

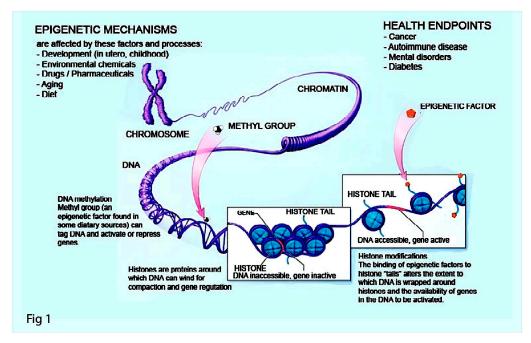
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"Let your food be thy medicine!".... Hippocrates

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GLOBAL EPIDEMIC OF DISEASES AND ILLNESSES ON THE RISE, THE ROLES OF BIO-TECH BIG-AGRA AND BIG-PHARMA - THEIR BILLION-TRILLION DOLLAR CASH COW PROFITS.....CONNECTING THE DOTS! - A.E.N.T



CONSPIRACY OR A SIMPLIFIED AND BRIEF 3 PART STEP IN GLOBAL HUMAN AND ANIMAL FOOD CHAIN DOMINANCE

1.) TRYPTOPHAN DEPLETION AND ALL ESSENTIAL MINERAL MICRONUTRIENTS BY BIO-TECH GIANT MONSANTO AND OTHERS = TRYPTOPHAN (EPSPS) PATENTS CREATE SICKNESSES AND DISEASES THEN MAKE MONEY OFF THE CONTRACTED SALE OF THE TRYP GMO GENETICALLY IMPROVED PRODUCTS!

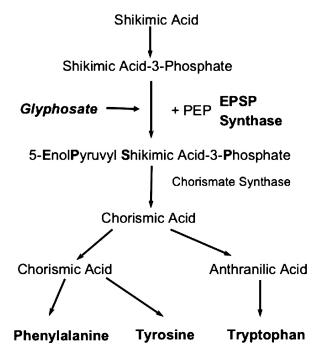


Figure 1.2. The site of inhibition of glyphosate from Dill (2005).

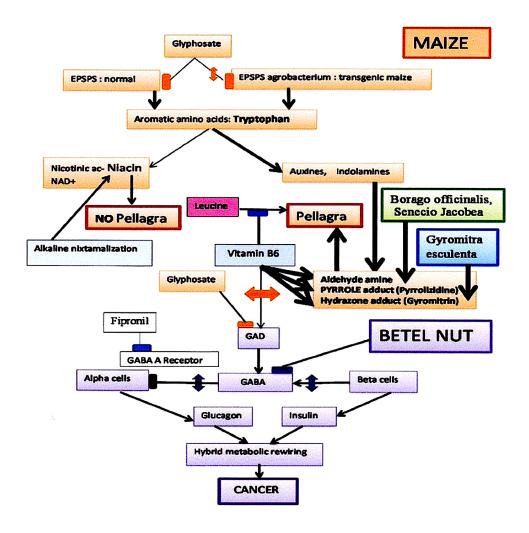
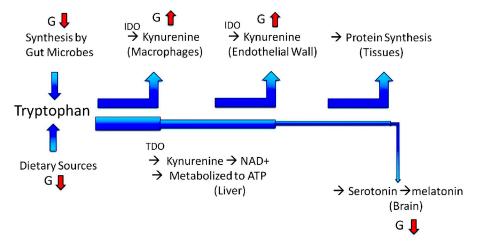


Figure 2. Illustration of tryptophan pathways in the body and the adverse effect of glyphosate on tryptophan bioavailability. IDO: indole amine dioxygenase; TDO: Tryptophan dioxygenase; G: glyphosate.



Glyphosate: Some Biological Effects*

- Depletes aromatic amino acids and methionine
- Disrupts gut bacteria
 - Studies with chickens, cows and pigs show overgrowth of pathogens in gut
- Disrupts cytochrome P450 (CYP) enzymes which are involved in many biological functions
- Depletes important minerals
 - Calcium, manganese, zinc, cobalt, iron,
- Likely impairs sulfate synthesis and sulfate transport

* A. Samsel and S. Seneff, Entropy 2013, 15, 1416-1463

Glyphosate: Some Biological Effects (cont'd)

Depletes aromatic amino acids and methionine

Tryptophan \rightarrow serotonin \rightarrow melatonin

- Serotonin deficiency is linked to obesity, autism, Alzheimer's disease, depression, and violent behavior
- Melatonin controls sleep/wake cycle

Tyrosine → dopamine, adrenaline, melanin, thyroid hormone

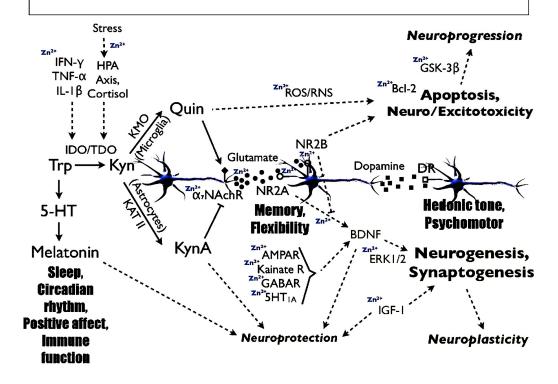
- Dopamine deficiency leads to Parkinson's disease
- Melanin in skin protects from UV exposure

