

# FOOD AND NUTRITION EDUCATION DAY

BEST REPORTS IN EARLY CHILDHOOD EDUCATION

BRASÍLIA • DF 2017

#### Organisation

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**EDUCATIONAL ACTIONS DEPARTMENT** 

NATIONAL SCHOOL FEEDING PROGRAMME COORDINATION

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COMPLEMENTARY FEEDING AND CHILDHOOD OBESITY PREVENTION

Childhood is a stage of life in which everything (or almost everything) has to do with routine and habits. During this time, one's personality begins to develop and patterns are established which will lay the foundations for adult behaviour.

For this reason, it is important for everyone who is directly or indirectly involved in a child's life to make every effort so his or her upbringing is the best possible. It is essential to be aware that children's physical health plays a vital role in their overall well-being.

One of the habits which can prevent childhood obesity is teaching children to eat well. Providing them with the right food from an early age is the best way to keep them in good health; then, everything starts with breastfeeding and, preferably, only after a child's sixth month of age should baby food, such as vegetable purees, be a part of their diet. At least until he or she turns two, a child's diet should include a bit of everything, encompassing the widest possible range of foods.

The effects of young children's eating habits, from birth through their early years, will be felt during their entire life. Therefore, breastfeeding is an important part of anyone's life. Breast milk on its own is capable of adequately nourishing children through their first six months of life; from then on, however, it should be complemented. Complementary foods' nutritional

adequacy is pivotal in reducing child mortality and morbidity rates, including both malnutrition and overweight. Therefore, complementary feeding is defined as the food provided to children during the same period in which they are given other sorts of food or liquids, in addition to breast milk.

Linear growth deficit acquired in early childhood is not usually reverted after children turn two. Habits acquired during their childhood and teenage years are usually kept through adult life and old age. Thus, achieving adequate feeding for young children should play an essential role in the global strategy for the feeding security of a community.

The food we enjoy, the spices we like and the mouthwatering smells we feel usually remind us of our childhood. Then, it is easy to understand how our early eating practices shape the habits we have during our entire lives.

Currently, due to modern technology and the easy access to processed foods, rich in salt, sugar and fats, people's health has changed and the impact of diseases such as obesity, diabetes and hypertension has increased sharply, harming children at earlier ages.

Why should we not try to revert this picture and improve children's quality of life? This is what we had in mind during the first part of the Food and Nutrition



Education Day's activities, when the importance of complementary feeding and obesity prevention was stressed. We know that educators play an essential role in schools. Besides, changing education entails transforming their pedagogic practices. It is not only about developing the experience at the pedagogic level, but also within a conceptual framework for fostering learning practices. During school classes, we can gather elements to give students new perspectives on negative experiences they might be having as far as their eating habits are concerned, since the food they eat carries more than nutrients; they are charged with symbols, meanings and beliefs which are tied to social, religious and economic aspects in everyone's daily life.

Food and Nutrition Education is an investment made in the present, but whose effects are felt in the future. Since it helps to prevent childhood obesity, it creates the conditions for tomorrow's adults to value their health and well-being, changing their habits for the better. It is the beginning of an important debate to be implemented in schools as a means of inspiring people to tread new paths.



The family lunch experience

#### Report 1

## The things we don't eat...

Rio de Janeiro Municipality



Centre of Reference in Child Education in Realengo: Colégio Pedro II



Rio de Janeiro



168 students

#### **Available educational stages**

Nursery School • Primary School • Secondary School

#### **Team**

Cristiane Gomes de Oliveira: School head teacher Alini Melo Naspoline: Municipality nutritionist

Liana Pereira Borba dos Santos: FNE Day coordinator

activity based on the principle that eating practices are shaped from an early age, and a child's family is extremely important in preventing childhood obesity.

Our goals were: discussing the issue of childhood obesity with students' families; giving students' guardians the chance to try the lunch offered at On that day, many children tried new foods, which school; strengthening the bonds between children and their parents through this experience; showing parents and guardians exactly what their children eat at school, as well as their choices and interactions during lunchtime, as mediated by their teachers.

comprised the following stages: firstly, a documentary on the issue of childhood obesity was screened,

"Families at school, families at the table" was an after which a nutritionist answered questions from parents and guardians. Then, children were asked to talk about the invitation their parents received to have lunch at school. Finally, there was a big family lunch, to which all parents contributed, by bringing different kinds of fruit and salad.

they usually refused to do, and many parents said they could now fully trust the quality of the food their children were given at school. They stated that "the food was delicious" and they were thrilled at how autonomously their children helped themselves with it. Nonetheless, there remains the challenge This activity, which took place during the FNE Day, of providing healthy foods instead of processed ones during school recess, when children often eat processed snacks brought from home.



