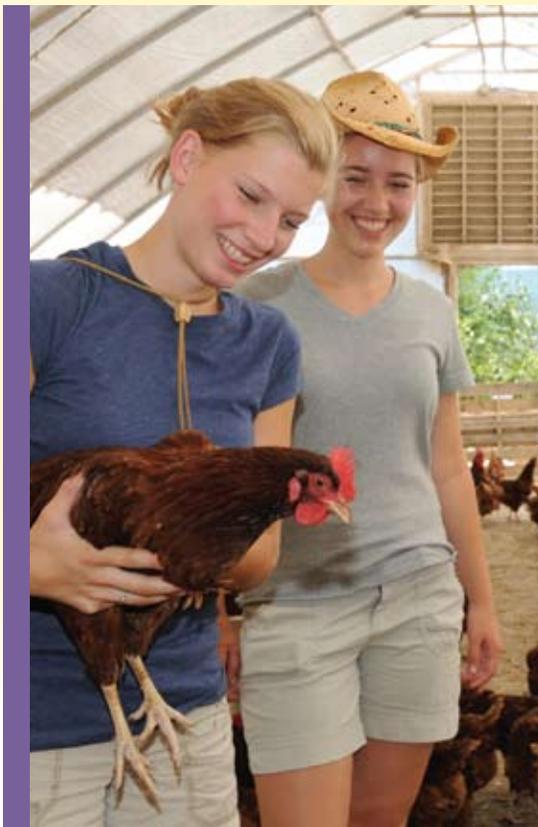


YOUTH ENGAGEMENT AND OPPORTUNITY:

MICHIGAN GOOD FOOD WORK GROUP REPORT SERIES

Report No. 1 of 5



MARCH 2011

This report was developed with leadership from the C.S. Mott Group for Sustainable Food Systems at Michigan State University, the Food Bank Council of Michigan and the Michigan Food Policy Council. This report, along with the others in the series, provides the foundation for the goals and agenda priorities put forth in the Michigan Good Food Charter.

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Youth Engagement and Opportunity

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YOUTH ENGAGEMENT AND OPPORTUNITY:

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VISION

We envision a food system in Michigan that ensures the health of all people through all the activities and processes from farm to fork. As stated in the Michigan Good Food Charter, "We envision a thriving economy, equity and sustainability for all of Michigan and its people through a food system rooted in local communities and centered on good food - food that is healthy, green, fair and affordable."¹

We envision public and private policies and practices changed to support this reimagined food system and a stronger, healthier Michigan. We envision a Michigan where young people understand, support and contribute to a good food system that supports healthy people and strong communities.

GOOD FOOD

means food that is:

Healthy

It provides nourishment and enables people to thrive.

Green

It was produced in a manner that is environmentally sustainable.

Fair

No one along the production line was exploited during its creation.

Affordable

All people have access to it.

Adapted from the W.K. Kellogg Foundation



¹ Colasanti, K., Cantrell, P., Cocciarelli, S., Collier, A., Doss, J., Edison, T., George, V., Hamm, M., Lewis, R., Matts, C., McClendon, B., Rabaut, C., Schmidt, S., Satchell, I., Scott, A., Smalley, S. (2010). Michigan Good Food Charter. East Lansing, MI: C.S. Mott Group for Sustainable Food Systems at Michigan State University, Food Bank Council of Michigan, Michigan Food Policy Council. Available from: www.michiganfood.org. p.7.



This youth engagement and opportunity report begins with an assessment of where we are today and what we need to do to have a healthy, green, fair and affordable food system that supports healthy lives and bright futures for Michigan’s young people. First, we look at our current state of affairs: a snapshot of what is helping or inhibiting young people in Michigan from attaining positive health, education and opportunity outcomes in the current food system. We then lay out the 10-year goals and the supportive strategies developed by the youth engagement and opportunity work group to address issues related to young people within the development of Michigan’s good food future.

In their own Words...²	
<p>What does a good food system look like for Michigan’s young people?</p>	<p>Here is what some Michigan youth told us a good food system should be:</p> <p>“When I ride my bike, I could get fresh broccoli.”</p> <p>“We could get ‘good’ food where we get ‘junk’ food.”</p> <p>“Local food in neighborhoods.”</p> <p>“Know who grows your food.”</p> <p>“I can find a place for me on the [family] farm and not have to get some other job.”</p> <p>“[Grocery stores] closer to my house so I can get a lot of vegetables.”</p>
<p>Why is a good food system for Michigan important?</p>	<p>According to one young person:</p> <p>“Everybody has to eat, so marketing and growing [food] helps our community.”</p>

² Youth input gathered from the good food workshop held Nov. 9, 2009 at the Community School Gardening Networking Meeting in Ypsilanti, Mich. and the youth track of the Northern Michigan Small Farms Conference held Jan. 15, 2010 in Grayling, Mich.

CURRENT STATE OF AFFAIRS

Michigan's food system should support youth with healthy, nutritious food and an economic sector rich with opportunity for young people. The youth engagement and opportunity work group spent six months working through what the roles and impacts for youth would be in a good food system. There was a lot to take in and a lot to understand about the ways our food system affects the lives of young people in Michigan.

The needs of Michigan's children for better health and future opportunity are complex and great. Ultimately, we focused on three priority areas for channeling efforts that support youth and the development of the Michigan good food system: health, education and opportunity.

It is important to note here that these priority areas and strategies are neither exhaustive nor exclusive of other efforts. Our aim here is not to propose strategies that will compete with existing efforts but rather be a call for leveraging the assets we have and empowering the work of those who are already leading the way.



Michigan Children's Health

Michigan's youth are paying a high price for the shortcomings of the current food system. The National Health and Nutrition Examination Survey (NHANES) shows that the national rate of childhood overweight has been increasing dramatically. Between 1963 and 1970, 5 percent of youth ages 12 to 19 were classified as overweight in the U.S.³ The percentages have steadily increased since then. According to the most recently published results of the Michigan Youth Risk Behavior Survey (YRBS) in 2007, 28.9 percent of Michigan youth are overweight or obese.⁴ The Pediatric Nutrition Surveillance Systems reports that of Michigan's most vulnerable youth, lower income children between 2 and 4 years of age, 29.5 percent are obese or overweight.⁵ Among older children, 12 percent of Michigan high school students are categorized as obese, and 83 percent reported eating less than the recommended five servings of fruits and vegetables a day.⁶

³ Michigan Department of Community Health. (2009) "Michigan Critical Health Indicators." Topic: Risky Health Behaviors #3: Pediatric Obesity and Overweight. Retrieved Jan. 5, 2010, from http://www.michigan.gov/documents/mdch/Critical_Health_Indicators_2007_198949_7.pdf

⁴ Kovalchick, K. (2009) "Michigan Youth Risk Behavior Survey Trends and United States Comparison 1997-2007." Michigan Department of Education. Retrieved from http://www.michigan.gov/documents/mde/1997-2007_YRBS_Trend_Report_291909_7.pdf.

⁵ Michigan Department of Community Health. (2009) "Michigan Critical Health Indicators." Topic: Risky Health Behaviors #3: Pediatric Obesity and Overweight. Retrieved Jan. 5, 2010, from http://www.michigan.gov/documents/mdch/Critical_Health_Indicators_2007_198949_7.pdf

⁶ Kovalchick, K. (2009) "Michigan Youth Risk Behavior Survey Trends and United States Comparison 1997-2007." Michigan Department of Education. Retrieved from http://www.michigan.gov/documents/mde/1997-2007_YRBS_Trend_Report_291909_7.pdf.



