HUNTINGDON LIFE SCIENCES UNMASKED

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Q: What does unleaded gasoline, Botox, grapes, parfum, preservative, soy fiber, food additives and paraffin wax have in common?

A: They were all tested on animals inside Huntingdon Life Sciences.

HLS' animal experiments revealed ...

The following pages detail HLS' atrocious testing of products on animals. The information has been gathered from previously unseen research papers, which were anonymously sent to the campaign at the start of 2011.

While these documents may be new, their content certainly is not. HLS pride themselves on testing anything they are paid to test; this has included Splenda coffee sweetener, mushrooms, cleaning chemicals, caramel food colouring, fermented vegetables, and starch - all of which resulted in the deaths of all animals involved.

All of the products HLS tested in these latest documents have already been tested on animals in previous years, are already circulating on the market, and used routinely by humans on a daily basis. Despite this, thousands of animals have been poisoned and killed inside HLS to pass a product as 'safe', using a method of testing that HLS themselves admit cannot even be applied to humans (see experiments 2 and 11). Some of the substances shown in the following experiment summaries have been tested repeatedly on animals at HLS, regardless of the fact that their effect on animals is already well documented (see experiment 10, for example). Many of the products which have been forced down the throats of animals are in actual fact used mainly in cosmetics - despite the fact that cosmetic testing is meant to be banned in the UK.

These documents are more proof of the sheer lunacy of the kinds of animal experiments that are allowed to continue inside places like Huntingdon Life Sciences - experiments which must end.

This document also unmasks previously unknown customers who are contracting experiments, some of which are the ones detailed here, inside HLS. Their details can be found on page 11; please write to them to protest at their involvement in such useless and cruel experiments.





HUNTINGDON LIFE SCIENCES

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Experiment 1: HLS pump unleaded gas into the lungs of over 70 pregnant rats

- Year and place: 2001, HLS New Jersey (USA)
- Product tested: Unleaded gasoline
- Product description

The product tested is the widely used unleaded gasoline (petrol). Gasoline has already been tested in rats, rabbits, guinea pigs plus many other animals, and is used globally on a regular basis.

• Experimental procedure

A group of over 80 female Sprague Dawley rats were shipped into HLS, New Jersey, and impregnated using male rats. Aside from short-term mating arrangements, the rats were kept individually in stainless steel cages with wire mesh floors. In total, 72 rats were impregnated and started the experiment. Once the rats were six days into their pregnancies, they were forced into tubes for six hours daily for a total of just under two weeks. They were denied access to food or water. During this time, vaporised unleaded gasoline was pumped into the tubes, forcing the pregnant rats to inhale it for the entire six hours straight. After the 12-days of exposure to the gasoline, the rats were killed and sliced open to have their semi-formed babies and organs examined.

The experiment found that there was no detrimental effect on the mother rats or the fetuses, thus allegedly deeming unleaded gasoline safe for humans to inhale. However, HLS stated in another experiment that rats are not a suitable toxicological model for humans – yet this does not seem to matter anymore. Conveniently, the study was financed by the American Petroleum Institute.

- Experiment source: 'Developmental toxicity evaluation of unleaded gasoline vapor in the rat', Reproductive Toxicology 15 (2001) 487–494
- Company who contracted HLS: American Petroleum Institute (API)

Experiment 2: HLS test naturally-occuring fragrance 'coumarin' on rats, only to summarise the use of rats in toxicity testing is not relevant to humans

- Year and place: 2001, HLS Cambridge (UK)
- Product tested: Coumarin
- Product description

Coumarin was previously used as an added flavouring ingredient, but occurs naturally in roots, bark, stems, leaves and fruits of some plants. It's most popular use is as a scent in perfumes, cosmetics and products such as soap and detergents. Coumarin is already widely used by the public in food, cosmetics and hygiene products. It has already gone through repeated animal and human tests and been on the market for many years.

• Experimental procedure

Six to eight week old rats were shipped into HLS and kept in stainless steel cages. A portion of the fur on their backs was shaved off in order to expose their bare skin for the testing procedure. Coumarin, at a concentration of 70% mixed with an alcohol solution, was squeezed onto the skin of the rats. They were then wrapped in



aluminium foil and left for differing periods of time, between 30 minutes and five days (120 hours). After an allotted amount of time, rats were killed by researchers breaking their necks. Their bodies were then gutted of all organs for examination.

