

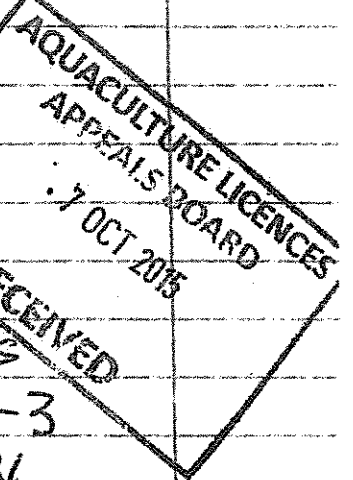
AP2/3/2015

MR JOHN BRENDAN O'KEEFFE

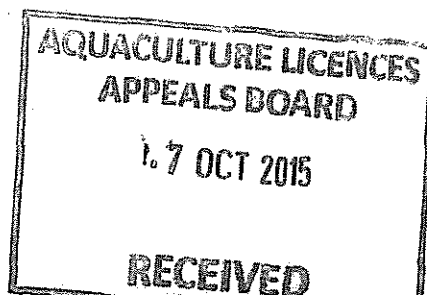
APPEAL

CONTENTS OF PARCEL.

- (1) NOTICE OF APPEAL + CHECKS 22B, 53E
- (2) SUMMARY
- (3) THE GRANTING OF A SALMON
- (4) COLLATERAL DAMAGE
- (5) DEAR PEOPLE 2012
- (6) ~~PICTURE MARINE HARVEST~~
WELL BOAT DUMPING
- (7) ~~PUB MED~~ CHANGING RATIOS
OF OMEGA-6 TO OMEGA-3
- (8) PCBs: INADEQUATE MARGIN
- (9) A GROWING NUMBER OF STUDIES LINK
- (10) MERCURY MINE "QUARRY"
- (11) POLYCYCLIC AROMATIC
- (12) CONSUMPTION ADVISORIES EPA
- (13) LINK TO VICTORIA WHITE'S
IS THERE SOMETHING FISHY
- (14) PAGE FROM "OUR DAILY POISON"
34 CHEMICAL RESIDUES IN "SALMON"
- (15) "INFLAMMATION NATION" BOOK
- (16) CD "OUR DAILY POISON RUBIN
- (17) "OUR STOLEN FUTURE" BOOK - COLBORN
- (18) THE GMO TRILOGY (3) CDs
- (19) SEEDS OF DECEPTION BOOK - SMITH
- (20) INTERESTING (AA) ARACHIDONIC ACID
- (21) GILL DISEASE IN MARINE FARMED ATLANTICS
- (22) MODELLING THE SPREAD OF ISA, AFDRI
- (23) WORLD FOOD SUPPLY GRAPH
- (24) 5. FARMED SALMON CANCER PIC
- (25) PAGE 90-91 INFLAMMATION NATION
- (26) HEALTH RISKS ASSOC. WITH CONSUMING
FARMED RAISE SALMON PCTE.



①



**NOTICE OF APPEAL UNDER SECTION 40(1) OF
FISHERIES (AMENDMENT) ACT 1997 (NO. 23)**

Name and address of appellant: JOHN BRENDAN O'KEEFFE

Telephone: [REDACTED] Fax: [REDACTED]
Mobile Tel: [REDACTED] E-mail address: [REDACTED]

Subject matter of the appeal:

AQUACULTURE LICENCE GRANTED AT
SHOT HEAD, BANTRY BAY, TRAFRASK, ADRIGOLE, CO. PORK.

Site Reference Number:-

(as allocated by the Department of Agriculture, Food and the Marine)

75/555

Appellant's particular interest
in the outcome of the appeal:

TO DENY OR REVERSE THE LICENCE ON
GROUND OF FOOD AND HEALTH ISSUES

Outline the grounds of appeal (and, if necessary,
on additional page(s) give full grounds of the
appeal and the reasons, considerations and
arguments on which they are based):

DOCUMENTS EXPLAINING
HEALTH ISSUES AND THE
HARM TO THE ENVIRONMENT AND THE HEALTH
AND SAFETY OF THE PUBLIC. EXHIBITS
AND REFERENCES.

Fee enclosed: 2 CHECKS TOTAL € 228.55.

(payable to the Aquaculture Licences Appeals Board in accordance with the Aquaculture
Licensing Appeals (Fees) Regulations, 1998 (S.I. No. 449 of 1998))(See Note 2)

Signed by appellant:

John Brendan O'Keefe

Date:

02/10/15

Note 1: This notice should be completed under each heading and duly signed by the appellant and be
accompanied by such documents, particulars or information relating to the appeal as the appellant considers
necessary or appropriate and specifies in the Notice.

Note 2: The fees payable are as follows:

Appeal by licence applicant

Appeal by any other individual or organisation

Request for an Oral Hearing (fee payable in addition to appeal fee)

In the event that the Board decides not to hold an Oral Hearing the fee will not be refunded.

€380.92

€152.37

€76.18

228.55

15/555

SUMMARY

(2)

Shot Head: A popular tourist destination. German Walking Tours increasing visit Shot Head over the past fifteen years. Their rout takes them right along the cliffs overlooking the new salmon farm at Shot Head. Cognitive dissonance between governmental departments, Agriculture, Tourism, Wildlife etc. is blatantly evident.

Farmed salmon is a toxic, dangerous and synthetic food and the cost-benefit to the environment, food safety, and our National reputation is prohibitive.

- a. FS's macro and microbiological metabolism is corrupted by "CAFO" feeding. Prof. Chilton.
- b. FS has up to 34 toxic chemical residues, the combined effects of which have been ignored by IFSA, EFSA, EPA and FDA. M.M. Robin-Our Daily Poison, T. Colborn-Our Stolen Future.
- c. FS is fed GE-GMO food which permeates all genomes through HGT, horizontal gene transfer. This food could make all other Aquaculture unmarketable, seaweed, shell fish etc. and have an imponderable effect on wild fish. This food will endanger any living species with a DNA-RNA structure.

Farmed salmon is Unsustainable. The amount of wild fish need to sustain one lb. of FS is approximately, 5 lbs. of wild fish for the meal and 8 lbs of wild fish for the oil required.

Countries and large swaths of the planet are going GE-GMO free. Markets are dropping because of GE-GMO food, i.e. the Canadian canola market, Monsanto's profits down 34% etc.

The Location of the proposed salmon farm is not visible from my house. I would have to walk 1/4ml to see the salmon farm. This is strictly a Public Health is in this appeal.

Signed:

Prof. Brendan O'Keefe

The granting of a salmon farming licence at Shot Head, Adrigole is the last nail in the coffin of our environment, food and health safety and the Democratic rights we have left.

BIM, a government agency, is applying for its own licence for a mega salmon farm in Galway Bay while it lobbies the government to give a licence to a multi-national company, Marine Harvest at Shot Head, in a location it declared or helped declare, unsuitable in 2009.