Methionine is an essential sulfur-containing amino acid

- Disrupts cytochrome P450 (CYP) enzymes which are involved in:
 - Activation of vitamin D, catabolism of retinoic acid
 - Bile acid production
 - Detoxifying environmental toxins
 - Stabilizing blood (hemorrhaging vs blood clots)

Some Biomarkers for Autism

- · Disrupted gut bacteria; inflammatory bowel
- Low serum sulfate
- Methionine deficiency
- · Serotonin and melatonin deficiency
- Defective aromatase (CYP enzyme)
- · Zinc and iron deficiency
- Vitamin D deficiency
- Impaired immune function
- Chronic low-grade inflammation in the brain



Major Health Warning: Avoid Genetically Modified Foods

The American Academy of Environmental Medicine (AAEM) urges physicians to advise all patients to avoid genetically modified (GM) food. They state, "Several animal studies indicate serious health risks associated with GM food." These include:

- Infertility
- · Immune problems

- Accelerated aging
- Faulty insulin regulation
- Changes in major organs and the gastrointestinal system.

Since 1996, GM plants such as soybeans and corn have had genes from bacteria and viruses forced into their DNA. Most Americans don't realize that GM ingredients are in an estimated 70% or more of all processed foods. In 2009, the American Academy of Environmental Medicine (AAEM) stated that, "Several animal studies indicate serious health risks associated with genetically modified (GM) food," including infertility, immune problems, accelerated aging, faulty insulin regulation, and changes in major organs and the gastrointestinal system. The AAEM has asked physicians to advise all patients to avoid GM foods.[1]

Starting in 1996, Americans have been eating genetically modified (GM) ingredients in most processed foods. Why isn't the FDA protecting us?

In 1992, the Food and Drug Administration claimed they had no information showing that GM foods were substantially different from conventionally grown foods. Therefore they are safe to eat, and absolutely no safety studies were required. But internal memos made public by a lawsuit[2] reveal that their position was staged by political appointees who were under orders from the White House to promote GMOs. In addition, the FDA official in charge of creating this policy was Michael Taylor, the former attorney for Monsanto, the largest biotech company, and later their vice president.

In reality, FDA scientists had repeatedly warned that GM foods can create unpredictable, hard-to-detect side effects, including allergies, toxins, new diseases, and nutritional problems. They urged long-term safety studies, but were ignored.

Today, the same biotech companies who have been found guilty of hiding toxic effects of their chemical products are in charge of determining whether their GM foods are safe. Industry-funded GMO safety studies are too superficial to find most of the potential dangers, and their voluntary consultations with the FDA are widely criticized as a meaningless façade.[3]

GM plants, such as soybean, corn, cottonseed, and canola, have had foreign genes forced into their DNA. The inserted genes come from species, such as bacteria and viruses, which have never been in the human food supply. Genetic engineering transfers genes across natural species barriers. It uses imprecise laboratory techniques that bear no resemblance to natural breeding, and is based on outdated concepts of how genes and cells work.[4] Gene insertion is done either by shooting genes from a "gene gun" into a plate of cells or by using bacteria to invade the cell with foreign DNA. The altered cell is then cloned into a plant.

Widespread, unpredictable changes

The genetic engineering process creates massive collateral damage, causing mutations in hundreds or thousands of locations throughout the plant's DNA.[5] Natural genes can be deleted or permanently turned on or off, and hundreds may change their behavior.[6] Even the inserted gene can be damaged or rearranged,[7] and may create proteins that can trigger allergies or promote disease.

GM foods on the market

There are eight GM food crops. The five major varieties—soy, corn, canola, cotton, and sugar beets—have bacterial genes inserted, which allow the plants to survive an otherwise deadly dose of weed killer. Farmers use considerably more herbicides on these GM crops and so the food has higher herbicide residues. About 68% of GM crops are herbicide tolerant.

The second GM trait is a built-in pesticide, found in GM corn and cotton. A gene from the soil bacterium called Bt (for Bacillus thuringiensis) is inserted into the plant's DNA, where it secretes the insect-killing Bt-toxin in every cell. About 19% of GM crops produce their own pesticide. Another 13% produce a pesticide and are herbicide tolerant. There is also Hawaiian papaya and a small amount of zucchini and yellow crookneck squash, which are engineered to resist a plant virus.

Growing evidence of harm from GMOs

GM soy and allergic reactions

Soy allergies skyrocketed by 50% in the UK, soon after GM soy was introduced.[8]
A skin prick allergy test shows that some people react to GM soy, but not to wild natural soy.[9]
Cooked GM soy contains as much as 7-times the amount of a known soy allergen.[10]
GM soy also contains a new unexpected allergen, not found in wild natural soy.[11]
Bt corn and cotton linked to allergies

The biotech industry claims that Bt-toxin is harmless to humans and mammals because the natural bacteria version has been used as a spray by farmers for years. In reality, hundreds of people exposed to Bt spray had allergic-type symptoms,[12] and mice fed Bt had powerful immune responses[13] and damaged intestines.[14] Moreover, the Bt

in GM crops is designed to be more toxic than the natural spray and is thousands of times more concentrated. Farm workers throughout India are getting the same allergic reactions from handling Bt cotton[15] as those who reacted to Bt spray.[16] Mice[17] and rats[18] fed Bt corn also showed immune responses.

