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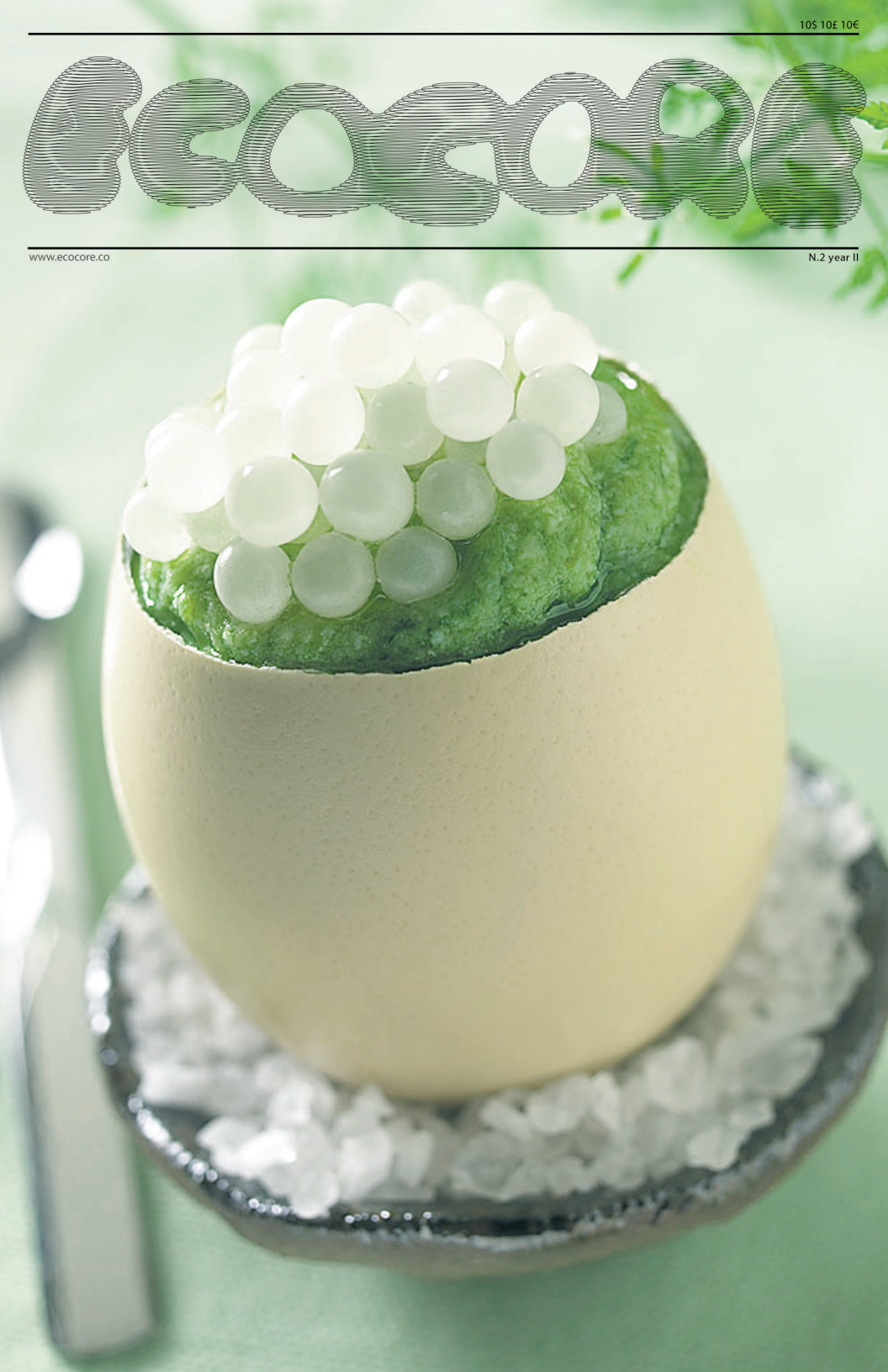

E C O C O R E

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Editor: .....Alessandro Bava

Feature Editor: .....Rebecca Sharp

Assistant Editor: .....Mary Wang

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c/o www.ecocore.co

ecocore.zine@gmail.com

Contributors:

Darren Bader
Yngve Holen
Dena Yago
Nik Kosmas
Tobias Madison
Luke Moore
Marlie Mul
Manuele Gaioni
Alejandro Bava
Biayna Bogosian
Michelle Obama
Irving Penn
Francis Bitonti Studio
AA-DRL
Lucie Stahl
Peter Lippmann
Gerald Domenig
Diane Bisson
Oscar Kahn
Paul Outerbridge

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YNGVE HOLEN

REMARKS BY THE FIRST LADY ON FRESH FOOD

by Michelle Obama

Fairhill Elementary School, Philadelphia, Pennsylvania 2:47 P.M. EST

MRS. OBAMA: Thank you. All right, Albalee, that applause was just as much for me as it was for your wonderful introduction. (Laughter.) Wasn't she? She did a great job, great job. (Applause.) Just know that we're all very proud of you, and we're all very proud of every single one of your classmates and every single student here in the city of Philadelphia and the state of Pennsylvania. I am so pleased to be here today, so grateful. And thank you all for having me.

Ever since July, when Secretary Vilsack stopped -- visited here, he has not stopped talking -- (laughter) -- about his visit here to Pennsylvania. (Applause.) No, really, I mean -- and when I heard about it I couldn't wait to get here. As we've been talking about the garden and talking about this initiative, I'm like, I got to see what's going on in Philly, what's going on in Pennsylvania. So I'm thrilled to finally have the chance to come here and see for myself, and I want to thank Secretary Vilsack not just for being out front on this issue but for his leadership and work at the U.S. Department of Agriculture.

I also want to thank Secretary Geithner also for joining us today. Both of them have just been terrific resources and support, not just in the Cabinet but just in everything that we're doing.

And I don't think that many Treasury Secretaries can claim childhood obesity as part of their portfolio, right? (Laughter and applause.) It is pretty cool to have your husband's Treasury Secretary enthusiastically a part of this initiative. (Laughter.)

So I salute you for your work. I know your wife has a lot to do with it, but that's -- (laughter.)

I also want to thank Senators Casey and Carper as well for being here; Representatives Brady and Fattah --I'm trying to make sure I'm catching everybody. And Representative Schwartz for joining us today and for their work on behalf of the people of this state and for the people of Delaware.

I want to thank Governor Rendell, Mr. Svelte -- (laughter) -- looking good, who's here. Every time I see him he gets smaller and smaller. (Laughter.) It's a good thing. You're looking good. And I also want to thank his wonderful wife, Judge Marjorie Rendell. I'm going to see you all very shortly tomorrow at the National Governors Association.

Have to thank Mayor Nutter, who still is getting the award for one of the best campaign rallies we had here in Philly. He just blew out the introduction, had everybody crying. (Laughter.) So thank you for your support and your leadership here.

Representative Evans, thank you for your outstanding work to ensure that the kids across this state can lead active, healthy lives. The work that you've done to get this going has been tremendous. (Applause.) Yeah, stand up!

And I also have to recognize Pat Burns, who hosted us at the Fresh Grocer today. (Applause.) Pat hosted us, just as Jeff Brown hosted Secretary Vilsack and others at his supermarket last summer. It was just wonderful tour, a wonderful experience, and I commend both of you for your leadership and for doing what's best for the people of this city.And I have to finally thank a few others: the Food Trust. (Applause.) The Reinvestment Fund. (Applause.) And the Greater Philadelphia Urban Affairs Coalition. (Applause.) You all have done extraordinary and some could say revolutionary work here in this city. And as you all have said consistently, you couldn't do it without each other. That has been the resonating message. So you all should be very proud to be highlighted here today for the work that you've done. It's really groundbreaking, and hopefully will set the tone for what we can do throughout the country.

Six years ago, when this city had fewer supermarkets per person than almost anywhere in America, all right, that was six years ago, when many folks had no access to healthy foods; six years ago many neighborhoods had alarming rates of obesity-related conditions like heart disease and diabetes -- the folks in this city, you all could have decided that you had an unsolvable problems on your hands, right? You could have done that. You could have decided that these problems were just too big and too complicated and too entrenched and thrown your hands up and walked away.

But instead you all took a stand, a really important, collaborative stand. You decided first that no family in this city should be spending a fortune on high-priced, low-quality foods because they have no other options. You decided that no child should be consigned to a life of poor health because of what neighborhood his or her family lives in. And you decided that you weren't going to just talk about the problem or wring your hands about the problems, but you were going to act.

And that's precisely the kind of determination, the kind of commitment that we need to address the epidemic of childhood obesity in this country. And this issue is an issue of great concern to me, and I've said this before, not because I'm First Lady -- or not just because I'm First Lady of this country -- but because I'm a mother, and I care about my kids and I care about all of our kids. And I know that this issue is a great concern to all of you, everyone around this country. We all care about our kids. That's why last week we enthusiastically and proudly launched "Let's Move." (Applause.) "Let's Move" is a nationwide campaign to rally this country around one single but ambitious goal, and that is to end the epidemic of childhood obesity in a generation so that the kids born today grow up with a healthy weight. Simple but ambitious.

So this is what we need to do.

Let's move to help families and communities make healthier decisions for their kids. Let's move to bring together our governors and our mayors, our doctors, our nurses, our businesses, our community groups, our parents, teachers, coaches, everyone to tackle this challenge once and for all. And let's move to get our kids what they need to succeed in life. Let's move to ensure that they have the energy and the strength to succeed in school and then in the careers that they choose. Let's move to ensure that they can later live lives where they can keep up with their own kids, maybe keep up with their own grandkids, and if they're blessed, maybe their great-grandkids.

And "Let's Move" is a simple initiative with four parts. And Albalee very well laid them out. (Laughter.) Good job. (Applause.)

But let me repeat: First part, let's move to give parents the tools and the information they need to make the healthy choices for their kids. So we're working to provide better labeling for our food and encourage our pediatricians to screen kids for obesity during well-child visits, but then to write a prescription for families when they identify a problem with a step-by-step sort of process for what they can actually do. And we started this wonderful Web site called letsmove.gov to help provide tips and step-by-step strategies on eating well and staying active so parents don't feel alone and isolated as they're trying to figure this out.

Second part: Let's move to get more nutritious food in our schools. Secretary Vilsack, that's something he's focused on. That's why we're working not just with the Department of Agriculture but with food suppliers, food service workers, school officials, and investing billions of dollars to revamp our school breakfast and lunch programs so that our kids are eating foods with less sugar, fat, and salt, and eating more foods with fresh vegetables and fruits and whole grains. (Applause.)

The third part of the initiative is: Let's move. That's literally let's move. We got to move. We got to find ways for our kids to be more active, both in and out of school. That's why we're expanding and modernizing the President's Physical Fitness Challenge. And we've recruited professional athletes from all across this country who are just ready and willing to encourage our kids to get and to stay active.

And then finally, one of the reasons why we're here, the final component: Let's move to ensure

that all families have access to healthy, affordable food in their own communities. (Applause.) And the approach on this aspect is very simple. We want to replicate your success here in Pennsylvania all across America.

Again, six years ago this state decided to invest $30 million in fresh food financing, which has leveraged $190 million more from the private and non-profit sectors. And so far these investments have funded 83 supermarket projects in 34 counties, bringing nutritious food to more than 400,000 people. (Applause.) And, more importantly in this economy, this investment is projected to create more than 5,000 jobs. (Applause.) And these jobs are occurring often in communities that need them the most. Across this state, right now, because of these efforts, new employees are learning new job skills. And I met many of them at the Fresh Grocer. Just folks who were proud -- proud to be in a store that was serving their community and proud to be doing a good job and have a chance to not just support their families but do something good for the rest of their communities. (Applause.)

But these new stores are also bringing new economic development into these communities, because they serve as anchors to attract other businesses to invest, and creating even more new jobs. So one good deed leads to another.

And we saw this example today again during our visit to the Fresh Grocer at Progress Plaza. As you all know, the last supermarket that was in that community closed more than 10 years ago. More than a decade ago. That was the last time that that community had a grocery store. So this community went 10 years without a place for folks to buy good food. For 10 years folks had to buy their groceries at places like convenience stores and gas stations, where usually they don't have a whole lot of fresh food, if any, to choose from. So that means if a mom wanted to buy a head of lettuce to make a salad in this community, or have some fresh fruit for their kids' lunch, that means she would have to get on a bus, navigate public transportation with big bags of groceries, probably more than one time a week, or, worse yet, pay for a taxicab ride to get to some other supermarket in another community, just to feed her kids.

So let's think about that. For 10 years in one community, there were kids in that community who couldn't get the nutritious food that they needed during some of the most formative years of their lives. And think about the impact that that can have on a child's health, not just now but in the future, because research shows that children who are overweight as adolescents are 70 to 80 percent more likely to become obese as adults.

And what happened in the neighborhood that we visited today is happening somewhere in every state all across this country. Right now there are 23.5 million Americans, including 6.5 million children, who live in what we call "food deserts." These are places and communities that don't have a supermarket. This is true in the inner city and in rural communities. This is happening all across the country.

But fortunately, right here in Philadelphia, you all have this wonderful grocer named Pat Burns who had already opened successful stores in other neighborhoods. And he decided that it was -- he was interested in opening a grocery store in Progress Plaza. (Applause.) But he could only do it because of a grant from the Fresh Food Financing Initiative. And today, just a few months after it opened -- and this is important for everybody to understand -- the Fresh Grocer is doing a thriving business. It's a beautiful store, attracting folks from neighboring communities and providing jobs for folks in the area. In fact, during the big snow the Fresh Grocer was able to stay open because so many of the employees live nearby.

So with your success here in Pennsylvania, what you've shown us is that when we provide the right support and incentives, then business leaders like Pat Burns and Jeff Brown, they're going to take the chance to invest in our communities. And when we bring fresh, healthy food to communities, what do we learn? People will buy it, right? People will buy it. These stores are turning a profit. And what's going on is that they're doing well by doing good. Isn't that something? (Applause.)

So it's because of this example that part of "Let's Move" we created this Healthy Food Financing Initiative that's modeled on what's been going on here. And as Secretary Geithner said, with a modest initial investment of about $400 million a year, we're going to use that money to leverage hundreds of millions more from private and non-profit sectors to bring grocery stores and other healthy food retailers to underserved communities all across this country. If you can do it here, we can do it around the country. (Applause.) And our goal is ambitious. It's to eliminate food deserts in America completely in seven years. (Applause.)

Again, we know this is ambitious, but we also know that tackling the issue of accessibility and affordability is key to achieving the overall goal of solving childhood obesity in this generation. Because we can give our kids the healthiest school breakfasts and lunches imaginable, but that won't mean much if they head to the corner store after school and buy candy and chips and soda because that's all they have available, right? And we can create the best nutrition education and physical education programs in the world, but if dinner is something off of the shelf of a local gas station or convenience store because there's no grocery store nearby, all our best efforts are going to go to waste. We're setting people up for failure if we don't fix this.

So it's clear that we need a comprehensive, coordinated approach. But we also have to be clear that that doesn't mean that it requires a bunch of new laws and policies from Washington, D.C. I have spoken to many experts on this issue, and not a single one of them has said that the solution to this problem is to have government telling people what to do in their own lives.

It's also not about spending huge sums of money, particularly during these times, when so many communities are already stretched thin. Instead, it's about doing more with what we already have.

And as you've shown us here in Philadelphia, it's about smart investments that leverage more investments and then have the

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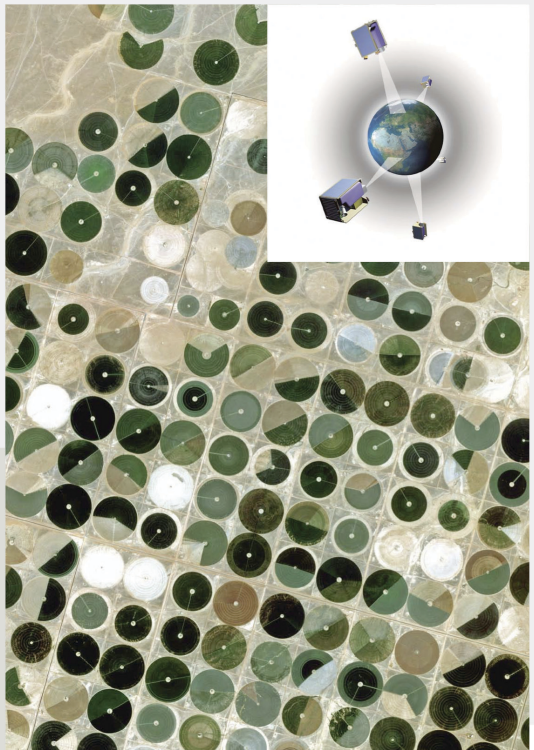

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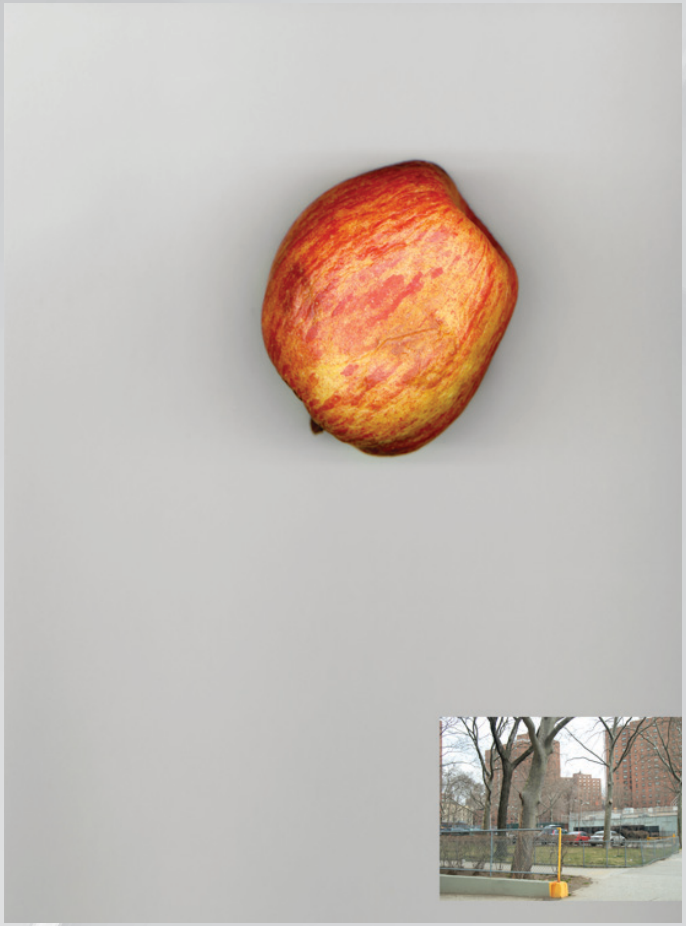


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Onetime dark horse bolts into contention
Showing cool under fire, Liberal Democrat's chief shakes up British election
BY JOHN F. BURNS
Now, Europe deals with the fallout
There was not much demand for cots Wednesday at Kennedy International Airport, in New York, as airlines around the world made progress in managing flights for stranded passengers.
"I'm sufficiently in touch with reality to know that what goes up can come down. The further people push you up, the further you have to fall."
Volcano saga gives plan to integrate skies over Continent a big push
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COMMISSION OF THE EUROPEAN COMMUNITIES Brussels, 12 January 2000 COM (1999) 719 final

EXECUTIVE SUMMARY

Assuring that the EU has the highest standards of food safety is a key policy priority for the Commission. This White Paper reflects this priority. A radical new approach is proposed. This process is driven by the need to guarantee a high level of food safety.