Marine Institute produced two studies on Irish seafood, Contaminants and Residues in Irish seafood; 2004-2008., Chemical Residues in Irish Finn Fish; 2011. Drawing conclusions from a study where one (n-1) wild natural salmon was compared to ninety one (n-91) Farmed Salmon (FH) does not constitute science. Suggesting that the benefit of the omega-3's in fish out way the harmful consequences of Persistent Organic Pollutants is morally, ethically and legally wrong. Laws to prevent this slippery slope are written into the laws of many global jurisdictions. From the conclusions in these studies, summaries and an advertisement, with chefs for props, and a garnished salmon, the study can only be considered promotional at best. These studies did not provide warning that these Persistent Organic Pollutants accumulate in the consumer over a lifetime and have an additive effect. When you combine all the POPs you get more than an additive effect in scientific language $20+20=60$. And more sinister is the scientific phenomenon, the non-monotonic effect, whereby these pollutants can be more dangerous at lower levels, in a u-shaped rather than the usually accepted linear effect as in "the dose determines the poison (Theo Coburn; Our stolen Future, exhibit enclosed). Like-wise the "acceptable daily intake", ADI, referred to as the EU Recommendation are totally arbitrary as is MRL, "maximum residues limits" and constantly changing, usually upwards to accommodate the rising level of pollution, (Maria Monique Robin; Our Daily Poison, CD exhibit enclosed). Some jurisdictions have banned Norwegian farmed salmon due to new pollutants, cadmium and lead, which the MI studies likewise uncovered in Irish seafood. The Norwegian government then prevailed on the European authorities for a higher MRL. Endosulphan was another toxin the Norwegians were interested in increasing.

Location.

Shot Head is located right on the mouth of the small estuary leading to the Dromagoulawn River. This river was known for its wild salmon, sea trout and pearl mussel and should be still known for such even to a lesser extent. Any public person found disturbing or endangering the pearl mussel is subject to a substantial fine (jail time in the UK). The EIS performed on this site-location at Shot Head failed to recognise the existence of this river, least of all its environmental significance.

The residents of Roosk, Trafrask, Adrigole and tourists use Shot Head for subsistence fishing. Local pot fisher boats and fishing boats from as far away as Bantry and Castletownbear fish there on a daily basis. There is a mandatory waiting washout period for farmed salmon following chemical treatment of FS at farms, who will enforce this regulation on fish caught in the farm vicinity during medicine treatment time as the medicines are mixed with the food and are consumed by wild fish around the cages? Definitely not Shellfish De La Mer, the frequent recipient of this oversized catch.

(Signature)

Will we have "no fishing" signs for tourists and local subsistence fisher people? Will the boats observe a "no-go" sign?

2

The existing Marine Harvest salmon farm at Raoncarrig and now Shot Head are in close proximity to Castletownbear harbour. The engineer's report on work in that harbour indicated the level of tBt in the silt was such that it had to be set in concrete and shipped to Germany. The second layer of silt was turned down by two West Cork recycling centres. Then it was taken out to sea and dumped near Bull Island (dumped at sea is hear-say or reliable source). Maine Institute has been asked for reports of testing done specifically on the salmon from Raoncarrig salmon farm, to no avail.

Local land owners around Shot Head have kindly and in the spirit of tourism, allowed walkers to walk the Shot Head area. This area is frequented mostly by German tourists, guided by a local walking tour operator, and on a regular basis throughout the year. What a fine "Gazebo" they will have to look at, if they continue to come there.

Shot Head is approximately equal distant from Castletownbear, Glengarriff and Bantry. Only Bantry has a sewage treatment plant with the old plant still in operation to dump the overload, untreated, as the new plant is insufficient (2013) All the sewage from the population surrounding Bantry Bay and Shot head flows into the bay, 26Km long and 6Km wide, with the current predominately towards the closed end. The average size salmon farm generates sewage of nitrogen-phosphate equivalent of 30-40,000 people, in salmon food and faeces.

The 2009 Marine Institute and BIM report that declared Shot Head an unsuitable site in 2009, will be added here when, available. The Shot head site was considered too exposed in 2009, and rightly so, the storm of the winter of 2014 ripped the land of parts of Shot Head, land that had been used for potato gardens and grazing for generations.

Shot Head is one of the locations where the Marine Harvest "Well Boat" dumps its load. The load is water in which the diseased fish has been washed with possible added chemicals. Building a fish farm, reported to be "organic" is not appropriate in a dumping area, as this water can be considered "sewage". Due to lack of transparency and information we do not know how much and how often it contains toxic and banned chemicals. Drawing the water and dumping has continued twice a day frequently for four years. The symbolism of the picture attached, showing the Marine Harvest Well Boat dumping its waste, extends far beyond the licencing of a salmon farm at Shot Head.

Food safety.

The food safety issue is vast but scientifically clear. A farmed salmon is unmarketable. Put paint on it and viola you have "the lady of the evening meal". "Beef or Salmon" mam? Better not be salmon on the evening of conception or at a critical point during gestation of her baby in the womb. Timing is everything when it comes to hormone disruption, foetal abnormality and birth defects. The European Food Safety Authority, disagreed in their recommendations to girls of child bearing age, on

whether to avoid Farmed Salmon for six or twelve months, prior to conceiving. Another "no-go" area?

3

Firstly, separate the chemical contaminants, residues and pollutants from the corrupted biology of the farmed salmon, the corrupted biology caused by feeding a salmon unsuitable food and confining it to a cramped area where each salmon has an average space of a small bathtub makes it unsuitable for human consumption. Feeding farmed salmon unsuitable food, collision and stress, pushes an inflammatory cytokine, arachidonic acid (AA), to toxic levels. This phenomenon is potentiated by the "Salmon Paradox". The farmed salmon produces copious amounts of AA from corn and soya as its metabolism is set up to process algae. Humans do not have this problem unless they eat a 4oz helping of farmed salmon which can have 1,300-2,000mgs of AA. This level of AA causes the blood cells in the arteries to become sticky and increases the chances of a heart attack. "Salmon or steak, Sir?" could turn "the painted lady" into a widow maker. A helping of steak may have 20-30mgs of AA, yes two-0 to three-0mgs. Ref: Inflammation Nation, pages 75-99; Floyd H. Chilton, Ph.D. with Laura Tucker (book included in exhibit). Professor Chilton has extended his warning since that publication. He has said "I can no longer stand by while cardiologists continue to recommend the "Inflammation Blue Plate Special" to someone with heart disease and already elevated levels of inflammation". Even though Prof. Chilton points out that it would be unethical to test FS in humans in a scientifically significant frequency, these tests can now be done in a few months, ethically, in humans by looking at the human genome, or with Itamar-100 PAT, again, ethically, in humans after a few meals of farmed salmon. The coveted fish oil, omega-3. EPA and DHA are now available in purified form in Dr's prescription and Health and Organic food stores, enabling people to avoid the unacceptable risk-benefit of eating FS.

Of the POPs, PCBs and mercury have attracted the most criticism. Irish farmed having the highest PCB levels in the world according to EWG. See graphs in exhibit. Dr. Coborn describes in her book "Our Stolen Future" (book exhibit) how PCBs and Mercury has entered our food chain and travelled to the Inuit's food chain with catastrophic consequences. These POPs are endocrine disrupters causing gender alteration and confusion, neurological damage, foetal abnormalities and even diabetes and obesity.

Non Substantial Equivalence.

Comparing a natural salmon to a farmed or organically farmed salmon shows little equivalency in nutritional and metabolic value. The toxic chemical profile of FS compared to a natural salmon is little equivalent and seriously dangerous. There are thirty four chemical residues in farmed salmon according to M.M. Robin's research (CD-exhibit). These chemicals are stored in fatty tissue, FS have double the space to store these chemicals compared to natural salmon, and the fish oil fed to FS is a product of other fish's fat and loaded, concentrated with POPs. See att.

