

WN *Farming*

Traditional food systems

Harmony in Tuscany





Stefania Vezzosi
Food and Nutrition Dept, Local Unit 3-Pistoia, Tuscany, Italy
E-mail: s.vezzosi@usl3.toscana.it

Michela Carruci
Food and Nutrition Dept (volunteer), Local Unit 3-Pistoia, Tuscany, Italy
E-mail: michela.carucci@gmail.com

Paola Picciolli
Food and Nutrition Dept, Local Unit 3-Pistoia, Tuscany, Italy
E-mail: p.picciolli@usl3.toscana.it

Access 2000 Earth Charter here
Access 2011 report of the UN Special Rapporteur on the right to food here
Access July 2012 Best Food on Earth: Peru. Enrique Jacoby here
Access August 2012 Best Food on Earth: Peru. Enrique Jacoby, Patricia Murillo here
Access April 2014 Spanish version of commentary below here
Access June 2014 Enrique Jacoby et al on family farming in the Americas here
Access September 2014 Open letter to FAO on agro-ecology here

Brooke Aksnes writes:

The old adage insists that 'it takes a village to raise a child.' In our rapidly changing world, we are relying more on the 'convenience' of technology, and less on ourselves and other people, to rear our families. The result of online socialisation, ultra-processed ready-to-eat food and automatic everything, is a gap that widens with each generation between humans, other humans and the dwindling and limited resources that sustain us.

In a Tuscan village, the pursuit to reconnect children with the Earth and their social responsibility towards the living and physical environment, as led by dietitian Stefania Vezzosi, has culminated in an ongoing community crusade for better school meals. This commentary follows the combined efforts of local dietitians, farmers, municipal officials and parents who are teaching how and why to eat healthfully, and are also demonstrating the power that a concentrated community effort has to impact the next generation.

What makes this seemingly-mainstream 'healthy and responsible eating' initiative so powerful, is its focus on the human element of food. Children are not simply handed a lifeless plate of bland-but-socially-responsible food, but a thoughtful meal that highlights the culinary and social aspects of Quarrata's Tuscan version of the traditional Mediterranean diet. So often we forget the fundamental role humanity plays in the pursuit of sustainability, equality and health, and fail to embrace the ways our cultures already propel us towards these values. The town of Quarrata, however, has successfully engaged its established community to nourish the bodies and consciences of its youngest citizens.

This school food programme brings the human aspects of tradition and culture to the lunch table to make ethical meals come alive for children. It is by investing in the health of both schoolchildren and the local economy, that Quarrata is reviving its centuries-old culinary legacy and strengthening its sense of community. This town's success in using its own resources and human power to bring up a generation of healthy, conscious eaters, serves as a reminder that it has been community units that have fostered well-being for generations.

Quarrata's grassroots project offers a powerfully simple model of community responsibility and efficacy in producing a new generation of adults connected with and conscious of the Earth's resources. This local school meal programme success shows that in order to ensure a well-nourished future for all, there is no need for radical innovation. Instead, communities can simply embrace the solutions that already lie in their own environments and cultures.

These simple cultural responses can enable families and friends to become more connected to food in its nutritional, social, ethical and other aspects, and can build up strong communities. In supporting local farms, community economies, the environment and people all become healthier. Local food supplies also allow food to reprise its social role in community dynamics, bringing people together to enjoy food and fellowship. Most relevant to established cultures being eclipsed by the 'convenience' of technology, is that returning to food-supply roots recovers the seasonal eating pattern from which we so often are so far removed. Local food permits us to regain our appreciation of natural weather patterns and regional provisions of nature.

As Quarrata understands, reuniting children with seasonal and local foods gives them a relevant perspective of our relationship with the Earth and her finite natural resources. An understanding of limited natural provisions also builds up respect for those who work the Earth to sustain community nutrition. Becoming more connected with our food allows us to become more closely linked to each other, the pleasure of community and the well-being of the environment for which we must take the utmost responsibility.

