

World Health Organisation's International Agency for Research on Cancer (IARC) has declared glyphosate as a 2A carcinogen (probably carcinogenic in humans)

The IARC reached its decision based on the view of 17 experts from 11 countries, who met in Lyon, France, to assess the carcinogenicity of 5 organophosphate pesticides.¹

Are we too chicken to tackle obesity?

This was a question posed on the BMA's latest newsletter. You clearly didn't read the US lawsuit against Monsanto that I sent you...or at least it wasn't acknowledged.

Los Angeles County, California, US has taken out a Class Action Lawsuit against Monsanto For False Advertising²

The lawsuit challenges a specific claim that appears on all Roundup® labels which reads:

GLYPHOSATE TARGETS AN ENZYME FOUND IN PLANTS BUT NOT IN PEOPLE OR PETS

..."and this claim is absolutely, positively false because glyphosate does target an enzyme "found in people" produced within our bodies – in our gut bacteria.

Defendant's claim is patently false because the targeted enzyme, factually speaking, is "found in people" specifically, in our stomachs and intestines."

Nancy Swanson Seattle GMO Examiner, 21 April 2015³

Extracts: *In the lawsuit, the argument is made that the targeted enzyme, EPSP synthase, is found in the microbiota that reside in our intestines and therefore this enzyme is found in humans and animals. It is further stated in the lawsuit that there are many human and animal health problems associated with the disruption of our intestinal microbes.*

*"Because it kills-off our gut bacteria, glyphosate is linked to stomach and bowel problems, indigestion, ulcers, colitis, gluten intolerance, sleeplessness, lethargy, depression, Crohn's Disease, Celiac Disease, allergies, **obesity**, diabetes, infertility, liver disease, renal failure, autism, Alzheimer's, endocrine disruption," and the WHO recently announced glyphosate is 'probably carcinogenic.'*

Obesity levels in England are second only to the US and are running a parallel course to the US ...and Australia is now a close third

As can be seen from the Lawsuit Against Monsanto, one of the key features of glyphosate residues in the diet of humans is **OBESITY**.

Defra Expert Committee on Pesticide Residues in Food:⁴ Monsanto is responsible for humans and animals having glyphosate residues in their bodies: it is in all staple, non-organic foods

The results from monitoring of Pesticide Residues in Food (PRiF) have been published quarterly in the UK since 2000, but pre-harvest application to crops had already been authorised 20 years before, from 1980. Bread and breakfast cereals are staple foods but there are no maximum residue limits (MRLs) for bread or breakfast cereals. Residues in bread are tested twice a year.

e.g. 2002 3rd Quarter: Comments from PRiF: "Residues of chlormequat,⁵ glyphosate and pirimiphos-methyl⁶ were found (in bread). These pesticides are commonly used on cereal crops, and residues have been found in other cereal products, therefore these findings are not unexpected. None of the residues found were of concern for consumer health."

¹ [http://www.thelancet.com/pdfs/journals/lanonc/PIIS1470-2045\(15\)70134-8.pdf](http://www.thelancet.com/pdfs/journals/lanonc/PIIS1470-2045(15)70134-8.pdf) Carcinogenicity of tetrachlorvinphos, parathion, malathion, diazinon, and glyphosate.

² Monsanto Roundup Class Action
<http://www.monsantoclassaction.org/>

³ <http://www.examiner.com/article/monsanto-sued-los-angeles-county-for-false-advertising>

⁴ <http://www.pesticides.gov.uk/guidance/industries/pesticides/advisory-groups/PRiF/about-PRiF>

⁵ Chlormequat is a plant growth regulator and was present consistently throughout.