GMOs fail allergy tests

No tests can guarantee that a GMO will not cause allergies. Although the World Health Organization recommends a screening protocol,[19] the GM soy, corn, and papaya in our food supply fail those tests—because their GM proteins have properties of known allergens.[20]

GMOs may make you allergic to non-GM foods

GM soy drastically reduces digestive enzymes in mice.[21] If it also impairs your digestion, you may become sensitive and allergic to a variety of foods.

Mice fed Bt-toxin started having immune reactions to formerly harmless foods.[22]

Mice fed experimental GM peas also started reacting to a range of other foods.[23] (The peas had already passed all the allergy tests normally done before a GMO gets on the market. Only this advanced test, which is never used on the GMOs we eat, revealed that the peas could actually be deadly.)

GMOs and liver problems

Rats fed GM potatoes had smaller, partially atrophied livers.[24]

The livers of rats fed GM canola were 12-16% heavier.[25]

GM soy altered mouse liver cells in ways that suggest a toxic insult.[26] The changes reversed after they switched to non-GM soy.[27]

GMOs, reproductive problems, and infant mortality

More than half the babies of mother rats fed GM soy died within three weeks.[28]

Male rats[29] and mice[30] fed GM soy had changed testicles, including altered young sperm cells in the mice.

The DNA of mouse embryos functioned differently when their parents ate GM soy[31]

The longer mice were fed GM corn, the less babies they had, and the smaller their babies were [32]

Babies of female rats fed GM soy were considerably smaller, and more than half died within three weeks (compared to 10% of the non-GM soy controls).[33]

Female rats fed GM soy showed changes in their ovaries and uterus.

By the third generation, most hamsters fed GM soy were unable to have babies.

Bt crops linked to sterility, disease, and death

Thousands of sheep, buffalo, and goats in India died after grazing on Bt cotton plants after harvest. Others suffered poor health and reproductive problems [34]

Farmers in Europe and Asia say that cows, water buffaloes, chickens, and horses died from eating Bt corn varieties. [35]

About two dozen US farmers report that Bt corn varieties caused widespread sterility in pigs or cows.[36]

Filipinos in at least five villages fell sick when a nearby Bt corn variety was pollinating.[37]

The stomach lining of rats fed GM potatoes showed excessive cell growth, a condition that may lead to cancer. Rats also had damaged organs and immune systems.[38]

Functioning GM genes remain inside you

Unlike safety evaluations for drugs, there are no human clinical trials of GM foods. The only published human feeding experiment revealed that the genetic material inserted into GM soy transfers into bacteria living inside our intestines and continues to function.[39] This means that long after we stop eating GM foods, we may still have their GM proteins produced continuously inside us.

If the antibiotic gene inserted into most GM crops were to transfer, it could create super diseases, resistant to antibiotics.

If the gene that creates Bt-toxin in GM corn were to transfer, it might turn our intestinal bacteria into living pesticide factories.

Animal studies show that DNA in food can travel into organs throughout the body, even into the fetus.[40]

GM food supplement caused deadly epidemic, Which then brought in the multi-billion dollar Anti-Depressants Era

In the 1980s, a contaminated brand of a food supplement called L-tryptophan killed about 100 Americans and caused sickness and disability in another 5,000-10,000 people. The source of contaminants was almost certainly the genetic engineering process used in its production.[41] The disease took years to find and was almost overlooked. It was only identified because the symptoms were unique, acute, and fast-acting. If all three characteristics were not in place, the deadly GM supplement might never have been identified or removed.

If GM foods on the market are causing common diseases or if their effects appear only after long-term exposure, we may not be able to identify the source of the problem for decades, if at all. There is no monitoring of GMO-related illnesses and no long-term animal studies. Heavily invested biotech corporations are gambling with the health of our

nation for their profit.

Help end the genetic engineering of our food supply

When the tipping point of consumer concern about GMOs was achieved in Europe in 1999, within a single week virtually all major food manufacturers committed to remove GM ingredients. The Campaign for Healthier Eating in America is designed to reach a similar tipping point in the US soon.

Our growing network of manufacturers, retailers, healthcare practitioners, organizations, and the media, is informing consumers of the health risks of GMOs and helping them select healthier non-GMO alternatives with our Non-GMO Shopping Guides.

Start buying non-GMO today. Help us stop the genetic engineering of our food supply.

Download your free Non-GMO Shopping Guide or ShopNoGMO iPhone App

The health information featured on this page is excerpted from Genetic Roulette: The Documented Health Risk of Genetically Engineered Foods, by Jeffrey M. Smith. © Copyright 2010. Institute for Responsible Technology.

