Paracelsus to parascience: the environmental cancer distraction - **Télécharger la publication**

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Abstract
Entering a new millennium seems a good time to challenge some old ideas, which in our view are implausible, have little supportive evidence, and might best be left behind. In this essay, we summarize a decade of work, raising four issues that involve toxicology, nutrition, public health, and government regulatory policy. □a. Paracelsus or parascience: the dose (trace) makes the poison. Half of all chemicals, whether natural or synthetic, are positive in high-dose rodent cancer tests.
These results are unlikely to be relevant at the low doses of human exposure. □b. EÍen Rachel Carson was made of chemicals: natural Ís. synthetic chemicals. Human exposure to naturally occurring rodent carcinogens is ubiquitous, and dwarfs the general public's exposure to synthetic rodent carcinogens. □c. Errors of omission: micronutrient inadequacy is genotoxic. The major causes of cancer □other than smoking. do not involve exogenous carcinogenic chemicals: dietary imbalances, hormonal factors, infection and inflammation, and genetic factors. Insufficiency of many micronutrients, which appears to mimic radiation, is a preventable source of DNA damage. □d. Damage by distraction: regulating low hypothetical risks. Putting huge amounts of money into minuscule hypothetical risks damages public health by diverting resources and distracting the public from major risks. q2000 Elsevier Science B.V. All rights reserved.
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