Overweight children face critical health consequences. The Michigan Department of Community Health (MDCH) says, “Overweight children, especially adolescents, are more likely to become obese adults than children with a healthy weight. Serious health conditions – high blood pressure, high cholesterol, hypertension, early maturation and orthopedic problems – occur with increased frequency in overweight youth. Type 2 diabetes, once regarded as an adult disease, has increased among children and adolescents.”⁷ Additionally, youth face social stigma and emotional health issues related to obesity, which can affect social health and even academic achievement.⁸

Many of the factors that contribute to youth overweight and obesity are environmental – the majority of food purchasing and preparation decisions are made for youth, particularly in the two arenas where youth spend the majority of their time: school and home.⁹⁻¹³ At home, youth are vulnerable to poverty and unreliable food access experienced by their families.¹⁴ Youth may influence some household purchases, but they are largely constrained to what food is made available by the lead household food purchaser. Further, as youth develop eating habits and preferences, they are greatly influenced by the preparation practices and consumption patterns within the home, for better or for worse.¹⁵

The school environment offers many opportunities for intervention in childhood obesity trends. First, school-based interventions have been shown to be effective for engaging students, families and the community in addressing nutritional health issues.¹⁶⁻¹⁹ Second, increasing numbers of children are participating in school meal programs, and more students are eating up to three meals a day at school. Finally, food industry marketing is aggressive and pervasive in schools and can undermine community and state efforts to affect youth nutrition, eating habits and preferences.²⁰ According to a Consumers International Report, \$500 is spent by the food industry in marketing to children for every \$1 the World Health Organization spends to address nutrition and obesity issues.²¹

⁷ Ibid.

⁸ Crosnoe, R., and Muller, C. (2004) *Body Mass Index, Academic Achievement, and School Context: Examining the Educational Experiences of Adolescents at Risk for Obesity*. *Journal of Health and Social Behavior*, 45(4), 393-407.

⁹ Preston, C. (2010) *Parental Influence upon Children’s Diet: the Issue of Category*. *International Journal of Consumer Studies*, 34(2), 179-182.

¹⁰ Wood, M. (2009) *Kids, Fast Food and Obesity*. *Agricultural Research*, 57(9), 20-21.

¹¹ Mayer, K. (2009) *Childhood Obesity Prevention: Focusing on the Community Food Environment*. *Family and Community Health*, 32(3), 257-270.

¹² Galvez, M., Hong, L., Choi, E., Liao, L., Godbold, J. and Brenner, B. (2009) *Childhood Obesity and Neighborhood Food-Store Availability in an Inner-city Community*. *Academic Pediatrics*, 9(5), 339-343.

¹³ Davis, B. and Carpenter, C. (2009) *Proximity of Fast-Food Restaurants to Schools and Adolescent Obesity*. *American Journal of Public Health*. 99(3), 505-510.

¹⁴ Washington, V. (n.d.) *“Persistent Disparities: The Impact of Race and Class on Young Children – and What Michigan Can Do about It”*. The Schott Fellowship in Early Care and Education. Retrieved Dec. 15, 2009 from <http://www.buildinitiative.org/files/PersistentDisparities.doc>.

¹⁵ Preston, C. (2010) *Parental Influence upon Children’s Diet: the Issue of Category*. *International Journal of Consumer Studies*, 34(2), 179-182.

¹⁶ Veugelers, P., and Fitzgerald, A. (2005) *Effectiveness of School Programs in Preventing Childhood Obesity: A Multilevel Comparison*. *American Journal of Public Health*, 95 (3), 432-435.

¹⁷ Sahota, P., Rudolf, M., Dixey, R., Hills, A., Barth, J. and Cade, J. (2001) *Randomized Controlled Trial of Primary School Based Intervention to Reduce Risk Factors for Obesity*. *British Medical Journal*, 323(7320), 1-5.

¹⁸ Harrell, J., McMurray, R., Bangdiwala, S., Frauman, A., Gansky, S. and Bradley, C. (1996) *Effects of a School-Based Intervention to Reduce Cardiovascular Disease Risks Factors in Elementary-School Children: The Cardiovascular Health in Children (CHIC) Study*. *Journal of Pediatrics*, 128 (6), 797-805.

¹⁹ U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). (2008) *“Healthy Youth! Make a Difference: Key Strategies to Prevent Obesity: Why Schools?”* National Center for Chronic Disease Prevention and Health Promotion, Division of Adolescent and School Health. Retrieved Dec. 29, 2010, from www.cdc.gov/HealthyYouth/KeyStrategies/why-schools.htm.

²⁰ Krisberg, K. (2006) *Food Marketing toward Youth Contributing to Unhealthy Choices: Industry has Role in Stemming Obesity*. *The Nation’s Health*, March issue. Retrieved Jan. 10, 2010 from <http://futureofchildren.org/futureofchildren/press/news/news-March06.pdf>.

²¹ Macmullan, J. (2009) *“Fried and Tested: An Examination of the Marketing of Fast Food to Children.”* Consumers International. Retrieved Dec. 29, 2010 from http://www.consumersinternational.org/media/511297/ci_fried-tst_report.pdf.

SCHOOLS AS A COMMUNITY INTERVENTION ACCESS POINT

Schools are a major socialization venue for young people, both formally and informally. Schools are, therefore, a logical place to empower youth to have a voice and effect change in their environment and community. Schools serve as community connection points where parents, families and community members can congregate, interact and receive information. Improving childhood nutrition, therefore, requires approaches that involve schools. Schools have been engaged in other long-term community health intervention outreach programs, such as school-based health clinics, and it makes sense to utilize these venues for promoting healthier eating.

STUDENT PARTICIPATION IN SCHOOL MEAL PROGRAMS

At school, students can make choices within what is available through school meal programming or for sale through sources like snack shops or vending machines. Despite the best efforts of food service directors to maintain high participation in school lunch programs, if other food options are available many students tend to take them. Numbers of students who bring lunch from home have been declining in recent years and young people across the country have expressed preferences for avoiding the school lunch program for reasons ranging from long lines and poor quality to taste preferences for the chips, pop and candy bars sold elsewhere and the desire to avoid being associated with a program seen as welfare-based.²²

Though Michigan schools have progressively been reducing the availability of less nutritious snacks and beverages in secondary schools,²³ the CDC's Obesity Epidemic and Michigan Students report says that 67 percent of Michigan middle and high schools still sell "less nutritious foods and beverages" outside of the USDA Child Nutrition Program's school meals.²⁴



Foods sold to students outside of these USDA-regulated school meals are called "competitive foods" and have not been held to the same USDA food service nutrition guidelines. By marketing foods such as candy, salty snacks and soda to students through competitive food programs such as "a la carte" bars in cafeterias or through school stores and vending machines, food service programs can recoup valuable revenue to supplement the cost of school meal programs. Many school food service directors are working within tight budgets and rigid constraints to feed thousands of children every day and rely on these revenue sources.²⁵

"Often separate from school or district budgets, school food service programs are expected to be self-sufficient. Food service directors must maintain budgets that at least break even without any assistance from the school's or district's annual budget. If a food service program turns a profit, that revenue must be put back into the food service program. In addition to purchasing food and supplies, school food service is often expected to pay for labor and benefits, utilities, trash removal, equipment and capital improvements. In 2008, the School Nutrition Association reported that the average of all costs to provide lunch was about \$3, but the schools were expected to charge only \$2 per 'paid' lunch."²⁶ Federal reimbursements do not make up this difference, so a majority of school food service directors use sales of competitive foods or "a la carte" items and vending

²² Poppendieck, J. (2010) *Free for All: Fixing School Food in America*. Berkeley, CA: University of California Press.

²³ U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). (2009) *Availability of Less Nutritious Snack Food and Beverages in Secondary School – Selected States, 2002-2008*. *Morbidity and Mortality Weekly Report (MMWR) Series*, 58(1-4), Oct. 5. Retrieved from www.cdc.gov/mmwr/preview/mmwrhtml/mm58e1005a1.htm.

²⁴ U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). (n.d) "The Obesity Epidemic and Michigan Students." National Center for Chronic Disease Prevention and Health Promotion, Division of Adolescent and School Health. Retrieved Jan. 5, 2010 from http://www.cdc.gov/HealthyYouth/yrbs/pdf/obesity/mi_obesity_combo.pdf.

²⁵ C.S. Mott Group for Sustainable Food Systems at Michigan State University. (2009) "School Budgets: A Brief Explanation". Retrieved Feb. 5, 2009 from www.mifarmtoschool.msu.edu.

²⁶ *Ibid*.



machines (which do not have to follow the same USDA nutrition guidelines as school meals) to avoid losing money in food service budgets for the meals served to participating students.