The experiment then also went on to use human volunteers to gain a more accurate insight into the effect of externally-applied coumarin on the body. Somewhat unsurprisingly however, the human volunteers gained different results compared to

In summary, the rat is a very poor model for humans, and toxicity in the rat cannot be extrapolated to humans.

- HLS, Food & Chemical Toxicology 2001

the rats, causing the animal part of the study to produce contradictory results to the human part. HLS summarised their experiment by admitting the inadequacy of their own type of experiments, pointing out that rats are a "very poor model" in human toxicity testing, and that "toxicity in the rat cannot be extrapolated to humans". Considering HLS conduct the majority of their toxicity tests on rats, either alone or as part of wider experiments using a second species, this is an extremely profound statement to be publishing in their own research papers. It provides an ideal example of animal researchers simply picking and choosing when to accept and when to ignore the results from animal experiments.

- Experiment Source: 'The in vivo dermal absorption and metabolism of [4-14C] coumarin by rats and by human volunteers under simulated conditions of use in fragrances', Food and Chemical Toxicology 39 (2001) 153 162
- Company who contracted HLS: Not available

Experiment 3: HLS test a herbal dietary supplement made from grape seed and grape skin extract on over 200 rats

- Year and place: 2002, HLS New Jersey (USA)
- Product tested: MegaNatural grape seed & grape skin extract supplement pills
- Product description

It goes without saying that humans have consumed grapes, including grape skin and seeds, for many thousands of years. Yet HLS were happy to test these substances on vast numbers of rats on behalf of "natural" supplement company, MegaNatural.

• Experimental procedure

After delivery of over 200 rats, they were assigned to five different groups, each of which contained 20 males and 20 females. Each rat had a metal tag pierced into their ears in order to make them identifiable, and were housed individually in wire mesh cages for the duration of the experimental period. High concentrations of Meganatural's grape seed and grape skin supplements were then added to their diets, and they were checked for any signs of negative effects. After four weeks, the rats were starved overnight and had blood taken the next day. After 96 days of being forced to eat huge doses of Meganatural's herbal supplement, the animals were gassed to death using carbon dioxide and had their organs weighed and examined for detrimental effects.



Unsurprisingly, the grape seed and grape skin was not found to be dangerous, even at high levels of dosage. Thus, the experiment was concluded as "results of the current study strongly support the safety of GSE and GSKE as dietary components for human consumption."

- Experiment Source: 'Subchronic 3 month oral toxicity study of grape seed and grape skin extracts', Food and Chemical Toxicology 40 (2002) 1731–1743
- Company who contracted HLS: MegaNatural

Experiment 4: HLS test PCBs banned since 1979 on Rhesus primates



- Year and place: 2002, HLS New Jersey (USA)
- Product tested: Polychlorinated Biphenyls (PCBs) / Aroclor 1260
- Product description

PCBs are primarily chemical compounds used in capacitors, coolants, dielectric fluids and electrical components. PCB production was banned in the US in 1979 due to severe toxicity – but despite this, HLS were still testing it on primates in 2002. In this study, the form of PCB tested was known as Aroclor 1260 – which is the specific type of PCB used by Monsanto Corporation.

• Experimental procedure

16 young adult female rhesus monkeys were shipped from Covance to HLS. Once ready to begin the experiment, four groups each containing four monkeys were formed. The PCB, in this case Aroclor 1260, was administered

to some groups of monkeys by direct injection into their bodies. The other groups were 'lightly anesthetized', had their fur shaven off and the contaminated PCB soil strapped to their bodies in order to make contact with their skin. They were then fitted with jackets to stop them tearing off the attached soil samples. Once the experiment was complete, and observations had been made, the monkeys were returned to the laboratory colony to be tested in future experiments.

The experiment was based on one previously conducted in 1993, which was almost identical in procedure except for the space allotted to the primates involved and soil type used. PCBs have been repeatedly and extensively tested already and are banned from production in the US due to them being extremely toxic.