European Food Authority

The establishment of an independent European Food Authority is considered by the Commission to be the most appropriate response to the need to guarantee a high level of food safety. This Authority would be entrusted with a number of key tasks embracing independent scientific advice on all aspects relating to food safety, operation of rapid alert systems, communication and dialogue with consumers on food safety and health issues as well as networking with national agencies and scientific bodies. The European Food Authority will provide the Commission with the necessary analysis. It will be the responsibility of the Commission to decide on the appropriate response to that analysis. A European Food Authority could be in place by 2002 once the necessary legislation is in place. Before finalising our proposals

we are inviting all interested parties to let us have their views by end April. A definitive legislative proposal would then be brought forward by the Commission.

Food Safety Legislation

The setting up of the independent Authority is to be accompanied by a wide range of other measures to improve and bring coherence to the corpus of legislation covering all aspects of food products from "farm to table". Already the Commission has identified a wide range of measures that are necessary to improve food safety standards.

The White Paper sets out over 80 separate actions that are envisaged over the next few years.

There have been enormous developments in the past decades, both in the methods of food production and processing, and the controls required to ensure that acceptable safety standards are being met. It is clear that, in a number of areas, existing European legislation has to be brought up to date. Following the Commission's Green Paper on food law (COM(97)176 final), and subsequent consultations, a new legal framework will be proposed. This will cover the whole of the food chain, including animal feed production, establish a high level of consumer health protection and clearly attribute primary responsibility for safe food production to industry, producers and suppliers. Appropriate official controls at both national and European level will be established.

The ability to trace products through the whole food chain will be a key issue. The use of scientific advice will underpin Food Safety policy, whilst the precautionary principle will be used where appropriate.

The ability to take rapid, effective, safeguard measures in response to health emergencies throughout the food chain will be an important element.Proposals for the animal feed sector will ensure that only suitable materials are used in its manufacture, and that the use of additives is more effectively controlled. Certain food quality issues, including food additives and flavourings and health claims, will be addressed, whilst controls over novel foods will be improved.

The risks associated with the contamination of foods have been brought into sharp focus by the recent dioxin crisis. Steps will be taken to address those areas where the existing legislation in this sector needs to be improved to provide adequate protection.

Food Safety Controls

The experience of the Commission's own inspection service, which visits Member States on a regular basis, has shown that there are wide variations in the manner in which Community legislation is being implemented and enforced. This means that consumers cannot be sure of receiving the same level of protection across the Community, and makes it difficult for the effectiveness of national authority measures to be evaluated. It is proposed that, in cooperation with the Member States, a Community framework for the development and operation of national control systems will be developed. This would take account of existing best practices, and the experience of the Commission's inspection services. It will be based on agreed criteria for the performance of these systems, and lead to clear guidelines on their operation.

In support of Community-level controls, more rapid, easier-to-use, enforcement procedures in addition to existing infringement actions will be developed. Controls on imports at the borders of the Community will be extended to cover all feed and foodstuffs, and action taken to improve co-ordination between inspection posts.

Consumer Information

If consumers are to be satisfied that the action proposed in White Paper is leading to a genuine improvement in Food Safety standards, they must be kept well informed. The Commission, together with the new European Food Authority, will promote a dialogue with consumers to encourage their involvement in the new Food Safety policy. At the same time, consumers need to be kept better informed of emerging Food Safety concerns, and of risks to certain groups from particular foods.

Consumers have the right to expect information on food quality and constituents that is helpful and clearly presented, so that informed choices can be made. Proposals on the labelling of foods, building on existing rules, will be brought forward. The importance of a balanced diet, and its impact on health, will be presented to consumers.

International dimension

The Community is the world's largest importer/exporter of food products. The actions proposed in the White Paper will need to be effectively presented and explained to our trading partners. An active role for the Community in international bodies will be an important element in explaining European developments in Food Safety.

Conclusions

The implementation of all the measures proposed in the White Paper will enable Food Safety to be organised in a more co-ordinated and integrated manner with a view to achieving the highest possible level of health protection. Legislation will be reviewed and amended as necessary in order to make it more coherent, comprehensive and up-to-date. Enforcement of this legislation at all levels will be promoted. The Commission believes that the establishment of a new Authority, which will become the scientific point of reference for the whole Union, will contribute to a high level of consumer health protection, and consequently will help to restore and maintain consumer confidence. The success of the measures proposed in this White Paper is intrinsically linked to the support of the European Parliament and the Council. Their implementation will depend on the commitment of the Member States. This White Paper also calls for strong involvement of the operators, who bear the prime responsibility for the daily application of the requirements for Food Safety.

Greater transparency at all levels of Food Safety policy is the thread running through the whole White Paper and will contribute fundamentally to enhancing consumer confidence in EU Food Safety policy.

potential to pay for themselves many times over in the long run. What you've clearly demonstrated here in this city and in this state is that we can do what's good for our businesses and our economy while doing what's good for our kids and our families and our neighborhoods at the same time. We can do it all. (Applause.)

And Jeff Brown put it best when he talked about his decision to put a grocery store in underserved communities. He said, "We have more than the bottom" -- "We have more than one bottom line here." That's important. He said, "We have more than one bottom line here...the community's success is important, too." That's a wonderful spirit. (Applause.) And in the end, that's what this is all about, really -- not just the kind of food that we want our kids to eat, but it's also about the kind of communities that we want our kids to live in. And it's about the kind of lives that we want them to lead, right, all of our kids.

We know it won't be easy to solve this obesity crisis, because these big problems are never easy. We're going to need a lot more folks just like all of you to step up to the plate. This isn't about the First Lady doing it all. I can't do it by myself. I'm going to need all of you. We're going to have to work together. But if there's anyone out there who doubts that it can be done, then I would urge them to come here to Philadelphia and to see what you've done here. (Applause.) I would urge them to see the difference that we can make when government and businesses and community groups and ordinary folks come together to tackle a common problem. It's a powerful thing. I would urge them to imagine what we can achieve if we take programs like this that have lifted up so many communities here in Pennsylvania and then we bring those programs and those efforts and those ideas to every part of this country. Just imagine how many jobs we can create. Just imagine how many neighborhoods that we could revitalize and how many lives could be transformed. You all are seeing that now.

So let's move. (Laughter.) That's really the point. (Applause.) If we know it can be done, let's move, let's get it done. Let's give our kids everything they need and everything they deserve to be the best that they can be. Thank you all. This has been a wonderful day. Thank you so much. (Applause.)

END 3:10 P.M. EST


BC 4
Jesus Christ, Date of birth

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Rome Declaration on World Food Security

by FAO @ UN

We, the Heads of State and Government, or our representatives, gathered at the World Food Summit at the invitation of the Food and Agriculture Organization of the United Nations, reaffirm the right of everyone to have access to safe and nutritious food, consistent with the right to adequate food and the fundamental right of everyone to be free from hunger.

We pledge our political will and our common and national commitment to achieving food security for all and to an ongoing effort to eradicate hunger in all countries, with an immediate view to reducing the number of undernourished people to half their present level no later than 2015.

We consider it intolerable that more than 800 million people throughout the world, and particularly in developing countries, do not have enough food to meet their basic nutritional needs. This situation is unacceptable. Food supplies have increased substantially, but constraints on access to food and continuing inadequacy of household and national incomes to purchase food, instability of supply and demand, as well as natural and man-made disasters, prevent basic food needs from being fulfilled.

The problems of hunger and food insecurity have global dimensions and are likely to persist, and even increase dramatically in some regions, unless urgent, determined and concerted action is taken, given the anticipated increase in the world's population and the stress on natural resources.

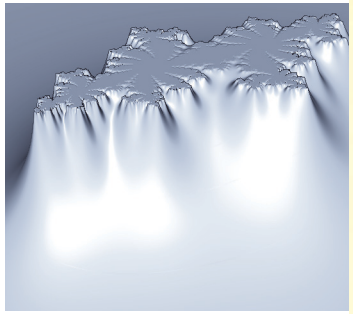
We reaffirm that a peaceful, stable and enabling political, social and economic environment is the essential foundation which will enable States to give adequate priority to food security and poverty eradication. Democracy, promotion and protection of all human rights and fundamental freedoms, including the right to development, and the full and equal participation of men and women are essential for achieving sustainable food security for all.

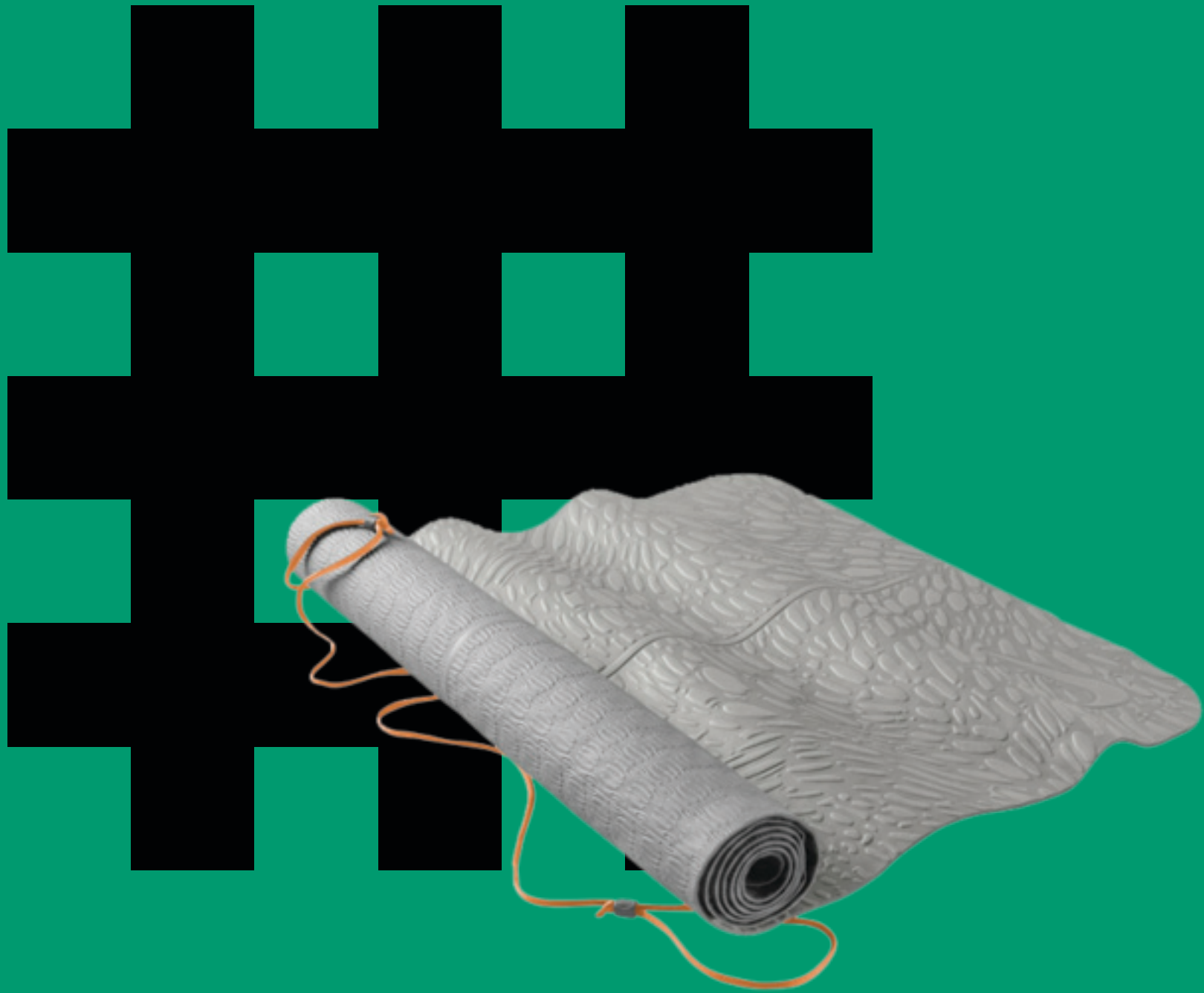
Poverty is a major cause of food insecurity and sustainable progress in poverty eradication is critical to improve access to food. Conflict, terrorism, corruption and environmental degradation also contribute significantly to food insecurity. Increased food production, including staple food, must be undertaken. This should happen within the framework of sustainable management of natural resources, elimination of unsustainable patterns of consumption and production, particularly in industrialized countries, and early stabilization of the world population. We acknowledge the fundamental contribution to food security by women, particularly in rural areas of developing countries, and the need to ensure equality between men and women. Revitalization of rural areas must also be a priority to enhance social stability and help redress the excessive rate of rural-urban migration confronting many countries. We emphasize the urgency of taking action now to fulfil our responsibility to achieve food security for present and future generations. Attaining food security is a complex task for which the primary responsibility rests with individual governments. They have to develop an enabling environment and have policies that ensure peace, as well as social, political and economic stability and equity and gender equality.

We expressour deep concern over the persistence of hunger which, on such a scale, constitutes a threat both to national societies and, through a variety of ways, to the stability of the international community itself. Within the global framework, governments should also cooperate actively with one another and with United Nations organizations, financial institutions, intergovernmental and non-governmental organizations, and public and private sectors, on programmes directed toward the achievement of food security for all. Food should not be used as an instrument for political and economic pressure. We reaffirm the importance of international cooperation and solidarity as well as the necessity of refraining from unilateral measures not in accordance with the international law and the Charter of the United Nations and that endanger food security.

We recognize the need to adopt policies conducive to investment in human resource development, research and infrastructure for achieving food security. We must encourage generation of employment and incomes, and promote equitable access to productive and financial resources. We agree that trade is a key element in achieving food security. We agree to pursue food trade and overall trade policies that will encourage our producers and consumers to utilize available resources in an economically sound and sustainable manner. We recognize the importance for food security of sustainable agriculture, fisheries, forestry and rural development in low as well as high potential areas. We acknowledge the fundamental role of farmers, fishers, foresters, indigenous people and their communities, and all other people involved in the food sector, and of their organizations, supported by effective research and extension, in attaining food security. Our sustainable development policies will promote full participation and empowerment of people, especially women, an equitable distribution of income, access to health care and education, and opportunities for youth. Particular attention should be given to those who cannot produce or procure enough food for an adequate diet, including those affected by war, civil strife, natural disaster or climate related ecological changes. We are conscious of the need for urgent action to combat pests, drought, and natural resource degradation including desertification, overfishing and erosion of biological diversity.

We are determined to make efforts to mobilize, and optimize the allocation and utilization of, technical and financial resources from all sources, including external debt relief for developing countries, to reinforce national actions to implement sustainable food security policies.





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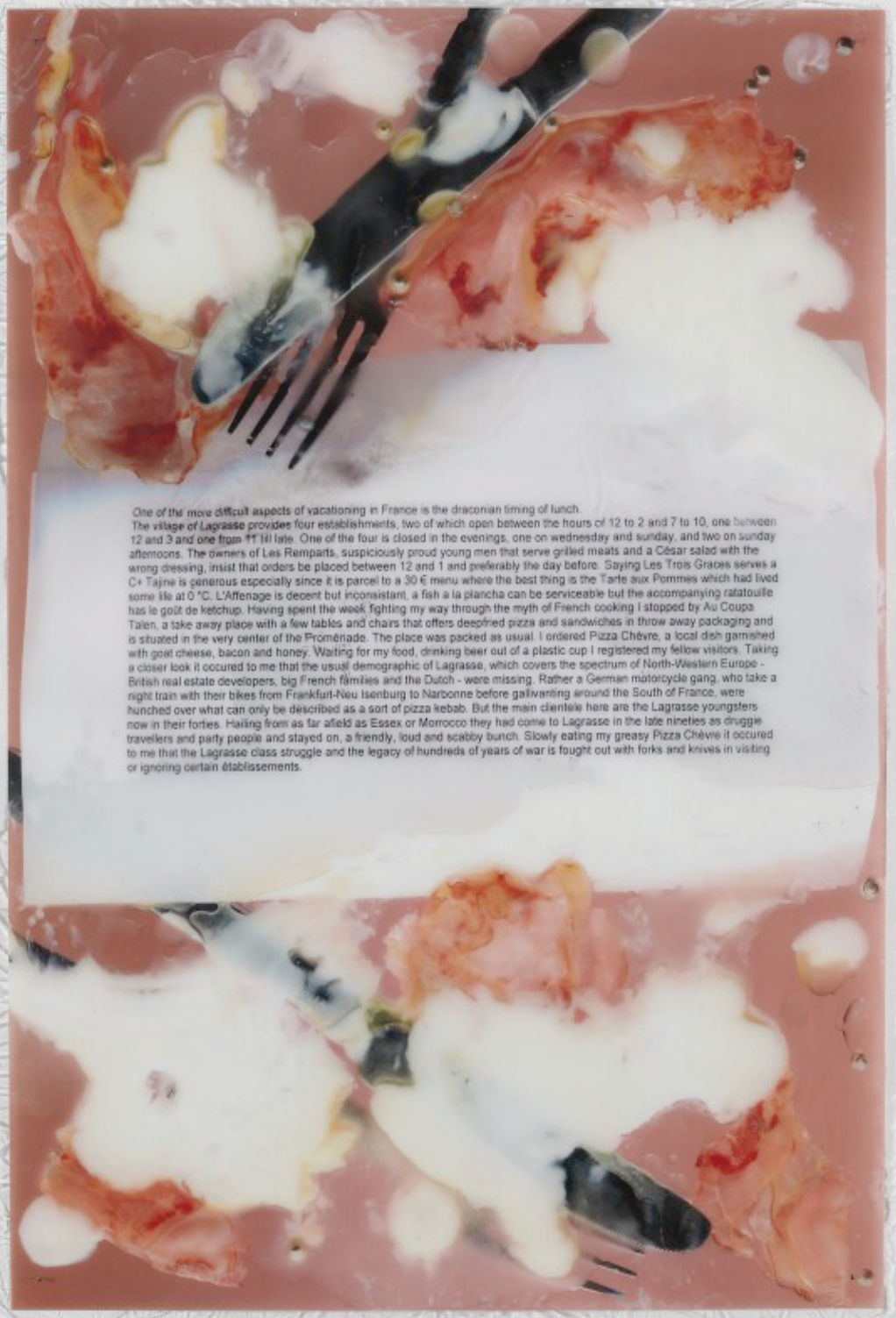