Introduction



Since 2005, Quarrata, a Tuscan town of 25,000 people, has engaged its community to implement a healthier school meal service which is based on Tim Lang's rules for ecological public health eating

Here we show progress made since 2005 in a Tuscan community by changing the food, economic, environmental, social and political aspects of the school meal service. This approach, inspired by Tim Lang's '15 new cultural rules for ecological public health eating' (Box 1), has involved the entire community.

The new healthy eating programmes in our schools use fresh foods during their natural seasonal cycle, together with simple traditional recipes from the Mediterranean culture. Meals are cooked on the premises to emphasise the links between dietary choices, human health, work practices and environmental responsibility.

Our school meal programme is inspired by the Mediterranean diet, a dietary pattern evolved and adapted from ancient and balanced food traditions that ever since their first beginnings in all regions of the Mediterranean littoral, respect ecosystems, climate, terrain, the earth and their rhythms.

This food style is a culinary melting pot of all the evolving, developing and changing civilisations and cultures that are or that have been adjacent to the Mediterranean Basin. Throughout history, these peoples have been able to merge flavours and quality with sobriety, simplicity, pleasure, health and well-being. In addition, they have been able to sustain the convivial Mediterranean atmosphere relative to the art of eating. A great attention to atmosphere around the table has also always been emphasised.

Box 1

15 rules for ecological public health eating

1. Eat less but better
2. Eat simply
3. Eat no more than you expend in energy
4. Eat equitably: don't take food out of another's mouth
5. Eat a plant-based diet with flesh more sparingly, if at all
6. Celebrate variety; get biodiversity into the field and thence to your plate. Aim to eat 20-30 species per week
7. Think fossil fuels. The energy transporting food to you or you to food = oil
8. Eat seasonally where possible
9. Eat according to the proximity principle, as locally as you can; support local suppliers
10. Learn to cook quickly producing simple meals; leave fancy food for really special occasions
11. Be prepared to pay the full externalised costs; if you do not, others will
12. Drink water, not soft drinks
13. Be aware of the hidden ingredients; look at the label to locate the unnecessary salt and sugars; it they are there, don't buy
14. Educate yourself without becoming neurotic!
15. Enjoy food in the short-term but think about its impact long-term; be confident. It's your food, your children's future!

Taken from Lang and Heasman (1)

Quarrata

Located in the upper-central part of Tuscany in the province of Pistoia, 30 kilometres from Florence, Quarrata is a town governed by a mayor and a town council. It is one of the most populous municipalities of Pistoia, with approximately 25,000 inhabitants. At the last count there were 1,250 children aged 0-4, 1,311 aged 5-9, and 1,211 aged 10-14.

According to the latest statistics, just over one-tenth of the population consists of people who are not Italian nationals. These are, in order, chiefly Albanian, Romanian, Moroccan and Chinese people.

Educational services for children include four nursery schools, eight kindergartens, six elementary schools and two middle schools.

In 2013, the average life expectancy in Quarrata at birth was to 79.3 years for men and 83.13 for women. This is one of the highest life expectancies in the world.

The Quarrata landscape is dominated by hills with grapevine cultivation in the plains, olive trees in the higher areas, and chestnut trees at the summits. The developed area is characterised by country houses and farmhouses. The landscape is referred to as 'country-gardens', highlighting the work farmers have done to make this area more beautiful and productive.



The Quarrata countryside is appropriately called 'country-gardens' by locals, demonstrating the town's understanding of the powerful effect farmers have in maintaining the beauty of the land

The extreme simplicity of traditional food in this area, which is a typical expression of the Mediterranean diet, is the result of many centuries of subsistence farming with much local trade done by barter with little use of money, and is based on 'poor' products such as: vegetable soups, pasta, bread, salads, legumes, cereals, olive oil, eggs, fish and little meat. This traditional way of eating uses simple, natural ingredients, wastes nothing. It is summed up with the thought: 'use less to get more'.

Although the modern and frenzied trends in manufacture, advertising, marketing and availability of cheapened processed food products have swept away many culinary traditions, this area still retains an incredible heritage based on originally ancient food systems and the Mediterranean diet. This is due to the strength of family ties which have permitted the handing down of daily patterns and culinary tradition, based on the family meal.