The family lunch experience

#### Report 2

# **Mashed pumpkins with** ground beef stew and beetroots

Araripina Municipality



Mãe Corina Daycare



Pernambuco state



116 students

#### **Available educational stages**

Nursery School • Primary School • Secondary School

#### **Team**

Maria do Socorro Santos Pinheiro: School head teacher Jocasta Edjane R. De Carvalho Figueiredo: Municipality nutritionist Maria do Socorro Santos Pinheiro: FNE Day coordinator



Nutritionist Jocasta Edjana and FNE Day coordinator Maria do Socorro, alongside students, parents, teachers, and food handlers all took part in the activities held during the FNE Day. The theme of the meeting was "Healthy complementary feeding and obesity prevention", which guided us in developing the following activities: assessing students' eating habits; measuring students' height and weight; cooking workshop activities, namely "Cooking Healthy Baby Food", "Making Healthy Juice" and "Food Traffic Lights".

During these activities, we dealt with the importance of different sorts of fruit through recipes created by the students' mothers, who shared their experiences in cooking, from preparing the ingredients to their methods to include healthy foods in students' diets, by using fruits and greens of high nutritional value. During the workshop, they made juice from ingredients as diverse as carrots, beetroots, oranges, passion fruit and kales.

Moreover, we discussed better ways of making use of juice preparation leftovers. We also approached proper hygiene, as well as the adequate handling of foods and kitchen utensils. After that, everyone was invited to taste the school food, and we observed that parents were pleased with the juice and purees our students are given.

During the "Food Traffic Lights" activity, the nutritionist provided participants with round cards in the colours green, red and yellow. Then, participants (parents and teachers) were asked to write next to each colour which kinds of food were healthy (green), which should be avoided (red) and which should be consumed in moderation (yellow). Thus, we tried to encourage the consumption of fruit and vegetables and raise awareness among parents, guardians and school workers concerning the excessive intake of fats, sugar and salt.

What made us put these activities into practice was our wish to show parents and the school community in general a new, simple way of dealing with the issue of Healthy Eating, by using foods that are easily accessible to our students. We had positive results, since we were able to see that the participants' interest in the issue of school feeding has increased, and that the students' attitude towards school food has improved.



The family lunch experience







**REGIONAL BRAZILIAN FOOD** 

Brazil is known for its cultural diversity and natural resources, but also for its food variety. Some foods have been known for a long time and are largely incorporated into Brazilians' eating habits. However, there is a range of nutritious regional foods which have not been consumed over the past decades, thus becoming unknown to Brazilian people today.

When we go to a local market, we can see several kinds of fruit, vegetables, grains and other sorts of food which come from different parts of Brazil or even from abroad. Nonetheless, it is essential to value locally-produced foods, for they are perfectly adapted to the weather of the region and to the soil on which they are grown, thus requiring less technology and fewer chemical additives.

Regional foods have several advantages, such as the easy access to them, low costs, and the fact that they are rich in vitamins and minerals that can contribute to reverting nutritional deficiencies and reducing infection risks, especially in children. Therefore, it is vital that students be familiar with regional foods available in their area, so they can enjoy the benefits they provide.

In addition to nutritional benefits, these foods promote the community's self-sufficiency and pride of its cultural values, which favour both economic and social development.

During this part of the FNE Day, our goal was giving students a taste of regional traditions through recipes that carry the legacy of different social and ethnic groups, while raising awareness on the fact that cooking healthy food with less fat, sugar and salt is perfectly possible for everyone.

When regional cuisine is valued, the historical importance of local foods is also acknowledged, and that is key in making nutritious meals even tastier, especially when we share them in an environment of joy and conviviality.