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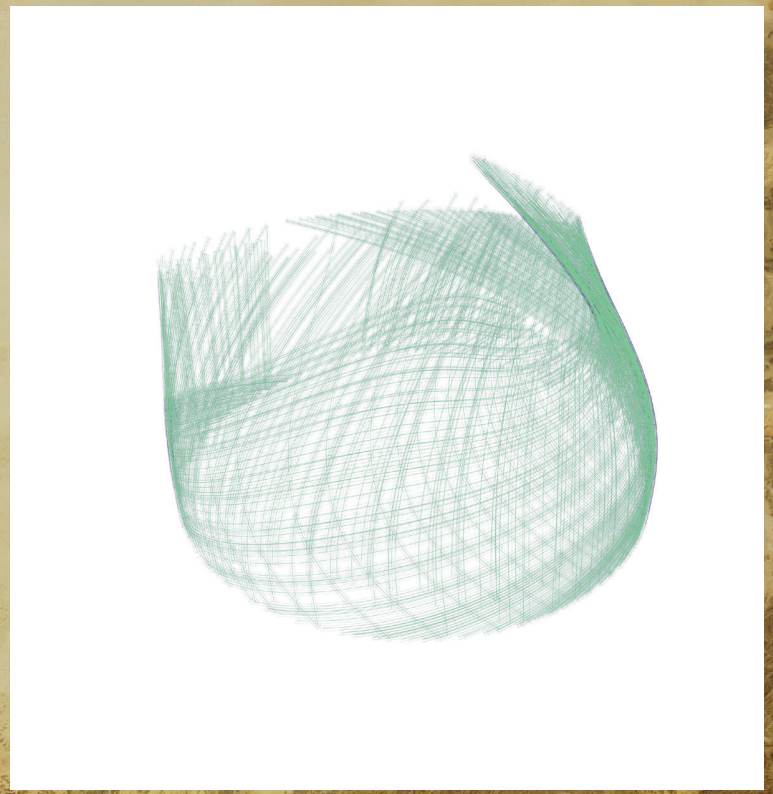

THE BIOPOLITICS OF FOOD PROVISIONING

by David Nally

Beginning with Foucault's writing on food provisioning in the mercantile period, this paper explores how a moral economy of hunger is gradually replaced by a political economy of food security that promotes market mechanisms as a better protection against scarcity. In Western Europe the emergence of political liberalism and laissez-faire economics substantially shaped how hunger and scarcity were conceptualised and socially managed. Beyond Europe these social forces were manifest in the development of colonial plantations. Here the transformation of non-capitalist social formations into market economies – what Harvey (2003) terms 'accumulation by dispossession' – was a foundational moment in the development of a global provisioning system that under- mined the anti-scarcity strategies of some populations, while ensuring food security for others. The subsequent discovery of the 'Global South' hunger, together with the desire to encourage better habits and purer morals among 'backward' peoples, created the context in which further curative interventions, designed to consolidate a capitalist food economy, were valorised and maintained. These reflections set up the final part of the paper, where I contextualise recent efforts to present agro-biotechnologies as a pro- welfare and anti-scarcity response. Moving beyond the causes of hunger to explore its strategic function, this analysis highlights how corporate agribusiness – in partnership with the life sciences – is attempting to recondition human, animal and bacterial life in order to quicken the reproduction of capital. I term this new moment in the commer- cialisation of food systems accumulation by molecularisation. The paper concludes by examining how the corporate management of food folds into biopolitical strategies for managing life, including the lives of the hungry poor who are 'let die' as commercial interests supplant human needs.

No man qualifies as a statesman who is entirely igno- rant of the problems of wheat. (Socrates cited in Mor- gan 2000, 3)
Then crop failure, drought, and flood were no longer little deaths within life, but simply losses of money ... Now farming became industry, and the owners fol- lowed Rome, although they did not know it. (Steinbeck 2000 [1939], 272–3)

Introduction

In the late 1970s Michel Foucault began exploring the emergence of a new technique of government
that established 'the basic biological features of the human species' (Foucault 2007, 1) as the primary object of political strategy. In The history of sexuality, Foucault famously outlined the significance of this development:
The old power of death that symbolized sovereign power was now carefully supplanted by the administra- tion of bodies and the calculated management of life. During the classical period, there was a rapid development of various disciplines – universities, secondary schools, barracks, workshops; there was also the emergence, in the field of political practices and economic observation, of the problems of birthrate, longevity, public health, housing, and migration. Hence there was an explosion of numerous and diverse techniques for achieving the subjugation of bodies and the control of populations, mark- ing the era of bio-power. (1980, 140, emphasis added)
For Foucault, what distinguishes the early from the late modern period is the fact that sovereign power is defined less as the 'right to kill' and more as the ability to seize, manage and exert influence over the living conditions of individual bodies and whole populations. This does not mean that the 'power of death' is completely abandoned, but rather that violence must be rationalised by appeal- ing to future improvements: the pauper will be con- verted into a sturdy labourer; the prisoner will be rehabilitated; savage populations will be civilised; and wastelands will be transformed into productive environments (Darby 1973; Murray Li 2007, 13). Accordingly, the 'era of bio-power' heralded a new taxonomy of everyday life: through adminis- trative measures life itself could be subjugated and managed with a view to the betterment and greater security of humankind (Foucault 1980 2008; Legg 2005; Lemke 2001).
This genealogy of biopolitics is now familiar enough and hardly requires further elaboration.1 This paper instead aims to empirically develop Fou- cault's conceptual history by exploring the biopoli- tics of the modern food economy. The focus on food provisioning is deemed appropriate for two reasons. First, the ongoing publication of Foucault's lectures at the Colle`ge de France, especially his lec- tures in 1977–1978, entitled Security, territory, and population, show that Foucault placed the history of food provisioning – and especially the problem of food scarcity – at the very centre of his account of biopower. But while the lecture courses have generated considerable debate, the importance of food in these discussions is generally ignored or poorly reviewed.2 Secondly, in considering food provisioning to be a material expression of bio- power, Foucault's work provides a bridge between research emphasising the political economy of agro-food systems (Friedmann and McMichael 1989) and work that studies the political strategies that regulate biological life (Rabinow and Rose 2006). While the former has enhanced our under- standing of the socio-economic transformations, the latter properly reminds us that the spatial dynamics of states and capital are also vital pro- cesses (Kearns and Reid-Henry 2009) that can encourage, undermine or otherwise attenuate the potential for life to replenish and flourish. The bio-politics of food provisioning is therefore, a lens to think about how the management of food maps onto strategies for managing life, a synergy that becomes more pronounced as agrarian structures are transformed to suit commercial interests rather than human needs.
My argument proceeds in four parts. The first part reviews Foucault's writing on food provision- ing, the problem of security and the problem of scarcity. I relate these reflections to Foucault's con- cern with the 'economic management of society', particularly the relationship between laissez-faire economics and liberal government. The second part examines the issue of food provisioning in Eur- ope's colonies where in fact the drive to eliminate non-market access to food was more acute and biopolitical controls were adopted with greater fervour. The final two sections of the paper use the idea of a 'biopolitics of food provisioning' to exam- ine corporate efforts to gain control over agricul- tural life and to turn agrarian systems into a vehicle for capital accumulation (Kloppenburg 2004, 8). The process of commodification through biotechnical innovation – what I term accumulation by molecularisation – is profoundly transforming the evolutionary life of animals and plants, and, in some cases, the very existence of the hungry poor who are finding that their access to vital provi- sions, and indeed their control over the means of production, is being progressively eroded.

Homo œconomicus and the problem of scarcity

The content of the lectures delivered under the title, Security, territory, and population, might sur- prise some scholars who believe that Foucault's concern with the politics of truth is developed at the expense of the vital role of political economy. In these lectures Foucault (2007, 2, 11) shows a strong interest in 'economic transformations', which he attempts to define in terms of a much broader history of 'apparatuses (dispositifs) of secu- rity'. This new project opens up four overlapping concerns: first what Foucault (2007, 11) outlines as 'spaces of security'; second, the management of the uncertain or 'aleatory'; third, new mechanisms of normalisation; and finally, the emergence of the population as a political-economic problem, and later as a problem of 'conduct'.
To begin, Foucault shows how these 'apparatuses of security' are materialised in the changing morphology of cities in the 17th and 18th centuries. Through the construction of the 'disciplinary town', hazards like theft and disease could be minimised and positive elements like the circulation of capital could be reinforced and optimised. Gradually, the spatial fabric of the town – the construction of quays, the partitioning of streets and the spacing of workshops – becomes ordered in such as way as to better manage the population in relation to 'natu- ral' and 'artificial' occurrences. Focusing on town plans and key urban texts, Foucault shows how the territorial sovereign became an architect of the disci- plined space, but also, and almost at the same time, the regulator of the milieu, which involved establishing not so much limits and frontiers, or fixing locations, as, above all and essentially, making possible, guarantee- ing, and ensuring circulations. This emphasis on the city as a site of circulation, and the sovereign as the 'regulator of the milieu', forms the background to Foucault's longer discus- sion of scarcity (la disette) and the policing of grain. The supply and provisioning of food, particularly the threat posed by urban food shortages, brings into sharp relief the concerns highlighted by Fou- cault earlier in the course. On the one hand, there is the priority of upholding the people's subsis- tence rights (what peasants viewed as 'laws of necessity') in order to prevent future convulsions and civil disorder. Against this is the emergence of commercial pressures to ensure the optimal circula- tion of capital and goods. The latter is presented first as a case for purging bad conduct (such as eradicating hoarding, regrating and forestalling practices), but is subsequently theorised as a case for promoting the freedom of trade as a public good in itself.
This tension between a nation's subsistence and the 'economic management of society' is most evi- dent in the doctrines of the physiocrats in France (and as we shall see in the writings of free market theorists like David Ricardo and Adam Smith in Britain) who sought to replace the paternalist-interventionist state with a liberal state committed to unrestricted trade.3 However, before the domi- nance of the physiocrats, the French government operated what Foucault describes as an 'anti- scarcity system' (2007, 32). Here he is alluding to the customary mechanisms for ensuring that interventions in times of scarcity were considered 'an inevitable extension of general state functions' (Devine 2004, 120). The purpose of these 'moral economies' (Scott 1976; Thompson 1971; Watts 1984) differed substantially between societies, though more often than not they included a mix- ture of price controls, curbs on exportation, the operation of public granaries, prohibitions on the use of provisions for the distillation of alcohol, and the duty-free import of victuals.4 Significantly, these practices were considered preventative rather than remedial: they were designed to stop food shortages from occurring in the first place.
With the ascendency of physiocratic doctrines, and within it the development of a new conceptu- alisation of the economy, this 'anti-scarcity system' begins to implode. According to the free-trade theorists, if entrepreneurial spirit and private inter- est was encouraged, the deadly effects of uncertain events – like droughts, floods and crop blights – would be lessened and protracted scarcity could be avoided. Indeed, not only was freedom of trade a 'better mechanism of security' (Foucault 2007, 34) against famine, but the traditional anti-scarcity structures – in existence for centuries – were repre- sented as the real scourge to be addressed.
This transition to a laissez-faire provisioning model enabled an important epistemological shift in the relationship between the population and subsistence. Under the old mercantile order, hun- ger and scarcity were considered to be a 'natural' phenomena, a reflection of 'bad fortune' or a divine condemnation of 'man's evil nature' (Vernon 2007, 3). In the writings of the physiocrats, however, the question of subsistence

emerges less as a moral/cosmological concern than as a governmental problem. Famines are no longer thought to be an unavoidable catastrophe (a cosmological crisis) and periodic hunger ceases to be considered as a categorical evil (a moral indictment). Under free-trade principles the fecundity of the soil, transportation networks, husbandry practices, and above all, the efficient functioning of the market, gradually displace the 'obsessive fears' that dominate the 'anti-scarcity' structures of the mercantile period (Foucault 2007, 35–6).

These developments are critical to what Foucault describes as a nascent 'ideology of freedom' associ- ated with European liberalism and 'capitalist forms of the economy' (2007, 48). The physiocrats' con- ceptualisation of market forces is principally an extended critique of customary food entitlements – now considered unnatural, even dangerous – as well as a prescriptive programme for a radically differ- ent kind of provisioning economy. For this reason Foucault is keen to point out that laissez-faire eco- nomics does not imply that 'everything is left alone'. The liberalisation of the food system – 'not interfering, allowing freedom of movement, letting things take their course' – only succeeds by refor- mulating 'the permitted and the forbidden' (Foucault 2007, 45–6) to produce a novel social order and a new level of working on reality called 'the economy'. Furthermore, the imposition of free markets will require the active collusion of state forces: 'anti-scarcity systems' will have to be dis- mantled; legislative assistance will be needed to place grain markets in private hands; the repressive powers of the police may be called upon to quell revolt, and so on. In other words, free markets emerge from the intimate connections forged between the state and capital. The assumption that markets are 'natural systems' operating outside of power and politics is itself an invention of the 19th century that takes for granted the violent manner in which the state must eliminate all behaviour that is now deemed aberrant or undesirable.

The transition to a free-trade economy also does not mean that famines and other catastrophes will in future be prevented. As mentioned above, re- ordering the food system will in some instances require an increase in repressive measures as arti- sans, small-holders and agricultural labourers are forced to bear the costs of market regulation (Block's introduction to Polanyi 2001, xxvii). In Foucault's words,

> there will no longer be any scarcity in general, on con- dition that for a whole series of people, in a whole ser- ies of markets, there was some scarcity, some dearness [in price], some difficulty in buying wheat, and conse- quentially some hunger, and it may well be that some people die of hunger after all he scarcity that caused the death of individuals not only does not dis- appear, it must not disappear. (2007, 42, emphasis added)

Put another way, the old problem of 'hunger amidst scarcity' will give way to the distinctly modern crisis of 'hunger amidst abundance' (Araghi 2000, 155).

Finally, to legitimise this new biopolitics of provi- sion an ideological distinction between 'peoples' and 'populations' must be introduced. According to Foucault, the population includes those who conform or adapt to the new economic order; they fall in line with market regulation, even promoting it as a means to attain greater security. The people, on the other hand, are those who 'disrupt the system' and 'throw themselves on the supplies'. They reject the new regime of planned scarcity, and therefore 'do not really belong to the popula- tion' (2007, 44). For Foucault the act of 'letting die' is profoundly connected to the classification of undesirables – what Giorgio Agamben (1995) would later term homines sacri – who are now rep- resented as 'threats, either external or internal, to the population' (Foucault 2003, 256). In a liberal biopolitical economy, he concludes,

> killing or the imperative to kill is acceptable only if it results not in a victory over political adversaries, but in the elimination of the biological threat to and improve- ment of the species or race. (2003, 256; see also Minca 2006)

Thus in addition to the identification of 'artificial' forms of food provisioning and 'aberrant' modes of economic management, there appears a regime of human classification that disaggregates populations according to their conduct and perceived threat to the social order (Dean 2002). Under biopolitical conditions, therefore, scarcity and hunger are permissible in so far as their presence provokes a desirable social or economic change (Raulff 2004, 611). To paraphrase David Keen (1994, 77), famines now have functions as well as causes (Nally 2008).

In this unique genealogy of the modern food system, Foucault does not discuss the political situ- ation in Britain. If he had, he would have found a clear analogue to the birth of liberalism and the biopower of the state that he readily detects in the political and economic discourse of 18th century France. In Thoughts and details on scarcity (1800), for instance, Edmund Burke (1729–1797) relates food supply ('one of the finest problems in legislation') to the issue of responsible government. For Burke, public provision was both naive and dangerous:

> Of all things, an indiscreet tampering with the trade of provisions is the most dangerous, and it is always worst in the time when men are most disposed to it: that is, in the time of scarcity. (nd, 267–8)

According to Adam Smith (1723–1790) restricting by 'the violence of government' the freedoms of the market was the most certain method of pro- longing famine (Smith 1998, 597). Similarly David Ricardo's (1772–1823) views on comparative advan- tage – suggesting that regions and states should specialise in a single niche product to gain a com- petitive edge – reinforced the case for interdependent global markets, unrestricted private enterprise and food trade liberalisation (Abraham 1991). Referring to the 'Irish emergency of 1847', the liberal econo- mist J.S. Mill (1806–1873) also endorsed market mechanisms as the optimal scheme for addressing food scarcity. In his acclaimed Principles of political economy, Mill warned against 'direct measures at the cost of the state, to procure food', favouring instead 'private speculation' (1871, 549).

The British promoters of free-trade (Griffin 2009) also dispensed theories about the effective regula- tion of social behaviour. Although Burke attacked government intervention in the provisions trade,

> he nevertheless felt that principled administrations should 'guide our judgment' and 'regulate our tem- pers', particularly in times of scarcity when 'multi- tudes' are thrust upon the government for support (nd, 251).

Such sentiments reinforce Foucault's point that 'the people' – those aberrant elements that 'do not really belong to the population' – need moral guidance and reformatory discipline to correct their individual and collective behaviour. In England the preventive measures that formed the bedrock of the 'anti-scarcity system' made way for novel remedial practices designed not to mitigate 'distress' – the conventional euphemism for starvation – but to stig- matise and discipline the poor (Himmelfarb 1985). This concern with social regulation received its clearest expression in the revision of the English Poor Law of 1834 (Dean 1991; Driver 1993). The new laws established for the first time an epistemo- logical separation and legal distinction between poverty and indigence. This distinction between the 'pauper' (a social delinquent) and the 'labouring poor' (those who struggled to make ends meet) – codified in law and spatialised in the workhouse – correlates precisely with the caesura distinguishing the 'people' from the 'population'. The Poor Law was therefore a techne □ for separating the 'normal' from the 'pathological' in such a way as to naturalise the violence of incarceration and correction. Clearly, market regulation would require certain procedures for disciplining bodies, and in some cases, whole populations (Nally forthcoming).