Nutritional and metabolic values. FS. 100-200 iu of vit-D, Natural 600 to 800 iu vit-D. Fat in FS is nearly double that of Natural wild salmon. Protein in FS is approx. half the amount in Natural. Omega-3, EPA, DHA is significantly less in FS compared to Natural, a hotly debated topic due to disruption of the enzyme necessary to convert omega-3 to EPA-DHA in farmed salmon. Astrazanthin,

MBW

one of the most beneficial and plentiful (krill) anti-oxidant on the planet is totally absent from FS or organic FS, leaving the FS a pasty grey colour before a petrochemical based, synthetic dye is added.

This lack of "equivalency" calls for toxicological testing of FSs, in keeping with international standards applied to other foods that have been altered substantially from their natural state.

4

The adding of chemicals other than and macro and micro nutrients to FS and organic FS, such as canthrazantin and chemicals in the form of medicines that persist in the fat of FSs, despite the hundred day wash out i.e. Endosulphan, makes the FS a candidates for toxicology testing for food safety before releasing to the public.

Precautionary Principle. Genetically Engineered Food, a Game Changer.

Ireland voted to allow GE-GMO corn into Europe in 1999, due to US pressure on the Irish Government, ironically during the Irish St. Patrick's day visit to the US. See; Genetic Concern, "US multinationals have more influence than Irish electorate"

What we know and what we do not know here again is confounded by "trade secrets" and lack of transparency in our system. Having had several visits to the Dept. of Agr. Food and Marine in 2012 were unhelpful. We sat opposite Mr John A Kelly who gave us little oral information and refused to arrange for us to look at certain documents and discouraged us from going to the Freedom of Information office as most of the information was "trade secrets". The experience was discourteous and condescending. Questions such as who permitted the use of water from the water table within a mile of our bored wells, for use in the well-boat to wash diseased fish? As we are outside the public water supply we need to draw possibly from the same water table. Likewise was the water tested for contaminants? When I asked the Co. engineer he told me "I looked and it looked fine to me". Was there a permit to dump the water in the ocean and at what location? What chemicals were in the sewage water being dumped? We pointed out to him that they were swimming schools on beaches adjacent to these dumping areas and existing salmon farms.

What we do know is that practically all animal foods for cattle and poultry in Ireland contain GE-GMO corn, soya and others. Winter Plus 3500 is an Aquaculture food used by Maine Harvest globally and the company that owns Winter Plus has a patent on Genetically Engineered corn.

We do know the toxins from GE-GMO food travel into the micro biome of the consuming animal and through the gut lining into the muscle tissue. Variable amounts may not be destroyed by the acid in the stomach or in cooking.

HGT or Horizontal Genetic Transfer is the mechanism by which the GE-GMOed, mutated, corrupted DNA, RNA and sometimes the miss-folded proteins are transferred from plant to animal to man, short-circuiting hundreds of thousands of years of adaption. Let us not ponder the consequences of the children at these swimming schools inadvertently swallowing some of the food that can often drift for miles from the salmon farms.

afw

Most of illnesses caused by GE-GMO products meld in with the prevalence of chronic diseases such as Cancer, Rheumatoid arthritis, Autoimmune disease, Alzheimer's disease, Chron's and Ulcerative colitis. Few let a footprint like Thalidomide and L-Tryptophan, L-Tryptophan caused Eosinophilic Myocitis Syndrome that killed one hundred and crippled thousands. Luckily L Tryptophan was genetically engineered by one company amongst many who produced it conventionally; otherwise it would continue to kill, under the radar. The conventionally produced L-Tryptophan was without problems.

5

Many other genetically engineered products that were found to be harmful in short and less than optimal testing went to market none the less. One such GE-corn StarLink was found to be harmful but could not be retrieved and is still out there among the other corn varieties.

Jobs, the final solution.

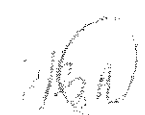
There is little demand for the vacancies in the local salmon farms in Bantry Bay. These jobs are minimum wage, temporary and dangerous. Farm hands are often worked from 8am-10am and dismissed and brought back again to resume work in a few hours to keep their hours worked in line with temp-hours.. Divers at salmon farms in Bantry Bay have reportable been solo-diving.

As already stated, the essential fatty acids found in fish are best obtained in a purified, extracted form. The global market for fish oil is upward of 5-Billion Euros. Extracting fish oil for human consumption is high tech and creates quality employment. The fish have to be processed at port for quality product to avoid spoiling. By-catch and discards in Irish waters can reach 3-5 million tons per year some estimates are higher. Fish oil producing companies who run their own fishing fleet can make 1,000 euros profit- plus per ton of whole fish. This is not low hanging fruit but it is quality employment which would give an enormous boost to the economy. We submitted this plan in more detail to the "Harnessing our Ocean Wealth" project. BIM personnel are already involved in fish oil production but not for human consumption. Norway and Peru are leaders in this field. Purity and Ethics go hand in hand, as in one Peruvian fish oil Co., all employees take an Oath of Ethics.

What Did We Know. What Do We Know and When Did We Know.

Some of the people and groups of people referred to in this appeal are unaware of the science and the consequences and dangers of that lack of awareness. Our Ethical responsibility now rest with a realisation "What Did We Know, and When Did We Know" and what we did within our intrusted power to rectifying the danger and safety issues. The weight of evidence in this appeal would at least call for Legislated "Precautionary Principle" to be applied.

I, John Brendan O'Keeffe the under signed swear that the material contained in this appeal is accurate and correct to the best of my efforts and knowledge.



Signed: John Brendan O'Keeffe, M.D. CCD. FAARFM. 02/10/2015

John Brendan O'Keeffe 02/10/15

TS/555

4

1

Co-lateral Damage.

The Dust Bowl of GE-GMO Seeds.

Spreading the Dung of the Devil

Minister Coveney's handing of an Aquaculture Licence to Oligarch, John Fredriksen and Multi-national Company, Marine Harvest has implications far more sinister than the pollutions dumped on the voiceless people of the Shot Head area. We have been further marginalized in Mr. Coveney's EIS referring to our location adjacent to the proposed site as "deserted" and fails to mention one of the larger rivers, the Dromagoulawn River, that flows into the estuary at the salmon farm site at Shot Head. As a rural area it could be considered densely populated.

Irish Farmers are feeding their stock GE-GMO altered food, corn and soya. Poultry Breeders are feeding GE-GMO altered food, corn and soya, to the poultry we are eating and to the hens they are selling us. Vegetable Farmers are spraying GE-GMO altered pesticides on the vegetables that are GE-GMO altered to withstand the pesticides, Round-up Ready, all of which we are consuming. Some of this GE-GMO is engineered to withstand heat and acid, acid stronger than the acid in our stomachs and sometimes heat higher than we use for cooking.

