Dirty Power and Healthy Schools is it Possible? What do dairy cows and students have in common?

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Last January I received a phone call from Michelle Illiatovitch in Toronto who told me that both she and her daughter, Kestra, were electrically sensitive. Shortly after some renovations Kestra began to feel ill. She noticed that the lights in her bedroom were flickering so they called in an electrician who corrected the problem that related to the loose wires in the fuse box. Kestra's health improved dramatically but she still felt tired and had frequent, headaches, fuzzy thinking, depression, chest pain and nausea.

Michelle's niece, Catherine, developed chronic fatigue shortly after moving to a farm in Wisconsin. She read that some farmers in her area were experiencing health problems and they were also having difficulty with their dairy herds and that Dave Stetzer was helping the farmers solve their problems, which were electricity-related.

She contacted Mr. Stetzer who told her to turn the power off in her home. She did this and began to feel better almost immediately. She then purchased some of his equipment to measure her home and to filter out the dirty electricity. Shortly after installing the electric filters, also known as capacitors, her health began to improve. She was so impressed she contacted her Aunt Michelle to share the good news.

Michelle also bought some filters, which plug into an electrical outlet, and installed them in her home. Not only did her health improve but the health of everyone improved including her dog and her husband.

Kestra was feeling much better at home but when she went to school she became ill again. Michelle asked the school principal if she could install some filters in the school to help her daughter. Joy Kurtz, the Principal of Willow Wood School agreed.

That's when Michelle phoned me.

She wondered if I would do a study to determine the effectiveness of these filters. I was familiar with electrical-sensitivity but it was my understanding that a very small percentage of our population is likely to be electrically-sensitive and because the symptoms are so vague it's difficult to know if it's indeed electrical-sensitivity or something else that's causing the problem.

The symptoms for sensitivity vary. Some develop headaches when they go shopping in stores that have bright halogen lights. Others become tired or can't think clearly. Some develop skin rashes after using a computer. In severe situations people can even loose consciousness. Generally those with electrical sensitivity prefer incandescent lighting to fluorescent lighting.

I was skeptical this study would show anything partly because I was skeptical about the effectiveness of the filters and partly because I felt the population of teachers and students was too small. But I was also intrigued and agreed to design a questionnaire.

No one in the school, apart from the Principal and the head Custodian, knew what we were doing. It was necessary to keep the teachers in the dark initially so that psychological bias would not play a role in the answers they provided. This is referred to as a "blind" experiment.

We measured the electromagnetic environment in the school with and without the filters. The filters removed many of the microsurges on the electrical wiring in the school but did not change the electric or magnetic fields, which were already low. These microsurges consist of high frequency energy on an electrical wire and are generated by various appliances and equipment.

At the end of the study that lasted 6 weeks, 3 weeks without and 3 weeks with the filters, I received several boxes of completed questionnaires. The real work began.

I analyzed the teacher results first and was amazed by what I found. Of the more than 40 teachers, 26 responded regularly. Of these 26, 4 did not change, 4 were slightly worse and 18 improved while the filters were installed. In decreasing order of magnitude this is what we found. While the filters were installed, 46% of the teachers experienced less fatigue, 42% were less frustrated, 35% were more satisfied with their work, 35% had a greater sense of "well-being", 27% were less irritable, 23% had more energy, 23% experienced less body pain, and 19% had fewer headaches. And all of this occurred during February, a month we normally associate with the "blahs."

Preliminary analysis of the student results shows that both high school and elementary students improved more during the afternoon than in the morning. In elementary school, student disruptions were reduced by an average of 3 to 4 minutes per class, which allows more teaching time. The high school results were less conclusive.

While the results are encouraging and suggest that these filters can improve the school environment, it's necessary to repeat this study at other schools to see if the results are consistent. If they prove to be consistent then we may now have a tool to improve our electrical environment at home and at work. Just as we have air filters to remove airborne particulates and water filters to remove chemicals in our drinking water, Dave Stetzer has designed a filter that reduces indoor electrical pollution associated with electronic devices like computers and variable speed motors.

At a recent talk at Willow Wood School in Toronto, Mr. Stetzer said this filter would even reduce some of the microsurges entering your home from your neighbour next-door. His work on dairy farms in Wisconsin resulted in healthier cows and higher milk yields. While these filters are not the answer to all of our electrical problems, they may make living more tolerable for the small percentage of the population who are truly electrically-

sensitive and, if our results are correct, they may improve the quality of life even for those of us who aren't.

For more information or if you would like to have your school tested contact the author at mhavas@trentu.ca.