Colonial agribusiness

This was the situation in Europe, but curiously Foucault fails to consider how the biopower of the state and the biopolitics of food provisioning unfolded beyond the metropole, in the colonies, where Euro- pean states paid remarkable attention to the biologi cal life of their subjects (Legg 2007; Legg 2009, 222; Stoler 1995). What Philip McMichael (2000, 26) defines as 'imperial agribusiness' – the use of state and institutional mechanisms to control world agri- culture and the circulation of goods – was made pos- sible through colonial expansion, and in particular, the use of temperate lands, their natural endow- ments and their indigenous peoples (as well as Euro- pean migrant/colonial populations) to power the process of capital accumulation. At the turn of the 17th century, for instance, the English government formed the East India Trading Company, granting it special exemptions and trading monopolies to wres- tle control of markets in tea, cotton, silk and opium. In 1602 the Dutch responded by forming the Dutch East India Company (VOC), using trade restrictions and state monopolies to control commodity markets in South Asia (Braudel 1985). In North America, the Hudson Bay Company administered vast territories and monopolised trade in furs and pelts well into the 18th century, while further south a small handful of royally chartered companies controlled the emerging maritime trade between Europe, Africa and the east coast of the United States.

Out of such intimate connections between capital and state-sponsored violence emerged the first experiment in modern industrial agriculture: the plan- tation economy. In his fascinating account of the coffee plantations in colonial Ceylon, geographer James Duncan (2007, 35) draws on the work of Foucault to suggest that the plantations were 'labo- ratories of modern governmentality'. Duncan's account highlights the exceptional control over labour (the daily disciplining necessary to insert racialised bodies into the process of surplus produc- tion), the creation of drastically new

ecologies engi- neered for the purposes of monocultural production ('cash cropping'), the growth of an 'international knowledge economy' (dedicated to the interests of the planting community and coffee industry), and finally, the role of the colonial state in restructuring markets to encourage export-oriented agriculture (2007, 35, 40). Although the exercise of biopower was never absolute – and workers continued to resist by feigning illness, refusing work and pilfering provisions (Duncan 2002) – there is no doubting the novel nature of the plantations as spaces in which the biological, the economic and the political mixed in a murderous form of capital accumulation (Banerjee 2008; Mbembe 2003).

complements Sidney Mintz's classic study on the transformation of sugar from an expensive and lar- gely unknown commodity to its central place in Western diets. For Mintz (1986, 51) the West Indian islands, home to the early sugar haciendas of the 16th and 17th century, were the sites of a vast European 'experiment' – the first synergy of field and factory – which he defines as 'agro-industrial'. Although proletarian labour in Europe was based on a 'free contract' between worker and employer, Mintz finds many similarities between the process of 'primitive accumulation' (Marx 1954, 667–724) in the colonies and the 'precocious development' of capitalism in Europe. Anticipating the work rhythms of industrial manufacturing (Thompson 1967), for example, labour processes on plantations were acutely 'time conscious'. Docility and optimal productivity were ensured through a host of corpo- real strategies, including dietary management, reproductive controls and physical punishments. Mintz also finds it significant that the slave workforce was composed of 'interchangeable units' (a labour structure typical of later forms of capital- ist production); that the slaves were divorced from the means of production (e.g. land, tools); and that the entire plantation economy depended on a sharp distinction between sites of production and con-sumption (Mintz 1986, 51–61; see also Drayton 2002).5

Needless to say, the appalling treatment of plan- tation slaves differs from the treatment of proletar- ian labour in Europe. Mintz's point is not that these labour processes are the same, but that they are connected:

> Most students of capitalism (though not all) believe that capitalism itself became a governing economic form in the late eighteenth century and not before. But the rise of capitalism involved the destruction of economic sys- tems that preceded it – notably European feudalism – and the creation of a system of world trade. It also involved the creation of colonies, the establishment of experimental economic enterprises in various world areas, and the development of new forms of slave-based production in the new World, using imported slaves – perhaps Europe's biggest single contribution to its own economic growth. (1986, 55)

In Foucault's account, the destruction of rural live- lihoods is the prelude to, and necessary condition for, establishing the welfare of the town and the safety of the (European) sovereign. Arguably, though, the economic experiments described by Foucault were already in train in the 17th century

While Duncan is concerned with the 19th cen- tury, his Foucauldian reading of colonial agriculture through the establishment of colonies (Habib 1995) and the creation of a plantation system dedicated to export production. These extraterritorial laborato-ries were in fact 'field-trials' (Rabinow 1995) for new forms of agricultural production and labour control that proved pivotal not only to the rise of capitalism within Europe, but also to the promo- tion of world markets and the development of a glo- bal provisioning system (McMichael 1997).

As Mintz signals, the plantation system contrib- uted enormously to European growth. In the 1650s, for example, only a few thousand tons of sugar were exported from the West Indies, but by the 1770s sugar exports had reached 88 000 tons per annum (Ogborn 2008, 118), making it the most valuable of all British exports (according to Mintz, sugar demonstrates the most remarkable upward production curve of any food commodity any- where in the world). This incredible fecundity had a number of significant consequences. Each increase in volume yielded a corresponding fall in retail price. The price of sugar halved from 1630 to 1680, while tobacco, an expensive plantation com- modity selling for between 20 and 40 shillings per pound in 1619, was sold in the 1670s for a shilling or less (Mintz 1986, 64). Such was the success of global provisioning that by the 19th century sugar was supplying the English with almost one fifth of all their calories, while tobacco became a common article that even the very poor could afford (Mintz 1986, 6). In the most literal of ways, the Global South was feeding the growth of the Global North. This explains why Cecil Rhodes (cited in Lenin 1939, 79) famously characterised colonial expansion as 'a bread and butter question'.

Outside the European heartland, the commodifi- cation of food and the commercialisation of agricul- ture involved the destruction of local people's safety nets and coping mechanisms through succes-sive waves of occupation, confiscation and displacement. In Europe, the dismantling of the 'anti-scarcity system', as Foucault describes it, usually went hand in hand with the codification of new remedial/disciplinary welfare measures, and conse-quentially, the state was given an increased role in the economic regulation of society. In the colonies, the erosion of customary entitlements and indi- genous moral economies was much more rapid: force was regularly applied as a surrogate to state-craft and remedial welfare measures, such as were used, were frequently stripped of any vestige of humanitarianism. In colonial Indonesia, Murray Li describes how 'agrarian differentiation' was accom- plished more commonly through 'forced markets' (Keen 1994, 111) than market forces:

> It took intervention, by force and law, to transform land into private property that could be bought, sold, and accumulated, and to transform people into wage labour-ers available for hire. (2007, 97)

Examining the agrarian question in Karamoja, Uganda, Mamdani (1982, 68) shows how British colonialism began with the forcible acquisition of land, leaving local people bereft of the means of production and thrust back on precarious modes of pastoral cultivation. In Nigeria (Watts 1983), Ire- land (Nally forthcoming) and India (Davis 2001), famines became lethal engines for sweeping the soil of its human encumbrances, preparing the ground for the commodification of the food system. Harvey (2003, 137) accurately calls this 'accumula-tion by dispossession'.

At first blush, the aggressive transformation of non-market economies into market systems (Kearns 2009, 189–90) might seem a more apt expression of the death function of sovereign power than the life administering mechanisms of biopower. I think two points qualify this assumption. Firstly, the pro- motion of agrarian capitalism was almost always couched in a rhetoric of improvement. Indigenous modes of agricultural production were derided as backward, while native farmers were socially con- structed as lazy and recalcitrant to change (e.g. Seavoy 1986). By the 19th century, the Global South was firmly embedded in a discourse of develop- ment and improvement – what Vernon ironically refers to as the 'humanitarian discovery of hunger' (2007, 4). In an extraordinary act of historical amne- sia, Global South poverty is re-codified as a symp- tom of native incompetence, and in the process, whole populations become the locus of a new 'will to improve' (Friedmann 2004; Makki 2004; Li 2007). In other terms, biopower resurfaces in the guise of developmentalism (Escobar 1995; Legg 2006; Watts 2003).

Secondly, as his lectures demonstrate, Foucault equates the advancement of free trade with the classification of refractory peoples that 'do not really belong to the population'. Within liberal European thought, room is clearly left for purging certain peoples for the greater security of the popu- lation. From a world historical perspective then, the biopolitical caesura distinguishing the 'people' from the 'population' corresponds very closely to the emerging distinction between Global South pro- ducers, who could exist as chattel property or be 'let die', and the Global North consumers, whose welfare must be secured. Colonial lands provided an abundant and cheap source of calories (which in turn facilitated the metropolitan expansion of wage labour and the birth of the modern con- sumer); however, this selfsame provisioning struc- ture subjected household economies to price fluctuations and market perturbations that under- mined the ability of poor peasants to self-provision (Watts 1983).

In short, if Foucault had considered colonial his- tories more systematically he would have seen that the security of the town – and the safety of the sov- ereign – were predicated on the steady commer- cialisation of the agriculture in the colonial periphery as much as the centre. Indeed, a case can be made that it is outside the European heartland that the biopolitics of the state is expressed in its most pure and aggressive form: the liberal ideology of freedom becomes la mission civilisatrice; the refractory people become a racialised Other defined in relation to enlightened European practices; and the dismantling of indigenous anti-scarcity systems becomes the sine qua non for developing a global provisioning system dominated by the West. Even the opening of space to flows of capital, briefly dis- cussed by Foucault, is prefigured in the topography of the plantation as miles of coastline were trans- formed into specialised production zones for dis- tant markets (Beckles 1998; Cronon 2003; Sheridan 1998).

In light of this discussion we are now a lot closer to the stage where we can develop Foucault's gene- alogy of biopower to think about the global food system as it exists today. Certainly some of the ten- sions

identified by Foucault remain at the very heart of the modern food economy. In so far as hunger and malnutrition are today bound up in disputes regarding the welfare and development of 'backward' populations, we have seen a definite tightening of the scarcity–security nexus. Similarly, the friction between liberal capitalism and public provisioning is very much evident in recent delib- erations on global agricultural policy and trade reg- ulation. Notwithstanding these important parallels, modern agriculture has undergone seismic trans- formations in recent times, transformations that Foucault could not possibly have contemplated in his lecture course. Most obviously new techno- logical pathways mean that human, animal and biological materials – including the very 'reality of the grain' (Foucault 2007, 36) – can be restructured and harnessed to facilitate the commercialisation of agrarian systems. Capturing 'life itself' through techno-scientific interventions (Rose 2007) creates new forms of economic management – and an his- torically new modality of biopower – that does not replace the role of force (or the relationship between the state and capital discussed earlier in the paper), so much as present novel ways of converting provisioning cultures into vehicles for capital accumulation. A number of questions immediately present themselves: What new oppor- tunities for capital accumulation are emerging in the food chain? How are scarcity and hunger managed and discursively represented in an era of transgenic possibility? How might agro-biotech- nologies affect the cost and availability of vital provisions? In what follows I suggest that the 'molecularization of life' (Braun 2007) has profound implications for agricultural systems, affecting not only how foodstuffs are produced and accessed, but also how life and death are administered within a neoliberal apparatus of security (Sparke 2006). Corporate biopower

In agriculture, control of the biophysical aspects of production shifted from a theoretical ambition to an achievable goal due to three interrelated devel- opments: first, the liberalisation of the agrarian markets following the debt crisis in the 1970s; sec- ond, the acceleration and expansion in the use of biotechnologies to control the production and reproduction of life; and third the privatisation of nature through the extension of intellectual prop- erty rights to agriculture products. I will briefly deal with each in turn before considering the regimes of truth and strategies for intervention mobilised through these structural transformations.

In the wake of the oil crisis in 1973, and the glo- bal recession that followed, Global South govern- ments were forced to borrow heavily from International Financial Institutions (IFIs) as private banks refused to risk mortgaging to volatile gov- ernments. With little choice, insolvent regimes accepted the loans and the strict conditions attached. These conditions usually included reduc- ing domestic tariffs to stimulate foreign investment, abolishing state support for farmers (including strategic grain reserves, state marketing boards etc.), and devaluing the national currency to make domestic products inexpensive for foreign buyers (Friedmann 1982; George and Sabelli 1994; Harvey 2005; Weis 2007). In short, Global South governments were being asked to 'liberalise' their economies.

These structural adjustment programmes (SAPs) gave IFIs like the World Bank, the International Monetary Fund (IMF) and the Inter-American Development Bank (IDB) an increased role in determining the trajectory of economies in the Global South (Bush 2007; Klein 2007; Weis 2007). As a former Director General of the World Bank put it: 'We are no longer writing the rules of inter- action among separate national economies. We are writing the constitution of a single global economy' (cited in Patel 2007, 98). In practice 'writing rules' often meant enabling corporations to lead a process of transnational accumulation.

While SAPs hastened the clearing of political hurdles, new developments in industrial biotech- nologies, and in particular transgenic techniques following the discovery of recombinant DNA (rDNA) in 1974, prepared the ground for cir- cumventing existing biophysical barriers to the liberalisation of agriculture. Through molecular interventions, geneticists are now able to transplant a particular gene, or sequence of genes, from one organism to another, even from one species to another. Transplanting genes from animals into plants or from bacteria into animals exponentially removes the obstacles limiting conventional breed- ing and expands the potential for genetic variation. It also blows open new possibilities for capital accu- mulation. By changing the genetic composition of crops, for instance, geneticists are able to engineer seeds to resist specific kinds of herbicide, programme plants to kill their own embryos ('terminator genes'), and design one species of plant with the genetic traits of another species (Kloppen- burg 2004). I will return to the consequences of these biological innovations momentarily.

The privatisation of nature – the final pillar in the construction of a new agrarian order – was bol- stered considerably by the establishment of the World Trade Organisation (WTO), following the Uruguay Round of trade negotiations (1986–1994). In addition to ratifying the core principles of the General Agreement on Tariffs and Trade (GATT), the WTO incorporated other commodity sectors like agriculture, intellectual property and textiles, giving them a legal framework and new institutional structures for resolving disputes (Herring 2007b; Patel 2007, 97; Rosset 2006). Con- troversially, the reforms included an agreement on Trade Related aspects of Intellectual Property (TRIPS) that established legal mandates for regulat- ing intellectual property. Through patent protection laws agribusiness could now convert scientific achievements into commodities and charge an 'innovation fee' or 'technological rent' for their use (Falck-Zepeda et al. 2000).

Not since the imposition of free-trade has agri- culture been subject to such sweeping reform. And like these earlier experiments, the standard justifi- cation for this reorganisation is Malthusian in char- acter (Scoones 2002). In both media and policy discussions, for example, the merits of the 'biorevo- lution' (Buttel et al. 1985) are frequently reduced to a series of stock images depicting a 'warmer crowded interconnected world of 9 billion people' (GFAR 2010, 1). The rehearsal of this 'threatening global dystopia' (Duffield 2009, 119) is comple- mented by a suite of prescriptive norms that invari- ably conclude that agricultural production must be increased if we are to deliver more calories to the poor of today and the hungry of tomorrow.

'Once again,' warn Pinstrup-Anderson and Schiøler in their award-winning tome, Seeds of con- tention, 'Malthus's clash between population growth and the food production looms threaten- ingly on the horizon' (cited in Herring 2007a, 3). A similar line is echoed by agribusiness giant Mons- anto in their $1.6 million advertising campaign stressing the welfare benefits of biotechnology:

Worrying about starving generations won't feed them. Food biotechnology will. The World's population is growing rapidly, adding the equivalent of a China to the globe every ten years. To feed these billion more mouths, we can try extending our farming land or squeezing greater harvests out of existing cultivation. With the planet set to double in numbers around 2030, this heavy dependency on land can only become hea- vier. Soil erosion and mineral depletion will exhaust the ground. Lands such as rainforests will be forced into cultivation. Fertilizer, insecticide, and herbicide use will increase globally. At Monsanto, we now believe food biotechnology is a better way forward. (cited in Shiva 2000, 11)

The Consultative Group on International Agricul- tural Research (CGIAR), partly sponsored by the World Bank, similarly proposes to tackle global hunger through technological investment. The Group's website announces that without CGIAR's innovation, developing countries would produce 7–8 per cent less food, world food and feed grain prices would be 18–21 per cent higher, and conse- quently, 13–15 million more children would be malnourished.6 Recently the World Health Organi- zation (WHO) furnished a report claiming that bio-technology could reduce hunger, increase 'food security' and address health problems in the devel- oping world (WHO 2005, 37).

A report produced by the United Nations Development Programme (UNDP) beckoned the dawn of a 'bionic world' – 'where nanotech and biotech merge' – to address the needs of an 'ever-growing population' (UNDP 2001, 30). In these accounts, genetic engineering and industrial biotechnology are presented as a toolkit to mitigate the worst effects of population growth – a hi-tech check, if you like, on the repro- ductive habits of the poor.

In other instances, genetic engineering is pro- moted as a means to diminish future threats and risks. In his account of scarcity, Foucault (2007, 11; 2003, 246) delineated a coterie of practices directed toward managing the 'aleatory', by which he meant the occurrence of uncertain events, like droughts and floods, events that were previously ascribed to 'nature' and were therefore considered ungovern- able (Bougen 2003; O'Malley 2000 2003). The physi- ocrats, however, promoted the belief that uncertain events could be managed if the state turned its attention to promoting free markets. This concern with the aleatoric is replayed in much of today's promotional literature as corporate agribusinesses reposition themselves as entrepreneurs in risk miti- gation and 'foresight methodologies' (GFAR 2010, xxi). Agro-biotechnologies are understood to pro- vide plant breeders with new crops that are pre- emptively insured against attacks by insects and pathogens ('biotic stresses') and engineered to cope with climate change and environmental instability ('abiotic stresses'). As pointed out in an important Nuffield Council report (2003), the ability of certain plants to survive in harsh climatic conditions is thought to be

associated with specific genes. If these genes can be isolated and successfully introduced into crops, they 'promise to be particularly valuable for developing countries, where abiotic stresses such as drought, heat, frost and acidic or salty soils are common' (2003, 26). The Nuffield report (2003, 36) invites us to imagine a biofuture replete with frost-tolerant potatoes in Bolivia, salt-tolerant wheat in Egypt, cold-tolerant tomatoes in China, and salt- and moisture-stress-resistant rice in Thailand. Undoubtedly risk aversion is a central compo- nent in the codification of genomic discourses (terms like 'biosafety' and 'biosecurity' abound) and the recent adoption of the term food insecurity (over conventional expressions like 'starvation' and 'hunger') suggests that the politics of food is now firmly embedded in a neoliberal apparatus of secu- rity. By another reading, however, pre-empting ale- atoric stresses – and managing scarcity – can be thought of as a stratagem for re-engineering the provisioning cultures of the vulnerable poor. Repo- sitioning transgenic biotechnologies as corrective healthcare, for example, is reminiscent of Foucault's characterisation of biopower as a mode of 'public hygiene' that works to 'medicalize the population' (Foucault 2003, 244; see also Bashford 2006) in order to legitimise curative practices. Today, industry specialists readily talk of engineer- ing plants that produce traits for curing cancer – a meshing of pharmaceutical firms and agribusiness known as 'pharming' – and 'who is opposed to curing cancer?', as one enthusiast opined (Herring 2007a, 21). The promoters of 'Golden Rice' (rice for- tified with Vitamin A) refer to the 'nutritional holo-caust' that will be avoided by embracing 'bio- fortification' techniques that reduce unwanted 'antinutrients' and enhance the 'bioavailability' of essential minerals and vitamins.7 Through the semi- otics of therapy and risk avoidance, corporate agri- business lays claim to being a central player in the 'war on hunger', predicting a future of increased yields, reduced biotic and abiotic threats, and engi- neered crops that target micro-nutritional deficien- cies in vulnerable communities. In short, changes at the molecular level are seen to be the principal route to agrarian reform, offering – so it seems – cheap health insurance for millions of poor farmers (OECD 2009, 42).