Chardon LL. A GE-GMO altered corn was approved in UK in 2004, it killed the chickens on which it was tested, and it was still released for sale. The shelves are full of GE-GMO altered products that failed to pass safety tests and were still released for consumption. How did it come to this, well just ask Minister Coveney, just ask the IFSA, just ask the EUFSA, Yes "A" stands for Authority. Just read Colborn's "Our Stolen Future", Jeffrey M. Smith's "Seeds of Deception" Prof Floyd Chilton, "Inflammation Nation", hard copies of which are included with this appeal. Down load on to any reading device Stephen Drucker's "Altered Genes, Twisted Truth" and you will be led along the trail, frequented by politicians and "Authorities" intrusted to safeguard our health. Reading publications published in low impact journals or in self-published documents, with tax payer's money will not enlighten us. The above material has exhaustive lists of references to scientifically conducted science, peer reviewed and published in the leading scientific Journals, Lancet-BMJ-NEJM etc. and material found in pre-trial discoveries.

Tax payer's money has been spent over the past few decades, determining the appropriate distance between salmon farms and rivers, the 20-30Km recommendation has been ignored. Can we now begin studying how far salmon farms should be from seaweed farms, mussel farms and oyster farms to prevent contamination caused by the GE-GMO food and waste that is waterborne from salmon farms? Our great prospect of seaweed cultivation is in jeopardy. There are GE-GMO free zones presently being established in vast areas all over the globe. These zones are being spear headed not by scientist and food safety authorities, allergies, but by medical doctors and medical personnel, who are on the front line, dealing with proliferation of GE-GMO related diseases, allergies, cancer, neurological and reproductive diseases. The world renown and prolific scientific researcher, Prof Ted Dinan, UCC, has highlighted the significant rise in Psychiatric and intestinal diseases, which he has attributed to disruption of the bacteria in our gut. To quote other scientists we are turning our gut into a pesticide factory by consuming GE-GMO food. Ireland, being an Island nation is in an ideal position to adopt a GE-GMO free system. A GE-GMO free tourist destination?

John C. Dinan
UCC

TS/555

WRITTEN IN 2012

(5)

Dear People.

As you know Marine Harvest has announced development of Salmon Farm by Shot Head. Your heritage and your livelihood are at stake. God knows a lot has been taken already. So much for good Governance and Guardianship.

The biggest problem is sewage. Average size Salmon Farm [SF] generates sewage equivalent to 10-20,000 people. Nitrogen, phosphates, bacteria, antibiotics, antifungals, red dye, lead, copper fowling, mercury, PCBs, in levels higher than could be possible from land in the area. The tax payer will be left with the cost of the destruction, just another "Bail-out" for big business. This sewage will contaminate the lobster, crab and scallop, which are plentiful at Shot Head. Equal amounts of these contaminants are found in fish within 150 meters and decreasing amounts thereafter.

Local fishing boats have an average of three crew aboard each fishing boat. Who will compensate these fishermen when their catch is contaminated, or wiped out? Such wipe-outs caused by fish farms are familiar to fishermen all around the Irish coast, Scotland, Chile, British Columbia and the eastern Canadian shore. They are also familiar to Irish Ag and Marine Dept and BIM who regulate and monitor these projects. Environmental Study on this farm was done by Watermark and Neil Bass for Marine Harvest, a major Conflict of Interest. Google "Nitrates and Nonsense watermark Bass" a cartoon in the power point displays a cavalier attitude to the environment.

Next would be the distortion of the nutrition value of the Salmon as compared with Wild Salmon. Fat and Omega-3 are distorted in Farmed Salmon. Reversing the ratio of the Omega-3 to Omega-6 negates the food value of fish. Prof Chilton has done years of research with NIH grants in his lab at Wake Forrest on this issue. If you don't have time to read his book "Inflammation Nation" he says the decrease of Omega-3, the increase of Omega6 and Arachidonic Acid [AA] which he found in farmed salmon, indicated that it would be unethical to test farmed salmon in humans. The production of cytokines, reduction of Omega-3, increased Omega-6, he goes on to say, increases the risk of Arthritis, Heart Disease, Strokes and Cancer. He shows that other farmed fish such as rainbow trout have a healthy increase in these medicinal compounds. "Global assessment of organic contaminants in farmed salmon" Science 2004 PubMed, Scientists tested 2 metric tons of farmed and wild salmon and stated "Risk analysis indicates that consumption of farmed Atlantic salmon may pose health risks that detract from the beneficial effects of fish consumption. If you Google "The Salmon Paradox you'll note I assumed Joan's dinner was farmed salmon, not wild" you will understand this paradox.

Promoting farmed salmon, as a source of omega-3 to expectant mothers, or as a good source of omega-3 [DHA-EPA] would be criminal. Mothers to be can more reliably obtain this essential nutrient from responsibly purified fish oil found in the Health Food stores. Lack of this essential fatty acid can cause premature births, mental retardation and is now being investigated in the pathophysiology of Autism. The much touted [by Fish Industry] European Nutrition Study used the purified form of omega-3 in their studies.

Further health issues arise in regards to fish feed. As it takes 3-4 lbs of wild fish feed to produce 1 lb of FS. The FS industry is looking for a more economical feed. Corn and soya are being used in some areas and may be produced in countries that allow Genetically Modified [GM] seed. Only the bravest of Scientists have published what they know about GM food [Search www.mercola.com on Roundup and GMO] and they have coined the word "Frankenfood". I will not address the new GM salmon which they want to farm. It grows to 30+ lbs in 12 months. They still have some work to do to prevent it from reproducing in the event of an escape. The US Congress had hearings on this issue. It had a lot of support. "Escapes" of FS are aggressive and attack wild salmon and other large fish. The Bald Eagle and other birds get killed diving into the open pens. Seals get trapped and die or are shot.

Continuing on about the health aspects of other additives to the feed. FS have a grey colored flesh until a Red Dye is added to the feed. This dye causes crystals in the eyes of humans. Crystals are reversible if the Dye is removed before it causes blindness. Antibiotics, Tetracycline, Ciprofloxin, Antifungals used regularly with FS linger in the fish flesh. This is considered one of the sources MRSA i.e. bacterial resistance caused by antibiotics in the food chain.

Native fish in the area can be diminished or totally wiped out. Sea Lice from SFs can kill up to 90% of Smolt migration out to sea, so no traditional return of the famed egg-laden salmon. Young salmon scale is not developed enough to protect the Smolt from the lice. The lice eat the Smolt's skin off and it bleeds to death. Interestingly Marine Harvest's web site says its salmon does not spread sea lice because the original eggs, seed or Smolt did not have lice when introduced to the farms? Norwegian studies have shown 12 miles to be the minimal ideal distance between salmon farms to prevent viral and lice spread. Their own studies are now recommending more than 20 mls. Cuan Baoi salmon farm is 4 miles or less and Roanarraig salmon farm is 6 mls approx from Marine Harvest proposed site.

Mussel farms in this area will be exposed to toxins produced by bacteria from SFs. Toxins not destroyed by cooking can be lethal to humans. Fish that swim near mussel farms are not harmed in any way. Fish that swim by SFs ingest the feed containing chemicals, parasites and dye. A local fisherman told me they have caught mackerel near a SF that had red dye in its meat. Harmful Bloom can develop from the high nitrates and phosphates released from SF's which in turn cuts off the oxygen supply and results in fish kills. Infective Salmon Anemia (ISA) wiped out Chilean SFs. ISA virus has been compared to Swine Flu H5N1 and Avian Flu. ISA virus could mutate and be transmitted to humans.