- [1] See http://www.aaemonline.org/gmopost.html
- [2] See www.biointegrity.org
- [3] See Part 2, Jeffrey M. Smith, Genetic Roulette: The Documented Health Risks of Genetically Engineered Foods, Yes! Books, Fairfield, IA 2007
- [4] See for example 233-236, chart of disproved assumptions, in Jeffrey M. Smith, Genetic Roulette: The Documented Health Risks of Genetically Engineered Foods, Yes! Books, Fairfield, IA 2007
- [5] J. R. Latham, et al., "The Mutational Consequences of Plant Transformation," The Journal of Biomedicine and Biotechnology 2006, Article ID 25376: 1-7; see also Allison Wilson, et. al., "Transformation-induced mutations in transgenic plants: Analysis and biosafety implications," Biotechnology and Genetic Engineering Reviews Vol. 23, December 2006.
- [6] Srivastava, et al, "Pharmacogenomics of the cystic fibrosis transmembrane conductance regulator (CFTR) and the cystic fibrosis drug CPX using genome microarray analysis," Mol Med. 5, no. 11(Nov 1999):753–67.
- the cystic fibrosis drug CPX using genome microarray analysis," Mol Med. 5, no. 11(Nov 1999):753–67. [7] Latham et al, "The Mutational Consequences of Plant Transformation, Journal of Biomedicine and Biotechnology 2006:1-7, article ID 25376, http://www.hindawi.com/journals/jbb/; Draft risk analysis report application A378, Food derived from glyphosate-tolerant sugarbeet line 77 (GTSB77)," ANZFA, March 7, 2001; E. Levine et al., "Molecular Characterization of Insect Protected Corn Line MON 810." Unpublished study submitted to the EPA by Monsanto, EPA MRID No. 436655-01C (1995); Allison Wilson, PhD, Jonathan Latham, PhD, and Ricarda Steinbrecher, PhD, "Genome Scrambling—Myth or Reality? Transformation-Induced Mutations in Transgenic Crop Plants Technical Report—October 2004," www.econexus.info; C. Collonier, G. Berthier, F. Boyer, M. N. Duplan, S. Fernandez, N. Kebdani, A. Kobilinsky, M. Romanuk, Y. Bertheau, "Characterization of commercial GMO inserts: a source of useful material to study genome fluidity," Poster presented at ICPMB: International Congress for Plant Molecular Biology (n °VII), Barcelona, 23-28th June 2003. Poster courtesy of Dr. Gilles-Eric Seralini, Président du Conseil Scientifique du CRII-GEN, www.crii-gen.org; also "Transgenic lines proven unstable" by Mae-Wan Ho, ISIS Report, 23 October 2003, www.i-sis.org.uk
- [8] Mark Townsend, "Why soya is a hidden destroyer," Daily Express, March 12, 1999.
- [9] Hye-Yung Yum, Soo-Young Lee, Kyung-Eun Lee, Myung-Hyun Sohn, Kyu-Earn Kim, "Genetically Modified and Wild Soybeans: An immunologic comparison," Allergy and Asthma Proceedings 26, no. 3 (May–June 2005): 210-216(7).
- [10] A. Pusztai and S. Bardocz, "GMO in animal nutrition: potential benefits and risks," Chapter 17, Biology of Nutrition in Growing Animals, R. Mosenthin, J. Zentek and T. Zebrowska (Eds.) Elsevier, October 2005. [11] Hye-Yung Yum, Soo-Young Lee, Kyung-Eun Lee, Myung-Hyun Sohn, Kyu-Earn Kim, "Genetically Modified and Wild Soybeans: An immunologic comparison," Allergy and Asthma Proceedings 26, no. 3 (May–June 2005): 210-216(7).
- [12] M. Green, et al., "Public health implications of the microbial pesticide Bacillus thuringiensis: An epidemiological study, Oregon, 1985-86," Amer. J. Public Health 80, no. 7(1990): 848–852; and M.A. Noble, P.D. Riben, and G. J. Cook, Microbiological and epidemiological surveillance program to monitor the health effects of Foray 48B BTK spray (Vancouver, B.C.: Ministry of Forests, Province of British Columbi, Sep. 30, 1992)
- [13] Vazquez et al, "Intragastric and intraperitoneal administration of Cry1Ac protoxin from Bacillus thuringiensis induces systemic and mucosal antibody responses in mice," 1897–1912; Vazquez et al, "Characterization of the mucosal and systemic immune response induced by Cry1Ac protein from Bacillus thuringiensis HD 73 in mice," Brazilian Journal of Medical and Biological Research 33 (2000): 147–155; and Vazquez et al, "Bacillus thuringiensis Cry1Ac protoxin is a potent systemic and mucosal adjuvant," Scandanavian Journal of Immunology 49 (1999): 578–584. See also Vazquez-Padron et al., 147 (2000b).
- [14] Nagui H. Fares, Adel K. El-Sayed, "Fine Structural Changes in the Ileum of Mice Fed on Endotoxin Treated Potatoes and Transgenic Potatoes," Natural Toxins 6, no. 6 (1998): 219–233.
- [15] See for example "Bt cotton causing allergic reaction in MP; cattle dead," Bhopal, Nov. 23, 2005
- [16] http://news.webindia123.com Ashish Gupta et. al., "Impact of Bt Cotton on Farmers' Health (in Barwani and Dhar District of Madhya Pradesh)," Investigation Report, Oct–Dec 2005; and M. Green, et al., "Public health

implications of the microbial pesticide Bacillus thuringiensis: An epidemiological study, Oregon, 1985-86," Amer. J. Public Health 80, no. 7(1990): 848–852; and M.A. Noble, P.D. Riben, and G. J. Cook, Microbiological and epidemiological surveillance program to monitor the health effects of Foray 48B BTK spray (Vancouver, B.C.: Ministry of Forests, Province of British Columbi, Sep. 30, 1992)

