APPENDIX E: Why Serve Organic School Food

There are many health, community and environmental benefits of serving more organic food in schools. In addition to reducing student exposure to toxic pesticides, organic farming systems protect the health of farmworkers, farmers, rural communities, our air, water and soil, and pollinators and other critical species. For the latest scientific data on the benefits of organic farming, visit The Organic Center and read the California Certified Organic Farmer's Benefits Report.[1]

ORGANIC FOOD PROTECTS CHILDREN FROM TOXIC PESTICIDES

Children are more vulnerable to the effects of pesticides because their bodies are rapidly developing.[2] Exposures can have significant and lifelong impacts, from reduced IQ to increased cancer risk. The American Academy of Pediatrics states that "children's exposure to pesticides should be limited as much as possible."

47 toxic pesticides residues are found on conventional apples,[3] including:

- 6 Known or probable carcinogens
- 16 Suspected hormone disruptors
- 5 Neurotoxins
- 6 Developmental or reproductive toxins

0 of these pesticides are allowed in organic farming.

WHAT IS ORGANIC?

Organic food is certified through robust standards governed by federal law under the USDA National Organic Program. These standards prohibit nearly all synthetic pesticides, including an estimated 17,000 pesticide products allowed in non-organic agriculture. The standards also prohibit GMOs (genetically modified organisms), synthetic fertilizers, irradiation and sewage sludge. In organic dairy and meat, the use of antibiotics, growth hormones and arsenic-based drugs is strictly prohibited, while over 450 drugs are allowed in non-organic production. The organic standards also require farmers to manage their land in ways that protect soil, water and biodiversity.

ORGANIC DIETS CAN RAPIDLY REDUCE PESTICIDES IN CHILDREN'S BODIES

Multiple studies have shown that organic diets rapidly and dramatically reduce exposure to pesticides[4,5] and some find that switching even a portion of one's diet to organic can make a difference.[6,7] That means if children *only* get organic food while they're at school, it can still reduce their exposure to pesticides. After just six days on an organic diet, pesticides in families' bodies dropped by the following percentages:[8]

- **70% decrease in organophosphates** – a neurotoxin linked to ADHD, lower IQ, Autism, Parkinson's, Alzheimer's, hormone disruption
- **95% decrease in malathion** – a carcinogen, neurotoxin, and hormone disruptor
- **61% decrease in chlorpyrifos** – a pesticide so toxic to children's developing brains that there is no safe level of exposure
- **70% decrease in glyphosate** – a probable human carcinogen, endocrine disruptor and reproductive toxin

ORGANIC PRODUCTION ELIMINATES ROUTINE USE OF ANTIBIOTICS AND OTHER DRUGS

Organic meat and dairy producers don't use antibiotics, growth hormones or arsenic-based drugs, whereas over 450 drugs are allowed in non-organic production. The use of growth hormones is common in pork and beef production and the routine use of antibiotics in conventional animal agriculture is a major driver of the development of antibiotic resistant "superbugs" that threaten public health.[9] Research finds fewer antibiotic-resistant bacteria on organic farms and on organic meat at the store.[10,11]

ORGANIC MILK

According to a 2019 study conducted by Emory University, antibiotic residue was detected in 60% of conventional milk samples but not in organic samples. Pesticide residues were found in up to 60% of conventional samples but not in organic samples. Pesticides found included atrazine (26%), chlorpyrifos (59%), cypermethrin (49%), diazinon (60%), and permethrin (46%). And levels of bovine growth hormones were 20 times higher in conventional milk samples than in organic.[12]

ORGANIC DIETS ARE ASSOCIATED WITH HEALTH BENEFITS

Research shows that organic diets are associated with reduced risk of allergies, otitis media, metabolic syndrome, high BMI, diabetes, and certain cancers.[13,14]

ORGANIC FOOD CAN BE MORE NUTRITIOUS

Organic school meals increase children's consumption of nutrient-rich food. A meta-analysis of 343 peer-reviewed studies found "meaningful differences in nutrient composition between organic and non-organic crops," including signficantly higher levels of health promoting antioxidants and phytochemicals:[15]