• Experiment Source: 'Dermal Absorption in Rhesus Monkeys of Polychlorinated Biphenyls from Soil Contaminated with Aroclor 1260', Regulatory Toxicology and Pharmacology 35, 289–295 (2002)

Company who contracted HLS: Monsanto / General Electric Corporate Research

Experiment 5: HLS test anti-wrinkle and muscular treatment, Botox, on rats and rabbits

- Year and place: 2003, HLS Cambridge (UK)
- Product tested: Botulinum neurotoxin (Botox)
- Product description

Botox can either be used as a cosmetic to minimise the sight of wrinkles, or as means of reducing muscle spasms and other muscular problems. Botox remains a controversial substance due to it being routinely tested on animals, despite more commonly being used as a cosmetic. Due to it's dual-use for both clinical and cosmetic requirements, laboratories use a loophole in which they can test the Botox on animals under the pretense of clinical use, when the Botox is later used for cosmetic purposes. Cosmetic testing on animals is illegal in the UK.

• Experimental procedure

This experiment was funded by Allergan, a large manufacturer of Botox, primarily as a



cosmetic for wrinkle-reduction. In the experiment, two groups of 10 week old rats (24 per group) were injected with varying concentrations of Botox. Two groups of six rabbits were injected with the substance into their eyelids. The rats were observed and consequently killed by carbon dioxide gassing. The rabbits were also killed, and all animals were examined to see if there had been any effect.

In the experiment, 48 ten-week-old rats were injected with Botox. 12 rabbits were then injected with the Botox substance directly into their eyelids.

The experiment concluded that there had been no negative toxic effects to the muscle. The aim of the experiment was also to observe whether the Botox substance spread from the site of injection to other parts of the body; particularly in the case of the rabbits, where the injection was in the eyelid. The conclusion was that "most" of the Botox does not travel from the original site of the injection.

- Experiment Source: 'Intramuscular injection of 125I botulinum neurotoxin complex versus 125I botulinumfree neurotoxin time course of tissue distribution', Toxicon 42 (2003) 461–469
- Company who contracted HLS: Allergan Inc

Experiment 6: HLS test naturally-occuring fragrance 'coumarin' on rats and mice - again - before making them bleed to death

- Year and place: 2003, HLS Cambridge (UK)
- Product tested: Coumarin
- Product description

Coumarin was tested by HLS in 2001 (see the previous coumarin experiment on page 3 for full product information). It is a naturally occurring scent derived from plants that is added into perfumes, toiletries and cleaning products.

• Experimental procedure

Despite having already tested this substance at least once themselves, and the fact that the effects of coumarin



have been investigated for the past 40 years, HLS have been testing it on mice and rats in more unnecessary tests. In the first part of the study, rats and baby mice were shipped into HLS, some from the US. Once acclimatised, mice were force fed the coumarin by oral gavage – inserting a tube down the throat and pouring substances directly to the stomach. Other groups of mice were given high doses of coumarin in their diet. At set intervals after consuming the product, they were killed by a method known as "exsanguination" - which means they were deliberately made to bleed to death.

Coumarin has been tested on animals for the past 40 years and has been consumed by humans for thousands.

During the second part of the study, rats were also force fed high doses of the coumarin substance via oral gavage. These rats had previously been operated upon to have

cannulas pre-inserted into their jugular veins so that blood could be withdrawn from them at regular intervals. At the end of the experiment, the results of tumor development and toxicity seemed to differ from the many other studies of the same substance, to which HLS researchers claimed was due to their administration of the drug using oral gavage, which was the actual cause of health problems, as opposed to the actual substance they were testing.

- Experiment Source: 'Comparative metabolism and kinetics of coumarin in mice and rats', Food and Chemical Toxicology 41 (2003) 247–258
- Company who contracted HLS: Not available

Experiment 7: HLS test food additive, polyvinyl alcohol (PVA), on rats and mice

- Year and place: 2003, HLS New Jersey (USA)
- Product tested: Polyvinyl Alcohol (PVA)
- Product description

PVA has a variety of uses; first, it can be used for the coating used for around pharmaceutical and dietary supplement pills. Second, it is used in cosmetics as a binder or film former. Furthermore, it is used as a food additive, and is often used as colourant for the shells of eggs.

• Experimental procedure

PVA has been used for many years, and is described as regularly consumed globally with a "long history of safe use". Despite this, HLS felt it was acceptable to test the substance on 160 rats and an unknown number of mice. At 6 weeks old, the rats were assigned to four different groups. Each of these groups were then fed PVA in varying concentrations for a minimum time of 3 months. After this time, all 160 rats were killed and dissected.