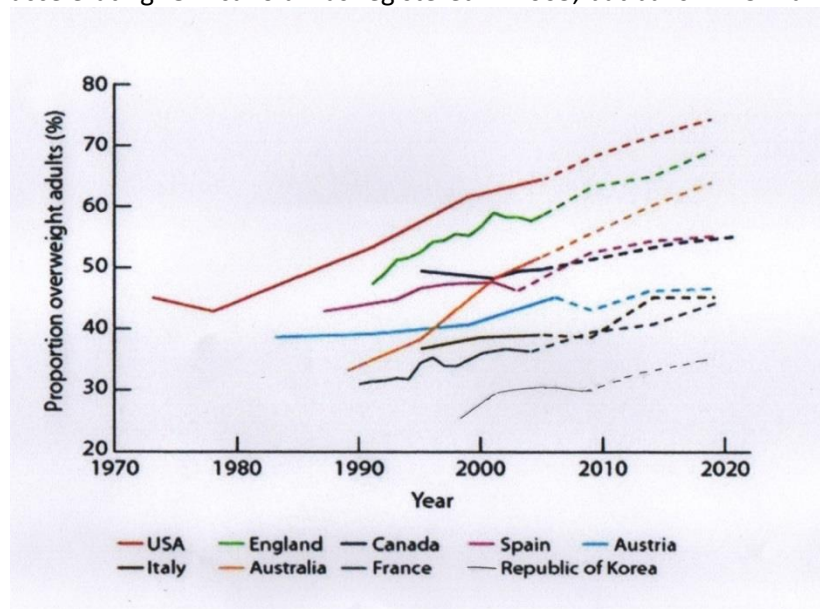
⁶ pirimiphos-methyl is an organophosphate insecticide for use in storage. The approval was revoked on 24/03/2011, but it was only finally banned 31/03/2013, presumably to allow stocks to be used up.

2011 3rd/4th Quarters for Lentils: Comments: *"Sixteen samples of lentils contained glyphosate above the MRL. A new higher level of glyphosate is expected to come into force in summer 2012. None of the residues detected in this survey would be above the new proposed MRL."*

When the CRD Head of Regulatory Policy replied on 28/02/2014 to defend the authorisation of glyphosate, he told me that the capability to detect individual pesticides in food had increased from 150 in 2003 to 393 in 2012. He stated: *"In the 2012 Report, although there were a large number of residues found in bread, none of these were at a level to suggest a risk to consumer health."* However, he failed to reply to my question as to why EFSA was regularly increasing the Maximum Residue Limits (MRLs) of glyphosate in foods at the request of Monsanto to accommodate their practice of desiccation of crops and to protect their imports into Europe.⁷

Countries with the biggest obesity problem; the US and the UK, Australia following from 1992 Australia has admitted that it is in the hands of the pesticides industry

Some of the UK population has been exposed to glyphosate residues in foods since 1980, even without GM Glyphosate-Tolerant crops being grown. The United States has grown Roundup® Ready GM crops since 1996. The third area with the most overweight adults is Australia, where obesity levels started to rise steeply in 1995 and by 2000 had overtaken Spain and Canada, both of which have GMs. There are 553 glyphosate products registered in Australia. Glyphosate use on GM crops is accelerating. GM canola was registered in 2003, but bans in NSW and Victoria were lifted in 2008.⁸



Historical and projected overweight rates in OECD countries⁹

Why has the British public been afflicted with the same cancers without GM Crops? Because ADAS recommended pre-harvest crop spraying with Roundup® in 1980¹⁰ and spraying on grassland in 1985. Researches showed two Monsanto scientists wrote the first papers (without declaring it) In 1980 UK ADAS¹¹ (at that time the science and advisory branch of Ministry of Agriculture, Fisheries and Food (MAFF) but now privatised) was recommending that arable farmers use pre-harvest

⁷ <http://www.efsa.europa.eu/en/efsajournal/pub/2550.htm>

⁸ <http://www.sbs.com.au/news/article/2012/11/15/factbox-gm-foods-australia>

⁹ Healthy Choices OECD Health Ministerial Meeting, Paris, 7-8 October 2010

<http://www.oecd.org/health/ministerial/46098333.pdf>

¹⁰ <http://www.hgca.com/media/185527/is02-pre-harvest-glyphosate-application-to-wheat-and-barley.pdf>