Environmentally, Shot Head is a Special Area of Conservation [SAC]. Shot Head maybe the only place in Bantry Bay that you find the rare Black Pollock, steeped in local folklore it can only be caught in December. I have met line fishermen from the Continent who spend weeks in local guest houses to fish specifically in that area. Jerry Murphy a "Grand Old Man of the Sea" rowed to this area from Glengarriff - 8 miles- to fish for scallop. He put his children through top class educational facilities and on to prestigious professions with that bounty. The family now have thriving business in Glengarriff. Presently there are fishing boats potting in Shot Head Area. Each boat has two to three people on board indicating good employment. We cannot jeopardize the fishermen's heritage with minimum wage jobs.

Boats heading back in high winds to Adrigole, Castletownbere and Bere Island tack closer to Shot Head to avoid the open sea and when they reach Adrigole harbor they then have shelter from Bere Island to get around the next head. Yachts in high winds will have difficulty avoiding these acres of nets. Fish pens strung across this area could result in human tragedy. Large ships anchor in that specific area to wait for suitable weather to be guided to Whiddy and inner Bantry Bay. These ships slip their anchors and shift location in high winds. Are the Harbor Master, Life Boat and the Whiddy Island Oil Terminal politically independent and secure to afford comment on this danger?

In regards to much needed employment in the area we can look at wages, working conditions and experience from other areas where Marine Harvest set up SFs. Chile, British Columbia, Vancouver, Nova Scotia, other parts of Canada and Norway. Accidents, deaths, safety violations, fines, workers rights and fair pay violations abound. Chilean SF workers got \$200-300 a month in wages. The Canadian Parliament is about to legislate laws to Govern SFs. Five 8hr days a week, holidays, workman's injury law and medical insurance coverage, to prevent this "race to the bottom".

We do not think the Irish Government has the time or the money to police this open pen farming. The area in question can be 30-70 meters deep, making the sea bed difficult to monitor. Closed ~~water~~ farms are now in operation in Canada and China and proving economical and totally environmentally friendly farms. The vacated Fleming-Tarmac quarry in Adrigole is a possible site for such, a 4-6 acre lake where a mountain once existed. Take the "discards" from the Trawlers in Castletownbere and filter extract omega-3, natural vitamin D3, and Astaxanthin locally. The quality is determined by the freshness of the fish. The state of the art in this multi billion euro business is not to ship it in tanks but in a UV protected bottle. See standards for purified fish oil.

Jobs ! Jobs ! Jobs! Let's equate in the jobs lost in Tourism when the environment is harmed or obstructed. Jobs lost in the local fishing industry. Jobs lost when visitors no longer come to line fish. Jobs lost when visitors find out the truth about the ingredients and health risks of the "Organic" salmon we are serving in our gourmet restaurants. There are four houses looking right over this proposed site. The Murphy, Cody, O'Sullivan and Crowley families have renovated these homes. Sometimes they are occupied by family, sometimes by guests. I have met people from Great Britain, the Continent and US who had come to stay in those houses. The EIS referred to this area as deserted. If this salmon farm goes ahead these families will be cheated. Their sense of place corrupted.

Dyed...Dosed...Doused and Domiciled. Dyed with synthetic coloring agent presently made from petroleum, otherwise farmed salmon would be pasty white. Dosed with antibiotics, antifungal chemicals and vaccinated when necessary against ISA. Doused frequently with anti parasitics, to delouse (fleas). Domiciled in cages, non-free range. Despite all this it is labeled Organic and carries the Irish Green Logo, as a guarantee of Excellence. All somewhat contrary to Irish Standards for the Organic Label?

The greatest economic loss to the peninsula is the Wild Salmon that in our life time teamed through its estuaries and rivers. Wild Salmon has 600 IUs of Vit D3 per 6 ozs, 60 IUs in farmed salmon. Wild salmon

has significant amount of omega-3 compared to farmed salmon and 80% less of harmful omega-6 than farmed. The natural Astaxanthin propels the salmon against currents and over high rapids, this is replaced with synthetic dye, cantrazanthin, synthetic astaxanthin etc., put in farmed salmon feed. Google these three compounds with athletic performance, muscle spindles, fracture reduction, cancer prevention, Alzheimers, strokes and heart attacks. The new feeding formulas have not corrected this problem due to the unique metabolism of the salmon. Repeating a mistake and expecting a different result does not make scientific sense.

Submitted to John A Kelly,
Aqua Culture and Farming
Sea Food Center
Dept. of Agriculture, Food and Marine
Clonakilty, Co Cork