### Your waste is someone's food + 1

Municipality of Toledo



Dr. Borges de Medeiros Municipal School



Paraná state



362 students

#### **Available educational stages**

Nursery School

#### **Team**

Eliane Moura de Souza: School head teacher

Deise Fernandes: Municipality nutritionist

Guilherme Matheus Kaiser Breda: FNE Day Coordinator

These activities took the vastness of our country into consideration, with kinds of food peculiar to each region, and which are often modified when consumed in other parts of the country, outside their original area. We wanted to taste these new foods and thus become acquainted with new flavours in order to discover a new, more diverse diet, full of unconventional fruits and vegetables.

The project aimed to emcompass the wealth of Brazilian foods, allowing students to learn about their origins and qualities, especially when it came to fruits and vegetables. Thus, we expected to: encourage students to taste new foods and flavours; teach them about cultural diversity and the multiplicity of eating habits in each Brazilian region; explain to them why similar foods have different prices (for instance, why one kind of banana is more expensive than another kind of banana in the same area); teach students about the origins of foods and what their possible by-products are — take sugar cane, for example, which is the raw material for molasses, brown sugar, white sugar and demerara sugar.

In order to have students fully understand the contents taught, we asked them to engage in active participation. Firstly, there was a class delivered by Mr Breda, FNE Day Coordinator, during which students were shown the main fruits, vegetables and spices of each Brazilian region, as well as the qualities of each kind of food, how it is grown and its possible by-products. The class also covered the history of these foods in Brazil; for instance, students were taught that bananas were originally from India and that cocoa beans were discovered in Mexico by Christopher Columbus, taken to Europe and then to Brazil, where they adapted perfectly. Afterwards, Mr Breda talked about the best weather conditions for a

good harvest. In a different class, a Science teacher showed students the different parts of a tree, how photosynthesis works, and why it is necessary for the healthy growth of all Brazilian fruits.

There was yet a different kind of class, which took place in Mercado Allmayer, a local market, where children were able to see the diversity of fruits and vegetables they had studied at school, while also discovering new kinds of food. Students were asked to do calculations on food prices and were encouraged to think about price variation in the market; and, during another class, students had the chance to try several kinds of food, such as groundcherries, bur gherkin, lemons, orange and yellow melons, plantain, sugar cane, cocoa, cupuacu, dragon fruit and pea pods. Children could also see some local landraces, such as red, white and black popcorn cobs, as well as white and purple sweet potatoes. The teachers also approached the sprouting of lemons and Key limes, two kinds of fruit commonly used in the area, being Key lime the commonest one.

Our biggest challenge was helping students face the fear of eating unknown foods, but after overcoming their fear, the result was remarkable: they wanted to eat those foods again. Also, students had to learn how to exercise their patience, as they waited for the lemon seeds to sprout. Teachers should also be patient and understanding while encouraging students to taste new kinds of food, and even try these foods in front of their students, motivating them to do the same.

As a result, we could observe that students were eager to buy the foods they tried, parents got curious about the food their children tried, and students wanted to take home sprouts of the fruits they had so that they could grow them and add them to their diets.



FNE Day Coordinator with students at a local market, getting to know new sorts of fruit and vegetables. It is the best and biggest market in town and it is also close to school. A teacher and the educational psychologist's assistant were also present









PREVENTING AND REDUCING FOOD WASTE

About one third of all the food produced globally is wasted, which accounts for 1.3 bn tonnes a year. In some countries, such as the US, England and Australia, where most of this waste takes place, one third of their entire production is wasted. Even in emerging countries, such as Brazil, food waste at consumer and retailer levels is high. In these countries, losses tend to be severe, from crops management to post-harvesting. Food waste might happen for several reasons, among which are: excessive production or purchasing, inadequate transportation and storage, and uninformed consumers. When cooking, if we are not aware of the properties of ingredients, we will certainly end up misusing them or we might not use parts that could be consumed, thus wasting a large amount of nutritious foods which would have been beneficial to us.

The concept of food waste encompasses much more than just food disposal. Besides the loss of nutrients which could prevent or stave off food insecurity and waste, it is also harmful to the environment, causing the loss of valuable production resources.

Actually, the consequences of food disposal go beyond environmental damage. Food waste impacts on the food security and economic growth of underdeveloped countries. If one third of all the food produced goes to the trash bin, then one third of the energy, water and financial resources used in production are also being wasted.

In face of this alarming scenario, the third topic of the FNE Day was the mobilisation of students, school cooks, educators and the entire school community for the prevention and reduction of food waste, discussing alternatives for healthy eating habits.