¹¹ ADAS is now the UK's largest independent provider of agricultural and environmental consultancy, rural development services and policy advice; formerly a branch of Ministry of Agriculture, Fisheries & Food. (MAFF)

application of glyphosate on cereal crops. M.G. O’Keeffe, a Monsanto scientist¹² wrote three articles about it, the first at a Crop Protection conference.¹³ They do not appear to have been peer-reviewed. By 1985 ADAS was advocating the use of glyphosate on grassland. They declared it to be good practice to graze the grass or preserve it as hay or silage after treatment.¹⁴ However, the main author of the 1985 paper was another Monsanto scientist, Colin D Stride.¹⁵ He later joined Exponent®, a firm which provides services for industry, governments and for EU regulatory bodies.¹⁶

Renewal Assessment Report (RAR) on Ecotoxicity¹⁷

The Glyphosate Task Force’s evaluation of peer-reviewed literature regarding ecotoxicity broadly concluded that glyphosate is not harmful to the environment.

The use of pesticides around the world has produced biological deserts

Reality does not match Monsanto’s claims. Here is a description of a 600 acre farm in Ohio US with GMO Roundup® Ready corn on which Craig Childs¹⁸ spent a long weekend and found virtually nothing. *"I listened and heard nothing, no bird, no click of insect. There were no bees. The air, the ground, seemed vacant...It felt like another planet entirely,"* he said, *"a world denuded."* Robert Krulwich’s blog commented on Craig Child’s description¹⁹: *"Yet, 100 years ago, these same fields, these prairies, were home to 300 species of plants, 60 mammals, 300 birds, hundreds and hundreds of insects. This soil was the richest, the loamiest in the state. And now, in these patches, there is almost literally nothing but one kind of living thing. We've erased everything else. There's something strange about a farm that intentionally creates a biological desert to produce food for one species: us. It's efficient, yes. But it's so efficient that the ants are missing, the bees are missing, and even the birds stay away. Something's not right here. Our cornfields are too quiet."*

Swansea has been called *"the Japanese Knotweed Capital of Europe."* It grows in former mining area where the soil has been disturbed; continued spraying produces Super-Weeds. The Council employs a national commercial firm, Complete Weed Control, presumably owned by Monsanto, to spray from April to October. We already have glyphosate in our drinking water but cannot find out how much has been used over the last 40 years. The Council refuses to stop spraying because they claim they cannot control it any other way and the CRD says it is safe. Complete Weed Control has just started a three-year eradication of Japanese knotweed in an even closer valley to our reserve.
http://www.i-sis.org.uk/How_Roundup_Poisoned_My_Nature_Reserve.php

¹²

https://books.google.co.uk/books?id=objYBAAQBAJ&pg=PA555&lpg=PA555&dq=Monsanto+O%27Keeffe+M+G&source=bl&ots=3k7GWMRWZ3&sig=wg0ZhiNFMTY86cNp_cp3jV4Dz3A&hl=en&sa=X&ei=Twz-VpMWA8mBU93GgqP&ved=0CEkQ6AEwBg#v=onepage&q=Monsanto%20O'Keeffe%20MG&f=false Chemical Manipulation of Crop Growth and Development Proceedings of Previous Easter Schools in Agricultural Science by J. S. McLaren

¹³ O’Keeffe MG. The control of Agropyron repens and broad-leaved weeds pre-harvest of wheat and barley with the isopropylamine salt of glyphosate; 1980. pp. 53–60. Proceedings of British Crop Protection Conference-Weeds.

¹⁴ Stride CD, Edwards RV, Seddon JC. Sward destruction by application of glyphosate before cutting or grazing; 1985. pp. 771–778. British Crop Protection Conference – Weeds 7B–6.