This situation has created a challenge in addressing the school food environment, which is critical to improving youth nutrition and eating habits. In Michigan, increasing numbers of students are eating more meals in schools through school lunch, breakfast and snack programs, as well as suppers offered through the Child and Adult Food Care Program, Summer Food Service Program, and School Lunch, Breakfast and Afterschool Snack meal programs. Given the volume of meals consumed by youth at school, the influence of the school food environment on childhood nutritional health and well-being, and the subsequent impact on the children's health as adults cannot be underestimated.

MARKETING BY THE FOOD INDUSTRY WITHIN SCHOOLS

Further compounding the issue is the massive power and influence of marketing by corporations and producers of "junk food" items. Youth are an attractive and particularly impressionable market for food producers because they are formulating lifelong eating habits and preferences.²⁷ Though not all of this advertising promotes food high in fat, sugar or salt, when it does, it undermines the positive messages about diet that are being promoted by governments and other health-promoting entities. "Marketing to children carries particular risks as children are less able to differentiate marketing messages from other communication and can be more susceptible to the techniques used in modern marketing."²⁸

Young people are barraged with marketing of high-sugar, high-calorie, low-nutrient food and beverages in both home and school environments. At home, television offers the greatest exposure to media promotion of junk food items. There is strong evidence that television marketing influences what food and beverages children 2 to 11 like and what they request their parents buy.²⁹ Although viewing television itself is not a direct cause of obesity in children, there is strong statistical evidence linking viewing the advertisements shown on TV and obesity. The more television that children watch, the greater their exposure to advertising.³⁰ In Michigan, one-third of students report watching three or more hours of television per school day.³¹

At school, students are exposed to marketing by food companies that insert their products into the competitive food and vending machine programs and even promote calorie-dense, high-fat, high-sodium and high-sugar products through school fund-raisers, which provide students with incentives to persuade parents, neighbors and relatives to purchase their products. This exposure to marketing of products high in sugar, fat or salt promotes unhealthy choices, particularly in situations such as competitive food programs and vending machines in schools, when youth can purchase foods or beverages without parental permission.

The Michigan Department of Education has made commendable efforts to slow and deter the infiltration of the school environment with less nutritious foods. For instance, in 2003, the Michigan State Board of Education adopted the "Policy on Offering Healthy Food and Beverages in Venues Outside of the Federally Regulated Child Nutrition Programs," which ensures that "students have access to food that meets their nutrient requirements to promote health and foster learning."³² In 2005, the state board issued a statement, through its model local wellness policy, that "schools should provide a campus-wide environment where students are taught healthy eating and physical activity knowledge, skills and values...and [are provided] ample opportunity to practice these skills on a daily basis."³³

²⁷ B. Robinson, T. Borzekowski, D., Matheson, D. and Kraemer, H. (2007) *Effects of Fast Food Branding on Young Children's Taste Preferences*. *Archives of Pediatric Adolescent Medicine*, 161(8), 792-797.

²⁸ Macmullan, J. (2009) "Fried and Tested: An Examination of the Marketing of Fast Food to Children." *Consumers International*. Retrieved Dec. 29, 2010 from http://www.consumersinternational.org/media/511297/ci_fried-tst_report.pdf.

²⁹ Institute of Medicine of the National Academies. (2006) *Food Marketing to Children and Youth: Threat or Opportunity?* Washington, D.C.: The National Academies Press.

³⁰ Ibid.

³¹ Kovalchick, K. (2009) "Michigan Youth Risk Behavior Survey Trends and United States Comparison 1997-2007." Michigan Department of Education. Retrieved from http://www.michigan.gov/documents/mde/1997-2007_YRBS_Trend_Report_291909_7.pdf.

³² Michigan State Board of Education. (2003) "Policy on Offering Healthy Food and Beverages in Venues Outside of the Federally Regulated Child Nutrition Programs." Adopted Dec. 18, 2003. Retrieved Dec. 30, 2010 from http://www.michigan.gov/documents/Healthy_Foods_AttchmtA_12_9_83179_7.pdf.

³³ Michigan State Board of Education. (2005) "Model Local Wellness Policy." Michigan Department of Education, p. 1. Retrieved Dec. 30, 2010 from http://www.michigan.gov/documents/Policy_on_Wellness_141434_7.pdf.



The Michigan Nutrition Standards recommended by the Michigan Department of Education³⁴ provide stringent guidelines for the quality of foods offered through Child Nutrition Program meals and snacks, as well as ALL FOOD offered within school campuses, including competitive food sales and fund-raisers. Support for such recommendations is critical to achieve more healthful school food environments. These standards were piloted in Team Nutrition schools in 2009-2010 and approved by the State Board of Education for non-mandatory adoption in all Michigan schools in October 2010. If adopted by school districts, these standards could lead to a dramatic decrease in availability of less nutritious foods for students in the cafeteria, across school campuses and even in after-school event concessions and fund-raisers.

Unless we take action against the influences that contribute to childhood obesity, we will witness the first American generation of children that will suffer poorer health and shorter life spans than their parents.³⁵ Improving the Michigan food environment for youth is essential for a future of healthier people. As one Michigan student put it, "Junk food means larger waistbands, good food means longer life spans."³⁶

Education for Future Good Food Citizens

YOUTH ENTER THE GOOD FOOD COMMUNITY

Although all Michigan youth eat (and perhaps buy) food regularly, they do not necessarily understand the dynamics of food access, production or marketing. Without intentional teaching, youth who enjoy food abundance may be only vaguely aware of others' food needs, and youth with limited access to healthy food may not understand that a fair, affordable, healthy food system in their community is attainable. Students need to explore good food concepts in school settings where they can systemically examine healthy food production, accessibility and affordability across Michigan's multiple geographic, cultural and economic regions. In our schools we have ideal venues for introducing good food systems to young children and building skills over time in age-appropriate ways. If these concepts were integrated throughout grade levels, high school seniors would graduate with a belief that they can help shape communities where local, healthy food is accessible by everyone.

Given experiences from preschool through secondary education, youth can enter the good food community as future professionals, researchers, educators and consumers. In Michigan schools, however, agriculture education, specifically in the context of ecology, sustainability, economics and community, is either non-existent or very limited. Neither Michigan's grade level content expectations for elementary and middle school nor the high school content expectations directly address sustainable food production, local food systems or healthy food access for all people, so those concepts are not often featured in classroom lessons.

Michigan does have an agriculture, food and natural resources cluster within its high school career and technical education standards, and secondary agriscience teachers report that the cluster helps them integrate agriculture with other academic areas.^{37,38} These standards are limited to high school, however, and do not target good food issues. Because state curriculum standards apply identically to rural, suburban and urban schools, all Michigan pre-K-12 students will benefit as sustainable agriculture production, processing and marketing gain an expanded presence in public school curricula.

³⁴ Michigan State Board of Education. (2010) "Michigan Nutrition Standards: Michigan Department of Education Recommendations for all Foods and Beverages Available in Michigan Schools." Retrieved Dec. 29, 2010 from http://www.michigan.gov/documents/mde/Michigan_Nutrition_Standards_Approved_10.12.10_338356_7.pdf

³⁵ Olshansky, S.J., Passaro, D., Hershow, R., Layden, J., Carnes, B., Brody, J., Hayflick, L., Butler, R., Allison, D. and Ludwig, D. (2005) A Potential Decline in Life Expectancy in the United States in the 21st Century. *The New England Journal of Medicine*, 352(11), 1138-1145.

³⁶ Youth input gathered from the good food workshop held Nov. 9, 2009 at the Community School Gardening Networking Meeting in Ypsilanti, Mich. and the youth track of the Northern Michigan Small Farms Conference held Jan. 15, 2010 in Grayling, Mich.

³⁷ Krueger, D.E. (1994) "Michigan Agriscience and Natural Resources Teachers' Perceptions of the Impact of the Agriscience and Natural Resources Curriculum on Local Agriscience programs." Doctoral dissertation, Michigan State University.

³⁸ For more information on agriculture and natural resources clusters, see: *The States' Career Clusters Initiative*. (2008) "Agriculture, Food and Natural Resources Cluster (Foundation) Knowledge and Skill Statements." Retrieved Apr. 12, 2010 from http://www.careerclusters.org/resources/pos_ks/FoundationKCharts/2008/AG-128-KSChart.pdf.