Aquaculture Licence Appeals Board
Kilminchy Portlaois
Co Laois

Yours respectfully
John Brendan O'Keeffe

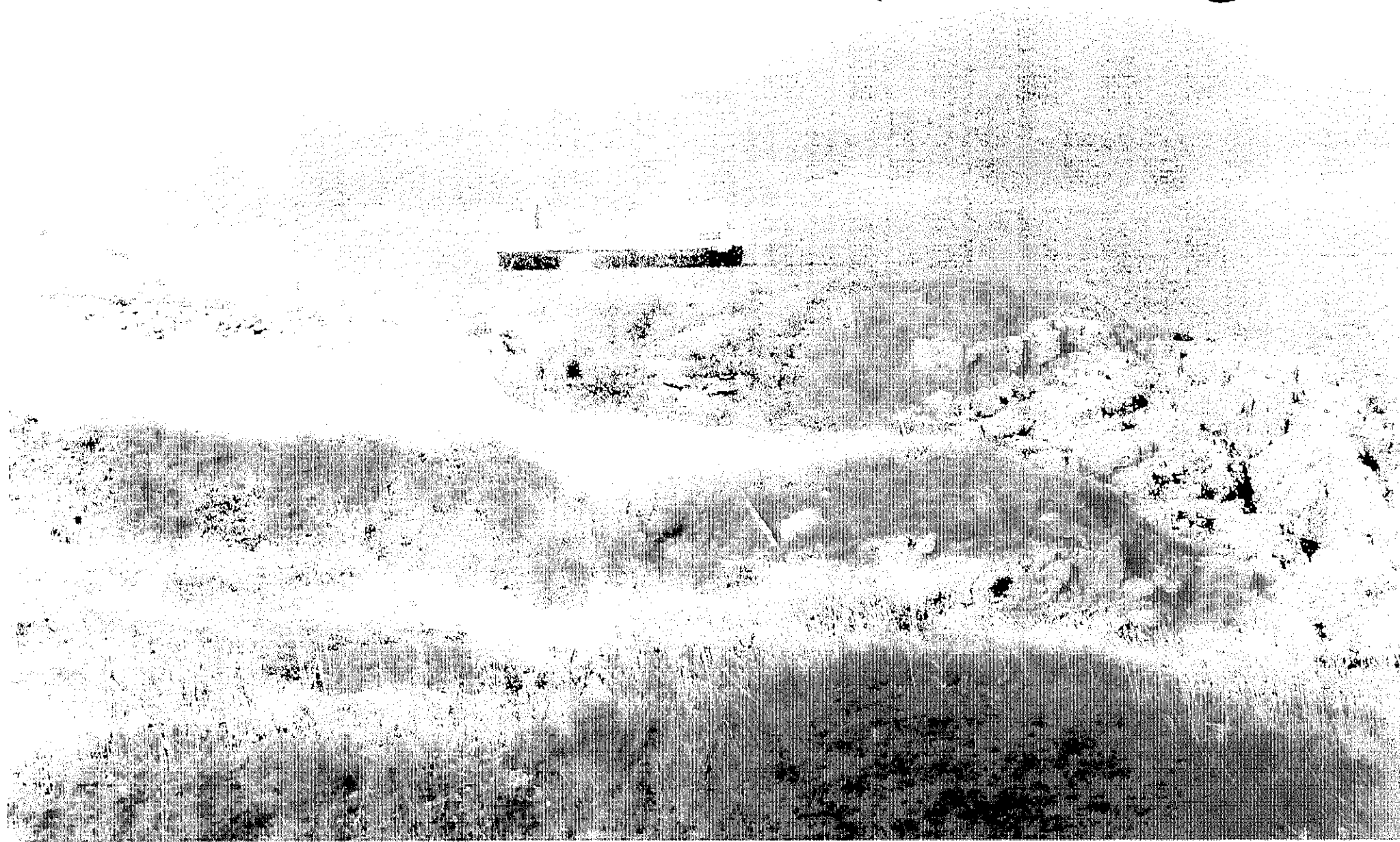
~~REDACTED~~
~~REDACTED~~
~~REDACTED~~

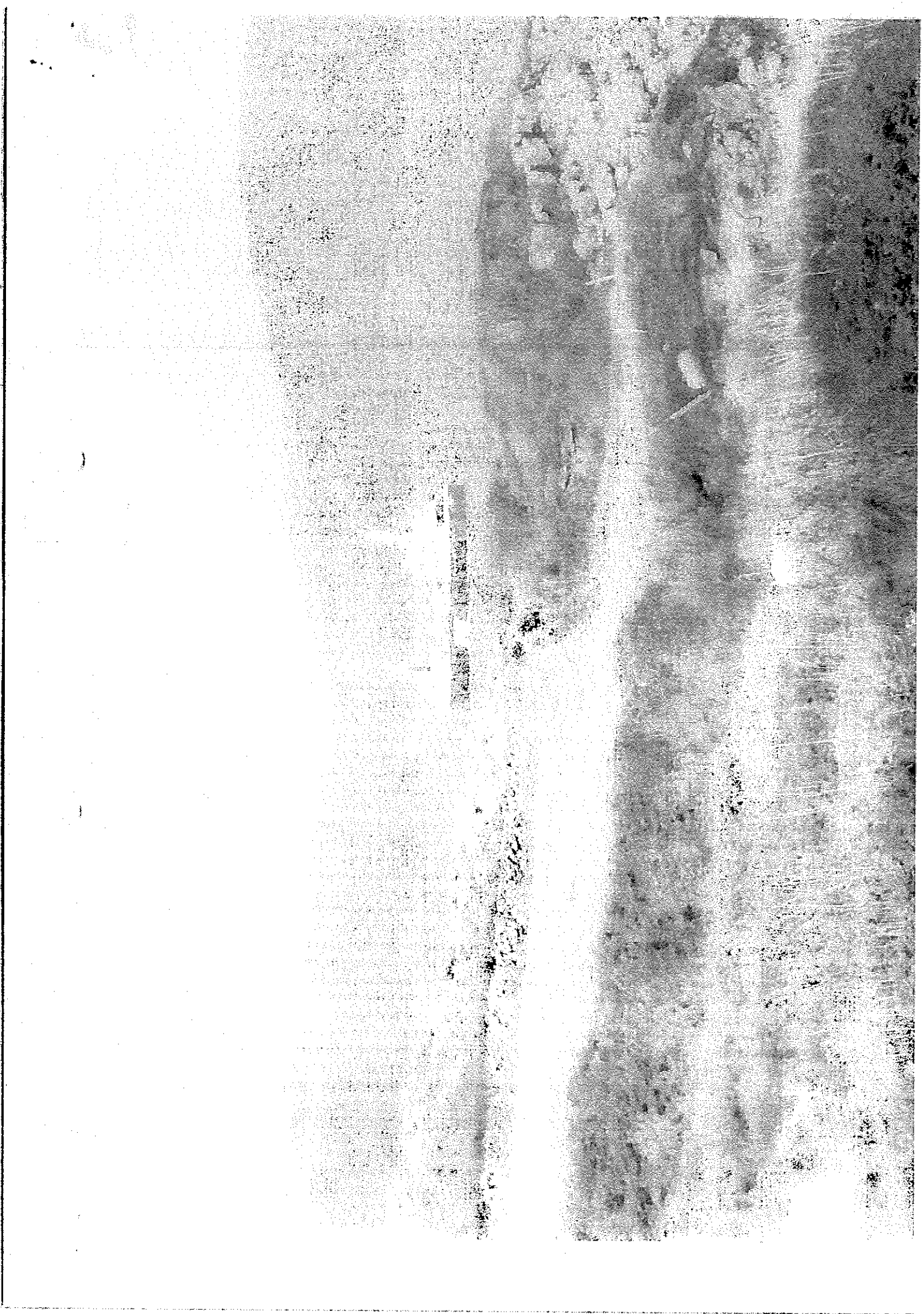
Sign John Brendan O'Keeffe

Note. Scientific support, Internet Links, Peer Reviewed articles and web-sites are available on request from this address or email in pdf form.

E/555

MARINE HARVEST WELL-BOAT¹ IN BANTRY BAY
ROCK AREA JUNE - JULY 2015 (6)





T5/555

<p class="nojs"> Warning: The NCBI web site requires JavaScript to function. more... </p>



PubMed



Full text links

Abstract



PMC

Full text

Chem Biol Interact. 2008 Mar 10;172(1):27-38. Epub 2007 Nov 19.

Changing ratios of omega-6 to omega-3 fatty acids can differentially modulate polychlorinated biphenyl toxicity in endothelial cells.

Wang L¹, Reiterer G, Toborek M, Hennig B.

Author information

Abstract

Exposure to persistent organic pollutants, such as polychlorinated biphenyls (PCBs) can cause endothelial cell (EC) activation by inducing pro-inflammatory signaling pathways. Our previous studies indicated that linoleic acid (LA, 18:2), a major omega-6 unsaturated fatty acid in the American diet, can potentiate PCB77-mediated inflammatory responses in EC. In addition, omega-3 fatty acids (such as alpha-linolenic acid, ALA and 18:3) are known for their anti-inflammatory properties. We tested the hypothesis that mechanisms of PCB-induced endothelial cell activation and inflammation can be modified by different ratios of omega-6 to omega-3 fatty acids. EC were pretreated with LA, ALA, or different ratios of these fatty acids, followed by exposure to PCB77. PCB77-induced oxidative stress and activation of the oxidative stress sensitive transcription factor nuclear factor kappaB (NF-kappaB) were markedly increased in the presence of LA and diminished by increasing the relative amount of ALA to LA. Similar protective effects by increasing ALA were observed by measuring NF-kappaB-responsive genes, such as vascular cell adhesion molecule-1 (VCAM-1) and cyclooxygenase-2 (COX-2). COX-2 catalyzes the rate limiting step of the biosynthesis of prostaglandin E(2) (PGE(2)). PCB77 exposure also increased PGE(2) levels, which were down-regulated with relative increasing amounts of ALA to LA. The present studies suggest that NF-kappaB is a critical player in the regulation of PCB-induced inflammatory markers as modulated by omega-6 and omega-3 fatty acids.