- [17] Alberto Finamore, et al, "Intestinal and Peripheral Immune Response to MON810 Maize Ingestion in Weaning and Old Mice," J. Agric. Food Chem., 2008, 56 (23), pp 11533–11539, November 14, 2008
- [18] Joël Spiroux de Vendômois, François Roullier, Dominique Cellier and Gilles-Eric Séralini. 2009, A Comparison of the Effects of Three GM Corn Varieties on Mammalian Health . International Journal of Biological Sciences 2009; 5(7):706-726; and Seralini GE, Cellier D, Spiroux de Vendomois J. 2007, New analysis of a rat feeding study with a genetically modified maize reveals signs of hepatorenal toxicity. Arch Environ Contam Toxicol. 2007;52:596-602 [19] FAO-WHO, "Evaluation of Allergenicity of Genetically Modified Foods. Report of a Joint FAO/WHO Expert Consultation on Allergenicity of Foods Derived from Biotechnology," Jan. 22–25, 2001; http://www.fao.org/es/ESN/food/pdf/allergygm.pdf
- [20] Gendel, "The use of amino acid sequence alignments to assess potential allergenicity of proteins used in genetically modified foods," Advances in Food and Nutrition Research 42 (1998), 45–62; G. A. Kleter and A. A. C. M. Peijnenburg, "Screening of transgenic proteins expressed in transgenic food crops for the presence of short amino acid sequences indentical to potential, IgE-binding linear epitopes of allergens," BMC Structural Biology 2 (2002): 8–19; H. P. J. M. Noteborn, "Assessment of the Stability to Digestion and Bioavailability of the LYS Mutant Cry9C Protein from Bacillus thuringiensis serovar tolworthi," Unpublished study submitted to the EPA by AgrEvo, EPA MRID No. 447343-05 (1998); and H. P. J. M. Noteborn et al, "Safety Assessment of the Bacillus thuringiensis Insecticidal Crystal Protein CRYIA(b) Expressed in Transgenic Tomatoes," in Genetically modified foods: safety issues, American Chemical Society Symposium Series 605, eds. K.H. Engel et al., (Washington, DC, 1995): 134–47.
- [21] M. Malatesta, M. Biggiogera, E. Manuali, M. B. L. Rocchi, B. Baldelli, G. Gazzanelli, "Fine Structural Analyses of Pancreatic Acinar Cell Nuclei from Mice Fed on GM Soybean," Eur J Histochem 47 (2003): 385–388.
- [22] Vazquez et al, "Bacillus thuringiensis Cry1Ac protoxin is a potent systemic and mucosal adjuvant," Scandanavian Journal of Immunology 49 (1999): 578–584. See also Vazquez-Padron et al., 147 (2000b).
- [23] V. E. Prescott, et al, "Transgenic Expression of Bean r-Amylase Inhibitor in Peas Results in Altered Structure and Immunogenicity," Journal of Agricultural Food Chemistry (2005): 53.
- [24] Arpad Pusztai, "Can science give us the tools for recognizing possible health risks of GM food," Nutrition and Health, 2002, Vol 16 Pp 73-84
- [25] Comments to ANZFA about Applications A346, A362 and A363 from the Food Legislation and Regulation Advisory Group (FLRAG) of the Public Health Association of Australia (PHAA) on behalf of the PHAA, "Food produced from glyphosate-tolerant canola line GT73," http://www.iher.org.au/
- [26] M. Malatesta, C. Caporaloni, S. Gavaudan, M. B. Rocchi, S. Serafini, C. Tiberi, G. Gazzanelli, "Ultrastructural Morphometrical and Immunocytochemical Analyses of Hepatocyte Nuclei from Mice Fed on Genetically Modified Soybean," Cell Struct Funct. 27 (2002): 173–180.
- [27] M. Malatesta, C. Tiberi, B. Baldelli, S. Battistelli, E. Manuali, M. Biggiogera, "Reversibility of Hepatocyte Nuclear Modifications in Mice Fed on Genetically Modified Soybean," Eur J Histochem, 49 (2005): 237-242.
- [28] I.V. Ermakova, "Diet with the Soya Modified by Gene EPSPS CP4 Leads to Anxiety and Aggression in Rats," 14th European Congress of Psychiatry. Nice, France, March 4-8, 2006; "Genetically modified soy affects posterity: Results of Russian scientists' studies," REGNUM, October 12, 2005; http://www.regnum.ru/english/526651.html; Irina Ermakova, "Genetically modified soy leads to the decrease of weight and high mortality of rat pups of the first generation. Preliminary studies," Ecosinform 1 (2006): 4–9.
- [29] Irina Ermakova, "Éxperimental Evidence of GMÓ Hazards," Presentation at Scientists for a GM Free Europe, EU Parliament, Brussels, June 12, 2007
- [30] L. Vecchio et al, "Ultrastructural Analysis of Testes from Mice Fed on Genetically Modified Soybean," European Journal of Histochemistry 48, no. 4 (Oct–Dec 2004):449–454.
- [31] Oliveri et al., "Temporary Depression of Transcription in Mouse Pre-implantion Embryos from Mice Fed on Genetically Modified Soybean," 48th Symposium of the Society for Histochemistry, Lake Maggiore (Italy), September 7–10. 2006.
- [32] Alberta Velimirov and Claudia Binter, "Biological effects of transgenic maize NK603xMON810 fed in long term reproduction studies in mice," Forschungsberichte der Sektion IV, Band 3/2008
- [33] I.V. Ermakova, "Diet with the Soya Modified by Gene EPSPS CP4 Leads to Anxiety and Aggression in Rats," 14th European Congress of Psychiatry. Nice, France, March 4-8, 2006; "Genetically modified soy affects posterity: Results of Russian scientists' studies," REGNUM, October 12, 2005; http://www.regnum.ru/english/526651.html; Irina Ermakova, "Genetically modified soy leads to the decrease of weight and high mortality of rat pups of the first generation. Preliminary studies," Ecosinform 1 (2006): 4–9.
- [34] "Mortality in Sheep Flocks after Grazing on Bt Cotton Fields—Warangal District, Andhra Pradesh" Report of the Preliminary Assessment, April 2006, http://gmwatch.org/latest-listing/1-news-items/6416-mortality-in-sheep-flocks-after-grazing-on-bt-cotton-fields-warangal-district-andhra-pradesh-2942006
- [35] Mae-Wan Ho, "GM Ban Long Overdue, Dozens III & Five Deaths in the Philippines," ISIS Press Release, June