Data retrieved from the III Boletín Pérdidas y Desperdicios de Alimentos en América Latina y el Caribe published by the Food and Agriculture Organisation of the United Nations in 2016. Further information on: http://www.fao.org/3/a-i5504s.pdf

Many actions can be taken to help reduce food waste, such as properly planning school menus, considering local eating habits, the population's epidemiological profile, and their locally-produced crops; supervising the handling, cooking and distribution of food, along with feeding and nutrition education activities. These measures together allow for the offer of better food, reducing food waste at schools, which needs to be tackled immediately, since they account for a large part of unnecessary expenses.

Though obstacles to changing this scenario may be many, so are the solutions. Reducing food loss and improving adequate feeding are often inexpensive actions, which depend solely on the school's commitment to reorganising itself. As a matter of fact, the first step towards change is a shift in the attitude of school managers.

It is essential that there be mutual understanding between the school head teacher, FNE Day's coordinator, the nutritionist, and the school cooks, in order to meet the needs of the children who eat school food.

#### Report 4

# **Avoiding food waste and loss: Schools and Community together for this cause**

Sento Sé Municipality



José Lucindo Ribeiro School



Bahia state



64 students

#### **Available educational stages**

Nursery School • Primary School

#### **Team**

Girlaide Gama da Silva: school head teacher

Rafaela Loureiro de Cerqueira Guerra: municipality nutritionist

Franciene Maria da Silva: FNE Journey Coordinator



The third stage of FNE Day's events was "Preventing" and reflect on new ways to prevent food waste both and reducing food waste and loss". Therefore, primary school teachers planned classes on food waste reduction practices. A week after these During the classes prior to this activity, students did classes, students were asked to hand out leaflets on the issue in the communities where they live. This activity took place on the 3rd of August, and the leaflets read nine tips to avoid food waste in people's everyday life.

The motivation for this activity was the lack of information concerning adequate food use and disposal. We aimed to help people be better informed on the subject, and thus be able to discuss

at school and at home.

research exercises, created charts and graphs and took part in group discussions. Among the activities that were carried out, we provided students with the school menu and, over that week, with the help of the school cooks, students had the chance to assess the weight of food residues and see on which weekdays food waste was higher. Then, these data were recorded on a graph. Afterwards, children participated in activities concerning food waste and consumption.



Raising awareness on how to prevent food waste

After these classes, students were challenged to take to their community streets together, carrying informational posters and handing out leaflets, while explaining their contents to passers-by. The entire activity was guided and mediated by their teachers.

We could observe immediate results, since the activities carried out at school and in the community brought about shifts in people's habits, as far as school feeding and food waste at home are concerned. At the end of the week, we observed that 1.550 kg of food had been wasted. To reduce waste, school cooks were asked to use smaller amounts of food when preparing children's meals.

The lack of primary school textbooks covering food waste and the amount of time teachers needed to plan their lessons were our main problems in putting FNE Day's activities into practice, along with planning the event itself.

Thanks to the FNE Day, we reflected on the importance of adequate feeding from early childhood. Interdisciplinary and transdisciplinary activities played an essential role in this process, and children will carry the lessons learnt at school out to their own communities. However, proper planning is vital so that FNE Day's stages be held without trouble, and it is also crucial to ensure that children learn the FNE Day's activities' contents satisfactorily.

Food and Nutrition Education Day

Best reports in early childhood education







# LEARNING AT THE SCHOOL VEGETABLE GARDEN

As far as learning is concerned, vegetable gardens give teachers of all subjects the opportunity to approach many topics with hands-on, interactive tasks, which teachs students to appreciate their surroundings, thus making their learning more meaningful.

The "School Vegetable Garden" project may comprehend several contents which make up the school curriculum, while bringing back traditional values, broadening students' knowledge of their culture, developing new skills and promoting healthy habits.

Environmental issues may be presented in all school subjects and take the community's reality into consideration, so that students can see how these issues are closely linked to their own reality, broadening their views on the world they live in. Therefore, the school should promote environmental conservation, leading students to realise they are also responsible for it. After-class activities may teach students to care for their school facilities and to develop healthier eating habits.