2005-2012
Seven years of transformation

2005. What's for lunch?

National and regional Italian laws recognise school meal programmes as an integral part of the education system. Municipalities, which are in charge of schools in their areas, either manage the school meal service autonomously or outsource to external catering companies.

The structure of a typical Italian school menu consists of:

- Primo Piatto. This is the meal's main source of carbohydrates (pasta or other cereals with vegetable sauce or beans and other legumes).
- Main dish. This will be fish, eggs, meat or cheese, always served with a generous portion of vegetables and a slice of bread.
- Seasonal fresh fruit.

In Quarrata, each educational facility's meal service is run by the municipality with an overall production of approximately 230,000 meals per year.

In order to safeguard quality and accountability of this public service, the municipal administration of Quarrata manages the school meals autonomously. In 2013, total expenditure for municipally-supported school meals was equal to roughly € 1,200,500 (amounting to 5.33 per cent of total current spending).

The service has an annual income-adjusted cost for each family and remains completely optional.

2005. Our project is conceived

In 2005, we conducted a nutritional survey to understand children's eating habits and school menu quality. From examining these data, we observed that what children were eating was very far removed from the traditional Tuscan diet, and that school meals had significant amounts of animal products. In addition, food procurement did not meet local criteria for healthy food. Starting from these observations, we decided to start working with the community to improve children's diets. This plan included changes to the whole school food supply policy.

2006. Happy snacking!

In 2006, the town council started providing a daily healthy snack to more than 1,200 children in primary schools at no cost to the families. The programme was called 'Happy Snack at School'.

The healthy snack was offered on a weekly rotating schedule for students as follows:

- Monday. Local yogurt (see Box 2)
- Tuesday. Bread with olive oil
- Wednesday. Pizza
- Thursday. Seasonal fresh fruit
- Friday. A little slice of pizza without mozzarella and tomato

2007. Traditional cuisine

Working with Baugiano Farm, local farmers revived the cultivation of an ancient grain (a variety of wheat) from a local seed bank. The wheat was milled at a local farm, and all of the whole wheat flour was used in a local bakery to make bread and white pizza for children in every school.

Box 2

Baugiano Farm Oasis

The Baugiano Farm Oasis is an organic, socially-active farm that was founded in 2005. It produces a wide range of organic products, and organises teaching and training activities for children. One of the main objectives of the Baugiano Oasis is to nurture future generations of sustainable farming families, by way of didactic activities, courses for the recognition of plants and herbs, and cooking classes. Currently, Baugiano Farm Oasis produces 2,400 cups of yoghurt a month, sold at the 'White Bar' which is managed by children. Yogurt is also served in local schools.



In 2006, Quarrata children participated in using an ancient local grain to bake their bread. This demonstration was part of a wider effort to connect children with their culinary heritage.

2008-2009: Community nutrition



Consistent and strong efforts from local farms like the Baugiano Farm Oasis have ensured that Quarrata students are aware of and respectful towards food, farm workers and the environment.

Policy-makers developed an agreement with local farmers to purchase food produced in the municipal area. This has helped to promote local products in school meals, and has cut out useless costs (transportation, packaging and marketing), reinforced the local economy, protected the environment, and improved the nutritional quality, taste and freshness of school lunches. Vincenzo Tropiano, director of Coldiretti Pistoia (Box 3), said, on working together with local schools

> The wonderful landscape of Tuscany hills would not exist without the work of small farmers. In this way, the agreement signed between the municipality of Quarrata and Coldiretti Pistoia for a new school food supply policy, represents an important part of our strategy for Campagna Amica.

Box 3

Coldiretti, Campagna Amica

Created in 1944, Coldiretti is one of the main national Italian farmers' unions with a membership of more than one million farming families. The union currently represents over half of all Italian farmers. Since its beginning, Coldiretti has supported small farmers in aiming to regenerate agriculture. Synergies, according to Coldiretti, are needed to valorise the agricultural activity in rural environments. An initiative of Coldiretti, *Campagna Amica* was founded in 2008 to carry out activities that reflect the value and dignity of Italian agriculture and its key role in the protection of the environment. It is also a network of actors and initiatives dedicated to short supply chains and local food. Coldiretti employs its network to revitalise or establish growing sales networks such as farms, farmers markets, shops.