- 2, 2006; and Mae-Wan Ho and Sam Burcher, "Cows Ate GM Maize & Died," ISIS Press Release, January 13, 2004, http://www.isis.org.uk/CAGMMAD.php
- [36] Personal communication with Jerry Rosman and other farmers, 2006; also reported widely in the farm press. [37] See for example Mae-Wan Ho, "GM Ban Long Overdue, Dozens III & Five Deaths in the Philippines," ISIS Press Release, June 2, 2006; "Study Result Not Final, Proof Bt Corn Harmful to Farmers," BusinessWorld, 02 Mar 2004; and "Genetically Modified Crops and Illness Linked," Manila Bulletin, 04 Mar 2004.
- [38] Arpad Pusztai, "Can science give us the tools for recognizing possible health risks of GM food," Nutrition and Health, 2002, Vol 16 Pp 73-84; Stanley W. B. Ewen and Arpad Pusztai, "Effect of diets containing genetically modified potatoes expressing Galanthus nivalis lectin on rat small intestine," Lancet, 1999 Oct 16; 354 (9187): 1353-4; and Arpad Pusztai, "Facts Behind the GM Pea Controversy: Epigenetics, Transgenic Plants & Risk Assessment," Proceedings of the Conference, December 1st 2005 (Frankfurtam Main, Germany: Literaturhaus, 2005)
- [39] Netherwood et al, "Assessing the survival of transgenic plant DNA in the human gastrointestinal tract," Nature Biotechnology 22 (2004): 2.
- [40] Ricarda A. Steinbrecher and Jonathan R. Latham, "Horizontal gene transfer from GM crops to unrelated organisms," GM Science Review Meeting of the Royal Society of Edinburgh on "GM Gene Flow: Scale and Consequences for Agriculture and the Environment," January 27, 2003; Traavik and Heinemann, Genetic Engineering and Omitted Health Research; citing Schubbert, et al, "Ingested foreign (phage M13) DNA survives transiently in the gastrointestinal tract and enters the bloodstream of mice," Mol Gen Genet. 242, no. 5 (1994): 495– 504; Schubbert et al, "Foreign (M13) DNA ingested by mice reaches peripheral leukocytes, spleen, and liver via the intestinal wall mucosa and can be covalently linked to mouse DNA," Proc Natl Acad Sci USA 94, no. 3 (1997): 961-6; Schubbert et al, "On the fate of orally ingested foreign DNA in mice: chromosomal association and placental transmission to the fetus," Mol Gen Genet. 259, no. 6 (1998): 569-76; Hohlweg and Doerfler, "On the fate of plants or other foreign genes upon the uptake in food or after intramuscular injection in mice," Mol Genet Genomics 265 (2001): 225–233; Palka-Santani, et al., "The gastrointestinal tract as the portal of entry for foreign macromolecules: fate of DNA and proteins," Mol Gen Genomics 270 (2003): 201-215; Einspanier, et al, "The fate of forage plant DNA in farm animals; a collaborative case-study investigating cattle and chicken fed recombinant plant material," Eur Food Res Technol 212 (2001): 129-134; Klotz, et al, "Degradation and possible carry over of feed DNA monitored in pigs and poultry," Eur Food Res Technol 214 (2002): 271-275; Forsman, et al. "Uptake of amplifiable fragments of retrotransposon DNA from the human alimentary tract," Mol Gen Genomics 270 (2003): 362-368; Chen, et al, "Transfection of mEpo gene to intestinal epithelium in vivo mediated by oral delivery of chitosan-DNA nanoparticles." World Journal of Gastroenterology 10. no 1(2004): 112–116; Phipps, et al. "Detection of transgenic and endogenous plant DNA in rumen fluid, duodenal digesta, milk, blood, and feces of lactating dairy cows," J Dairy Sci. 86, no. 12 (2003): 4070-8.
- [41] William E. Crist, Toxic L-tryptophan: Shedding Light on a Mysterious Epidemic; and Jeffrey M. Smith, Seeds of Deception, Yes! Books, Fairfield, IA 2003, chapter 4, Deadly Epidemic
- 2.) KILLING OFF ALL OUR ANIMALS IN OUR FOOD CHAIN WITH CORN, SOY AND COTTONSEED FEEDS = MALNUTRITION RESULTING IN OFFSPRING AND GENETIC LINEAGE WEAKENING AND MEATS WITH SUB-OPTIMAL NUTRIENT LEVELS! THE IMPLEMENTATION OF ALL PATENTED GMO MEATS, SALMON AND ALL PTHER MEATS TO FOLLOW!