No negative effects of consuming PVA were found in the rats.



PVA has a long history of safe use in a number of products on a global basis ... PVA is used in coating pharmaceutical products and dietary supplement products, in cosmetics [and] ... for use as an indirect food additive.

- HLS, Food & Chemical Toxicology 2003

In the second part of the experiment, HLS then tested the substance on mice. The mice were force fed the test substance at varying concentrations using the oral gavage method. After more than 2 months, the mice that had not already died were killed. HLS admitted that a blunder by staff who took too much blood accidentally killed two of the mice: "Two males administered 5000 mg/kg/day of PVA died following the month 1 and month 2 blood collection due to a technical error. The mortality occurred due to an excessive blood volume that was drawn."

• Experiment Source: 'Subchronic toxicity study in rats and genotoxicity tests with polyvinyl alcohol', Food and Chemical Toxicology 41 (2003) 719–727

Company who contracted HLS: colorcon

Experiment 8: HLS test food additive, polyvinyl alcohol (PVA) on 200 pregnant rats

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- Year and place: 2003, HLS New Jersey (USA) Product tested: Polyvinyl Alcohol (PVA)
- Product description

PVA has already been tested at HLS in the same year. It is used as a food additive and has various other purposes. See the previous experiment (page 8) for a more detailed product description.

• Experimental procedure

After an initial experiment involving the deaths of 160 rats and an unknown number of mice (see page 7), HLS then went on to test the exact same substance, PVA, on pregnant rats. 224 rats were shipped into HLS, where they were evaluated, and 208 chosen for experimentation. The females were then impregnated and some groups were given diets which included varying concentrations of PVA. Rats who did not fall pregnant were killed at 26 days after mating. The others, including the babies, were killed by either carbon dioxide overdosing or use of other drugs. Unsurprisingly, having already tested this substance and knowing that it has been consumed by humans for many, many years, the conclusion of the experiment was that PVA is "safe for human consumption".

- Experiment Source: 'Effects of polyvinyl alcohol administered in the diet to rats on fertility, early embryonic development, growth and development', Food and Chemical Toxicology 41 (2003) 729–737
- Company who contracted HLS: colorcon

Experiment 9: HLS test soybean fiber on 176 rats

- Year and place: 2003, HLS New Jersey (USA) Product tested: Soluble soybean fiber
- Product description

Soluble soybean fiber is indeed exactly as it sounds – the powdered fiber of soya beans. It is a type of food, and has been consumed for many thousands of years.

• Experimental procedure

In this astonishing experiment, where a regular food eaten by people globally on a daily basis, rats were used to test a product we all already know to be totally fit for human consumption. 176 rats were shipped into HLS at 4 weeks old and began the experiment shortly after. Varying concentrations of soybean fiber were added to the rats' diets, and notes were made regarding their weight and general appearance. After a set period of time, all animals were killed. The rats were starved overnight, and the following day, they were anesthetized with carbon dioxide before being bled to death. Of course, there were no adverse effects in the rats from the consumption of soy fiber and the experiment was concluded as such.

- Experiment Source: 'Soluble soybean fiber a 3 month dietary toxicity study in rats', Food and Chemical Toxicology 41 (2003) 1111–1121
- Company who contracted HLS: Fuji Oil Company Ltd

Experiment 10: HLS test a food preservative (LAE) on rats and rabbits

- Year and place: 2004, HLS Cambridge (UK)
- Product tested: N-a-Lauroyl-I-arginine ethyl ester monohydrochloride (LAE)
- Product description

LAE is produced synthetically and is being developed as a preservative for food.

• Experimental procedure

LAE has been tested on animals at HLS alone in at least 14 experiments, ranging from subjecting pregnant rats



to the substance, to forcing tubes down rabbit's throats to pump LAE solution into their stomachs. The previous experiments date from as far back as 1995 and can already demonstrate the effect of this food preservative in animals.

In one study, HLS force-fed groups of rats with varying doses of the LAE food preservative. After 13 weeks, all animals were killed and stripped of their organs to see any possible effects.

