NANOTECHNOLOGY AND PUBLIC HEALTH

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Nanotechnology is developing very quickly, and Japan is in many respects leading the world in this convergence of nanoscale engineering techniques. The public health community in Japan must start to think about the public health impacts of nanotechnology over the next 20 years. The responsibility for the benefits and the harms of nanotechnology lies with government, with corporations and the business community, with scientists and specialists in all related fields, and with NPOs and the public. There are very many questions of public health which are not yet being asked about nanotechnology. If nanoparticles are to be used in cosmetics, food production and packaging, how will they react or interact with the human skin and organs? What chemical-toxic effects on life might there be from the nanoparticles in car tires and vehicle plastic mouldings when they are disposed of by incineration? Will they pass into the soil and groundwater and enter into the food-chain? It is now an urgent ethical demand, based on the precautionary principle, that Japan join the governments of the world to take an intergovernmental initiative to intervene in the further development, production and marketing of nanotechnological products with precautionary research and regulation.

Key words : Nanotechnology, nanoparticles, public health, precautionary principle, risk, global governance

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