As critics claim, these 'cornucopian fantasies' (Patel 2007, 131) mask the fact that industrial bio- technologies are furthering the commodification of the food system while marginalising calls for distri- butional justice (O'Neill 1994). In the final part of this paper, therefore, I want to reflect further on this dominant aetiology of hunger and how it naturalises industrial science, and in particular, the biorevolution, as an 'anti-scarcity' response. I sug- gest that the neoliberal re-regulation of the food economy is occurring through an historically new modality of biopower designed to 'accelerate the reproduction of capital' (Brooks 2005, 367). Recent innovations mean that biopower now targets life at the molecular level (in addition to the species level), thereby transforming human, animal and biological systems to suit private interests. The end game of this logic is the corporate control of the means of production and the gradual elimination of non- market access to food.

Accumulation by molecularisation

It needs stressing that before the biorevolution the penetration of capitalism into agricultural life was inhibited by both the limits and vagaries of bio- physical life (Weis 2010). Animals and plants are what we might call reluctant commodities, con-strained by vital growth periods and cycles of reproduction; in other words, biological realities that inhibit the quick reproduction of capital (Lewontin 2000, 97).8 Through genetic interven- tions, however, corporate agribusiness is able to gain control of the entire process of agricultural production, including the productive and repro- ductive cycles of animals, plants and seeds. For Lewontin the intent is: To wrest control of the choices from the farmers, forc- ing them into a farming process that uses a package of inputs, of maximum value to the producers of those inputs, and tailoring the nature of farm products to match the demands of a few major purchasers of farm outputs.

As the farmer loses any power to choose the actual nature and tempo of the production process in which he or she is engaged, while at the same time losing any ability to sell the product in an open market, the farmer becomes a mere operative in a determined chain whose product is alienated from the producer. That is the farmer becomes proletarianized. (2000, 96–7)

We have seen that the severing of 'organic' ties between peoples and places, and the invention of a 'new metabolism with nature' (Wood 2000, 39), has been a central component of commercialised agri- culture since the invention of the colonial planta-tion. But whereas colonial agriculture depended on a monopoly of trade and experimental forms of labour control – what Duncan (2007, 33) calls 'authoritarian governmentality' – modern agribusiness rests on the monopolisation of life and living resources (Shiva 2000, 3). This represents a more thorough mode of biopolitical control made possible by technical advances, corporate consolidation and legislative fiat. As Cooper observes: 'In the age of postme- chanical reproduction the point is to generate and capture production itself, in all its emergent possibilities' (2008, 24). For giant corporations like Cargill and Monsanto, controlling agricultural life begins with seeds, 'the first link in the food chain' (Shiva 2000, 80–1). Kloppenburg helpfully elaborates:

A seed is, in essence, a packet of genetic information, an envelope containing a DNA message. In that mes- sage are encoded the templates for the subsequent development of the mature plant. The content of the code crucially shapes the manner in which the growing plant responds to its environment. Insofar as biotech- nology permits the scientific and detailed 'reprogram- ming' of the genetic code, the seed, as embodied information, becomes the nexus of control over the determina- tion and shape of the entire crop production process. (2004, 201, emphasis in original).

At the production end of the food chain, seeds can be designed to withstand the application of partic- ular herbicides and pesticides, creating a captured market for selling more chemicals (Lawrence 2004, 61). Monsanto's Roundup Ready Soy, for example, is genetically engineered to resist Monsanto's broad-spectrum herbicide. As Monsanto's flagship product, Roundup is the most widely used weed killer in the world and is responsible for the lion's share of the company's profits.

The ability to engineer seeds so that they are paired with particular herbicides and pesticides explains why chemical companies largely sponsor research and capital investment in seed techno- logies, but the potential for horizontal expansion is also enormous. Several firms are presently develop- ing seeds that are more amenable to biofuel pro- duction. In Malaysia a number of projects have already been established to develop B100, a biofuel made entirely from palm oil; if successful, these products will convert automobile drivers into con- sumers of agricultural products (Shiva 2008, 87), with wholly predictable consequences for global hunger. In a recently leaked World Bank report, for instance, increases in agro-fuel production were linked to escalating global food costs and price vol- atility in 2007 and 2008.9

More worryingly, control of seed production and reproduction is expropriating the subsistence rights of poor peasants and accelerating the historical process of 'depeasantisation' (Araghi 1995; Davis 2007; UN-Habitat 2003, 25). The commercialisation of seeds criminalises redistributive anti-scarcity practices, like seed-saving and seed-sharing, thereby eroding non-market access to food in self- provisioning societies. Little wonder Roberts cha- racterises the commodification of seeds as 'one of the biggest transfers of wealth in human history' (2008, 25). To prevent farmers from 'illegally' using seeds, several corporations are currently working on state-of-the-art surveillance systems that can be used to detect unauthorised use of patented plants. Already farmers using Monsanto's products must sign a detailed contract that authorises, inter alia, random farm inspections. Monsanto also operates a 'piracy hotline' and encourages neighbouring farm- ers to report any suspected contravention of the company's patents.10 The development of gene use restriction technologies (GURTs) – less flatteringly called 'terminator genes' – may render these repressive controls obsolete. By engineering seed that cannot reproduce, farmers will be forced to return to the market annually. Ever more, Jack will have to pay for his beanstalk.

The reengineering of agricultural systems is not only confined to plant life (Gibbs et al. 2009). Roberts describes how a mixture of genetic inter- ventions, breeding techniques, concentrated feed formulas and antibiotics are revolutionising the livestock industry and facilitating the commodifica- tion of sentient life. 'A quarter of a century ago,' he says, 'a breeding sow averaged fourteen piglets a year. Today . . . the average litter is twenty piglets' (Roberts 2008, 72). Efforts to fast-track the repro- ductive cycle of animals are matched by industrial designs to induce faster growth, 'The modern chicken', says Paul Aho, a longtime poultry- industry analyst, has metamorphosed 'from a lean barnyard racer that was all skin and bones to a slower moving animal that fully utilizes its internal organs' (cited in Roberts 2008, 69). The nature of animal research is always clandestine, but several corporations are reputedly trying to reproduce transgenic birds whose egg whites could also be used to develop commercially viable quantities of cancer-treating drugs and other proteins of potential value to human medicine.

> Companies [also] envision the generation of GM chickens with improved disease resistance, faster growth rates, less fragile bones, or a bigger breast, for example. (Avis 2004, 97–8)

In many countries poultry are legally defined as property without enforceable protections (Weis 2007, 60), a legal coup that makes poultry particu- larly suitable for experimentation.11

This has massive implications for human welfare too, as the engineering of animals coincides with corporate efforts to encourage the 'meatification' of human diets. With a view to addressing world hunger, meat is one of the least efficient ways to acquire protein (17 kg of grain are required to pro- duce 1 kg of beef), but from an agro-industry perspective, livestock production is a perfect way to sell grain to consumers at a higher price. As Lawrence explains:

> the surest way to add shareholder value to cheap subsi- dized commodity crops is to use them as animal feed, turning the carbohydrates and proteins in corn and soya into higher value proteins in the form of meat and milk. (2008, 34)

As a result of these shifts we are now facing what geographer Tony Weis describes as 'dietary conver- gence' on a planetary scale; according to Weis, China alone is now consuming more meat than the world's entire population in 1961 (Weis 2007, 18).

There is in fact compelling evidence to suggest that these dietary transformations are connected to what George (1980, 169) aptly termed 'comerciogen- ic malnutrition'. For example, a recent report pub- lished by the Food and Agriculture Organisation (FAO) shows that 75 million people have been added to the number of chronically hungry since 2006, bringing the global figure to 923 million. The report suggests that meat consumption has intensi- fied demand for livestock feed, thus diverting basic crops from humans to animals. The use of crops and land for biofuel production has similarly distanced resources from human consumption, while contrib- uting to the recent upward trend in food prices (FAO 2008). The result, says Josette Sheeran, Execu- tive Director of the World Food Programme (WFP), is that the UN no longer has adequate funds to keep global malnutrition at bay (Borger 2008). Food riots are now a common occurrence in many low- and middle-income countries. Several governments have had to freeze the price of basic food stables.12 On the other hand, increased meat consumption is linked to rising levels of obesity, mostly across the Global North, but also a factor in pockets of the developing world (Lang and Heasman 2005). Indeed, some estimates suggest that the number of people considered obese has now surpassed the glo- bal number of people considered to be undernour- ished.

In this sense, as Guthman and DuPuis (2006) observe, the central contradictions of corporate agri- business are quite literally embodied in a planet of 'stuffed and starved' bodies (Patel 2007).

At work here is the conversion of life forms into knowledge that can be patented and privately owned (Maathai 1988), the erosion of non-market access to food (Spitz 1981), the transfer of owner- ship of production processes (Lewontin 2000), the monopolisation of food markets and the expansion of opportunities for surplus extraction (Buttel et al. 1985). These developments, I propose, are the pri- mary consequences of two interdependent phenom- ena. The first I call corporate biopower, by which I mean a practice of social control that targets every- thing from farming systems to abiotic stresses and from seeds to intellectual property rights. Contrary to conventional claims, at every level of the modern food system, from production, to manufacturing, to consumption – encompassing field, factory and store (George 1980, 166) – the trend is toward greater corporate control over the elements that constitute the food system. This process approxi- mates what Foucault famously characterised as the strategic management of 'men in their relations':

> The things, in this sense, with which government is to be concerned are in fact men, but men in their relations, their links, their imbrication with those things that are wealth, resources, means of subsistence, the territory with its specific qualities, climate, irrigation, fertility, and so on; men in their relation to those other things that are customs, habits, ways of acting and thinking, and so on; and finally men in their relations to those still other things that might be accidents and misfor- tunes such as famine, epidemics, death and so on. (1994, 209)

This is a prescient description of a form of power that captures life through the very process of man- aging 'the economy' – a new reality that some are calling the 'bioeconomy' (OECD 2009; Rajan 2006). The second practice relates to a new form of sur- plus extraction that I term accumulation by molecu- larisation. The tightening relationship between the bio-sciences and agribusiness has led to biological interventions that have, amongst other things, accelerated the commodification of the food system in ways that were not previously possible. These shifts will continue to devalue life, including the human right to food (Huish 2008), even as they promise a future of surplus and plenitude (Cooper 2008, 49).

Conclusions

Unfolding before us today is a massive realign- ment of human, animal and bacterial life in order to facilitate the reproduction of capital. In place of the old liberal order we have a neoliberal consensus celebrating the modernising powers of market- based reforms on seemingly backward agricultural systems. The neoliberal truth regime presents glo- bal markets, agrarian biotechnologies and multi- national corporate initiatives as the structural preconditions for alleviating world hunger. This discussion invariably ignores Amartya Sen's (1981, 154; Roberts 2008, 263; WFP 2009, 17) classic point that the volume and availability of food alone is not a sufficient explanation for the persistence of hunger. Indeed, it is well established that enough food exists to feed in excess of the world's current population (OECD 2009, 21). The conviction that further production gains will seamlessly translate into more calories for the poor is empirically shaky and ideologically driven. So long as the world's hungry remain poor consumers, they are unlikely to reap the benefits of a food system hinged on the cash nexus. Calories will continue to flow up the food chain, reappearing as meat or fuel, available at a price.

This paper has sought to historically contextua- lise this crisis and the power structures that underwrite it. Much of what seems current has in fact a long genealogy. In the mercantile period, for instance, fears of scarcity led to the produc- tion of political pamphlets attacking hoarders and private speculators for driving up food prices (Rashid 1980, 493), but by the 18th century a vocal coterie of free-trade theorists were able to turn these fears on their head by arguing that market forces were the most effective means to prevent food scarcity. In their view, a liberalised food system would increase competition, depress prices and eradicate hunger. In Europe the grad- ual commercialisation of provisioning cultures represented a 'great transformation' (Polanyi 2001) between peasants and their environment. In the colonies, however, the destruction of pre-existing anti-scarcity programmes was rapid and severe as market mechanisms were frequently permit- ted to operate unchecked and with devastating consequences.

The regulation of scarcity, therefore, does not signal the end of hunger so much as its displacement in space and time. Indeed, a careful consideration of the biopolitics of food provisioning shows that abundance and scarcity need to be theorised as interdependent phenomena (Cooper 2008, 49). It is commonly claimed that agro-fuels will reduce dependency on Middle Eastern oil (and address 'future risks' associated with climate change), but this supposed 'abundance' masks the real suffering of others forced to go hungry or endure higher prices for basic commodities because of 'cost-push effects' (World Food Programme 2009, 32). Like- wise the burden of food surpluses – encouraged by subsidy regimes – can be suppressed by encourag- ing meat-based diets that enable companies to retail low-cost grain to consumers at a higher price. However, this very action re-imposes scarcity – as land and resources are diverted to meet the demands of more affluent consumers – and abun- dance, as obesogenic diets transform the human body into an accumulation strategy (Guthman and Du Puis 2006; Harvey 1998).

The spectre of hunger in a world of plenty seems set to continue into the 21st century. It bears repeating that this is not the failure of the modern food regime (Edkins 2000), but the logical expression of its central paradoxes, particularly its reliance on over-production in some places and under-production in others. To think seriously about global hunger means addressing the legal, institutional and biotechnical mechanisms – including trade tariffs, agricultural subsidies, enforcement of intellectual property rights and the privatisation of public provisioning systems – that directly restrict certain people's ability to subsist. Thinking about global hunger also means getting behind the biopolitical practices designed to 'help the poor' (Pogge 2002, 23) to address the routine violence that sustains the global food economy making those curative interventions necessary in the first place. In short, the spatial paradoxes of the global food system require new mappings that show how scarcity and abundance, privilege and suffering, and life and death are mutually consti- tuted. Such mappings would form the first steps toward building and preserving alternative provi- sioning cultures that are socially just and humane.

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RECIPES
NOTES
NOTES


ALL·BAR·ONE

PH Neutral DIET

1. Don’t let a huge breakfast slow you down
The first meal of the day often causes high levels of acidity. Foods like pancakes, waffles, muffins, oatmeal, breakfast cereals, sweet rolls, toast, maple syrup, honey, coffee, orange juice, etc., contain huge amounts of sugars and simple carbohydrates which over-acidify the blood and tissues. This creates a terrain that promotes the growth of bacteria, yeast, and fungi – the great decomposers of cells and tissues in the human body.
What a way to start the day! Also traditional high-protein breakfast foods like eggs, sausage, bacon, omelets, etc., compromise the terrain and ultimately promote the growth of yeast and fungi. In addition, all meats, especially pork, are high in parasite activity.
In contrast to that a favorite breakfast for many people new to the alkalizing diet is soup, millet or brown basmati rice with fresh avocado and tomato slices, soaked almonds, sunflower sprouts and flax oil. Vegetable soups and juices such as SuperGreens in the morning offer a low carbohydrate, high fiber, and delicious way to start your day. Blood sugar levels are not sent soaring, causing an increase in blood insulin and a burden on your pancreas. This is an excellent way to start the day!
2. Add liberal amounts of all kinds of vegetables and grasses to your diet
The chlorophyll (a plants “blood”) contained in plants and grasses is identical to the blood of humans, except for one atom, and therefore rich in nutrients for our body. Fresh vegetables and grasses are an excellent source of the alkaline substances that are anti-yeast, anti-fungal, and anti-mycotoxic.
Green foods such as wheat grass and barley grass are some of the lowest-calorie, lowest-sugar, and most nutrient-rich foods on the planet. Juiced, green vegetables are very cleansing and loaded with fiber. Basic rule of thumb: vegetables all day long! Add three teaspoons of SuperGreens by InnerLight (contains 49 different greens) powder blended into 3 liters of water every day.
3. Avoid all yeast-containing foods
You should especially avoid baked goods such as bread, muffins, pies, cakes and pastries. In the US, one out of nine women will develop breast cancer. Contrary to that, Japanese have a much lower rate of this form of cancer – and research links it with the ingestion of baked goods with bakers or brewers yeast. Research also clearly links diets with yeasty or fermented breads to gall and kidney stones and arthritis.
4. Eat legumes, grains, sprouts and low carbohydrate vegetables

PH NEUTRAL DIET


Quick
Guava
Real fruit in flavoured jelly
LIFT TO OPEN
Best served chilled • A delicious, healthy and convenient ready-to-eat serving of real fruit in flavoured jelly • Contains no
Ben
Martens
Make awesome apps
BUILD conference
13
TUESDAY
Video
People
Control Panel
Desktop
2.3%
401K Fund (Fidelity)
Investment Portfolio

ASPARTAME, FOOD FOR YOUR BRAIN

by Dr. Mercola

More than 90 countries have given the artificial sweetener aspartame the green light to be used in thousands of food and beverage products.

Two hundred times sweeter than sugar, aspartame allows food manufacturers to produce sweet foods they can market as "low calorie," "diet," or sugar-free," appealing to hundreds of millions of consumers looking to cut sugar from their diets.

No doubt about it, the less sugar you include in your diet, the better. But replacing sugar with aspartame is not the solution, and in fact is likely to be even worse for your health.

Despite assurances from the U.S. Food and Drug Administration (FDA) and other public health agencies that aspartame is safe, the research says otherwise...

So What the Heck is Aspartame Made Of?

Virtually all of the marketing material emphasizes the fact that aspartame is natural and made of two amino acids, the building blocks of protein. But, like many deceptions, this is only partially true. While there are two amino acids that comprise 90% of aspartame, aspartic acid and phenylalanine, they are held together in a methyl ester bond that comprises 10% of the molecule.