As a means of envisioning students of all ages studying food issues, this report refers to a “good food curriculum.” However, at the elementary and middle school levels, this does not mean adding a separate curriculum to school agendas that are already full. Instead, the term “curriculum” refers to content that can be approached by teachers and students through existing curricula. From math to art, there is no curriculum that cannot make meaningful connections to good food. As the public grows more aware of local, sustainable food possibilities for communities, so will educators see possibilities for their students. It will not be difficult for elementary and middle school teachers to guide students to practice math, reading, writing, speaking and listening, the scientific process and social studies applications within the context of food system study. In contrast, at the high school level, the addition of courses dedicated to sustainable agriculture and fair food access will call for a targeted curriculum. As a means of minimizing startup costs while also highlighting local food systems, schools might rely less on printed texts and more on hands-on learning with support from community resources, including interaction between students and local producers, processors and distributors. As awareness of good food’s importance to Michigan students grows and educators welcome its inclusion in their schools’ curriculum, planning can begin. Without a planned curriculum spiraling up through grade levels and building new learning upon previous understanding, youth exposure to good food concepts may be fragmented and incomplete. On the other hand, carefully planned study of overarching good food matters such as land use policy, production science and community economics will grant Michigan youth entrance into the growing network of people who seek healthy, fair food solutions through informed dialogue and practice. Cost-effective, local community-supported implementation might follow planning, with more costly published materials to follow when funds allow. The important thing is to get started where we are with what we have so that youth can, in the near future, begin to imagine, investigate and, ultimately, lead the way toward an improved good food system.

GOOD FOOD COMPLEXITY AND OPPORTUNITY

Because of good food’s breadth and complexity, it is teachable from preschool through every elementary grade level and in multiple high school courses. It is also well-suited to cross-curricular study in which a broad concept is studied in two or more subject areas simultaneously. We should recognize, however, that even though good food principles—healthy, green, fair and affordable—affect all Michigan citizens, teachers may lack experiential knowledge about agricultural practices and, therefore, may hesitate to include good food in their curriculum. Furthermore, unfamiliarity with gardens, high tunnels and similar settings; minimal sustainable agriculture or fair food access teaching materials; limited teacher planning time; and administrators’ concerns about professional development costs might collectively inhibit good food’s integration into the pre-K-12 curriculum.

To overcome such barriers, good food’s complexity should be acknowledged and presented not as a burden but as an asset. Teachers can be encouraged to welcome the opportunity for shared hands-on learning experiences in which students and teachers learn together. Just as agricultural producers begin every growing season with some uncertainty about the outcome, so can teachers and students launch a school year agreeing that meaningful learning will occur even in the midst of challenges.

Furthermore, in a mirror image of real-life communitywide good food systems in which members support one another, schools might invite local good food community advocates ranging from producers to policymakers to share their expertise and thus nurture the teacher and student co-learning classroom environment. Availability of community resources supportive of good food teaching varies from one school district to another, and it is likely that school personnel are not fully aware of the many programs and people to whom they might turn for assistance. Finding and categorizing such resources could be quite time-consuming, but this process can be facilitated by survey and planning tools made available to school districts, with which educators could first identify local resources and then implement community-supported teaching plans. (These tools are described in the 2015 Agenda on page 22.)



GOOD FOOD'S PLACEMENT IN THE SCHOOL CURRICULUM

For approximately a decade, school reform has been emphasizing standardized testing and accountability in the core subject areas: English language arts, math, science and social studies. To ensure food and sustainable agriculture's inclusion in the school curriculum, it must be viewed not as standing outside of these four subject areas but logically embedded within them.³⁹ Fortunately, given the wide scope of good food content, teachers can intuitively approach it through many curricular areas, including reading, writing, speaking, listening, math, science and social studies.

Recent developments open the door even wider for good food's admission into the school curriculum. Michigan adopted new common core state standards for math and English language arts in June of 2010. The "English Language Arts and Literacy in History/Social Studies and Science"⁴⁰ section emphasizes the fact that these particular standards call for developing K-12 students' ability to read informational history, social studies and science material and then incorporate new knowledge in their writing. From production science to economics to community systems, good food offers a wealth of real-life content with which students can practice reading and responding to informational text; therefore, it can be presented to educators as a valid resource tool.



The Michigan Merit Curriculum's secondary graduation requirements include three science credits, and students are encouraged to earn a fourth credit. Agricultural science is listed as a science credit choice in the Michigan Merit Curriculum, and additional non-specified agricultural courses can be offered as electives.⁴¹ Nevertheless, we should not assume expanding sustainable agriculture's presence in the secondary curriculum will be easy. Two factors must be recognized: without proactive input from good food advocates, elective courses might not be designed to specifically teach food and sustainable agriculture concepts; and no science course should focus solely on content unique to that course. Instead, each course's content should be thought of as the context in which students rigorously study scientific principles and methodologies. Phipps et al. point out that agricultural

science courses will earn a secure place in schools' curricula only to the extent that they are viewed as "a renewed richer context for studying basic and abstract science concepts and principles".⁴²

As students advance through fair food access and sustainable agriculture content that might at first glance appear to be solely science- or social studies-oriented, they might be asked to apply technology, math, reading, writing, speaking and listening, as well as fine and applied arts skills. Therefore, whether good food advocates propose high school courses in production, ecology, economics, culinary arts or any other aspect of Michigan's food system, they will strengthen their proposal by recommending that course content be fully integrated with cross-curricular skill building.

³⁹ Phipps, L., Osborne, E., Dyer, J. and Ball, A. (2008) *Handbook on Agricultural Education in Public Schools*. Clifton Park, N.Y.: Thomson Delmar Learning.

⁴⁰ Michigan Department of Education (n.d.) "Common Core State Academic Standards." Retrieved Apr. 12, 2010 from <http://www.michigan.gov/mde/0,1607,7-140-232021-,00.html>.

⁴¹ Michigan Department of Education. (2010) *Michigan Merit Curriculum: High School Graduation Requirements*. Retrieved Dec. 29, 2010 from http://www.michigan.gov/documents/mde/FAQ_-_Entire_Document_12.07_217841_7.pdf.

⁴² Phipps, L., Osborne, E., Dyer, J. and Ball, A. (2008) *Handbook on Agricultural Education in Public Schools*. Clifton Park, N.Y.: Thomson Delmar Learning. p.18.



GOOD FOOD EDUCATION ANCHORED IN PLACE

The rate at which good food concepts make their way into curricula and classroom practice can be significantly increased by the presence of a good food coordinator in each school district who might be a district staff member, a teacher, a volunteer parent or even a designated high school class. These coordinators can serve as points of communication between school districts and good food advocates, funneling information to and from teachers as follows:

- Regularly scan fair food access and sustainable agriculture Web sites for news about curriculum models, equipment and materials, effective extracurricular programs and high-impact special events – for example, the Liberty Prairie Conservancy’s curriculum,⁴³ urban gardening summer programs like the Food Project⁴⁴ and SARE’s (Sustainable Agriculture Research and Education) links to programs and curricula.⁴⁵
- Gather similar information as it becomes available from the Michigan departments of Education and Agriculture, colleges and universities, and good food advocacy groups.
- Informally encourage teachers to share news about their good food classroom activities, either by posting directly to a designated Web site or by informing the coordinators, who would do the posting.
- Once each school year, formally survey teachers about new teaching resources (textbooks, kits, visual aids and online helps) that they have found and post this information to a Web site.
- Disseminate accumulated good food news to district teachers via periodic written communiqués and/or staff meeting presentations.

It is true that school district budget restraints will mean that coordinator duties will probably have to be fulfilled by either volunteers or district staff members who most likely already have multiple obligations and may not have the time or training necessary to help teachers actually plan good food lessons. Nevertheless, the presence of coordinators will anchor the good food movement firmly in school districts, advance the process of embedding good food concepts in local school culture and strengthen this initiative’s grass-roots energy. Ideally, coordinators would be invited annually to attend a training seminar co-sponsored by good food advocacy institutions and organizations.

