. All are living documents of a culinary past, when wild food was fundamentally local and sustainable produce.

A CHIMP STICK?

The same ethos about cooperation, knowledge sharing, and open-source research is found in the whole of Scandinavia, where a renaissance in Nordic cuisine identity has been witnessed over the last five or six years. A group of Scandinavian chefs confronted the possibilities of their homeland traditions. It was the time and place for a confederation, a New Nordic Cuisine – Ny Nordisk Mad – to be established. This very quickly restored Nordic pride gave birth to the Nordic Food Lab, a result of Noma's narrow creative framework in which Redzepi confined his cuisine to only Nordic ingredients. They needed a laboratory that could explore a new vocabulary of flavours. To begin with, there were precious few good-quality Scandinavian products and suppliers.

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OPENING THE WAY

Signs of this conscious, open-source attitude to farming are many. On the other side of the Atlantic Ocean, for example, Anson Mills grows and mills one of the most diverse collections of heirloom grains in America, seeds that were grown in South Carolina before 1850; they are thereby recovered, preserved, repatriated, and distributed free of charge to like-minded farmers, thus creating a seed bank. And Bren Smith, owner of Thimble Island Oyster Co, is pioneering the development of sustainable 3D ocean farming – the growing of native aquatic plants and shellfish in salt water, in collaboration with the Yale Sustainable Food Project. This champions a new form of marine conservation: seaweed and shellfish require no input; they grow three-dimensionally and use space more efficiently than their land-based counterparts. They also act as filters, drawing out nitrogen and heavy metals, and have excellent nutritional scores.

But maybe the most inspiring of these journeys into food futures is the story of a new African business developed by Chido Govera, based on the cultivating of mushrooms from coffee grounds. Govera is a dynamic young woman from Zimbabwe who not long ago was an orphan fighting poverty and malnutrition. Through a project run by the Zeri Foundation she learned how to grow mushrooms on organic waste, thus enabling her to feed herself and her family. Mushrooms are a good source of fungal protein and turn out to have been a staple food in Africa for generations. Unfortunately, colonialism and destruction of the forests has greatly reduced this tradition. Today Govera is sharing that knowledge in order to enable others to overcome destitution, and so begins an independent community. Her mushrooms are intended to inspire people as to the possibilities of this form of production. For that purpose, an online open-source workshop has been published and her experience is currently being used to build a global network of partners with the joint aspiration of re-using waste to grow food products. ‹

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unisg.it, yale.edu/sustainablefood, domrestaurante.com.br, madfood.co cookitraw.org, cookitraw.tumblr.com, forager.org.uk, ansonmills.com thimbleislandoysters.com, chidos.org

elBulli: Ferran Adrià and The Art of Food, Embankment Galleries, Somerset House, London, until 29 September somersethouse.org.uk

SLOW FOOD (1)

SLOW FOOD, MAURITANIA (2)
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SLOW FOOD (3)

SLOW FOOD (4)