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Title: Environmental Contaminants and Children's Health – for future generations

Abstract:

We have researched the relationship between environmental contaminants and human health, especially the health effect to children and fetuses. It became clear that human fetuses are contaminated by environmental pollutants by detecting persistent organic pollutants (POPs) such as dioxins and PCBs from umbilical cords after delivery. Furthermore, the correlation between molecular weight and transfer rate of congeners of dioxins, PCBs and polybrominated diphenyl ethers (PBDEs) from mother to fetus has been found recently. It means that smaller molecular weight chemicals are more easily transferred to fetuses from mothers than larger molecular weight chemicals. We have also studied on the relationship between volatile organic chemicals (VOCs) and human health, and a model town, "Chemiless Town" was constructed in a university campus in 2007. It became clear that there is a strong correlation between the concentration level of the total VOCs and sick building syndrome symptoms. We published a book entitled, "Environmental Contaminants and Children's Health – Sustainable Science for Future Generations", and the data of the contents are all downloadable free of charge from HP of Center for Preventive Medical Science of Chiba University. The address is as follows. <http://cpms.chiba-u.jp/>