ORGANIC PROTECTS FARMWORKERS AND RURAL COMMUNITIES

Supporting organic farming protects farmworkers and rural communities from being exposed to pesticides. Pesticide contamination is responsible for these groups sufferring higher rates of acute poisonings, cancers, birth defects, asthma, infertility, autism and other neurological and reproductive effects.[16,17]

ORGANIC IS A CLIMATE SOLUTION

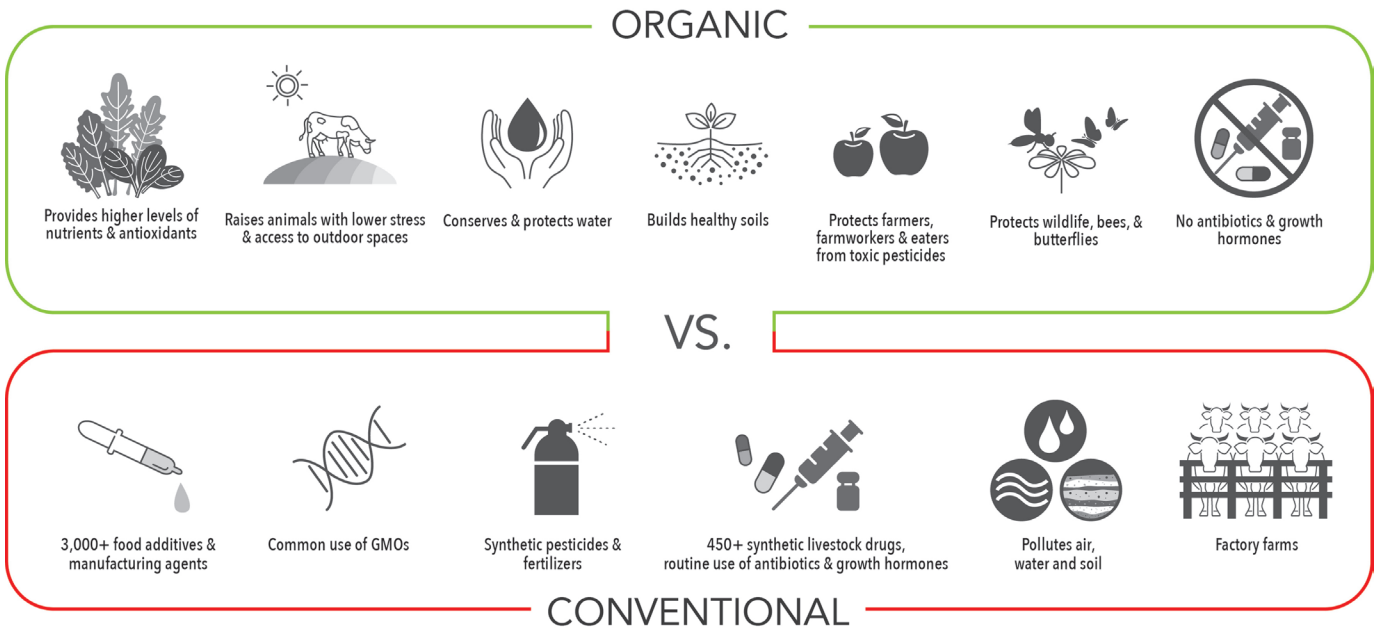
Organic farming uses less energy, emits fewer greenhouse gases and helps pull carbon dioxide from the atmosphere into the soil where it belongs.[18,19,20] Organic farming protects pollinators and other beneficial insects, conserves water resources and has been shown to have higher yields during major climate events such as droughts and floods.[21,22,23] By buying from regional organic farms, schools can play a key role in creating a more resilient food system.

"Nourishing children with food grown without pesticides and that supports healthy soil aligns with our values, and demand from schools allows us to plan forward. It's a win-win."

- Adriana Silva, Farmer, Tomatero Farms

ORGANIC FARMING CREATES GREEN JOBS

Data shows that organic farming is more profitable for farmers and provides greater economic stability and well-being.[24,25] Organic farms often create more jobs than their conventional counterparts.[26]



Sources for the information presented above can be found here.