The methanol is released from the aspartame within hours of consumption after hydrolysis of the methyl group of the dipeptide by chymotrypsin in the small intestine. Once this methyl ester bond is broken it liberates free methyl alcohol or methanol, which is commonly called wood alcohol. The problem with methanol is that it passes into your blood-brain barrier

and is converted into formaldehyde, which causes the damage. You may recognize formaldehyde as embalming fluid.

Interestingly, methanol is only toxic in humans. All other animals are able to detoxify it before it causes damage.

Methanol is a toxin that destroys the myelin tissue in your body, which is the insulating material around your nerves that allows nerve signals to travel properly. Once injured, one can have what are called demyelinating symptoms that are commonly seen in diseases like MS and also migraines that can include bizarre and inconsistent visual field disruptions.

My sister that helped me start my practice in 1985 is actually one of the people that develops these symptoms when exposed to aspartame. In the late '80s I helped to diagnose her with this sensitivity and she has avoided it for over 25 years.

Why is Methanol So Toxic?

Methanol breaks down into formic acid and formaldehyde in your body. Many experts believe formic acid is the problem but the real problem is the formaldehyde, which is a deadly neurotoxin and carcinogen. An EPA assessment of methanol states that methanol "is considered a cumulativepoison due to the low rate of excretion once it is absorbed. In the body, methanol is oxidized to formaldehyde and formic acid; both of these metabolites are toxic."2

They recommend a limit of consumption of 7.8 mg/day. But according to Woodrow Monte, Ph.D, R.D., director of the Food Science and Nutrition Laboratory at Arizona State University:3

"When diet sodas and soft drinks, sweetened with aspartame, are used to replace fluid loss during exercise and physical exertion in hot climates, the intake of methanol can exceed 250 mg/day or 32 times the Environmental Protection Agency's recommended limit of consumption for this cumulative toxin."

Further, he states that due to the lack of a couple of key enzymes, humans are many times more sensitive to the toxic effects of methanol than animals. Therefore, tests of aspartame or methanol on animals do not accurately reflect the danger for humans.

"There are no human or mammalian studies to evaluate the possible mutagenic, teratogenic, or carcinogenic effects of chronic administration of methyl alcohol," he said.

Symptoms from methanol poisoning are many, and include headaches, ear buzzing, dizziness, nausea, gastrointestinal disturbances, weakness, vertigo, chills, memory lapses, numbness and shooting pains in the extremities, behavioral disturbances, and neuritis. The most well known problems from methanol poisoning are vision problems including misty vision, progressive contraction of visual fields, blurring of vision, obscuration of vision, retinal damage, and blindness. Formaldehyde is a known carcinogen that causes retinal damage, interferes with DNA replication and may cause birth defects. The researchers in the featured study then reasoned that the aspartame- induced methanol exposure was likely possible for oxidative stress in the brain.

New Study Shows Aspartame Damages Your Brain

A newly published study with rats investigated the chronic effect of aspartame on oxidative stress in the brain. Researchers found that there was a significant increase in lipid peroxidation levels, superoxide dismutase activity, GPx levels and CAT activity, showing that chronic exposure of aspartame resulted in detectable methanol in the blood, which may be responsible for the generation of oxidative stress and damage in the brain.4

So the study found that aspartame exposure did result in "detectable levels" of methanol in the blood. Methanol is gradually released in the small intestine when the methyl group of aspartame encounters the enzyme chymotrypsin.

Are Artificial Sweeteners Stressing Out Your Brain?

Oxidative stress can be defined as the state in which damaging free radicals outnumber your antioxidant defences. Oxidative stress tends to lead to accelerated tissue and organ damage.

Case in point, earlier this year another study investigated the effect of long-term intake of aspartame on the antioxidant defence status in the rat brain and also found it leads to oxidative stress.5 Male rats that were given a high dose of the artificial sweetener exhibited a lowered concentration of

reduced glutathione (the active, antioxidant form of glutathione), and reduced glutathione reductase activity, a sign of increased oxidative stress-induced damage in the body.

Glutathione deficiency has also been linked to age-related diseases such as Alzheimer's. Examination also revealed mild vascular congestion – an obstruction of the normal flow of blood within the brain – in these rats. Researchers concluded:

"The results of this experiment indicate that long-term consumption of aspartame leads to an imbalance in the antioxidant/ pro-oxidant status in the brain, mainly through the mechanism involving the glutathione-dependent system."

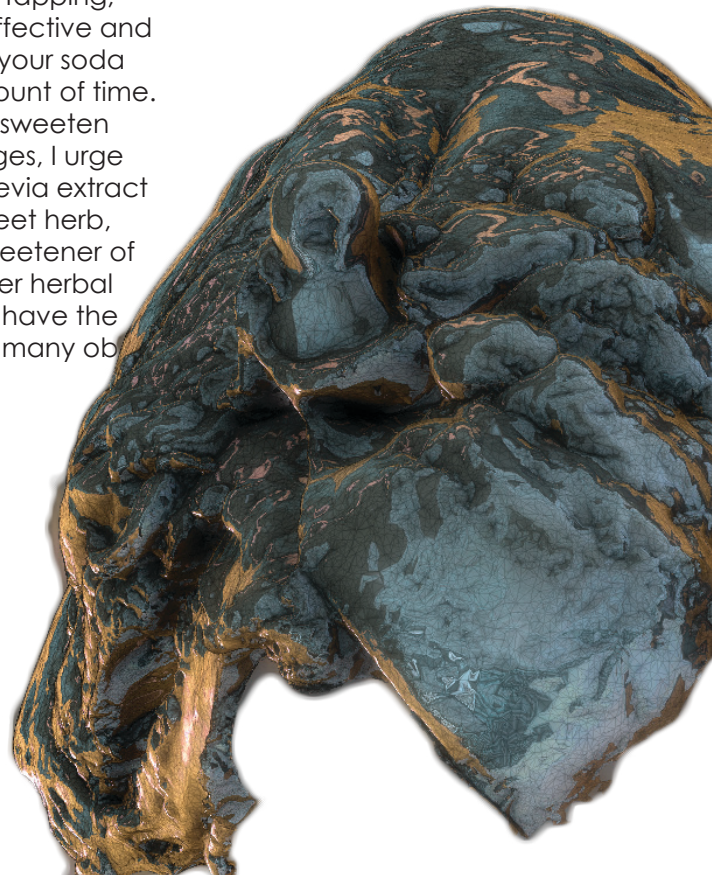
Adding to the problem, one of the amino acids in aspartame, aspartic acid is capable of crossing your blood-brain barrier. There it attacks your brain cells, creating a form of cellular overstimulation called excitotoxicity, which can lead to cell death.

Your blood-brain barrier, which normally protects your brain from excess aspartate, as well as toxins, is not able to adequately protect you against the effects of aspartame consumption because it:

Is not fully developed during childhood Does not fully protect all areas of the brain Is damaged by numerous chronic and acute conditions Allows seepage of excess aspartate into the brain even when intact That excess aspartate slowly begins to destroy neurons, and the large majority (75 percent or more) of neural cells in a particular area of the brain are killed before any clinical symptoms of a chronic illness are noticed. Then, when they do occur, they may or may not be associated with aspartame consumption, even though examples of chronic illnesses that are made worse by long-term exposure to excitatory amino acid damage include:

Multiple sclerosis (MS) ALS Memory

loss Hormonal problems Hearing loss Epilepsy Alzheimer's disease and dementia Parkinson's disease Hypoglycemia Brain lesions Neuroendocrine disorders Why Was Aspartame Ever Approved?
If it causes brain damage, why is aspartame allowed in our food and drinks? The truth of the matter is the FDA rejected aspartame not once but multiple times. The scientific data just did not support it as a safe product. But the FDA is a federal agency subject to the political winds, and the people in charge of the agency have repeatedly and notoriously been accused of many conflicts of interest, both economically and ethically.
In 1975, the FDA came to the conclusion that aspartame should not be allowed on the market. They requested that further studies be conducted. The FDA's next move was to set up a public board of inquiry composed of outside experts to investigate the safety of aspartame, and in 1980 that board unanimously rejected aspartame's request for approval. Another internal FDA panel convened in 1980 also rejected aspartame for approval.
So it was three strikes against aspartame at this point, four strikes if you count the Bressler Report. This report was compiled in 1977 after FDA scientists looked into the field studies conducted on aspartame. The Bressler Report uncovered fraud and manipulation of data so serious that the FDA forwarded their files to the Chicago U.S. Attorney's office for prosecution.
Basically the results of the scientific data were fairly clear up until 1980: Aspartame was a dangerous, brain-tumor-causing man-made poison and the company trying to get it into the food supply was recommended for prosecution by the FDA. You would think that would be the end of aspartame, right? Not by a long shot. Did You Know Aspartame May Make You Fat?
If you're one of the people who suffers from headaches/migraines, vision problems, fatigue, anxiety attacks, abdominal pains or other symptoms when you consume aspartame, deciding to eliminate it from your diet was probably an easy choice.
For the rest of you, doing so based on the possibility that it could "one day" cause symptoms of brain damage is much more abstract, and probably much less likely to make you take action today.
That's why I want to share with you one of the major deceptions surrounding artificial sweeteners like aspartame, which is that they will help you lose weight by avoiding sugar.
This is a MYTH. Research has shown that artificial sweeteners can: Stimulate your appetite Increase carbohydrate cravings Stimulate fat storage and weight gain. In fact, diet sodas, which are well-known sources of artificial sweeteners, may actually double your risk of obesity!6 So much for being a dieter's best friend... The point is, if you're having a hard time giving up aspartame based on its potential to damage your brain, maybe the fact that it could make you pack on the pounds in the very near future will motivate you toward positive change.
My Favorite Tool for Addressing Artificial Sweetener Addictions
Artificial sweeteners tend to trigger enhanced activity within your brain's pleasure centers, yet at the same time provide less actual satisfaction. This separation of the taste of sweetness from caloric content means that when you consume artificial sweeteners, your brain actually craves more of it because your body receives no satisfaction on a cellular level by the sugar imposter. This can actually contribute to not only overeating and weight gain, but also an addiction to artificial sweeteners.
In order to break free, be sure you address the emotional component to your food cravings using a tool such as the Emotional Freedom Technique (EFT). More than any traditional or alternative method I have used or researched, EFT works to overcome food cravings and helps you reach dietary success. If diet soda is the culprit for you, be sure to check out Turbo Tapping, which is an extremely effective and simple tool to get rid of your soda addiction in a short amount of time.
If you're determined to sweeten your foods and beverages, I urge you to consider using stevia extract – a safe and natural sweet herb, which is my personal sweetener of choice. Lo Han is another herbal sweetener that doesn't have the aftertaste of stevia that many ob to.



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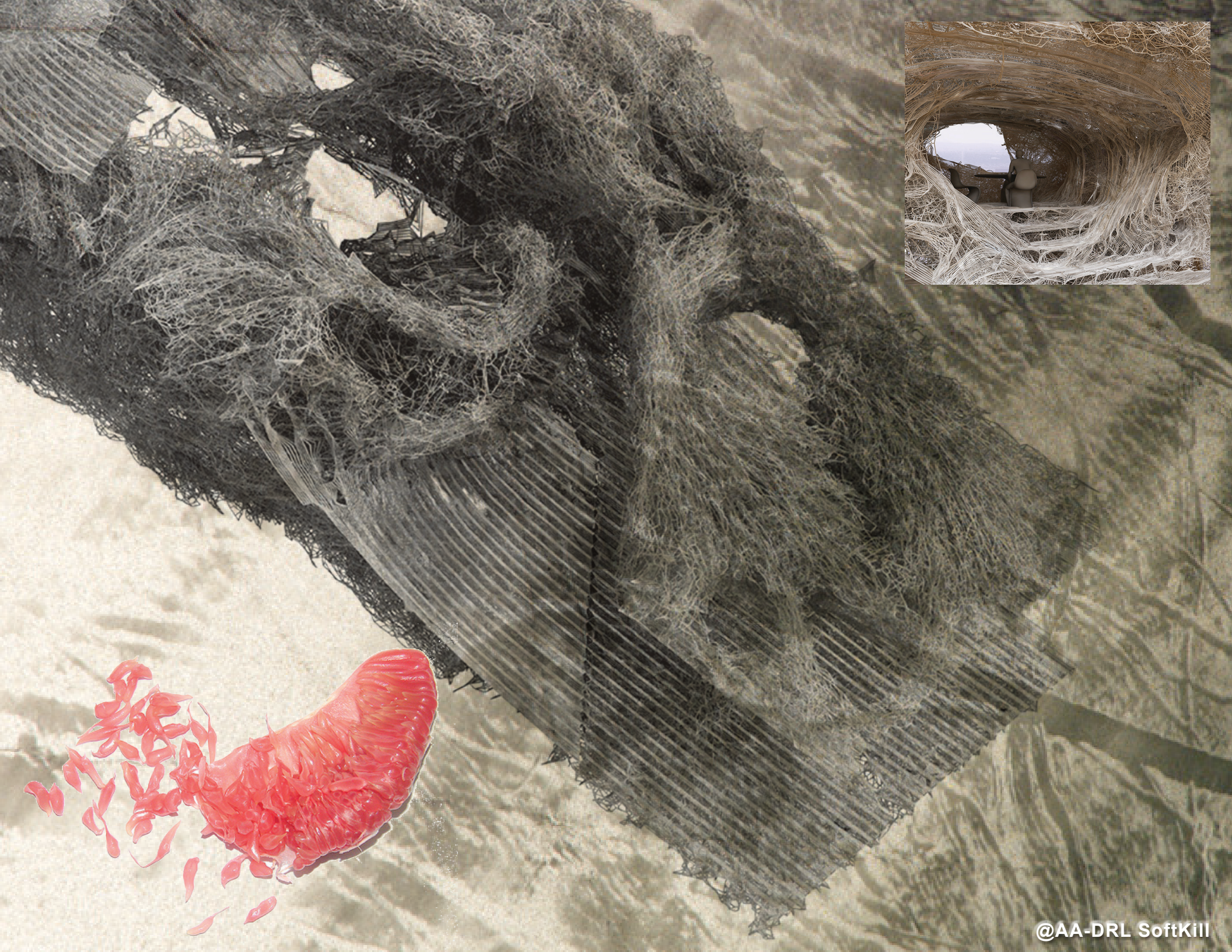
@AA-DRL SoftKill

Luke Libera Moore

props by Francis Bitonti Studio

Food Photography: Peter Lippmann


BILLA
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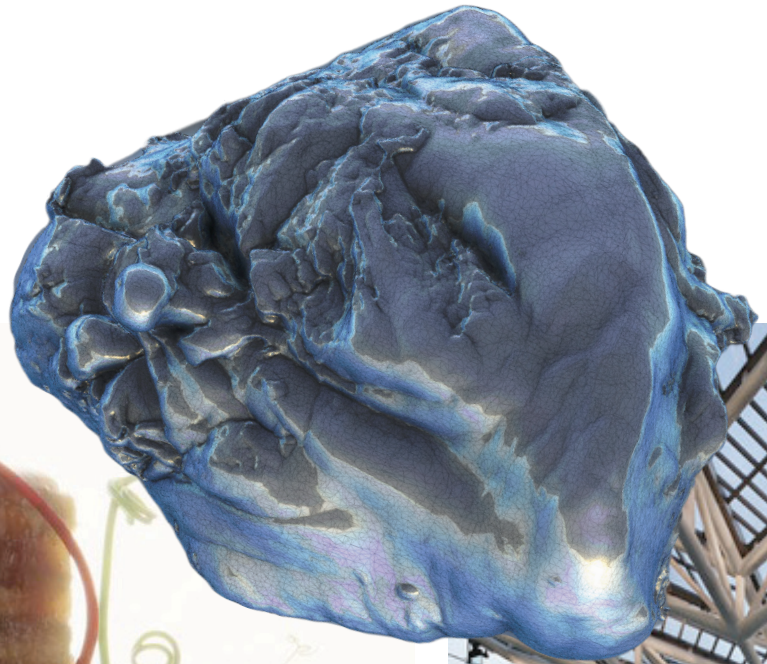
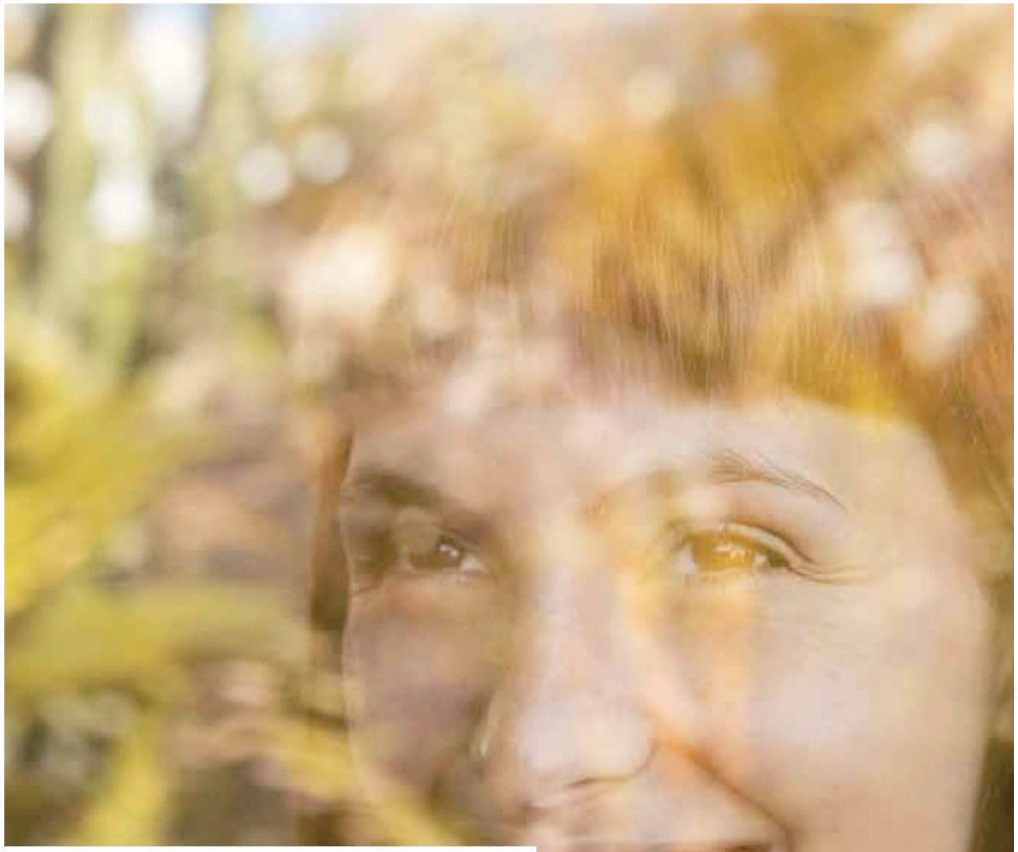




EL COLOR DEL DINERO

UNA PUBLICACIÓN DE TRIODOS BANK · NÚMERO 22 · OTOÑO 2010 · WWW.TRIODOS.ES

EN ESTE NÚMERO: **TRANSPARENCIA EN LA BANCA** BIOCONSTRUCCIÓN **A QUIÉN FINANCIAMOS** INTEGRACIÓN SOCIAL A TRAVÉS DEL ARTE **AGRICULTURA ECOLÓGICA EN ANDALUCÍA** TARJETA TRIODOS

Triodos Bank

Tom Cruise's Linguine with Zesty Red Clam Sauce

Makes about 4 1/2 cups of sauce - Serves 6

This is not your typical red clam sauce. You use freshly steamed clams here, served in their shells, in a light tomato sauce heady with garlic, that is peppery, too.