Box 4

Support

Alessandro Landini, director of educational services



Sudden changes of ways of life over the last few years have made people forget that behind food, there are relationships with natural cycles and links with traditions. We insert nutrition education in an overall process of global education aimed to put the person at the centre. The strengths of this project include making children aware of those who work to feed them, including farmers and food service workers, and involving parents in meal planning and serving. Since 2005, we have supported the dissemination of healthy and balanced nutrition across multiple educational platforms and ensured that our food fosters a sense of culture, full respect of the environment, and an in-depth knowledge of local agricultural heritage. The enhancement of national and local agriculture systems through knowledge and promotion of local products have a double effect. This contributes to the development of respect for the environment. It also ensures the transmission of healthy food traditions rooted in our Mediterranean diet, to new generations .Special attention is given to development of our children's palates and rules of good alimentation. The fundamental role of this project is the education of a future generation that practices balanced nutrition.

Marco Mazzanti, mayor
Lia Anna Colzi, town Councillor, head of school and educational policy





A proper diet is fundamental for pleasant growth of children. Having lunch together at school has an important educational value for children and enables them to share the pleasure of tasting and appreciating food with friends and teachers. The school meal service is the result of deep reflection and research to promote innovative solutions and a healthier, more balanced diet. When we develop the menu, we pay special attention to: seasonality, incorporating typical Tuscan recipes and the colours and presentation of plates. We create a familiar ambiance at school and teach children to respect the environment. Children eat from porcelain plates and drink from proper glasses. The department of education, food and nutrition of local unit 3, Pistoia - National Health System, families, and members of the canteen committee, all share a path whose destination is children that recognise what is good, beautiful and healthy to eat.

Alessandra Cacciappoli. Former chair of the canteen committee



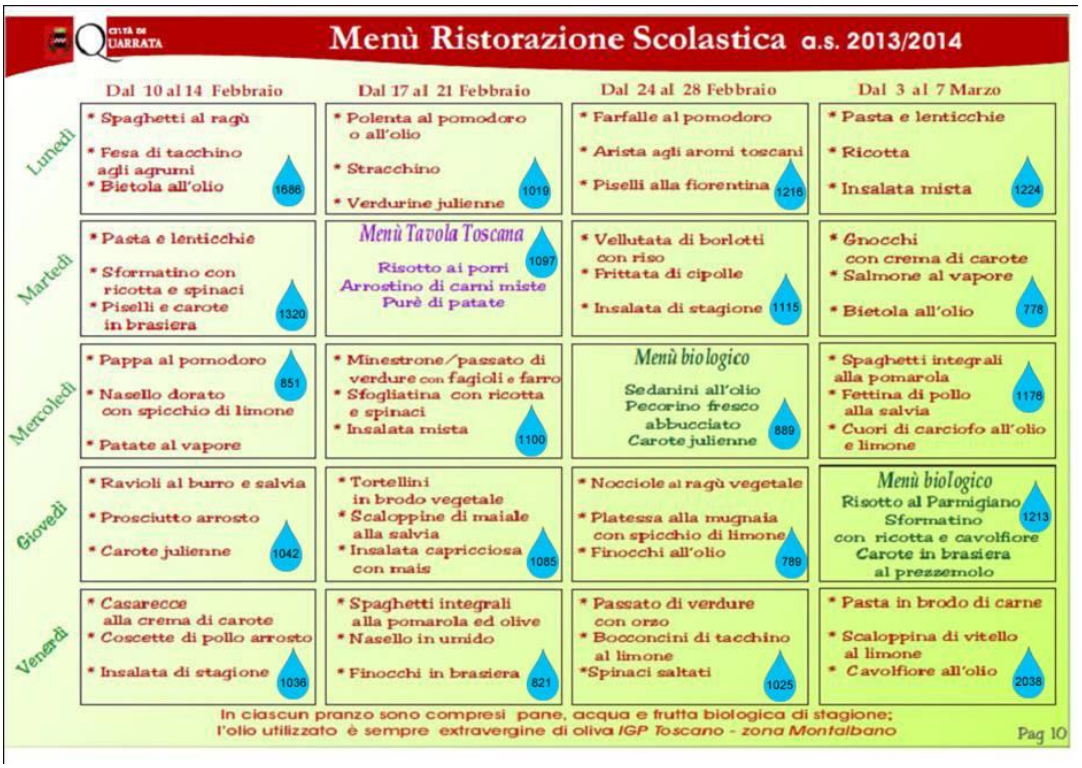
Thanks to the commitment and the knowledge of all the staff of the food and nutrition department of Pistoia, the school meal service has greatly improved over the years. Particularly, the whole community has been actively empowered in a positive and fruitful way. Organising focus groups and public meetings and always being available for positive discussion, Stefania Vezzosi and her colleagues have involved the whole community in this nutrition education project as a means of achieving a global education for all. The success of this long-term collaboration can also be seen in our children who have not only improved the nutritional quality of their diet, but changed their approach to food. Today, Quarrata children more naturally taste new foods and recipes, increasing the variety of their diet and discovering new flavours.

