

Food For Thought

What is the impact of malnutrition on academic success?
How can the educational system be enhanced to help individuals break this life cycle?

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In a country where there seems to be a plethora of food and education, an overwhelming number of students still lack the proper nutrition to ensure optimal cognitive and physical development. As a country, Canada possesses extensive amounts of food and is one of the world's largest agricultural exporters. In 2007, \$92 billion was spent on food and beverages in stores for household use, and an additional \$50 billion in restaurants and bars (Statistics Canada, 2016). However, malnutrition still remains a prominent barrier in Canadian schools which prevents many students from reaching their full academic potential. In 2012, more than 1 in 10 households in Canada and 1.15 million children experienced some degree of food insecurity (Bronson, 2017). Although there are millions of dollars invested in student's nutrition and breakfast programs, many children still lack sustainable diets. How can we expect our children to learn if their diets are lacking in nutrients? Schools need to effectively educate and promote nourishment in order for all children to attain their academic potential, regardless of their regional, socio-cultural or economic circumstances.

Malnutrition is a detrimental impediment to human brain development, and therefore, students who suffer from lack of nutrients do not have the cognitive skills that others possess to maximize their academic endeavours (The Nutrition Puzzle, 2012). Malnutrition negatively affects brain development causing delays in motor and cognitive development, such as; attention deficit disorder, memory deficiency, reduced language development and reduced problem-solving abilities-just to name a few (Orphan Nutrition, 2017). Studies have proven that malnutrition is a major contributor to mortality and is increasingly recognized as a cause of potentially lifelong functional disabilities (Guerrant, 2008). A common myth is that malnutrition

only occurs in impoverished countries, but truthfully, it can be just as prominent in wealthy societies. This disease does not only ensue from simply a lack of food, but can also form if someone is eating the correct amount of calories, but not nutrients (The Nutrition Puzzle, 2012). Furthermore, as a malnourished student, you are less likely to be able to maintain a satisfactory attendance record because you are more susceptible to illness (Money Life, 2015). This is a serious issue that requires urgent solutions and consequently, Canadians need to find creative solutions to provide nutrition education and a food secure future for everyone.

Firstly, by adapting a program created by a small group of individuals called “Incredible Edible,” Canadians can collaboratively work towards successful food and nutrition solutions to benefit all communities. In a recent Ted Talk by Pam Warhurst, the mastermind behind edible landscaping and founder of Incredible Edible, she explained the importance of having easily accessible healthy food options for all citizens. Incredible Edible is being adopted by cities all over the world, and is a welcoming educational program for those interested in creating social change. As the inventor stated “If you eat, you’re in” (Warhurst, 2012). This revolutionary program consists of using open, unused land to plant fruits and vegetables, which citizens can then pick and eat-at no cost. At each field, there are signs educating others on how to grow plants, and images showcasing when they are finished growing, and able to be consumed. Interestingly enough, a new type of tourism was formed from this initiative, called “vegetable tourism,” and people travel from all over the world to become educated on the newly adapted system in Todmorden, England. This initiative combines the passion and drive of the community coupled with the education system. It empowers the community to take personal responsibility for nutrition, food and the environment. Locals build herb gardens, vegetable

beds, bee friendly sites, fruit trees and vegetables near police stations, hospitals, old age homes and schools (Warhurst, 2012). They also integrate farmers, colleges and local garden centres to promote local food solutions. As a result, high schools across England are now teaching agriculture and horticulture. If more communities were inspired to replicate this initiative, people's nutritional knowledge would grow and spark a worldwide food revolution.

Implementing Edible Gardens in Canada would definitely provide students access to nutritious foods as well as connect community members, as a result of being kind to each other and the environment. Not only would this innovative program provide nutrition education, but it would also allow for easy access to foods for students. In turn, the learnings from this program could promote academic success and eradicate a lack of focus during class.

Secondly, making a nutrition class a mandatory credit for students to pass in high school would ensure that children were not making unhealthy eating choices due to lack of knowledge. Currently, nutrition courses are offered as electives, proving that only a select few individuals truly have a thorough understanding of what constitutes a nutritious diet. In a recent interview conducted by CBC news, a committee member of The Ontario Home Economics Association voiced; "The current Ontario curriculum has 21 "family studies" courses, seven new ones dealing with subjects such as food and nutrition, food and health and food and culture added in 2013, but sadly a very small percentage of students across the province actually get to benefit from this excellent curriculum" (Fenlon 2014). Consequently, if nutrition courses were made mandatory, there would be an increased adolescent awareness and they could educate others through projects that are currently only reaching a small percentage of students who choose to sign up for these courses. For example; Food Revolution Day; an initiative created by Jamie

Oliver that is typically run by students in schools who are passionate about showcasing that healthy eating can be fun by preparing sample meals for their peers. Typically, initiatives such as these cannot be run in highschool because the student body enrollment in the course is not large enough to execute such a massive event. Not only would teaching nutrition to schools benefit the students, it would improve the school's test scores and overall ratings, as the direct correlation between nutrition and academic performance has been proven. In addition, when students are nourishing their bodies properly, they are physically stronger and it has been proven they are more inclined to join sports teams and achieve excellence in physical activity (Kass, 2015). Increased student engagement would most likely encourage students to excel in school, as they would be more connected to schooling as a result of joining extracurriculars. Aside from making nutrition class mandatory, the government should also force school nutrition policies to restrict the selling of unhealthy food products in cafeterias and vending machines, forcing students to make healthy choices. In Ontario, the mandatory legislation regarding food sold in schools is that; they must limit the amount of artificial fat, and can choose to follow the *voluntary* guidelines for what they sell in their vending machines (Government of Ontario, 2008). Overall, the regulations regarding healthy eating need to be more heavily enforced, and made mandatory so that students can be educated on how to overcome malnutrition, preventing them from a lifetime of potential health issues and learning challenges.

Consequently, implementing a national food policy that educates Canadians about the importance of nourishment should definitely be a priority and used as a framework to support nutrition curriculum. Canadians need an inclusive food policy that encourages innovative community programs like Incredible Edible. This is crucial in order to promote grassroots

collaborative programs, while providing land and monetary support to a variety of socio-economic and geographical settings. Adapting a holistic National food policy would encourage innovative solutions as to how to sustainably and readily provide wholesome food for all. A national food policy should ensure nation wide access to food, including immigrant communities as well Canadians that live in remote Northern areas. In conclusion, the federal government has voiced a willingness to instate collaborative policies and there is no better time to develop a National policy that will provide nutrition options to Canadians, and in return enable student's learning abilities.

Malnourishment is an issue that affects one's physical, emotional, social and cognitive health. Food is a human right, and Canada has an international legal obligation to respect it (Food Secure Canada, May 2017). Therefore, the education system has the responsibility to provide creative solutions to drive social change in order to improve improve human health. With mandatory education on this topic, implementing community run and school supported edible landscapes, and a sustainable food policy, Canada has the exciting opportunity to set the stage as a world leader promoting health, sustainable diets and ultimately a life full of promise.

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