THE ETHICAL AND LEGAL CONCERNS OF THE USE OF GENETICALLY MODIFIED (GM) FOODS IN SOUTH AFRICA

Thiriloshani Padayachee

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Student No: 703691
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DECLARATION

I Thiriloshani Padayachee declare that this Research Report is my own, unaided work. It is being submitted for the Degree of Masters of Medicine: Bioethics and Health Law at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at any other University.

________________________________________
Candidates Signature
DEDICATION

This Research Report is dedicated to Sedhoorajan Padayachee. I thank you for your love, compassion, patience, motivation, understanding, forbearance, unwavering support and encouragement. Without which this would not have been possible.
ABSTRACT

Worldwide genetically modified (GM) foods provide one of the major challenges facing the food industry in the twenty-first century. The safety of GM foods are being questioned by consumers, researchers and medical professionals as it is believed that these foods may pose a serious public health risk, especially for the young, aged, pregnant and immuno-compromised persons (Azadi and Ho, 2010). At present the safety of GM foods remains questionable mainly because of insufficient long term scientific data, and the vulnerability of the developing and developed countries to satisfy the food demands of their growing populations. There are already some 800 million people who do not have access to sufficient food to meet their needs. Malnutrition plays a significant role in half the nearly 12 million deaths each year in developing countries, of children under the age of five (Asante, 2008). Therefore, the need for increasing agricultural yields is of urgent concern in the entire developing world. A multitude of reasons are put forward to validate GM food production. The use of GM microbes does not necessarily raise alarms but there are considerable ethical concerns; concerns about “messing with nature”; concerns about safety for human health, and concerns about environmental impact (Racovita, 2013). However, the technology offers opportunities to accelerate the efficiency and extent of further agricultural improvements by the transfer of genes conferring resistance to pests, disease, herbicides and environmental stress, as well as quality traits such as improved post-harvest storage, flavour, enhanced nutritional content and colour (Coles and Ladikas, 2013). The aim of the research project is to raise the ethical, legal and social issues about the use of GM foods in South Africa. The research will also highlight the ongoing debate in the areas of environmental protection, public perceptions and acceptance and ethical concerns.
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LIST OF ABBREVIATIONS

GM - Genetically Modified
GMO - Genetically Modified Organisms
DNA - Deoxy-Ribonucleic Acid
NCB - Nuffield Council of Bioethics
FAO - Food and Agricultural Organization
IPTS - Institute for Prospective Technology Studies
WHO - World Health Organisation
OEDC - Organisation for Economic Co-operation and Development
ICSU - International Council for Science
GURT - Gene Use Restriction Technology
AEBC - Agriculture and Environment Biotechnology Commission
SA - South Africa
ACC/SCN - Administrative Committee on Coordination/Subcommittee of Nutrition
IFPRI - International Food Policy Research Institute
WTO - World Trade Organisation
CBD - Convention on Biological Diversity
EU - European Union
DAFF - Department of Agriculture, Forestry and Fisheries
NBS - National Biotechnology Strategy
SABS - South African Bureau of Standards
EUFIC - European Food Information Council
IUCN - The World Conservation Union