2009-2010. Responsible school meals

School meal review and assessment was based on the availability of local products. Animal foods were reduced in meals.

In each school, a dietitian from the local health system presented the project to stakeholders in partnership with decision-makers to collect opinions and suggestions for school lunches.

2010-2011. Reducing our water footprint



The 2013-2014 menu was printed with the meal's water footprint to raise awareness of the impact food choices have on the environment. The town serves a once-weekly vegan meal to reduce the footprint.



Dietitians of the local health system calculated the water footprint of each school meal and presented the results to decision-makers. The canteen committee approved the introduction of a once-weekly vegan menu to help reduce the water footprint. The city received a grant from the Tuscany region department of agriculture to further implement the project.

The water footprint of a product is defined as the total volume of fresh water that is used directly or indirectly in the manufacture of the product. Fresh water consumption during all stages of the production chain is taken into account, and calculation procedure is similar for all products, whether they are derived from agricultural, industrial or service.



Quarrata has established a contract with the local farmers' union to ensure that schools are provided with fresh, local foods year-round. This initiative also helps to strengthen the local farming economy

We used the Water Footprint Network's calculator to define the amount of water (cubic meters/year) consumed by categories of food. Schools' food products were divided into specific categories: cereals, meat, dairy products, cooked and raw vegetables, fruit and starchy roots. Also taken into account were the number of eggs per week and the average fat content of the diet. The water footprint allowed the calculation of a theoretical water footprint based on recommendations in *Guidelines for the Regional School Meals in Tuscany* and a real footprint based on food effectively consumed.

To calculate the water footprint, it was necessary to identify the number served daily in our schools, the exact composition of foods served during a three-day period, the amount of processed foods, and the theoretical quantities of foods based on regional recommendations. These data were used to define the amounts, in kilograms, to be inserted in the calculator.

The data analysis showed a strong correlation between the resulting water footprint and two main variables. These were the amount of food, and the origin of food (animal or vegetable product)**.** However, the water footprint appears influenced by many other variables as well, such as the nature of goods and ethical behaviour. We also noted differences between the theoretical water footprint, and the real water footprint with our actual footprint being lower than the theoretical calculation.

With this evidence, the local authorities working for Quarrata, the canteen committee, and other people involved in school food provision, accepted our suggestions to further decrease meat-based dishes in the school meal plan and to introduce a once-weekly vegan menu to reduce our water footprint. Considering the great amount of food waste that occurs during food production, the typology of each animal product was re-evaluated, as well.

2012 and beyond. Working towards the future

In 2012, our food and nutrition department presented a new project on food loss and waste in schools to decision-makers, the canteen committee and everybody else involved in our work. The project aims to develop, plan and implement interventions that use resources more efficiently.