LAE has been tested at HLS in more than 14 experiments, each one involving the deaths of hundreds of animals. All for the sake of a food preservative which we do not require.

HLS later did more experiments for the testing of LAE. This time, they impregnated rats and rabbits, and used oral gavage to pour the LAE substance into the animals stomachs. After timed observations, all animals were killed and their unborn babies cut open for examination. The experiment looked at a number of animal experiments and found that LAE has no detrimental effect upon the animals health, which researchers choose to presume means it is safe for human consumption.

• Experiment Source: 'Toxicological and metabolic investigations of the safety of N-[alpha]-Lauroyl— arginine ethyl ester monohydrochloride (LAE)', Food and Chemical Toxicology 42 (2004) 245–259

Company who contracted HLS: Not available

Experiment 11: HLS test paraffin wax on animals

- Year and place: 2010, HLS New Jersey (USA)
- Product tested: Paraffin wax (a mineral hydrocarbon MHC)
- Product description

Highly refined mineral hydrocarbon (MHC) products (white oils and petroleum waxes) are widely used in foods, food packaging, cosmetics and pharmaceutical products.

• Experimental procedure

Historically, the safe use of these products for human consumption has been supported by a number of subchronic and chronic feeding studies in dogs and various rat strains. However, rather typically for animal experimentation, other studies performed on animals have given differing results, throwing all of the previous studies into question. HLS presumed they could answer the question of whether paraffin wax is a dangerous substance, by conducting yet more animal studies.

Two different species of rats were given the paraffin wax as a substance within their regular laboratory diet. The rats were made to eat paraffin wax for either 30, 60 or 90 days before being killed and dissected. The study

These results add to the evidence from other studies that the dietary effects of MHCs [such as paraffin wax] in the F-344 rat are of questionable relevance for human safety evaluation.

- HLS, Food & Chemical Toxicology 2010

concluded by pointing out that previous studies cannot be relied upon in terms of evaluating if paraffin wax is safe for humans due to the large discrepancies between different breeds of rats used. In short, some other animal studies are in fact "of questionable relevance for human safety".

• Experiment Source: 'Comparative 90 day dietary study of paraffin wax in Fischer 344 and Sprague Dawley rats', Food and Chemical Toxicology 48 (2010) 363–372

Company who contracted HLS: Amertican Petroleum Institute

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> Section Two: CUSTOMERS UNMASKED

The Customers who pay for experiments inside HLS:

Many of the below customers are the ones who have directly financed the experiments you have just been reading. These companies were previously unknown HLS customers who thought they could secretly fund animal experiments for products like petrol, grapes, powdered soybean and botox. Please write to their global headquarters and tell them to stop funding needless experiments at Europe's most exposed animal testing laboratory:

• Bausch & Lomb One Bausch & Lomb Place Rochester, NY 14604-2701, USA Tel: +1 (800) 323-0000 Web: www.bausch.com

• MegaNatural Polyphenolics 12667 Road 24 Madera, CA 93639 Tel: 559-661-5556 Web: www.meganaturalbp.com

Colorcon Inc.
Colorcon, Inc.
275 Ruth Road
Harleysville, PA 19438, USA
Tel: 215-256-7700
Web: www.colorcon.com

• American Petroleum Institute (API) 1220 L Street, NW Washington, DC 20005-4070, USA Tel: 202-682-8000 Web: www.api.org

• Family Health Intl 2224 E NC Hwy 54 Durham, NC 27713 USA Tel: 191-954-47040 Web: www.fhi.org

• Allergan, Inc 2525 Dupont Drive Irvine, CA 92612 **Tel:** (714) 246-4500 **Web:** www.allergan.com

LAMIRSA Labs Géminis, 4 Polig. Ind. Can Parellada 08228 Terrassa (Barcelona) Spain Tel: (+34) 93 731 50 94 Web: www.lamirsa.com

• FujiOil Company Ltd

FujiOil Company Limited Hannan Business Operations Complex, 1 Sumiyoshi-cho, Izumisano-shi, Osaka 598-8540, Japan **Tel:** 81-72-463-1511 **Web:** www.fujioil.co.jp

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66 There is no way in the world to extrapolate animals to human circumstance. Animal research is cruel to the animal, dangerous to the public and misleading to the scientist.

– Dr G Dettman







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