## "Healthy food doesn't hurt"

João Pessoa Municipality



Delegada Maria Tereza de Sousa Leite Nursery School



Paraíba state



176 students

#### **Available educational stages**

Nursery School

#### **Team**

Rosilene da Silva Santana: School head teacher attending the FNE Day

Ana Paula Leal: Municipality nutritionist

Rosilene da Silva Santana: FNE Day Coordinator

Promoting healthy eating entails integrating different actions towards adopting healthy habits. Educational activities can help people to make better choices concerning the food they eat, therefore raising awareness on excessive food consumption and on food waste as well.

"Healthy food doesn't hurt", our school's vegetable garden, is a Healthy Eating Project that aims to engage students in caring for their feeding, thus fostering positive eating habits from early childhood. Hence, it is vital that students have access to healthy food on a daily basis so they can grow up to be healthy, happy individuals.

Our vegetable garden was built from scratch by using recycled tyres. In building it, student's autonomy and care for their food environment were encouraged, for we believe that students' identities and socialisation should be developed in an authentic, conscious and contextualised way, causing children to acquire new skills and internalise new rules, feelings and behaviours.

Our purpose was to encourage: healthy eating practices; awareness on recycling; the use of vegetable gardens at school and at home; family participation in building children's healthy habits.

This action was a part of the healthy eating project at our school. At first, parents were invited to attend a lecture on the project, delivered by the project team and a local environmentalist, discussing the harms caused to the environment by the disposal of used tyres and by pesticides. Then, parents were asked to take part in collecting and painting used tyres for the vegetable garden. On the next day, students sowed some seeds in it, and after some time these seeds would grow into the vegetables they would have for lunch.

We had but a few challenges, since this was a very pleasant activity, and we realised that we would not have made it without the community participation. Among its results, we can see that children have learnt valuable lessons about discipline and care, which they show in their daily routine of watering plants. Their families also contributed with seeds and have helped to keep the vegetable garden.









#### **SMALLHOLDER FARMING AT SCHOOL**

One of the greatest achievements of School Feeding Law no. 11,947/2009 is the incentive to purchase regionally and locally-produced food,, besides the mandatory purchase of Smallholder Farming (SF) produce. This law provides that at least 30% of FNDE (National Fund for the Development of Education) funds should be invested in the purchase of SF produce, either directly from a smallholder farmer or from other organisations, such as land reform settlements, indigenous and Quilombola\* communities.

Therefore, in addition to the incentives for the development of smallholder farming, promotion of culture and participation of local actors, the enactment of Law no. 11,947/2009 intends to ensure food and nutrition security for children enrolled in state schools by providing adequate food while respecting the dietary and cultural habits of each region.

For those who produce food, the initiative contributes to the enhancement of smallholder farming and of its commercial actions. For those who buy these products, the result of such improvement is betterquality food and the adoption of healthy eating habits, in tandem with more sustainable local development.

The integration of products from smallholder farming into the production of food served in Brazilian public schools has brought several benefits, since the model of food cultivation of smallholder farming seeks to be an alternative to the usual production model, especially regarding its impacts on the environment.

If once our schoolchildren used to eat canned, processed foods, mainly due to the power of the food industry, which has always massively advertised their highly caloric and much less nutritious products, today it is possible to see fruits, vegetables and greens on their plates, among other healthy products, including regional, traditional ones, which many people have stopped consuming.

We are in favour of teaching about organic agriculture at school because we hope that children will be able to learn about the workings of nature on their daily lives, for instance, when they can see that some fruits are available in seasons when other fruits are not, because nature follows its own rhythm.

It is at school that a community's life conditions, and consequently its eating habits and food production, begin to improve. The community should also be in permanent contact with smallholder farmers in order to know their stories and the work they perform, from growing the crops to delivering them to the school. This challenge is a unique Food and Nutrition Education experience.

The association of school feeding with smallholder farming has promoted a real change in the schools of our country by making it possible for regional, locally-produced smallholder farming products to be consumed by Brazilian students on a daily basis.

\*In Colonial Brazil, Quilombolas were areas where runaway enslaved people would settle and live according to their culture. To this day, many of these settlements remain in different places around the country.