GMO CORN, SOY AND COTTONSEED FEEDS CAUSES ANIMAL ILLNESSES, DISEASES AND INFERTILITY

3.) KILLING OUR PETS - WITH GRAIN AND SOY PET FOODS - NOT PART OF THEIR EVOLUTIONARY DIETS EVER! - MAKING THEM SICK - ANTI-NUTRIENTS, TRYP/PROTEASE - INH PHYTATES - MORE BIG PROFITS FOR BIG-AGRA AND BIG PHARMA - GRAIN COMMODITIES SKYROCKET - VETS TO SELL MORE PET DRUGS!

GMO CORN, SOY AND GRAINS IN PET FOODS CAUSES ANIMAL ILLNESSES, DISEASES AND INFERTILITY Pet food provides a convenient way for slaughterhouse offal, grains ... The "95% Rule" applies when the ingredient (s) derived from animals, poultry, or fish believe that ethoxyquin is a major cause of disease, skin problems, and infertility in dogs, ... ingredient of cattle feed; soy and corn are used directly in many pet foods.

This is true for humans as well as our companion animals. The commercial pet food industry would have us believe that food is largely about ... Like corn and wheat, soy is a less expensive, inferior source of protein often used in ... Foods such as soy that cause goiter are therefore referred to as goitrogenic.

Corn can cause cystitis---bladder inflammation—in cats, even epilepsy in dogs ... The high cereal content in pet foods contributes to dogs and cats developing stones ... corn and soy were being used in pet foods and fed to farmed animals and I ... inflammatory bowel disease, colitis, recurrent diarrhea, vomiting, indigestion, ...

Three Simple Strategies to Optimize Your Pet's Health ... How Genetically Engineered Corn and Soy Can Wreak Havoc on Your Health ... fatter quicker and retained the weight compared to animals fed a non-GE grain diet. ... Scientists speculate that it may lead to autoimmune diseases and food allergies.

Chances are you are feeding a **pet food** which contains more than one of the ... Foods **pet food** recall, which **caused** a countless numbers of companion **animals** to ... of Acana **Dog Food** confirm that utilizing **grains** in **pet food** is used more as a ... an estimated 89% of **soy** and 61% of **corn** crops are **genetically engineered** [2].

What's In Your Dog Food?

Proponents say grains aren't part of a cat or dog's natural diet. (in the wild), and that these carb sources are contributing to obesity, disease and immune ... cause acute lethal illness and cancer in animals and humans, and are among the most ... since the 90s, our corn, soy, cottonseed and canola in the U.S. are now 90%.

Carnivores were never designed to obtain the majority of their energy requirements from carbohydrates. In fact dogs, cats and ferrets have zero nutritional requirements for carbohydrates or grains. Veterinary text books agree upon this.

Yet the mass of pet foods on the market regularly consist of 50% or higher carbohydrate content.

Eons of evolution have designed carnivores to obtain energy from amino acids (protein) and fatty acids, fat from prey animals through the process of gluconeogenesis.

Other than simple economics there is no reason to challenge the eons of evolution nature has put into place when it comes to feeding carnivores like dogs, cats & ferrets.

Our animals are what they eat. And we want healthy, vibrant animals. So we pay attention to what we feed them. Lately there have been so many pet food recalls that we have to pay more than the usual attention. Here are a few of the big issues, in a nutshell:

- 1.) Grain-free diets. Proponents say grains aren't part of a cat or dog's natural diet (in the wild), and that these carb sources are contributing to obesity, disease and immune system/allergy issues in our animals. I spoke to 3 salesmen at a recent trade show, guys who were featuring these foods at their booths, who all thought grain-free pet food was a ridiculous fad.
- 2.) Aflatoxin concentrations. Aflatoxins, produced by a fungus in plants, cause acute lethal illness and cancer in animals and humans, and are among the most carcinogenic substances on earth. Aflatoxins poison the liver, and their carcinogenic properties can lead to tumor formation. Last year's drought conditions resulted in dangerously high concentrations of aflatoxins in grain crops, especially corn. Tons of pet foods had to be rejected by inspectors or recalled from the shelves. Keep an eye out for more of this in 2013 as the drought continues in some areas.
- 3.) Genetically modified/engineered food. Banned by the entire European Union since the 90s, our corn, soy, cottonseed and canola in the U.S. are now 90% genetically modified (GM). This is not an extension of normal hybridizing or plant improvement; it involves taking genetic material from animals and other sources and splicing it into a plant's DNA. Sometimes, they are introducing a pesticide directly into the plant genetics, so that bugs eating that plant will die. So what happens when we, or our animals, eat those plants? Initial research is very disturbing; researchers are seeing significant problems with fertility, reproduction, lactation, digestion and life expectancy. The worst news is that in the U.S. there is no requirement that GM/GE foods be labeled as such, though we certainly have a right to know this before we buy. If a food is labeled 'organic', it will not contain GM/GE ingredients. You can also look for the official label of the Non-GMO Project.
- 4.) Dangerous by-products. In many cases the rendered meat used in pet foods came from condemned animals that had already decayed or that were euthanized, thus giving your pet small doses of the lethal euthanizing drug Pentobarbital every time they chow down on their feed. Not to mention the body bags, microchips, dog collars and everything else thrown in with them.

MONSANTO PATENTS ON TRYPTOPHAN GENE SEQUENCING

Monsanto's patent rights over glyphosate tolerant plants. The judges argued that a **patented DNA sequence** which is presently incapable of performing the function for which it was **patented** is not **... phenylalanine**, **tryptophan** and **tyrosine**.

Monsanto's patented genes. For some activists, the the plant to be able to produce tryptophan; thus the ... sequenced arabidopsis, which is a model.

Monsanto, **Calgene** und einigen anderen Firmen ... Title: Plant elongation factor, promoters, coding **sequences** and uses Specials: Change of **tryptophan** content of a plant .

L-**Tryptophan** is an amino acid, one of the building blocks of proteins. ... diseases through recombination of the vector **sequences** with **DNA** from known court by biotech seed company **Monsanto** for using their **patented** Roundup Ready.

In 2008, **Monsanto** plans to sell a genetically modified maize variety with high ... While **gene sequences**, genetically modified organisms, and methods ... **tryptophan** content of at least about one-tenth milligram per gram dry seed.

DNA sequencing analyses of the MON 89788 insert confirm the expected coding region of the cp4 epsps United States **Patent** 6,660,911. Harrison ... http://www.soymeals.org/**pdf**/processing3.**pdf**. **Tryptophan** (% DW).

Safety Assessment Summary of Genuity Roundup Ready 2Yield MON 89788 Soybean

Ongoing developments in biotechnology and molecular-assisted breeding have enabled Monsanto to develop a second-generation glyphosate-tolerant soybean product: GenuityTM Roundup Ready 2 Yield® or MON 89788 soybean (OECD Unique ID: MON– 89788–1). Similar to the first generation product Roundup Ready® soybean, MON 89788 soybean will continue to provide growers with flexibility, simplicity, and cost effective weed control options. However, MON 89788 soybean and varieties containing the trait have the added potential to enhance yield and thereby further benefit farmers and the soybean industry. In 1996, Roundup Ready soybean was the first soybean product containing a biotechnology trait to be commercialized in the U.S. Roundup Ready soybean was produced by incorporation of the cp4 epsps coding sequence derived from the common soil bacterium Agrobacterium sp. strain CP4. The cp4 epsps coding sequence directs the production of the 5-enolpyruvyl shikimate-3-phosphate synthase (termed CP4 EPSPS) that is much less sensitive to glyphosate inhibition than endogenous plant EPSPS. The CP4 EPSPS renders Roundup Ready soybean tolerant to glyphosate, which is the active ingredient in Roundup agricultural herbicides. The utilization of Roundup agricultural herbicides plus Roundup Ready soybean, collectively referred to as the Roundup Ready Soybean System (RRSS), has provided significant convenience in weed control, encouraged the use of conservation-tillage, and provided substantial positive economic benefits to farmers.

MON 89788 soybean was developed by introduction of the cp4 epsps gene cassette containing a promoter that has been used in other crops such as Roundup Ready Flex cotton (Fincher et al., 2003). In addition, the transformation was based on a new technique of Agro-bacterium-mediated gene delivery to soybean meristem, where cells were induced directly to form shoots and give rise to plants (Martinell et al., 2002). This new technique allowed direct transformation of the gene cassette into elite soybean germplasm such as the Asgrow soybean variety A3244 (Paschal, 1997), which is known for its superior agronomic characteristics and high yielding properties (Tylka and Marett, 1999). Using elite germplasm as the base genetics, the superior agronomic characteristic of the A3244 soybean can be introgressed to other soybean varieties through crosses with MON 89788 soybean containing the cp4 epsps cassette. In general, MON 89788 soybean has been found to have a 4 to 7% yield advantage compared to 40-3-2 soybeans, in the same genetic background, while maintaining the weed control and crop safety benefits of the Roundup Ready Soybean System. As a result, MON 89788 soybean will be an excellent agronomic base trait for future breeding improvements and multi-trait products.