From data we obtained in 2012-2013, we have planned a reduction of food portions, and the introduction of a single dish (for example, pasta and beans, or pasta and meat or fish.) together with a vegetable, bread and fresh fruit. The Quarrata authorities and everybody else we are working with, have already approved this model on a once-weekly basis

Conclusion



The magic of Quarrata lies in its landscape shaped through centuries of agricultural activity. The agrarian roots of this Tuscan town support a healthy diet and sustainable model of food production

By introducing this school lunch system, we have decreased the number of school meals featuring meat from 51.6 per cent in 2005 to 43.1 per cent in 2013. We hope that many children will naturally learn what meals of normal daily life should be, and will recognise food as a valuable natural resource. We further hope these children will empathise and engage with a fair, sustainable and participatory model of food production appropriate for modern development and a socially responsible contribution to public health.

We believe that the ability to achieve population-wide, sustainable results depends on building larger networks that will spread our local benefits. We also think that an action plan made by a public authority is essential to establish long- term community goals, to coordinate various interventions and to avoid unnecessary waste of resources.

With our actions, we sincerely hope to have made, and continue to make, school meals a valuable opportunity to understand food and its unarguable social role in health promotion. If food literacy is both a tool and an outcome to promote empowerment and participation in communities, we also hope that people can enjoy all-around well-being from this programme.

Through their food choices, all people consciously or unconsciously support certain models of global food production. Freedom of choice places humans in a close relationship with planet, and assigns each of us a responsibility towards the Earth**.** The way we eat not only influences our health, but also the entire environment. We must therefore hold ourselves accountable to the Earth every time we acquire food and prepare and consume a meal.

The food supplies and dietary patterns of industrialised and other countries have become increasingly unsustainable. So we need to define and implement interventions that empower people to eat with a lower impact on the planet's resources. School lunches, as also affirmed by the European Commission, have become a favoured setting to promote research and define interventions in this area.

In Italy, 2.8 million children attend primary school, and there are thousands of meals prepared by central kitchens daily. For children, eating at school is a special opportunity to learn why and how to adopt an ecological perspective. Moreover, the number of children who might change their eating habits as a result of school lunch programs is significant.

Sustainability is not a radical position. It is simply a position of seeing what we need to do in order to ensure that we aren't depleting the natural capital of the earth, or that we reduce the rate at which we are doing so. We should regularly ask ourselves: 'What is the impact of what I'm doing?' and 'Can I do it in a better and more sustainable way without noticing a big difference in my quality of life or work environment?' These very values have guided our daily actions in the Quarrata school meal service. We have, we hope, devised a strategy that includes food,

economy, the environment and social and political goals set by and for the community.

We are convinced that progress in this direction is dependent above all on education and public awareness. We believe that the empowerment and growth of personal skills should always be pursued, to ensure change not only on a personal level, but on one that involves entire communities. Our concept of community does not refer to a compact group of people who think and act in the same way. It refers to a plurality of people who share the same difficulties and all together, in inter-relationship, who work to find common solutions and who therefore ensure greater advantages for all.

Reference

1 Lang T, Heasman M. Food Wars: the Global Battle for Mouths, Minds and Markets. London: Earthscan, 2004.

Status

The commentary was devised, researched and drafted by the authors, whose project was presented at the conference on *Building Healthy Food Systems* held in Oxford in September 2014. Edited and with an introduction by Brooke Asknes. Convenor of the WN *Farming* series is Enrique Jacoby. Readers may make use of the material in this commentary if acknowledgement is given to the association, and *WN* is cited. Cite as: Vezzosi S, Carucci M, Piccioli P, with Aksnes B. Traditional food systems. Harmony in Tuscany *[Farming] World Nutrition* October 2014, 5, 10, 870-883. All *WN* contributions are obtainable at www.wphna.org.

World Nutrition commentaries are reviewed internally or by invitation. Contributions to *World Nutrition* are the responsibility of their authors. They should not be taken as the view or policy of the World Public Health Nutrition Association unless this is explicitly stated.

How to respond

Please address letters for publication to wn.letters@gmail.com. Letters should usually respond to or comment on contributions to *World Nutrition*. More general letters will also be considered. Usual length for main text of letters is between 350 and 1000 words. Any references should usually be limited to up to 10. Letters are edited for length and style, may also be developed, and once edited are sent to the author for approval.