GOOD FOOD COLLEGE AND CAREER READINESS

Limited numbers of Michigan high school students are attracted to postsecondary education and careers in sustainable agriculture production, processing and marketing, or in science fields that support the development of Michigan’s good food system. This situation can be addressed not only with an expanded K-12 food and agriculture curriculum but also through agri-career counseling and programs commonly known as “pipelines” that inspire students to take a close look at particular types of careers. Pipelines create essential links between students and colleges. They foster communication between students and college representatives, and some offer middle school and high school students opportunities to explore college/career options in real-life settings. Agriculture-related pipelines exist today, and expansion of those focused specifically on good food is essential. This can happen by cooperatively engaging with existing postsecondary programs. Increased numbers of summer camps held on college campuses, one-day campus visits, middle/high school career exploratory programs and visits to schools by college representatives all can contribute to students’ awareness of college and career possibilities.

⁴³ The Liberty Prairie Conservancy. (n.d.) “What We Do... Sustainable Agriculture Curriculum.” Retrieved Apr. 9, 2010 from <http://www.libertyprairie.org/whatwedo/sustainable.html>.

⁴⁴ The Food Project. (n.d.) “Sustainable Agriculture Curriculum.” Retrieved Apr. 5, 2010 from <http://thefoodproject.org/sustainable-agriculture-curriculum>.

⁴⁵ Gold, M. (2002) Sustainable Agricultural Resources for Teachers, K-12. Alternative Farming Systems Information Center (AFSIC) Notes Series, No. 4. Retrieved Apr. 9, 2010, from http://www.nal.usda.gov/afsic/AFSIC_pubs/k-12.htm

Job and Career Opportunities for Youth in the Food System

A community food system can be described as a localized, value-based food system in which the components of the food system - producing, processing, distributing, retailing and consuming - support the people, health and the economy of the community, and vice versa. It is important for youth to find opportunities to participate in and contribute to the development of community food systems, which support the Michigan good food system. Youth entrepreneurship is one way that youth can find meaningful ways to contribute and participate.

YOUTH ENTREPRENEURSHIP AND CAREER OPPORTUNITIES

Traditionally, youth entrepreneurship – self-started youth-run business and innovation – has offered many benefits for youth. It provides personal employment for the young entrepreneur and sometimes for other youths he or she may be able to employ. Entrepreneurialism can also have a democratizing effect by bringing disadvantaged and marginalized youth into success in the mainstream. Youth entrepreneurship promotes innovation and resilience by encouraging young people to find new solutions, ideas and ways of doing things.⁴⁶

Several organizations and initiatives support youth entrepreneurship. Nationally, Junior Achievement is dedicated to educating young people about work readiness, entrepreneurship and financial literacy through hands-on programs. Junior Achievement programs help prepare young people for the real world by showing them how to generate wealth and effectively manage it, how to create jobs that make their communities more robust, and how to apply entrepreneurial thinking to the workplace.⁴⁷ 4-H is another national program that supports youth entrepreneurship through the “Be the E” curriculum and programs, which are accessible locally to young people across Michigan through Michigan State University Extension programs.

Another key support for young people is workforce development programs such as the federally funded and state- and county-managed Michigan Works! Summer Youth Employment programs. These programs offer working experience for youth, job shadowing opportunities and opportunities to learn entrepreneurship skills. According to the Centre for Youth Entrepreneurship Education, “Effective youth entrepreneurship education prepares young people to be responsible, enterprising individuals who become entrepreneurs or entrepreneurial thinkers and contribute to economic development and sustainable communities”.⁴⁸

For rural youth, particularly young people raised on family farms or in farm-related businesses, entrepreneurship skills can help them identify ways to diversify the family business. Young people may need to innovate to make a place for themselves within a successful family business or even re-imagine a struggling family farm business in the face of changing markets.

Youth entrepreneurship is an important way that youth can contribute directly to the development of Michigan’s good food system. Youth entrepreneurship in the traditional sense brings goods and services to a community and offers innovative approaches to business. Youth entrepreneurs can respond to new opportunities and trends.⁴⁹ These are the qualities needed as Michigan agriculture and food systems evolve to become more sustainable.

Because the good food system is a value-based food system, social entrepreneurship is an important component of how youth can participate and contribute to its development. Social entrepreneurship is similar to traditional entrepreneurship with a critical exception: in social entrepreneurship, the mission is explicitly social, and making money is seen as the means to the end, not the end itself. Social entrepreneurs operate as change agents, adopting a mission to create and sustain social value (not just private value). Like traditional entrepreneurs competing in the marketplace for wealth, social entrepreneurs

⁴⁶ Chigunta, F. (2002) “Youth Entrepreneurship: Meeting the Key Policy Challenges.” Youth Employment Summit (YES2002). Education Development Center, INC. Retrieved from www.yesweb.org/gkr/res/bg.entrep.ta.doc

⁴⁷ Junior Achievement (2009) “About Junior Achievement.” Retrieved Jan. 12, 2010, from <http://www.ja.org/about/about.shtml>.

⁴⁸ Ibid.

⁴⁹ Ibid.



must also pursue new opportunities to serve their mission, engaging in a process of continuous innovation, adaptation and learning while exhibiting heightened accountability to the constituencies served and for the outcomes created.⁵⁰

“A social entrepreneur identifies and solves social problems on a large scale. Just as business entrepreneurs create and transform whole industries, social entrepreneurs act as the change agents for society, seizing opportunities others miss in order to improve systems, invent and disseminate new approaches and advance sustainable solutions that create social value.”⁵¹

We often associate social entrepreneurship with the non-profit or non-governmental organization (NGO) world, but social entrepreneurship also encompasses for-profit businesses that compete in the marketplace yet hold social values in their business practice and product, and offer a social value to consumers in the marketplace. Food system entrepreneurs that seek to participate in community food systems where the food system sustains communities economically, socially and healthfully and, in return, are sustained by that community would be considered social entrepreneurs. A good food system is based on the values of healthy, fair, green and affordable food and requires entrepreneurs that also embrace these values in their mission.

What we know about youth tells us that developing social entrepreneurship opportunity for Michigan’s young people is a good option. According to a national survey conducted by Junior Achievement (JA) and the ING Corporation in 2009, 84 percent of teens said they would forgo their ideal job for the opportunity to make a difference in the world, even over the opportunity to be paid more money. The surveyed teens expressed that they value work for community betterment, not just the dollar. According to the survey report, 83 percent said that they need workforce development opportunities to prepare for their future, stating that workforce development programs help them understand more clearly how what they are learning will be useful later, provide job shadowing opportunities, and teach them how to work well with others and be successful.⁵²



In fact, Michigan teens are already participating in food system related social entrepreneurship opportunities through such programs as the Mr. Rogers “Just Say No” program, a partnership of the Genesee Regional Chamber of Commerce and Catholic Charities. Students are hired and paid through federal Summer Youth Employment dollars. As students work at the Mr. Rogers gardens producing fresh fruits and vegetables, which they market at the Flint Farmers’ Market to provide access to low-income and disadvantaged community members, they are also receiving workforce training and entrepreneurship skill development.

Similarly, other Michigan youth are experiencing local food entrepreneurship by participating in 4-H clubs that operate community gardens and farm stands, such as the 4-H Green Growers Group of Monroe. The Springport High School Agriscience/Future Farmers of America (FFA) program has utilized the farm stand and the community-supported agriculture (CSA) model in their supervised agricultural experience and even integrated peer nutrition educator leadership roles in the FFA leadership experience. These examples show that some Michigan students are already experiencing this type of good food entrepreneurship. These programs need to continue to be supported, and their models are examples of the types of experiences that we must work to extend to more Michigan young people.

⁵⁰ Dees, J.G. (2001) “The Meaning of ‘Social Entrepreneurship.’” Center for the Advancement of Social Entrepreneurship at Duke University’s Fuqua School of Business. Retrieved from http://www.caseatduke.org/documents/dees_sedef.pdf.

⁵¹ Actual Films. (2009) “The New Heroes.” Oregon Public Broadcasting in Association, Malone Grove Productions Inc. Retrieved Feb. 12, 2010 from <http://www.pbs.org/opb/thenewheroes/>.

⁵² Junior Achievement and ING Corp. (2010) “2010 Kids and Careers Survey.” Retrieved Feb. 2, 2010 from http://www.ja.org/files/polls/kids_careers_2010-JA-ING-Teens-and-Career-Poll.pdf.

