A small garden sits atop a hilly slope in a quiet middle class neighborhood in Sao Paulo city. The garden belongs to the Leão Machado school, a large public school in the area. Its bright orange building is at the bottom of this hill.

The garden has several rectangular plots spread out between the trees. Upside down soda bottles, filled with water, line the plots. A few plots have herbs, cabbage and some garlic plants. Most however, are empty. But a group of sixth graders is here to change that. They are armed with seeds, soil and a range of gardening tools. Two young teachers, Daniel Giglio Colombo and Marta Natividade Crizol Martins accompany the students. Martins calls out the students’ names and divides them into three groups. Each one is assigned a different task. I follow one of the groups to the farthest patch of the garden.

A boy named Felipy Pigato tells me they are preparing the soil for planting.

“Yesterday we mixed regular soil with coconut fiber,” he says. “The coconut fiber holds the seeds in the soil.” Today, he says they will add in the compost.

The students start digging. As their spades strike the earth, the children pull back chunks of soil, creating shallow pits, where they will pour the compost in. Soon, there are earthworms wriggling around in the freshly dug out soil.

“Lots of worms coming out,” I say a boy digging near me. Mateus Feitosa de Almeida, 12, pauses, points to an earthworm, and slowly pulls back the soil around it with his spade. “We have to pull like that so we don’t hurt the worms,” he explains. “If we take them out, it’s bad for the soil.”

Two other students push a wheelbarrow with a large sack of compost in it. The kids pour in the compost and mix it with the soil.

This is the second year of the project, says Colombo, the teacher who helped start this project. “We’re going to grow the same things we did last year,” he says. “Arugula, lettuce, and radishes.” The vegetables they grow are used in school meals. But the real aim of the school garden is not to supply ingredients, but to teach students where food comes from, so they can develop a connection to their food.

“When we ask students where lettuce comes from, they say the market,” says Colombo. “They have lost contact with nature, the soil, sowing, and growing of crops.” And that reflects in their diets, which are increasingly unhealthy, he says.

Just like in the US, highly processed foods like fast food, soda, and high-fructose corn syrup have become all too popular here in Brazil. And obesity rates are rising as a result, even among children. It is a nation-wide problem that has alarmed the government and public health experts in the country.

The government has banned sodas, cakes, and cookies in school meals. It has restricted the amount of salt and sugar in them as well. It also requires at least one daily serving of fruits and vegetables.

Initially students used to reject fresh food, says teacher Martins. She and her colleagues hoped that the school garden would change that.

“We wanted to create better habits with this project,” she says. “We wanted them to improve their eating, and become healthier.”

That idea is behind the flourishing of school gardens across Brazil. The program started 12 years ago as a pilot project in five schools as part of a pilot project by the United Nations Food and Agricultural Program. Today there are a few thousand school gardens in 700 cities and towns. Many are run independently by schools. Others are supported by city governments.

It’s hard to know as yet whether school gardens have improved children’s health, says Albaneide Peixinho, who ran Brazil’s school meal program for 13 years. But, schools are reporting that the gardens have made students more aware of their food.

“With school gardens, they see that food comes from the earth,” she says. And they are eating healthier. Some studies even show that the students are influencing how their families eat, she says. “Parents say that the kids are eating a lot of fruits and vegetables, and they insist on eating those foods at home.”

Sarah Campos, 14, took the school garden class last year at Leão Machado school in Sao Paulo. “I had never eaten radishes before,” she says. “I had never thought about trying them.” But she did try some when she and her classmates cooked radishes they had grown in the school garden.

“I loved it so much that I even had a second plate,” says Campos. Now, she says eats radishes often. “I ask my mom to make them for lunch sometimes. She puts them in the salad with carrots. And with potatoes. It’s very good.”

She and her classmates say they are more open to eating vegetables now. They try to avoid fast food and they’re more conscious of their diets.

Out in the garden, I ask Mateus, the student who told me about earthworms, what he has learned in his gardening class.

“Many things,” he says. “Like digging, what organic fertilizer is, what animals do to make the soil better.”

“What did you learn about vegetables?” I ask him.

“That they are good for our health and well being,” says Mateus.

“Do you eat vegetables?” I ask.

“I’m not so keen on them, but I guess I do now with this project,” he says, laughing sheepishly.

The hope is that by the end of the school year, he will really enjoy them.