## Visiting a Smallholder Farming Vegetable Garden

Municipality of Tapiraí



Criança Feliz Municipal School



Minas Gerais state



12 students

#### **Available educational stages**

Nursery School

#### **Team**

Adenize Ferreira Garcia Correia: School head teacher Ana Paula Martins Vieira de Freitas Souza: Municipality nutritionist Ana Paula Martins Vieira de Freitas Souza: FNE Day Coordinator It is important to show children that the food purchased from smallholder farmers is non-transgenic and free from pesticides, which harm our body and the environment. Thus, we came up with the idea of taking the children on an excursion to a smallholder farm so that they could understand the process their food undergoes before they can eat it at school. Students were allowed to witness the management of the soil, the sowing of seeds, the growth and harvest of fruits and vegetables.

In doing this, we aimed at: helping children to develop healthy eating habits; encouraging children to consume organic products; incentivising school staff and students to value and respect nature by fostering activities through hands-on tasks, so they could appreciate the environment as a source of life.

The FNE Day team took the students to a smallholder farm, where they were able to see how the processes of planting and harvesting crops work (especially fruit and vegetables). They picked up cassava, navel oranges, mulberries, eggs, bananas and papayas, and then took these to the school cooks, who came to the farm, to make their meals. Then, the students ate these meals, which consisted of cassava and chicken pie, mulberry juice, orange cake and fruit salad.

As a result of this project, we could see that children have been eating better and are more concerned about the environment. Having a well-balanced diet is essential for an active, healthy life, and that should start in early childhood, so that children will grow up to be conscious, healthy adults.



Smallholder farmer explaining to the Criança Feliz school students how to plant a banana tree





Criança Feliz school students and school staff with farmer Claudio Oliveira picking up cassava roots in his farm



Criança Feliz school students and staff trying some cassava pie with chicken and vegetables, made by school cooks with the food purchased from the smallholder farm

## A Visit to Mr Mineiro's farm

Municipality of Araquari



João Ignacio Filho School



Santa Catarina state



105 students

#### **Available educational stages**

Nursery School

#### **Team**

Eliane Terezinah Gabiatti: School head teacher Bárbara Emilia Vázquez: Municipality nutritionist

Tatiana Marcele de Souza Silva and Florisa Renaud Guimarães:

**FNE Day Coordinators** 

We developed this action in view of the importance and how they are packed and stored. They were of showing students typical food from their area, as well as its production process, from its planting to its arrival at school.

This activity had the following goals: teaching children that food undergoes a series of processes before reaching their plates; showing them what a farmer's routine is like; teaching them about the parts of plants; making them appreciate locally-produced food as an important part of their school menu.

To put the activity into practice, the FNE Day nutritionist started by getting in touch with the smallholder farmer to schedule a visit. After it had been scheduled and parents had authorised their children to go on this excursion, students and school staff went to the smallholder farm together. There, they were welcomed by a technician from the Santa Catarina State Agricultural Research and Extension Company (EPAGRI/SC). Then, the technician and instance, children learnt how to wash cassava roots very excited to see how large cassava roots can be and even happier when the farmer gave them some cassava roots - of which a delicious cake was eventually made.

Back at school, we were happy to see their faces when they realised the cake they were about to eat had been made from the cassava roots they had seen on the farm. We can say for sure that they were able to understand the processes involved in producing cassava.

One of our main challenges was to keep students focused on the activity itself, for they were curious and eager to see the farm's machinery and to explore the land.

The lesson we derived from this activity is that, once we know how the healthy food on our plates is produced, we tend to take more pleasure in our the smallholder farmer explained to the students meals. On the other hand, when we get to know how about all the stages of cassava production. For processed foods are made, and how harmful they are, we are more liklely to refuse it.



Teacher talking to students about cassava





Students making cassava cake with the roots picked at Mr Mineiro's property







GAMES FOR DEVELOPING SOCIAL EATING PRACTICES

Children's development is a continuous process which pervades all their experiences, including their eating habits and their attitude towards food. Therefore, mealtimes at school should be an extension of its pedagogic approach, thus guiding and shaping children's eating habits, taking into consideration cultural, social, affective, emotional and behavioural aspects of children's lives.

Games and playful activities are meant to entertain those who take part in them by bringing thought, action and feeling together. Through them, children can express themselves and acquire knowledge while making sense of their reality. They can also add something to the game, by using their previous experiences, combined with their interests and tastes.