GOALS FOR YOUTH ENGAGEMENT AND OPPORTUNITY IN GOOD FOOD

We propose two overarching goals for Michigan by 2020:

- Michigan Nutrition Standards will be met by 100 percent of school meals and 75 percent of schools selling food outside of school meal programs.
- Michigan schools will incorporate food and agriculture into the pre-K through 12th grade curriculum for all Michigan students and youth will have access to food and agriculture entrepreneurial opportunities.

Health: We can use school and community partnerships to transform school environments to reflect and promote the healthy eating habits that will ensure Michigan students a healthy future.

Education: We can increase youth exposure to good food values through classroom teaching and other educational programs. We can incorporate good food concepts in the curricula of preschools, elementary and middle school grades, and high school life science and economics courses so that food and sustainable agriculture literacy increases among Michigan students.

Opportunity: We can expand opportunities for social entrepreneurship skill development and good food career exposure that support youth and community economic development. To do this we can partner colleges, universities, local food businesses and non-profits with workforce development and college or career preparatory programs to develop opportunities for youth to explore potential careers and ventures in good food.

INDICATORS

How will we know if youth are better served by the food and the curricula in their schools and finding increased opportunities within Michigan's good food future? Below are some key indicators and tracking strategies that would assist in monitoring the good food youth agenda progress across the three key areas identified: health, education and opportunity.

HEALTH INDICATORS

A variety of data collection tools enable regular tracking of change in youth diet, behavior and health status. The goal with the selected health indicators is to track the development of healthy school environments for youth, as well as transformation of individual health status and behavior as related to obesity. It is also important to document how youth are participating in school-based health interventions. Studies have shown that youth development through participation in health initiatives can lead to better health outcomes.^{53,54}

- **Percentage of Michigan schools in which students cannot purchase candy or salty snacks from vending machines at the school, the school store, canteen, snack bar or any other source.**



⁵³ Birkhead, G., Riser, M., Mesler, K., Tallon, T. and Klien, S. (2006) Youth Development is a Public Health Approach. *Journal of Public Health Management and Practice*, 12(Nov. Supplement), S1-S3.

⁵⁴ Kreipe, R. (2006) Adolescent Health and Youth Development: Turning Social Policy into Public Health Practice. *Journal of Public Health Management and Practice*, 12(Nov. Supplement), S4-S6.



Tool: School Health Profiles Survey

School Health Profiles Surveys are conducted biannually across 40 states, including Michigan, by the Centers for Disease Control and Prevention (CDC). Reports are released biannually in the fall of odd-numbered years.

- In 2008, 43.4 percent of the survey sample of Michigan secondary schools did not make candy and salty snacks available to students outside of school meals.

● Portion of Michigan youth who are overweight or obese and portion who report consuming less than the recommended five or more fruits and vegetables each day.

Tool: Youth Risk Behavior Survey (YRBS)

YRBS is an annual nationwide survey led by the CDC. YRBS monitors students' (grades 9-12) health risks and behaviors in six categories identified as most likely to result in adverse outcomes, including dietary behaviors and physical inactivity. It provides data at the state and county level and reports are available through the Michigan Department of Education (MDE).

- The Michigan YRBS showed an increasing proportion of students who are overweight between 1999 and 2007 and no significant long-term change in obesity. A plateau of rates of overweight and a drop in rate of obesity between 2008 and 2020 would indicate a stabilization or reduction of the proportion of Michigan youth who are overweight or obese.
- In 2007, 83 percent of Michigan students reported consuming less than the five servings of fruits and vegetables recommended daily.

● Reports of youth leadership in school health teams, school-based health initiative boards of advisers, governance or committees, and active participation in school-based obesity prevention initiatives.

Tool: Youth Health Engagement Survey

This tool would need to be developed and implemented through a Michigan research university in partnership with the MDE and the MDCH. This survey should be sent to a sample of Michigan students in grades 6-12 in schools that are concurrently implementing school-based obesity prevention intervention programs. The objective of the survey would be to gather data on students' reported participation in the program and specifically inquire about levels of leadership and engagement in the intervention program.

- Data would need to be collected at consistent intervals for the duration of the interventions, starting in 2012 and extending through 2020.
- Survey data could be analyzed and compared with each intervention's outcomes to gain greater understanding of the effects of youth involvement in school-based obesity prevention interventions.

EDUCATION INDICATORS

In this section we describe four targeted indicators that could mark progress toward attainment of education goals. Both new and current tools may be used to collect quantitative and qualitative data needed to measure and understand indicator changes. Developing rubrics (scoring tools with a set of criteria and standards) that offer respondents several choices among descriptive and comparative responses would maximize each tool's usefulness. Suggested rubric formatting follows each indicator described below.

It should be noted that collected data need not find its ultimate use solely as an indicator of change. Information gathered from and widely disseminated to school districts can not only inform school officials but also inspire them to expand their food and sustainable agriculture educational offerings. Even data that reveal curricular, equipment or program challenges will be valuable because it can help the Department of Agriculture,



Furthermore, if data collection instruments feature rubrics that are carefully designed, those tools can illuminate educators' hopes for expanded fair food access and sustainable agriculture curricula, clarify financial shortfalls, and inform public and private funding priorities. It is for these reasons that the rubrics accompanying the measurement instruments described below all ask respondents to provide more than quantitative data.

- **Number of textbooks, kits, visual aids and online tools designed to promote classroom and extracurricular study of good food science, economics and values.**

Tool: Resource Locator

This survey instrument will have to be created. The resource locator can be used at three levels:

- At the district level, teachers can be surveyed annually to determine whether they have found or created new good food teaching materials.
- At the state level, good food advocacy groups can be surveyed annually to determine if they have produced new teaching materials.
- At the national level, publishers of textbooks and other teaching aids can be surveyed annually to determine if they are marketing new good food material.

All of these data can be submitted to a university entity for analysis. Findings can be made publicly available online and also sent directly to school district coordinators for dissemination to teachers and, ultimately, used for curriculum planning.

Rubric:

The resource locator should not only ask respondents to quantify textbooks, kits, visual aids and online tools – it should also ask them to:

- Name resource titles and sources.
- Indicate appropriate grade levels.
- Select, from among listed curriculum applications, all those that the resource might benefit.

In this way, the resource locator can serve its original purpose as a quantifying instrument and also support classroom teaching and extracurricular programming.

- **Number of preschools and K-12 schools where students cultivate gardens, manage hoophouses, operate grow labs, visit farms or otherwise engage in hands-on good food learning.**

Tool: Administrator Questionnaire

This tool will have to be created. Following analysis, findings can be made publicly available online and also sent directly to district coordinators for dissemination to administrators and teachers and, ultimately, used in local program planning.

Rubric:

This tool should incorporate rubrics that drill deeper than mere yes/no or numerical answers. Incremental response choices should ask respondents to both quantify and characterize students' hands-on experiences. By selecting among multiple descriptors offered in the rubric, respondents should be able to reveal the successes and challenges experienced with particular hands-on lessons.

- **Number of schools offering elementary and/or secondary classes as well as extracurricular and summer programs that incorporate direct interaction between students and good food practitioners such as producers, processors, and distributors of local, sustainably raised food.**



Tool: Administrator Questionnaire

This tool would have to be created. It could be part of the tool described in the previous indicator.

Rubric:

A rubric including both quantitative and qualitative response choices would allow respondents to:

- Quantify students' interactions with good food practitioners.
- Match practitioner categories with types of programs in which practitioners served as resources (for example, master gardener and classroom grow labs or greenhouse operator and school garden transplant day).
- Characterize the kinds of learning that occurred.

Descriptions of school-community joint endeavors gleaned from such a detailed rubric could prove highly valuable to districts planning ways to connect students with experienced practitioners.

- **Exposure of middle/high school students to two- and four-year postsecondary certification and degree programs through participation in precollege pipeline programs that demonstrate food and sustainable agriculture college or career possibilities:**

- Increased numbers of sustainable food and agriculture precollege pipeline programs available.
- Increased numbers of middle/high school students participating in food and sustainable agriculture precollege pipeline programs.