To crush garlic, use the same technique you do to peel it. First separate the cloves from the head. Put the flat side of a knife down on one garlic clove at a time and with your other hand smack the knife right over the clove. This should split the garlic peel with one whack. If it doesn't, try again. Remove the peels and use the cloves whole.

Tomato Sauce: 1/2 cup olive oil 1/4 cup cloves garlic, crushed 1/4 cup capers, undrained 2 cups chopped parsley plus 1/2 cup additional for garnish 2 cups chopped plum tomatoes 3/4 cup fresh lemon juice 3/4 cup dry white wine 1/2 teaspoon crushed red pepper flakes 1 teaspoon salt 1 heaping teaspoon freshly ground black pepper

Pasta: 1 pound linguine

Clams: 30 littleneck clams, scrubbed 1/4 cup chopped garlic 1 cup dry white wine 1 cup vegetable broth or water

To make the tomato sauce: Heat the oil in a large saucepan until hot. Add the garlic and capers, then carefully add the parsley. Stand back because the oil may spatter. Add the tomatoes, lemon juice, wine, pepper flakes, salt, and black pepper. Cook, stirring occasionally, for 15 minutes.

Bring a large pot of salted water to a boil. Add the linguine and cook according to the package directions until firm but tender.

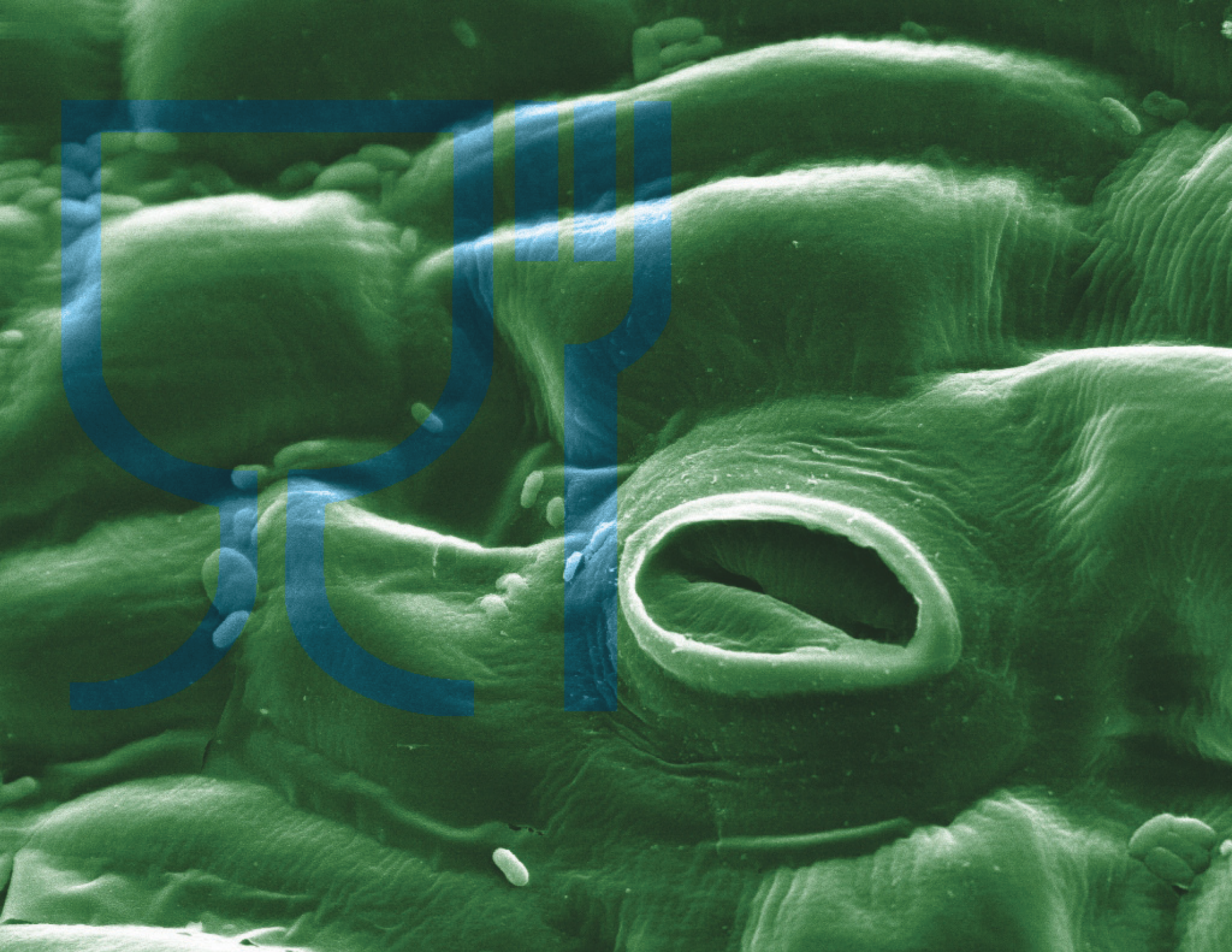
While the pasta is cooking, steam the clams. Place the clams in another large pot with the garlic, wine, and vegetable broth. Cover and bring to a boil over high heat, shaking the pot, until all the shells are open. Leaving the open clams in the pot, drain off all but 1/4 cup of the steaming liquid and stir it into the tomato sauce. Cover the clams and keep warm while preparing the rest of the dish.

Drain the linguine and add to the tomato sauce. Cook over high heat for about 4 minutes to heat through.

Divide the pasta among 6 heated bowls. Top each serving with 5 clams and garnish with the remaining parsley.

Darren Bader


PAUL
NEWMAN
as COOL HAND
LUKE




SAMSUNG
Albums
Memories...(31)
Journey...(43)
Journey...(14)
Video...(1)

ARE BIOTECH FOODS SAFE TO EAT?

by Salynn Boyles

Most Americans have eaten genetically modified foods without knowing it, but are they safe?

Genetically modified food has quietly become second nature in the U.S., and it may surprise you just how many foods you are eating that you never knew contained a genetically modified ingredient.

Experts say 60% to 70% of processed foods on U.S. grocery shelves have genetically modified ingredients. The most common genetically modified foods are soybeans, maize, cotton, and rapeseed oil. That means many foods made in the U.S. containing field corn or high-fructose corn syrup, such as many breakfast cereals, snack foods, and the last soda you drank; foods made with soybeans (including some baby foods); and foods made with cottonseed and canola oils could likely have genetically modified ingredients. These ingredients appear frequently in animal feed as well.

If this shocks you, a new USDA-funded survey shows you're not alone. Researchers from the Food Policy Institute at Rutgers' Cook College found that only 52% of Americans realized that genetically modified foods are sold in grocery stores and only 26% believed that they have ever eaten genetically modified foods -- a modest 6% increase since 2001.

But what exactly is genetically modified food? Is it safe to eat? Why isn't it labeled in the U.S.? The European Union and the U.S. are boxing it out.

The U.S. government's position: Genetically engineered crops are safe, resist disease better, and can provide much-needed food in starving nations.

The EU position: Keep it out. We prefer organic,

which is much healthier. The risk of genetically modified foods to health and the environment outweigh the benefits. Only the multinational biotech companies will benefit, dominating the world food supply and squeezing out traditional farmers.

The U.S. is the largest producer of genetically modified crops.

More than a dozen countries around the world have latched on to the technology, including Argentina, Canada, China, Australia, India, and Mexico.

'Frankenfood' Fears

The term genetically modified food (also known as biotech or genetically engineered food) refers to crop plants that have been modified in the laboratory to enhance desired traits, such as resistance to herbicides or improved nutritional content. Experts say this science, like any other, has no guarantees. Risks include: Introducing allergens and toxins to food Accidental contamination between genetically modified and non-genetically modified foods Antibiotic resistance Adversely changing the nutrient content of a cropCreation of "super" weeds and other environmental risks Benefits include:

Increased pest and disease resistance Drought tolerance Increased food supply

Is Regulation Too Soft?

So you might ask, what's the big deal? The U.S. government wouldn't allow a product on the market without strict testing and approval, right? It seems genetically modified foods are a bit of a scientific anomaly, a creature that U.S. regulation agencies aren't quite sure how to efficiently manage.

Regulation for genetically modified foods falls under three jurisdictions: The FDA, EPA, and USDA. But industry experts say the green light on market approval is left mostly to the companies creating the technology. Monsanto Co. dominates the industry, accounting for a 90% share of genetically modified crops worldwide. Dow Chemical Company and Syngenta AG, among others, control the rest.

Despite differing opinions on genetically modified food safety, most experts agree on one point: The regulation system is flawed.

"Clearly I think the regulation system in the U.S. could be greatly improved," says Gregory Jaffe, director of the Biotechnology Project at the Center for Science in the Public Interest, a nonprofit, public advocacy group that supports the use of this biotechnology. But he says a CSPI study released in January 2003 showed that biotech companies don't always voluntarily comply with federal requirements. "They did not do state-of-the-art tests when they needed to do those. In some instances they had errors in their submissions, and the agency did not do a thorough review of those. Our view is that there should be a mandatory, premarket approval process by the FDA before biotech foods go on the market; that the public is entitled to have the FDA determining that the food is safe and not relying on [companies such as] Monsanto telling us the food is safe."

The FDA litmus test for genetically modified food safety is based on a policy that states genetically modified foods are substantially equivalent to non-modified foods. "No serious scientist in the world would stand behind that unless they're on the payroll of the biotech companies. If they're substantially equivalent, why do these companies have a patent on them?" says Ronnie Cummins, national director of the Organic Consumers Association and author of the book, Genetically Engineered Food: A Self-Defense Guide for Consumers. "You can summarize it in three words: [Genetically modified foods] are unpredictable, they are untested, and they are unlabeled."

Monsanto states that genetically modified foods are "more thoroughly tested than any other food on the grocer's shelves to date" and "there have been no adverse effects documented from food produced from biotech crops."

Among industry supporters of this technology are heavy hitters such as the American Medical Association.

Are Genetically Modified Foods Safe?

Jaffe agrees that overall, the current genetically modified crops -- which he says are generally one- gene additions -- are safe. He says no food is 100% safe -- genetically modified or not -- and the odds of having an adverse reaction to a genetically modified food are slim. "Even though we've done all of the tests and everything else, one might say, 'Yes, there is still some risk and we don't know the long-term effects.' That's true, but we have enough knowledge about the protein and where it's been introduced, how we've been exposed to it in our food supply in other ways without danger, to have confidence that this is a safe food now."

Others strongly disagree.

"When you're doing genetic engineering, you're getting into a whole different mode of manipulating plants, and one, do we need to do it? Two, have enough studies been done in the past to really make it viable for commercial use?" Margaret Wittenberg tells WebMD. She is vice president of marketing and public affairs for Whole Foods Market, a certified organic supermarket chain that supports madatory labeling of GM foods. "There are just a lot of question marks, and I think many people have registered the concern that we need to have more answers before we move forward on having it commercially available at this point in time."

One immediate health concern with eating genetically modified foods is allergens. Opponents point to an incident involving Starlink modified corn. In 2000, StarLink (approved by the EPA for animal feed in 1998 but not for human consumption because of concerns it contained a protein that could cause dangerous allergic reactions) turned up in many Kraft products, including their Taco Bell corn shells. Some corn crops were accidentally contaminated with the StarLink seed. Several people reported severe allergic reactions, and major recalls resulted. In the end, the EPA said federal tests didn't conclude that genetically modified corn causes allergies, nor did they eliminate the possibility that it could not cause such a reaction.

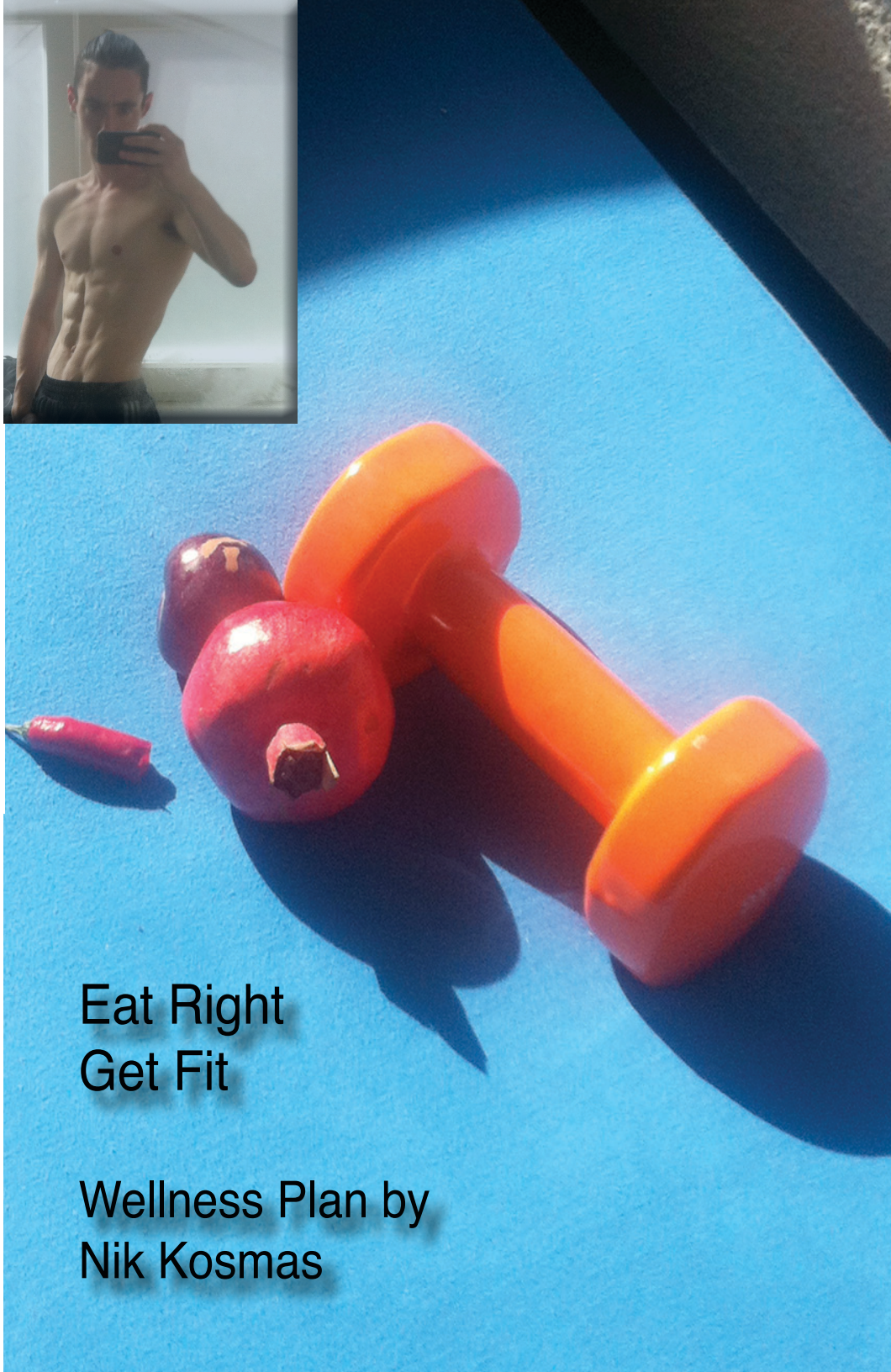
"Contamination is a very real risk in terms of growing genetically modified crops," says Lisa Archer, grassroots coordinator for the Safer Foods-Safer Farms campaign and Kraft campaign at the nonprofit organization Friends of the Earth -- the group that sparked the

StarLink investigation. "[Genetically modified crops] can contaminate neighboring crops relatively easily. Once you get this stuff out into nature it's very difficult to control where it goes, and StarLink is a great example of that."
Archer's group continues to press Kraft -- the leading U.S. food supplier -- to stop using genetically modified ingredients in their products, hoping if it does, the move will have a domino effect on other food suppliers.
Labeling: The Right to Know or Not?
To label or not to label has also been a hot button with consumer advocacy groups.
Currently, food companies aren't required by law to label foods containing genetically modified ingredients, so it's no surprise that most Americans don't know they've eaten them.
"I think consumers need to have info about the foods they're consuming. ... I think that if these products are so great, then why are there no labels? Why can people not know that [genetically modified ingredients] are in their food?" Archer tells WebMD.
Jaffe agrees that people should have the right to know. However, he says he thinks that genetically modified foods are safe and labeling isn't an issue as far as that is concerned.
One reason food companies may shy away from labeling genetically modified food is the possibility of consumer rejection. Public opposition has had some effect, as seen in Europe, where the EU has banned genetically modified foods despite the U.S.' wishes. American companies have vowed not to sell products made with genetically modified ingredients there, yet some of the same companies continue to sell them in the U.S., Archer says.
But there are some U.S. companies making the switch.
"There are quite a few companies out there that have made this transition. Frito-Lay, for example, is sourcing non-GM ingredients, Gerber baby food is also sourcing non-GM ingredients, [and] there are many others that are listed on our web site," Archer says.
In the end, the way to effect change, regardless of what side you take, is to take action, Wittenberg says. "I think it's the power of the dollar. Businesses watch to see what consumers are buying, and that's what they want to get into. That's the old entrepreneurial spirit."


KNÄCKEBRÖD
FLERKORN
IKEA FOOD


KNÄCKEBRÖD
RÅG
IKEA FOOD


TRUE
LEMON
AIR FRESHENER
TRUE
STRAW
BERRY
AIR FRESHENER
TRUE
FROST
AIR FRESHENER


Eat Right
Get Fit
Wellness Plan by
Nik Kosmas

EAT RIGHT! Feel good.

some ideas:

i almost always eat from a bowl. I chop things up beforehand so I don't have to use a knife because cutting in the bowl is awkward. (although you can still eat with a knife if you like to use it to help load the fork :))

quantity for these recipes is based on the bowl, cook to fill it up and have no leftovers. this way you control your serving size,

i buy food every day or every other day, and i shop at a co-op which is close to my apt.

i try to think about what food is in season and eat that…and I try to eat a small meal when its later in the day so I don't have to digest much while I'm sleeping.