¹⁵ http://www.exponent.com/files/Attorney/2f28f368-0f2c-48d0-91c2-60589cce38f1/Presentation/ceExpertCVUpload/stride,c_full.pdf

¹⁶ *"Exponent, Inc., a research and scientific consultant firm with clients from industry (including crop protection) and government"*.

¹⁷ Renewal Assessment Report Vol 3 Annex B9. Evaluation of peer-reviewed literature regarding ecotoxicity

¹⁸ Craig Childs Apocalyptic Planet <http://www.houseofrain.com/bookdetail.cfm?id=1344621970977>

¹⁹ <http://www.npr.org/blogs/krulwich/2012/11/29/166156242/cornstalks-everywhere-but-nothing-else-not-even-a-bee>

In 2006, we had 143 different species of moth, by 2013 this had been reduced to 51 and in 2015, up until now, moths have been sparse. Butterflies, bumblebees, bats and insects are all decreasing. There are no long frogs in our pond and frogspawn has been absent for at least 12 years.

MONSANTO KNEW OF GLYPHOSATE / CANCER LINK 35 YEARS AGO/ GM-Free Cymru Special Report²⁰ 8th April 2015

"According to evidence unearthed from the archives of the EPA (Environmental Protection Agency) in the United States, it has been established that Monsanto was fully aware of the potential of glyphosate to cause cancer in mammals as long ago as 1981" wrote Dr Brian John.

Speaking for GM-Free Cymru, Dr Brian John says: *"The evidence shows that by 1981 both Monsanto and the EPA were aware of malignant tumours and pre-cancerous conditions in the test animals which were fed small doses of glyphosate in the secret feeding experiments.... If they had acted in a precautionary fashion back then, instead of turning a blind eye to scientific malpractice (16), glyphosate would never have been licensed, and thousands of lives might have been saved."*

Research scientist Dr Anthony Samsel says: *"Monsanto's Trade Secret studies of glyphosate show significant incidence of cell tumors of the testes and tumorigenic growth in multiple organs and tissues. They also show significant interstitial fibrosis of the kidney including effects in particular to the Pituitary gland, mammary glands, liver, and skin. Glyphosate has significant effects to the lungs indicative of chronic respiratory disease. Glyphosate has an inverse dose response relationship, and it appears that its effects are highly pH dependent. Both Monsanto and the EPA knew of the deleterious effects of this chemical in 1980 at the conclusion of their multiple long-term assessments, but the EPA hid the results of their findings as "trade secrets." Monsanto has been lying and covering up the truth about glyphosate's harmful effects on public health and the environment for decades. The increases in multiple chronic diseases, seen since its introduction into the food supply, continue to rise in step with its use. Monsanto's Roundup glyphosate based herbicides have a ubiquitous presence as residues in the food supply directly associated with its crop use. Nations must stand together against Monsanto and other chemical companies who continue to destroy the biosphere. We are all part of that biosphere and we are all connected. What affects one affects us all."*

International Society of Doctors for the Environment (ISDE): members in 27 countries²¹

"To immediately and permanently ban, with no exceptions, the production, trade and use in all the EU territory, of glyphosate-based herbicides and the four insecticides assessed by IARC. Tetrachlorvinphos, parathion, malathion and diazinon." The CRD still registers two of these

Read what countries have already banned, or are in the process of banning glyphosate

[http://www.i-sis.org.uk/Fallout from WHO Classification of Glyphosate as Probable Carcinogen.php](http://www.i-sis.org.uk/Fallout%20from%20WHO%20Classification%20of%20Glyphosate%20as%20Probable%20Carcinogen.php)

Will the British Medical Association join the ISDE in calling for a ban on glyphosate?

Or is it too chicken to stand up to the Government and Monsanto on behalf of their patients and the environment?

Rosemary Mason MB ChB FRCA

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²⁰ http://www.gmfrecymru.org/documents/monsanto_knew_of_glyphosate.html

²¹ http://www.isde.org/Appeal_glyphosate_IARC.pdf