Tool: Sustainable Agriculture Precollege Pipeline Registry

This tool, which would need to be developed, would quantify the following related to food and sustainable agriculture:

- College/career information made available to middle/high school students.
- School visits made by college representatives.
- Students taken to college campuses to develop college/career awareness.

Rubric:

This tool's rubric should ask respondents to identify for each pipeline:

- Title.
- Purpose.
- Appropriate grade levels.
- Specific good food target area(s).
- Participant numbers.

This rubric might also offer respondents a selection of descriptors and ask them to anecdotally characterize students' response to each pipeline. Following analysis, data collected by this tool could be posted publicly online and also disseminated directly to high school counselors and agriscience pipeline directors.



OPPORTUNITY INDICATORS

Progress toward greater youth opportunity in entrepreneurship and postsecondary education and training would be indicated by increased numbers of Michigan youth participating in job training and college preparatory programs related to sustainable agriculture and food system entrepreneurship. Perhaps even more indicative of positive trends in good food opportunities for youth would be the fruits of these endeavors seen in actual increases in the numbers of local food system businesses owned by young people in their teens or early 20s and enrollment of young Michiganders in postsecondary education and training programs in sustainable agriculture and related fields that support the good food movement.

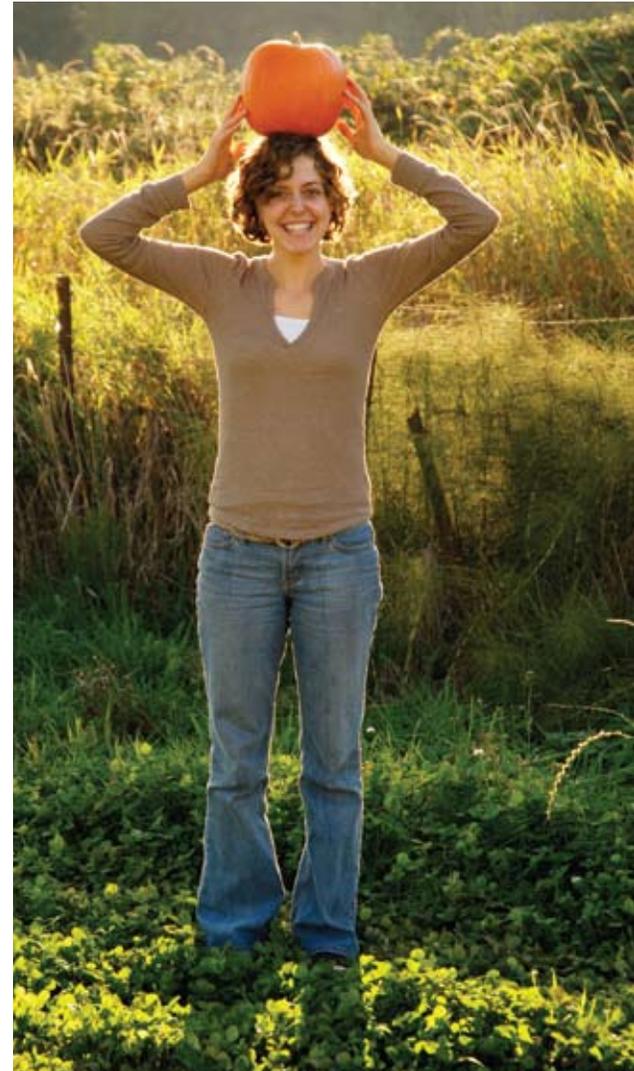
Below are some possible indicators and approaches that would track these types of trends.

- **Student exposure to good food careers through workforce development programs such as Michigan Works! Summer Youth Employment programs and youth entrepreneurship programs such as Junior Achievement, 4-H and FFA supervised agricultural experiences. (See also education indicator #4.)**

Tool:

There is currently a dearth of data sources on sustainable food system career exposure for youth. An assessment could be devised by aggregating data from several established workforce development and entrepreneurship youth programs. A partner organization such as a Michigan research institution or other entity could analyze data on student participation in program tracks or placements that align with the good food agenda priorities. To track youth experience in good-food-related careers through workforce development programs in Michigan, this data collection and analysis should be conducted every two to four years through 2020. Such an assessment would be enhanced if other youth workforce development and entrepreneurship programs were included as data are available. Sources for data should at least include the following:

- Program data from county Summer Youth Employment programs (Michigan Works!) in Michigan on job placements with good-food-related host organizations, as collected and maintained by Michigan Works! and the Department of Labor and Economic Growth.
 - Relevant 4-H program and membership data as maintained and available through MSU county Extension offices on club and individual entrepreneurship projects involving local and sustainable food.
 - FFA program data on supervised agricultural experience (SAE) projects focused on sustainable agriculture or local food system activity.
- **Numbers of self-employed youth and small business startups in good-food-related sectors such as local food businesses and sustainable farm and food production and processing enterprises that are owned by Michiganders younger than 25.**





Tool:

Accurate and systematic data on entrepreneurship among youth and young adults, let alone in specific sustainable food and agriculture sectors, are lacking. For instance, data from the National Youth Entrepreneurship survey reporting self-employment of youth in the agriculture/farm business sectors do not indicate types of businesses these may be and if they align with the good food agenda. Michigan research institutions, the Michigan Small Business Association, the Department of Labor and Economic Growth and other stakeholder organizations could collaborate to establish a data collection and analysis system to monitor growth in businesses owned and operated by youth and young adults in Michigan that are related to developing the good food system of Michigan.

- **Enrollment of Michigan students in postsecondary sustainable agriculture majors and programs in universities and colleges, as well as community colleges, technical degree programs, farmer training and small business classes.**

Tool:

Currently, no single survey or data clearinghouse specifically tracks enrollment in sustainable agriculture or good-food-related majors or programs. However, from current data maintained by colleges and universities on their program enrollment, an entity such as the Sustainable Agriculture Education Association or other stakeholder could gather the necessary data and conduct an analysis to establish the current enrollment rates in sustainable agriculture programs and track the trend of enrollment over time.

The components of such an analysis would include:

- Defining and categorizing postsecondary university and college programs, technical degree programs and other certificate programs across education institutions within Michigan and across the United States.
- Collecting enrollment data from education institutions for identified sustainable agriculture programs on an annual or biannual basis.
- Collecting data on the residency of enrolled students in such programs, to the state or even county level, if possible, to determine how many and where Michigan students are going for sustainable agriculture education opportunities.



AGENDA PRIORITIES

To see the goals identified through the youth opportunity and engagement work group achieved, over the next 10 years the following incremental agenda priorities would need to be met.

2012 Agenda

1. Health: Within public and private granting programs, prioritize school-based nutrition education that includes parents and families and supports environmental change as well as individual behavior changes.

To leverage current dollars and expand implementation of obesity prevention programs and strategies, funding entities should prioritize project proposals that:

- Utilize schools as centers for student, parent and community outreach and education.
- Increase school partnerships with organizations such as non-profits, university extension and other entities to support and augment efforts of teachers, school administrators and staff members to build healthy school environments.
- Coordinate with other physical activity and built-environment initiatives.
- Emphasize the good food values of green, fair, healthy and affordable food access.
- Engage students in meaningful and contributive ways (see 2015 health agenda).





2. Education: Embed good food concepts in elementary and secondary curricula by promoting curriculum standards supportive of good food learning and by enriching teachers' understanding of good food principles.

- Participate in the National Research Council's drafting of new national science standards (2010-2012).
- Work with social studies educators to identify points where current curriculum standards interface with good food concepts. Publish findings to Michigan elementary and secondary social studies teachers.
- Develop a "Good Food...Let's Learn Together" theme demonstrating that teachers and students can simultaneously gain good food skills and understandings.
 - Develop a "Good Food...Let's Learn Together" logo and display it on all material intended to promote good food teaching.
 - Recognize and publicize exemplary good food classroom and extracurricular programs in which teachers and students focus on learning together.
 - At a designated Web site, post school districts' "we jumped in and learned together" stories.
- Address good food's complexity by promoting its breadth as a rich source of cross-curricular subject matter, ideal for collaborative teacher planning.



3. Opportunity: Through youth entrepreneurship, college preparatory and development programs such as Junior Achievement, Gear Up, Upward Bound, and 4-H and similar programs, develop career exploration and job shadowing opportunities focused on good food.