PMID: 18088888 (PubMed - free full text) DOI: 10.1016/j.cbi.2007.11.005

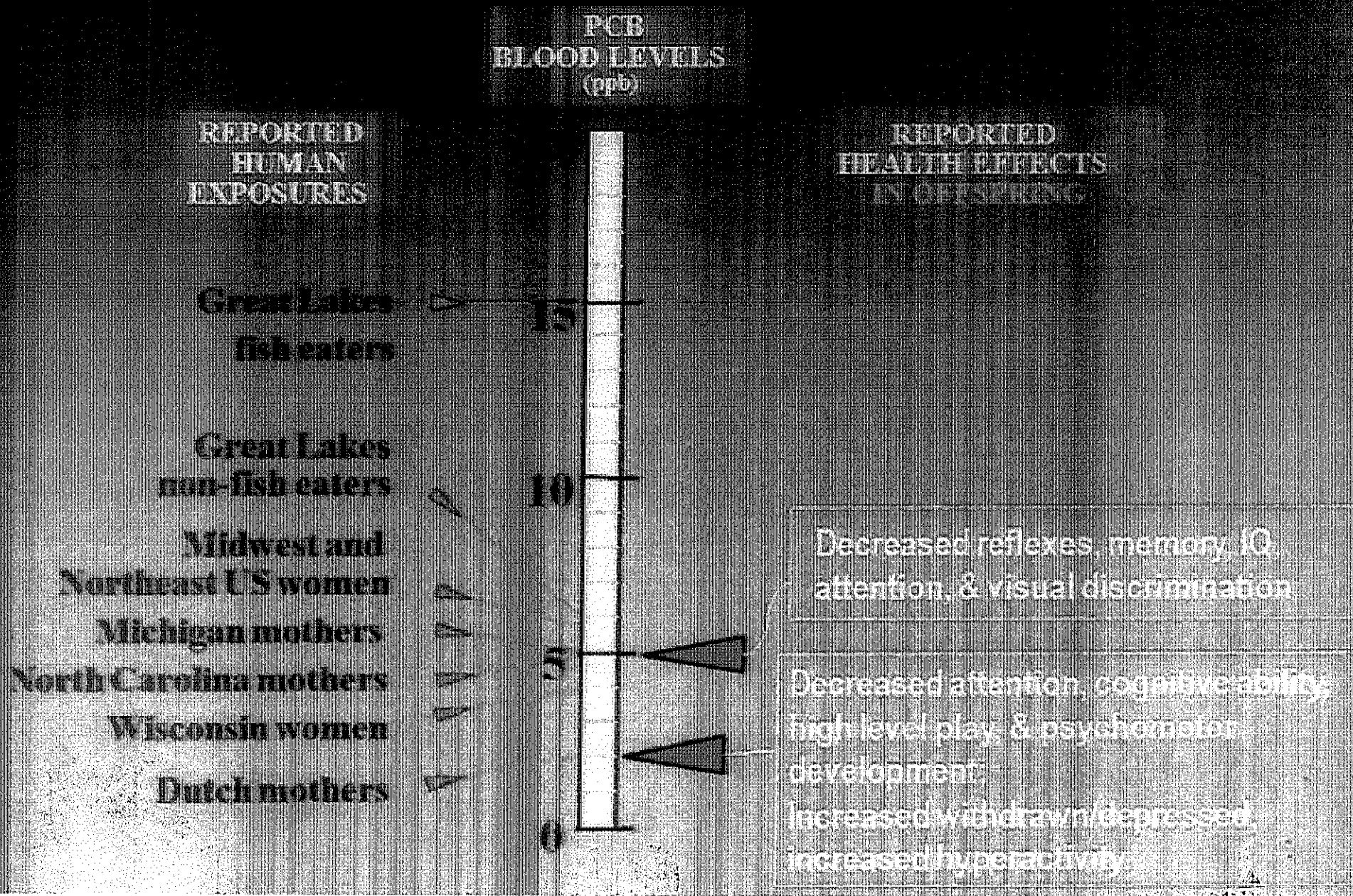
[See all images \(7\)](#) [Free text](#)