I strongly avoid dairy and wheat

im not sure if im really suffering from celiac disorder, but i feel gassy and sick when i eat too much bread and also, i think it makes me find other options for food which are almost always healtheir than white bread or...pasta...(im *really* against classic pasta)

i only eat a little red meat

and i don't always follow the rules (especially when I'm traveling!)

further reading; Food Fules by Michael Pollan,
Healthy Eating: A guide to the new nutrition by Harvard Medical School Special Health Report
Never Gymless by Ross Enamait (good for food and some hardcore home workout ideas)

breakfast smoothie

frozen spinach
some kind of frozen berry or combo
a banana
then please get creative:
apples melon cucumber carrot nuts nut butter cayenne pepper cinnamon fresh mint peach pear lemon or lime juice ginger
and on and on,

maybe try not to add too much fruit that has a high glycemic index, the fruits above are mostly low-medium sugar, excluding banana which is really sugary but tastes good and helps texture a lot …

add some water

(i like the smoothie to be really thick so be prepared to be somewhere between drinking and chewing)

I also supplement with Sun Warrior vegan protein powder but if you aren't training a lot and probably even if you are, it's not really necessary.

i use one of those wand mixers, buy one that costs like 70$ or more, it won't break after 2 months and u are gonna be using it every day.

I'm not really recommending adding fruit juice because its mostly sugar and no fiber but i guess if you can't handle the taste u could…. and i don't really eat dairy products so i don't add yoghurt but you may if you like it... i guess...

green tea steamed salmon

some salmon, super ripe avocado, bit of spinach, bit of purple leaves
some good sushi ginger, black rice noodles, seaweed, salt n pepper
ume su, sesame oil, olive oil, tamari, lime

start soaking the seaweed
mix up the:
avocado
spinach
leaves
ginger
sesame seeds
salt and pepper to taste

make dressing - set aside
mostly olive oil
some sesame oil (roasted if you want a stronger flavor)
dash of ume su
dash of tamari
half a lime

boil water,
pour it onto the green tea in a pot, set steamer device inside wait a moment till its simmering and add thick slices of salmon, cover and let it steam till its cooked thru or if you have good salmon, and you like it rare, cook it just a little

in a pan bring water to a boil then add black rice noodles, reduce heat and simmer, remove them when they are still a bit firm as they will soften up after you strain the water out, cool them off with some cool water..:) (timing these noodles not to get mushy can be hard so be careful)

when every things almost done boil the seaweed for a minute,
then throw everything in a big pot or bowl and mix it all together
transfer to a bowl if don't want to eat out of what u mixed in (sometimes its easier to get a good mix going in a bowl bigger than the one I eat out of.)
enjoy

ginger chili garlic swiss chard with chicken and quinoa

a bunch of different colored swiss chard chopped up into strips
some chopped ginger
some chopped up chili pepper
a very chopped up garlic clove
diced chicken breast
kalamata olives
spring onions
flaxseed

put the quinoa on

de-stone the olives and chop them up,
chop up a spring onion, (the whole thing)

heat up some olive oil and sesame oil with med-low heat (roasted sesame or plain)
toss the garlic chili and ginger into the oil and let it cook for a minute or so… stirring frequently to get it all mixed up

toss in the chard and cook it till its a getting soft, but not too long…keep stirring
pick the chard out and scrape the pan clean, but don't wash it
toss in the chicken and don't cook it too long! (just getting golden)

quinoa should be about finished so toss the chard chicken and quinoa together, throw on the seeds
add salt pepper olive oil tamari and vinegar if you like it

snacks...
eat one between meals and maybe one after dinner but not too late.

almond butter with; an apple, a peach, a carrot...I love almond butter! and its healthier than peanut butter, albeit more expensive but if you think of price per calorie its a good deal!

a handful of pistachios, or cashews and a bell pepper

some baby spinach, yes people might look at you weird for eating handfuls of raw spinach but actually its quite good by itself and you can eat it right out of some small overpriced bag :)

GET FIT! Feel Strong and Confident.

These workouts range from moderate to high intensity
They are designed to challenge your conditioning, coordination, flexibility and provide a whole body workout. Get ready to feel the burn!

If you have a smartphone use the QR code next to each workout to download it as a ready-to-use timer in the app Seconds Pro... which is well worth the 1.99 or whatever it costs...:)

Please google the titles of exercises you are not familiar with and pay attention to the demo-videos!

If you're just starting out choose this workout!
1:00 jog
1:00 sashay
0:45 step jack
0:30 walking and circle arms forward
0:30 walking and circle arms backwards
1:00 shadow boxing
0:45 knee thrusts
0:30 side to side hops
1:00 squat to oh-stand
1:00 jog
1:00 recover

complete 3 circuits of the following drills. perform each movement at maximum intensity, the squats are almost like bouncing, moving as fast as you can up and down without compromising on your form. In the plank really tighten your legs and core and press backwards with your heels to extend your body and hold the tension.
0:20 squat
0:10 rest
0:20 squat
0:10 rest
0:30 medicine ball chop
0:45 plank
0:45 recover

complete 3 circuits of the following
0:45 belly angels (a snow angel, but facedown, lift arms and legs off the floor and as you bring your hands together in front of you open your legs, as you bring your arms down to the sides close your legs)
0:30 yogi pushups
0:30 crunches
0:30 balance on one leg while making small circles with medicine ball overhead L
0:30 balance on one leg while making small circles with medicine ball overhead R
0:30 recover
all 30 seconds
side stretch L
side stretch R
squat stretch
forward fold
quad stretch L
quad stretch R
butterfly
knee to chest on back L
knee to chest on back R
lay

this workout is similar but at a bit higher intensity!
1:00 jog
0:30 agility shuffle
0:30 ski jumps
1:00 walking lunges
0:30 squat hold
1:00 plank with leg lift (alternate legs every 2 seconds)
1:00 plank to rotation
0:30 recover

repeat this circuit 3 times at maximum intensity
0:20 burpees
0:20 mountain climbers
0:20 split jumps
0:20 low jacks
0:20 froggers
0:20 tuck jumps
0:30 recover

repeat this circuit 3 times
0:30 staggered-hand pushups (switch hands each two pushups)
0:30 prone flutter kicks
0:30 windshield wipers
0:30 burt reynolds
0:30 v-ups

30 seconds each pose/ side
triangle pose
side lunge L+R
runner stretch L+R
hamstring
forward fold
butterfly
lower back squat stretch
down dog
cobra

and here we go with a final high-intensity workout! this one requires a pull-up bar, medicine ball and some weights for the get-ups!

1:00 Jog
1:00 High Knees
0:30 Fast Knee L
0:30 Fast Knee R (perform a knee strike and use your hands!)
1:00 Jumpstyle (that dance u do to jumpstyle music)
1:00 Boxing Jog (jog in place and as you lift up your knees alternate punches)
0:30 Uppercuts
1:00 Kicks
1:00 Recover

then 4x
0:30 Pull Ups
0:30 Get Ups
0:30 Handstand Pushups
0:30 Squat Jumps
0:45 Recover

then 3x
0:30 One Leg Arm Plank On Medicine Ball L
0:30 One Leg Arm Plank On Medicine Ball R
1:00 Bicycles
1:00 V-Up With Medicine Ball
1:00 Standing Russian Twist with Medicine Ball
1:00 Crunch
0:30 Recover

then stretch it out
0:30 Side Tri L
0:30 Side Tri R
0:30 Splits
0:30 Squat Hips
0:30 Splits
0:30 Squat Hips
0:30 Low Back L
0:30 Low Back R
0:30 Knee To Chest L
0:30 Knee To Chest R

Coca-Cola
BlaK

Cannibal Manifesto
by Oswald de Andrade

The Manifesto Antropófago (Cannibal Manifesto) 1928 by the Brazilian poet and polemicist Oswald de Andrade.

Only Cannibalism unites us. Socially. Economically. Philosophically.
The unique law of the world. The disguised expression of all individualisms, all collectivisms. Of all religions. Of all peace treaties.
Tupi or not tupi that is the question.
Against all catechisms. And against the mother of the Gracchi.
I am only interested in what's not mine. The law of men. The law of the cannibal.
We are tired of all those suspicious Catholic husbands in plays. Freud finished off the enigma of woman and the other recent psychological seers.
What dominated over truth was clothing, an impermeable layer between the interior world and the exterior world.
Reaction against people in clothes. The American cinema will tell us about this.
Sons of the sun, mother of living creatures. Fiercely met and loved, with all the hypocrisy of longing: importation, exchange, and tourists. In the country of the big snake.
It's because we never had grammatical structures or collections of old vegetables. And we never knew urban from suburban, frontier country from continental. Lazy on the world map of Brazil.
One participating consciousness, one religious rhythm.
Against all the importers of canned conscience. For the palpable existence of life. And let Levy-Bruhl go study prelogical mentality.
We want the Cariba Revolution. Bigger than the French Revolution. For the unification of all the efficient revolutions for the sake of human beings. Without us, Europe would not even have had its paltry declaration of the rights of men.

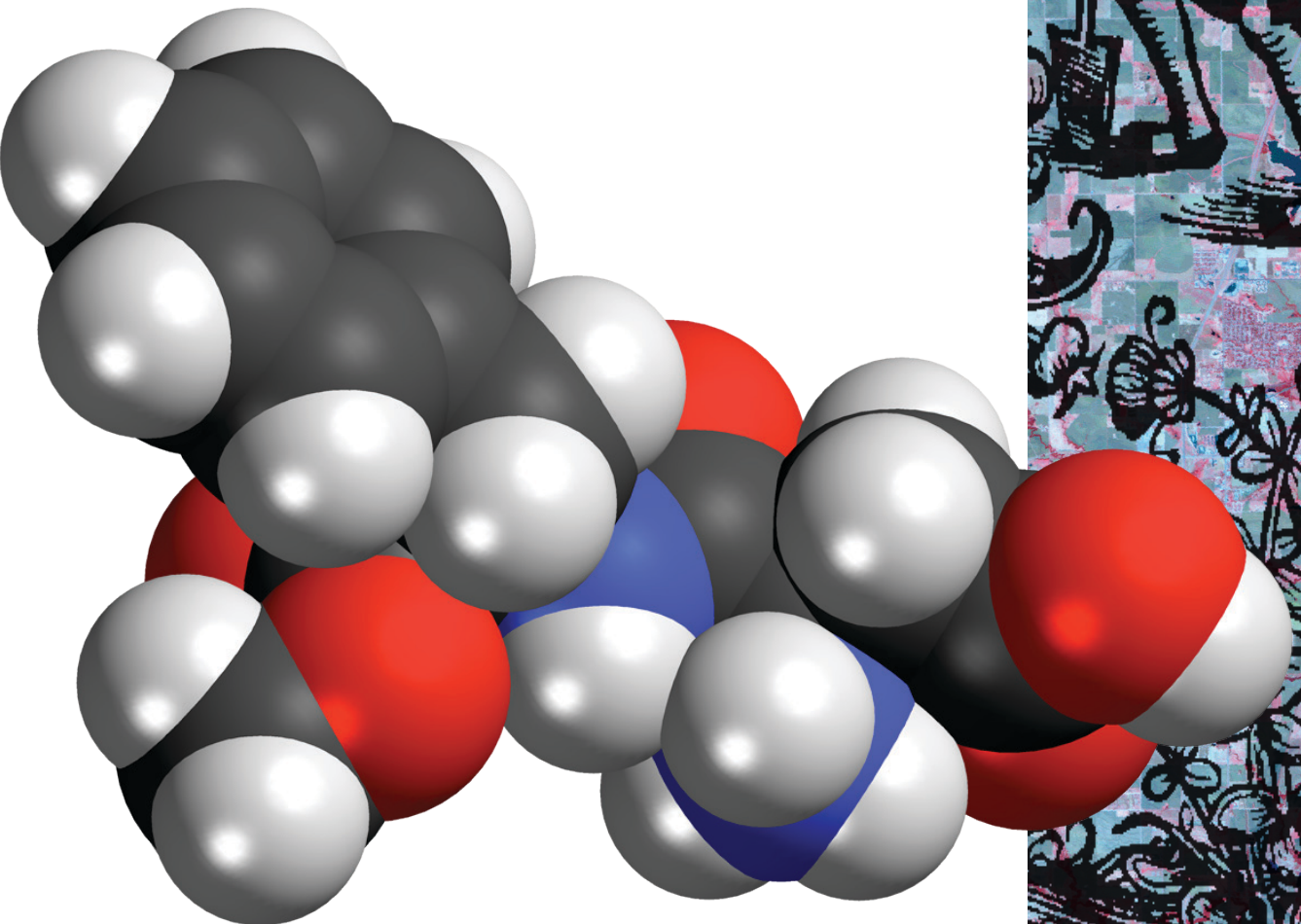
The golden age proclaimed by America. The golden age. And all the girls.
Filiation. The contact with the Brazilian Cariba Indians. Ou Villegaignon print terre.
Montaigne. Natural man. Rousseau. From the French Revolution to Romanticism, to the Bolshevik Revolution, to the Surrealist Revolution and the technological barbarity of Keyserling. We're moving right along.We were never baptized. We live with the right to be asleep. We had Christ born in Bahia. Or in Belem do Pata.
But for ourselves, we never admitted the birth of logic.
Against Father Vieira, the Priest. Who made our first loan, to get a commission. The illiterate king told him: put this on paper but without too much talk. So the loan was made. Brazilian sugar was accounted for. Father Vieira left the money in Portugal and just brought us the talk.
The spirit refuses to conceive spirit without body. Anthropomorphism. Necessity of cannibalistic vaccine. For proper balance against the religions of the meridian. And exterior inquisitions. We can only be present to the hearing world.
We had the right codification of vengeance. The codified science of Magic. Cannibalism.
For the permanent transformation of taboo into totem.
Against the reversible world and objectified ideas. Made into cadavers. The halt of dynamic thinking. The individual a victim of the system. Source of classic injustices. Of romantic injustices. And the forgetfulness of interior conquests.
Screenplays. Screenplays. Screenplays. Screenplays. Screenplays. Screenplays.
Cariba instinct.
Death and life of hypotheses. From the equation I coming from the Cosmos to the axiom Cosmos coming from the I. Subsistence. Knowledge. Cannibalism. Against the vegetable elites. In communication with solitude.
We were never baptized. We had the Carnival. The Indian dressed as a Senator of the Empire. Acting the part of Pitt. Or playing in the operas of Alencar with many good Portuguese feelings. We already had communism. We already had a surrealist language. The golden age.
Catiti Catiti
Imara Notia
Notia Imara
Ipeju1Magic and life. We had relations and distribution of fiscal property, moral property, and honorific property. And we knew how to transport mystery and death with the help of a few grammatical forms.
I asked a man what was Right. He answered me that it was the assurance of the full exercise of possibilities. That man was called Galli Mathias. I ate him. The only place there is no determinism is where there is mystery. But what has that to do with us?
Against the stories of men that begin in Cape Finisterre. The world without dates. Without rubrics. Without Napoleon. Without Caesar.
The fixation of progress by means of catalogues and television sets. Only with machinery. And blood transfusions. Against antagonistic sublimations brought over in sailing ships.
Against the truth of the poor missionaries, defined through the wisdom of a cannibal, the Viscount of Cairo - It is a lie repeated many times. But no crusaders came to us. They were fugitives from a civilization that we are eating up, because we are strong and as vindictive as the land turtles.
Only God is the conscience of the Uncreated Universe, Guaraci is the mother of all living creatures. Jaci is the mother of vegetables.
We never had any speculation. But we believed in divination. We had Politics, that is, the science of distribution. And a socio-planetary system.
Migrations. The flight from tedious states. Against urban scleroses. Against Conservatives and speculative boredom.
From William James and Voronoff. Transfiguration of taboo into totem. Cannibalism.
The pater familias is the creation of the stork fable: a real ignorance of things, a tale of imagination and a feeling of authority in front of curious crowds.
We have to start from a profound atheism in order to reach the idea of God. But the Cariba did not have to make anything precise. Because they had Guaraci.
The created object reacts like the Fallen Angel. Ever since, Moses has been wandering about. What is that to us? Before two Portuguese discovered Brazil, Brazil discovered happiness.Against the Indian de tocheiro. The Indian son of Mary, the godson of Catherine of Médicis and the son-in-law of Don Antonio de Mariz.
Happiness is the real proof.
No Pindorama matriarchy.
Against Memory the source of habit. Renewed for personal experience.
We are concrete. We take account of ideas, we react, we burn people in the public squares. We suppress ideas and other kinds of paralysis. Through screenplays. To believe in our signs, to believe in our instruments and our stars. Against Goethe, against the mother of the Gracos, and the Court of Don Juan VI.
Happiness is the real proof.
The struggle between what we might call the Uncreated and the Created - illustrated by the permanent contradiction of man and his taboo. Daily love and the capitalist modus vivendi. Cannibalism. Absorption of the sacred enemy. To transform him into a totem.
The human adventure. Earthly finality. However, only the pure elite manage to realize carnal cannibalism within, some sense of life, avoiding all the evils Freud identified, those religious evils. What yields nothing is a sublimation of the sexual instinct. It is a thermometric scale of cannibalist instinct. Once carnal, it turns elective and creates friendship. Affectivity, or love. Speculative, science. It deviates and transfers. We arrive at utter vilification. In base cannibalism, our baptized sins agglomerate - envy, usury, calumny, or murder. A plague from the so-called cultured and Christianized, it's what we are acting against. Cannibals. Against Anchieta singing the eleven thousand virgins in the land of Iracema - the patriarch Joa Ramalho the founder of Sao Paulo.
Our independence was never proclaimed. A typical phrase of Don Juan VI - My son, put this crown on your head, before some adventurer does it! We expel the dynasty. We have to get rid of the Braganza spirit, the ordinations and snuff of Maria da Fonte.
Against social reality, dressed and oppressive, defined by Freud - in reality we are complex, we are crazy, we are

prostitutes and without prisons of the Pindorama matriarchy.

Oswald de Andrade, in Piratininga, Year 374 of the Eating of Bishop Sardinha

Endnote1"The New Moon, or the Lua Nova, blows in Everyman remembrances of me" in The Savages, by Couto Magalhaes.

2The basis of Andrade's date is the Tupi cannibalization of Bishop Pero Sarinha, who had shipwrecked in 1556 on Brazil's northeast coast.



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