Play fosters children's learning process, stimulates the development of language, thinking and social skills and promotes children's autonomy and self-esteem. It is believed that playful activities meet children's needs for individual satisfaction and cognitive development, because during playful activities children have the chance to make decisions and solve conflicts, thus elaborating on different concepts.

Playful activities on school feeding need to be incorporated into school routines, especially when it comes to nursery and primary schools. These activities allow children to "learn by playing", fostering their personal development. When playing games, children are more motivated to learn about healthy

eating habits. While exploring their five senses, food becomes more attractive, and children can train their motor skills, and thus their culture, socialisation and imagination are valued.

In face of the feeding transition process now in progress in Brazil, due to a shift in eating habits, we see that there is a growing need for developing actions towards improving children and teenagers' dietary habits.

The teaching of food-related issues at schools depends on nutritional education activities, which aim at broadening children's views on the subject, so they can make healthier choices concerning their food. Young children, especially, are always eager to learn about feeding and eating practices.

Therefore, using playful activities in feeding and nutritional education allows children to learn more easily and better, thanks to their engagement in such joyful activities. Though games may be seen as mere pastimes, they are essential in building one's views on the world from an early age.

Play and games related to eating habits are a valuable tool for encouraging children to develop their autonomy and to help them think about the importance of a well-balanced diet, without food waste. While playing, different features of children's personalities are developed, as they learn how to deal with the world around them.

# A Mango Festival at School

Municipality of São João do Sabugi



Maria Nilciene Mariz de Medeiros Nursery School



Rio Grande do Norte state



267 students

#### **Available educational stages**

Nursery School

#### **Team**

Ana Maria Galvão: School head teacher

Luana Cavalcanti de Oliveira: Municipality nutritionist

Claudete Medeiros: FNE Day Coordinator

At last, we have come to the end of this journey. It was not easy, amid so many school errands, to incorporate such important changes into our routine, especially the ones concerning school feeding. Thus, in drawing attention to everyday healthy eating practices at school and at home, we wished to end our FNE Day activities in a remarkable way. We had the idea of holding a Mango Festival to celebrate this delicious fruit, easily found in streets, squares, gardens and farms in our town and region.

This is why we held our School Mango Festival, which may become a Municipal Mango Festival in the future. Mangoes are a part of our childhood and everyday lives, but we tend to know very few dishes we can make with mangoes. The mango harvest in our town, São João do Sabugi, in the Brazilian state of Rio Grande do Norte, is a large one, but much of it is wasted and lost, for there is little concern to use this product to generate income. In São João do Sabugi, a warm and dry region in the backlands, we decided to show our guests and students all the benefits mangoes can provide, as well as several dishes that can be made with it.



The setting for the Mango Rain reading

To start with, we invited all the schoolchildren out to the school courtyard and read them a story called Mango Rain, by Chadian author James Rumford. Then, children went back to their classrooms and did activities related to mangoes, such as drawings, paintings and games, among others.

Afterwards, we called the children out to the courtyard again, where cooking workshops were to take place. Three recipes were made: mango cake, mango and banana sorbet, and mango salad. The children absolutely enjoyed the workshops and their parents were given a cookbook, entitled Mango Treats, with a dozen mango-based recipes.



A mango-based dish



Festival poster: CMEI Maria Nilciene

People from São João do Sabugi are used to eating mangoes, but most do not know how to use them in the making of recipes other than mango juice, popsicles or sweets. They do not usually make savoury mango-based dishes or mango cakes, which were new to them.

As a result of our actions, we expect children to eat mangoes more often, and also include mangoes in their meals at school and at home. We also hope that mango sales at markets and industries help to create new jobs. Our challenges were the usual ones: lack of time, logistic problems and a slight unwillingness to leave our comfort zone. Nonetheless, we managed to overcome these problems and achieve positive results.

As for the lessons we derived from the FNE Day, they were many, especially concerning team work and new ways of improving our students' eating habits. Doing research on the health benefits mangoes provide was a very useful experience in that sense.

We believe that, if there is a Municipality Mango Festival in the future, it may be able to generate income to local families, while encouraging people to include mangoes in the dishes they make daily, and perhaps our town's economy will also benefit from an increase in mango production and consumption.

Finally, there is a little anecdote which a local folklorist, João Emídio de Lucena, used to tell. Once a boy asked João permission to pick up a mango from a tree, to which João answered: "Of course, but leave some for the birds!"

