# Diabetes

**D**iabetes is on the increase. In the United States, 16 million people are diagnosed as diabetic and more are suspected of having this disease. Case studies show that blood sugar levels are associated with dirty power on internal wiring as well as radio frequency radiation from nearby cell phone antennas and that these blood sugar levels can change quickly as one moves from a "dirty" to a "clean" electrical environment.

# Case 1

#### 51-year old male diabetic: April 23 to May 29, 2003 [minus 1 data point]



Figure 7. A 51-year old male diabetic exposed to dirty electricity in his home. Plasma glucose levels increase with dirty power. The high blood sugar value (277 mg/dL) at 250 mV (insert) is a real number, not an error. However, since it contributed disproportionately to the correlation coefficient it was removed. The resultant correlation is statistically significant.

### Case 2

57-year old female diabetic who lives near cell phone antennas: May/June 2004 mmoles/



Figure 8. A 57-year old female diabetic exposed to radio frequency radiation (RFR) in her home from nearby cell phone antennas. Fasting plasma glucose levels increase with RFR. High RFR is associated with headaches, nausea, joint pain, dizziness and facial flushing. Twenty minutes in a "clean" environment lowers her blood sugar levels 30 mg/dL (1.7 mmoles/L).

### Case 3

80-year old female diabetic: Graham Stetzer filters installed June 2004



Figure 9. An 80-year old female diabetic exposed to dirty electricity in her home. Graham/Stetzer filters were installed on June 12, 2004 and the microsurges on indoor wiring decreased from 800 to 13 GS units. Her fasting plasma glucose dropped from 171 mg/dL (9.4 mmoles/L) without filters to 119 mg/dL (6.5 mmoles/L) with filters and her average daily insulin intake (Humlin 70/30) decreased from 36 to 9 units respectively. Results were noticed within one day. [Note: GS refers to Graham/Stetzer units and is a function of amplitude and frequency of microsurges on indoor wiring.]

# **Multiple Sclerosis**



Figure 10. Significant improvements in muscle strength, joint stiffness, pain, and walking were noticed within the first two weeks. Wet/humid weather during weeks 3 to 6 slowed progress.



Figure 11. MS patient experienced less dizziness, reduced swelling and improved circulation of hands and feet with G/S filters.

flu

asthma

medication

unfocussed

accomplishment

coughing

pain

mood

headache

well-being satisfaction

> energy health

irritable frustration

fatigue

0%

20%

well being, and were more focused.

**Teachers** 



Figure 12. MS patient experienced less fatigue while filters were installed especially during dry weather. She woke up fewer times during the night and had some difficulty waking up in the morning.



Figure 13. Improvements were noticed in concentration, restlessness and depression. MS patient was more moody and experienced more nervousness while filters were installed.

## Case 4

Multiple sclerosis (MS) is a neuro-degenerative disorder that is characterized by lack of coordination, muscular weakness, numbness, and pain. Figures 10-14 document the response of a 43-year old woman, who has had MS for 8 years, to Graham/Stetzer filters installed in her home. Filters decreased microsurges from 170 to 33 GS units. Within 24-hours her sense of balance improved and she was able to walk without a cane. Within 2 weeks she was able to walk without ankle support. Her symptoms became worse during humid weather but she recovered rapidly with the filters installed.



Figure 14. While filters were installed, MS patient experienced improvements in overall health, sleep quality, energy level and MS symptoms. Improvements were noticed within 1 week.

**Dirty Electricity** 

plus filters

# **Electrical Hypersensitivity**

# School

100

Microsurges (mV, rms)

13

23

Graham/Stetzer Filters

Electrical hypersensitivity (EHS), is a relative new phenomenon that seems to be on the increase. Symptoms include chronic fatigue, depression, headaches, body aches and pains, ringing in the ears, eye discomfort, skin irritations, facial flushing, nausea, dizziness, cardiac palpitations, impaired sleep, memory loss, and confusion. One student with EHS prompted the present study. Installation of Graham/Stetzer filters at Willow Wood School coincided with improved student behaviour and teacher well being. This was a single blind study. Data were collected during a 6-week period, 3 weeks with filters and 3 weeks without. Response was greatest among younger students in elementary school, suggesting that they might be more electrically sensitive than middle and high school students. These data suggest that poor power quality may be interfering with the education of students and the performance of teachers. If these improvements, which coincided with improved power quality at Willow Wood, are a sign of electrical sensitivity then the proportion of electrically sensitive people in the population may be 20-60%.

Figure 15. 43% decrease in dirty electricity (<20 kHz) with 50 G/S filters installed at Willow Wood School. Graham/Stetzer filters reduced but did not eliminate dirty electricity in this school. For a school of this size 150 filters are required. Figure 16. While filters were installed, teachers were less tired, less frustrated, less irritable. They had Figure 17. Students were more actively involved in their lessons and were more focused while the filters were installed. They required fewer repetition of instructions. On average 4 minutes were saved dealing fewer headaches and less pain. They had more energy, better health, greater accomplishments and sense of with disruptions in each class. Results were most pronounced in elementary school (grades 1 to 6). Response of Teachers to Improved Power Quality **Students** Response of students to improved power quality ■ significantly better □ slightly better ■ statistically better  $\Box$  no change Active ■ slightly worse ■ slightly better ■ significantly worse no change Behaviour in Focused ■ slightly worse Class ■ statistically worse Repeat Instruction 60% 20% 40% 80% 100%80% 100% 60% Percentage of Classes Percentage of Teachers Willow Wood School, Toronto, Canada