- Adapt community food system entrepreneurship models – such as the Michigan Youth Farm Stand Project, 4-H, Junior Achievement (JA) and other youth-serving programs – to extend social entrepreneurship opportunities in community food to youth across Michigan.
- Utilize after-school and summer programming venues in school districts and community programming in partnership with youth entrepreneurship organizations and sustainable agriculture and food system advocacy organizations to expand good food career exploration and learning.



2015 Agenda

4. Health: Through partnership with the Michigan Department of Education and community organizations focused on engagement/inclusion, develop and provide training and resources to school health teams and other school-based health initiative leadership that support meaningful participation and effective engagement of youth in school food health initiatives.

- Increase participation of youth in school health teams and development of school wellness policies by establishing leadership opportunities in creating healthy school food environments.
- Expand community access to equity and inclusion training developed and offered by universities and Extension and other institutions to encourage and facilitate greater youth participation and leadership in school health teams and/or other school-based health initiatives.

5. Education: Facilitate school districts' search for local community resources dedicated to accessible, healthy food and sustainable agriculture, particularly those resources that might support correlating school curricula. Assist implementation planning for school-led, community-supported teaching of good food concepts and skills.

- Develop collaboratively with teachers and distribute to school districts a community survey tool kit for use by educators and/or volunteer teams to identify local resources supportive of good food curricula (land access sites, farm produce markets, producers, agribusiness and agriservice professionals, chefs, master gardeners, etc.).
- Develop collaboratively with teachers and distribute to school districts an implementation tool kit as a follow-up companion piece to the community survey tool kit. On this template, categorize implementation guidelines to make it easier for urban, suburban and rural districts to choose protocols most suited to their student populations and most applicable to their cross-curricular teaching units and performance assessments.
- At a designated Web site, post successful fair food access and sustainable agriculture school-community partnership models with anecdotal records, thereby facilitating idea exchanges among educators.

6. Opportunity: Launch an initiative to match Michigan students to apprenticeships with farmers, food system entrepreneurs and non-profits through the Michigan Works! Summer Youth Employment Program.

- Through collaboration with select Michigan Works! offices, initiate a pilot program in several counties to develop a "good food" track of summer youth employment opportunities. After making appropriate adjustments and adaptations, expand the piloted model to additional counties across Michigan.
- Supplement the workforce development training that students would typically receive through summer youth employment programs with good food entrepreneurship training that would be provided through partnership with sustainable agriculture and local food system advocacy entities. Such training would include education about local food economic opportunities, business planning, and information and outreach about supportive resources and postsecondary educational programs.



2020 Agenda

7. Health: Address school food service program dependency on the competitive food programs to meet revenue-raising requirements and reduce the proportion of Michigan schools that offer less nutritious snacks and beverages outside of school meals from 67 percent to 45 percent by 2020.

- Support recommendations of the Institutional Food Purchasing Work Group Report⁵⁵ to expand farm-to-school programs.
- Support the implementation of the State Board of Education and the Michigan Department of Education's Michigan Nutrition Standards Recommendations for all Foods Available in Michigan Schools. These recommendations would institute policy for all school food sold, both within and outside of the national school lunch program, giving stringent guidelines that limit the sale of calorie-dense and low-nutrient food and beverages in school stores, "a la carte" bars and vending machines, as well as in school fund-raisers.
- Engage statewide and districtwide support for devising alternative fund-raising strategies for food service programs that do not counter school meal nutrition agendas or a healthy school environment. Address critical revenue goals by developing and implementing alternative fund-raising to cover costs such as staffing, infrastructure and equipment necessary to prepare and serve more fresh foods in school meal and snack programs.

8. Education: Expand pipeline programs to help students gain college and career readiness related to food system activities such as food preparation, distribution, sustainable agriculture production, processing and marketing.

- Distribute to all Michigan secondary career counselors material that describes food and agriculture careers and informs students about community college and university programs leading to certificates and degrees pertinent to good food system development.
- Increase the number of pipeline events, including both college representative visits to schools and student visits and extended student stays at community colleges and universities.
- At a designated Web site, publish pipeline program information with locations, dates and contact information.
- Collaborate with Future Farmers of America (FFA), 4-H, Boys and Girls Clubs, Boy Scouts of America, Girl Scouts of America, Michigan Farm Bureau Ag-Ed and other such groups in initiatives to publicize and promote good food college/career possibilities.

9. Opportunity: Expand agriscience and FFA program models to more Michigan students and enhance sustainable agriculture and local food system entrepreneurship education through FFA leadership projects and supervised agricultural experiences (SAE).

- Through investments by the foundation community, establish youth individual development accounts (IDAs) to provide matched savings to Michigan Good Food Corps participants (2015 agenda) and FFA/SAE earnings for investment in youth business start-ups and postsecondary education.

⁵⁵ George, V., Matts, C., and Schmidt, S. (2010). *Institutional Food Purchasing: Michigan Good Food Work Group Report No. 3 of 5*. East Lansing, MI: C.S. Mott Group for Sustainable Food Systems at Michigan State University. Available from www.michiganfood.org.

CONCLUSION

Michigan's food system should support young people with healthy, nutritious food and economic opportunity. The needs of Michigan's children for better health and future opportunity are complex and great. However, by leveraging the assets we have and empowering the work of those who are already leading the way, the vision of a good food system for young people in Michigan can be realized.

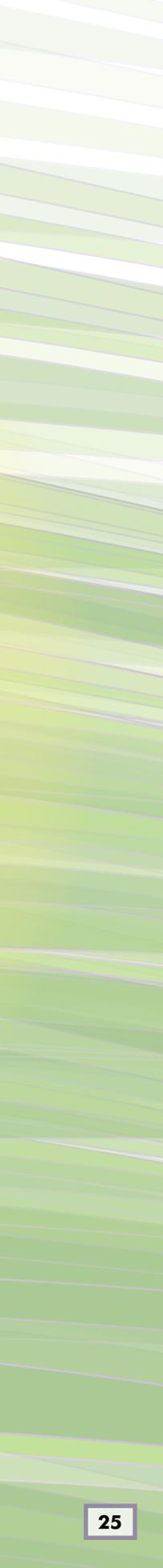
Health: Unless we take action against the influences that contribute to childhood obesity, we will witness the first American generation of children that will suffer poorer health and shorter life spans than their parents.⁵⁶ Improving the Michigan food environment for youth is essential for a future of healthier people. The school food environment is one key arena for change. We can use school and community partnerships to transform school environments to reflect and promote the healthy eating habits that will ensure Michigan students a healthy future.

Education: Given experiences from preschool through secondary education, youth can enter the good food community as future professionals, researchers, educators and informed consumers. Good food values can be incorporated into classroom teaching and other educational programs, from pre-k to grade 12, by enhancing current agriculture education and using food systems as a teaching tool within existing curriculum. Agriculture education should continue into post-secondary learning opportunities through agri-career counseling and programs commonly known as "pipelines" which connect students to educational opportunities and good food system careers. Developing these pipelines will ensure Michigan's next generation is prepared to make good food in Michigan a reality.

Opportunity: In addition to educational exposures and pipelines, it is important for youth to find opportunities to participate in and contribute to the development of Michigan's good food system as entrepreneurs. We can expand opportunities for entrepreneurship skill development and good food career exposure. To do this we can partner colleges, universities, local food businesses and non-profits with workforce development and college and career preparatory programs to develop opportunities for youth to explore potential careers and ventures in good food.

Through the strategies proposed in this report, the youth engagement and opportunity goals could be realized by 2020: Michigan schools will meet nutrition standards that reinforce a healthy food environment; food and agriculture will be integrated into the pre-K through 12th grade school curriculum; and Michigan students and youth will have access to enhanced food and agriculture entrepreneurial opportunities.

⁵⁶ Olshansky, S.J., Passaro, D., Hershow, R., Layden, J., Carnes, B., Brody, J., Hayflick, L., Butler, R., Allison, D. and Ludwig, D. (2005) A Potential Decline in Life Expectancy in the United States in the 21st Century. *The New England Journal of Medicine*, 352(11), 1138-1145.



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