Long live mangoes and mango trees!

#### Report 9

## Games for developing social eating practices

Municipality of Farroupilha



Dos Anjos-Sao Roque Municipal School



Rio Grande do Sul state



68 students

#### **Available educational stages**

**Nursery School** 

#### **Team**

Maria Elisabete Ribeiro da Silva Montemezzo: School head teacher Anne Caroline Gelmini Cauduro: Municipality nutritionist Fabiana Bernardi: FNE Day Coordinator





Our main goal was to give our school teachers the opportunity to use their creativity, by preparing fun, playful lessons for their students to learn about school feeding inside and outside the classroom, thus broadening their perspectives on this topic.

This action had the following objectives: encouraging students to develop healthy eating habits through fun activities and stimulating students to do physical exercise, in order to promote their overall well-being.

These activities were planned over the course of the project, aiming at fostering healthy eating practices

within the school community through games, play and cooking, in order to engage children in active learning, encompassing different fields of knowledge.

We were able to observe that the school staff put much effort into all activities, and we could see that the children and their families learnt that healthy eating practices should be a part of their daily lives. The obstacles we found along the way did actually teach us that the school and students' families need to work together to carry out projects like the FNE Day, which was very rewarding for all of us at Dos Anjos-Sao Roque Municipal School.



School project on the origin of foods



**Nursery school children** 



Fun dishes made by preschoolers



School project on the origin of foods

# **Self-service Feeding: Making Better Choices**

Municipality of Araguatins



Dona Marina Pereira de Miranda Municipal School



Tocantins state



182 students

#### **Available educational stages**

Nursery School

#### **Team**

Marlene de Moura Mota Oliveira: School head teacher Haysa Fernandes da Silva: Municipality Nutritionist Dulcineide Ribeiro dos Santos: FNE Day Coordinator



"Self-service Feeding: Making Better Choices" was an event held at our school that was actually a lunch where children were allowed to serve their own food themselves, as if they were at a restaurant, making their own choices, using glass plates and metal kitchen utensils, such as forks, knives and spoons. Teachers, mothers, school cooks, the school staff and nutritionists attended the lunch. We realised that, before this event, children were used to eating whatever food adults served them, so they did not have the freedom to choose their own food and develop their autonomy.

Through this event, we aimed at promoting children's autonomy at lunch, in a very playful manner. Moreover, we expected children to: appreciate eating healthy food; learn how to use cutlery and kitchen utensils; understand the importance of eating fruit and vegetables and that of chewing food properly; avoid food waste.



**Building autonomy and solidarity** 

During this event, there were many playful activities on healthy eating habits to encourage children to consume healthy food. These activities were developed by the nutritionist and the teachers together, and included dancing, drawing, exercising and playing music. For instance, the children were asked to colour fruit drawings, sing songs about healthy foods and play with puppets, roleplaying dialogues on the issue of healthy eating. The children were taught to make healthier choices, to handle some kitchen utensils and to chew their food properly.

Finally, the children's mothers were invited to have lunch at school, together with the school feeding board and nutritionist Haysa Fernandes da Silva. At our lunch, children were allowed to serve their food themselves, making healthy choices on their own and putting what they had learnt at school into practice.

The children really enjoyed coming to the cafeteria knowing that they would be allowed to serve themselves. They were able to make healthy choices, helping themselves with salad, fruit and a bit of all the available dishes. They were also free to choose where and with whom they would sit, and we could see that they were happy to use forks and knives, instead of spoons.

At first, we observed that the teachers and parents did not want children to serve their own meals, fearing that they would spill the food. We were happy to see that they managed to serve themselves, and from that we learnt that we should believe in children's potential. Offering children healthy food choices and letting them serve themselves was a means of helping them to develop their autonomy, while learning to eat healthy food in a playful manner, without forcing them to do so.



Josefa Martins Nunes and her daughter Isabelly Christina Alves, a preschooler

# **ACRONYMS LIST**

SF – Smallholder Farming

PPA – Protected Preservation Areas

FNE – Food and Nutrition Education

EPAGRI - Santa Catarina State Agricultural Research and Extension

FNED - Food and Nutrition Education Day

PNAE - Brazilian National School Feeding Programme

SEDUC - Education Secretariat

SISVAN – Food and Nutrition Vigilance System