Publication Types, MeSH Terms, Substances, Grant Support

LinkOut - more resources

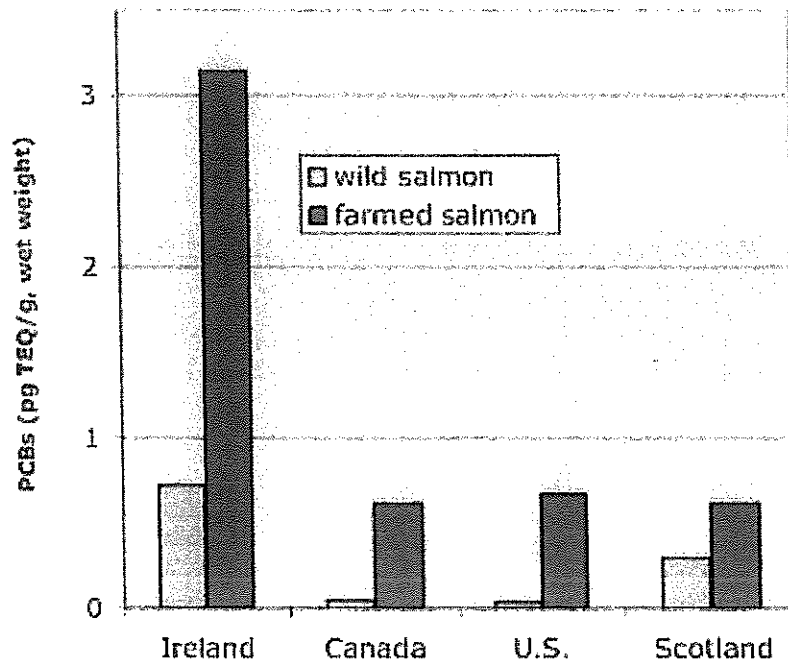
PCBs: Inadequate Margin of Safety



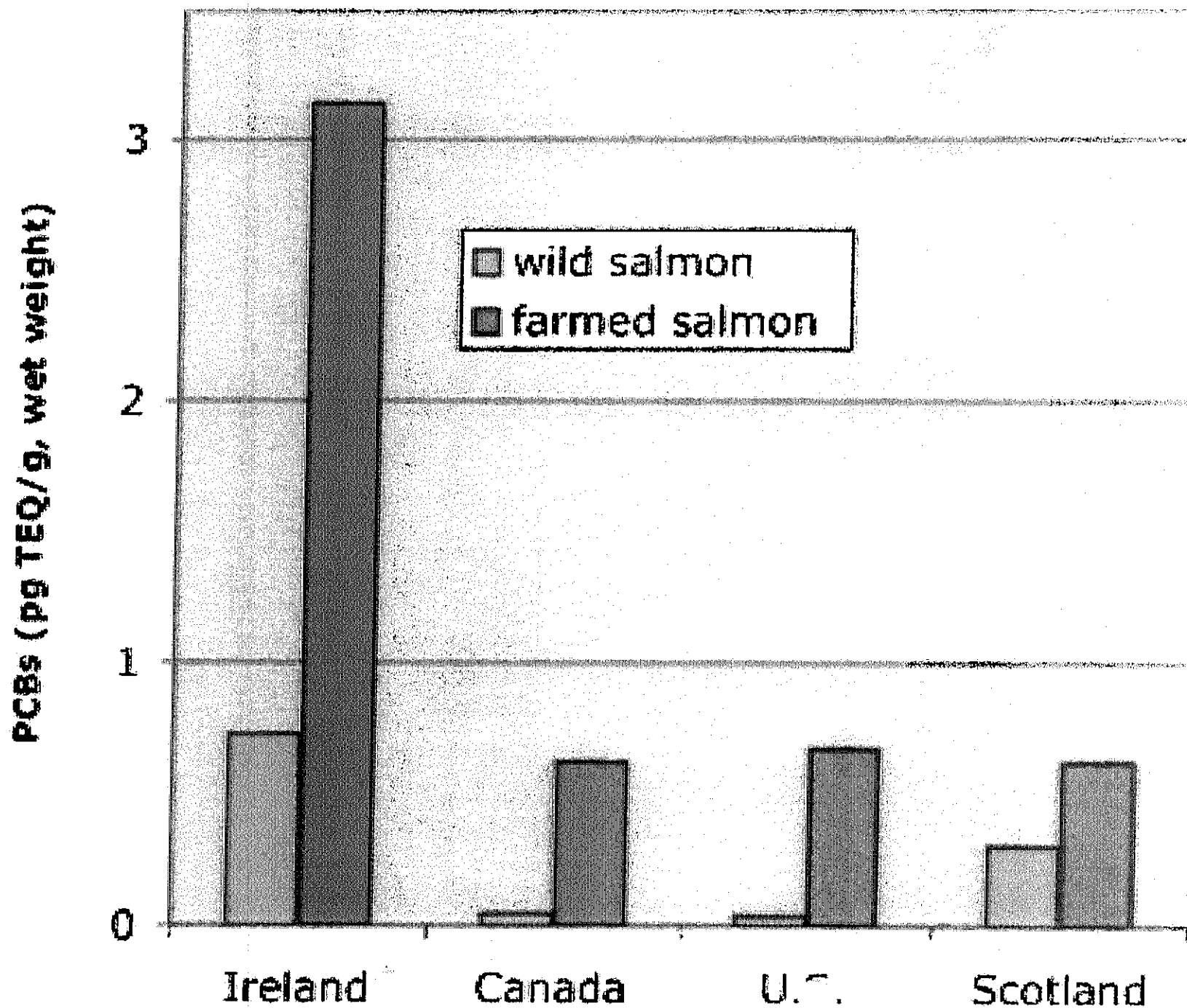
15/555

(9)

**A growing number of studies show
that farmed salmon contains
more PCBs than wild salmon**



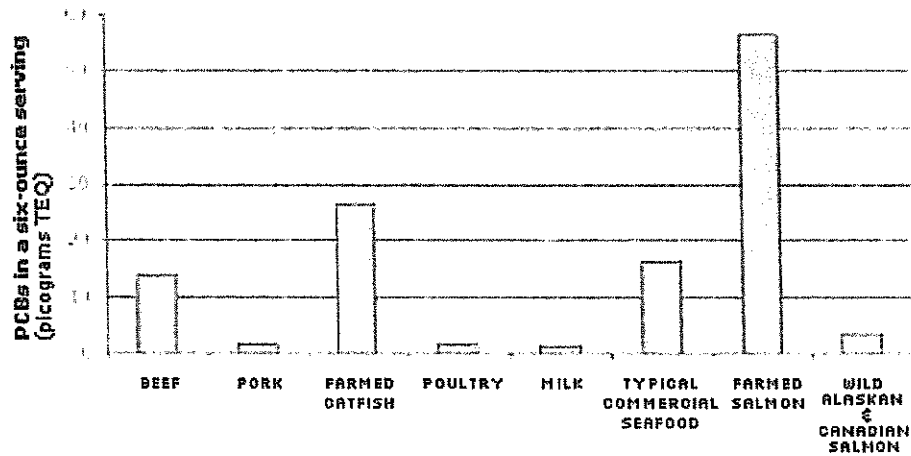
“Exposure to these chemicals during early foetal development can cause brain injury at doses much lower than those affecting adult brain function”
Ref: Prof PJ Landrigan MD Mount Sinai Dept. of Pediatrics. Prof P Grandjean MD Uni. Southern Denmark and Harvard School of Public Health. Published in The Lancet 2006 Volume 368 Nov. 2006.



Civilised societies are judged by how they protect the vulnerable within
Children and the Elderly.

c

A serving of farmed salmon has up to 40 times more PCBs than other foods



NOTES: The levels shown in this figure represent the sum of 66 PCB congeners and related chemicals, including dioxins and furans, as measured by the U.S. Environmental Protection Agency (EPA) using a method called "TEQ" (toxic equivalents). The EPA has established a reference level for PCBs in food, which is 100 picograms TEQ per pound of food. The levels shown in this figure are expressed as picograms TEQ per six-ounce serving, which is equivalent to 100 picograms TEQ per pound of food. The background level for PCBs in food is 100 picograms TEQ per pound of food.

SOURCE: U.S. Environmental Protection Agency, Office of Research and Development, National Health and Environmental Effects Research Laboratory, Office of Chemical Safety and Hazard Investigation, 1997. For more information, see EPA's website at <http://www.epa.gov/chemicals>.

Methodology and References

75/555

PubMed

Page 1

Display Settings: Abstract



Performing your original search, **developmental neurotoxicity of industrial chemicals**, in PubMed will retrieve 28 records.

Lancet. 2006 Dec 16;368(9553):2167-78.

Developmental neurotoxicity of industrial chemicals.

Grandjean P, Landrigan PJ.

Institute of Public Health, University of Southern Denmark, Odense, Denmark.
pgrand@hsph.harvard.edu

Abstract

Neurodevelopmental disorders such as autism, attention deficit disorder, mental retardation, and cerebral palsy are common, costly, and can cause lifelong disability. Their causes are mostly unknown. A few industrial chemicals (eg, lead, methylmercury, polychlorinated biphenyls [PCBs], arsenic, and toluene) are recognised causes of neurodevelopmental disorders and subclinical brain dysfunction. Exposure to these chemicals during early fetal development can cause brain injury at doses much lower than those affecting adult brain function. Recognition of these risks has led to evidence-based programmes of prevention, such as elimination of lead additives in petrol. Although these prevention campaigns are highly successful, most were initiated only after substantial delays. Another 200 chemicals are known to cause clinical neurotoxic effects in adults. Despite an absence of systematic testing, many additional chemicals have been shown to be neurotoxic in laboratory models. The toxic effects of such chemicals in the developing human brain are not known and they are not regulated to protect children. The two main impediments to prevention of neurodevelopmental deficits of chemical origin are the great gaps in testing chemicals for developmental neurotoxicity and the high level of proof required for regulation. New, precautionary approaches that recognise the unique vulnerability of the developing brain are needed for testing and control of chemicals.

Comment in

Lancet. 2007 Mar 10;369(9564):821; author reply 821-2.

Lancet. 2007 Mar 10;369(9564):821; author reply 821-2.

Republished in

Ugeskr Laeger. 2007 Aug 20;169(34):2782-4.

PMID: 17174709 [PubMed - indexed for MEDLINE]

Publication Types, MeSH Terms, Substances, Grant Support

LinkOut - more resources

T5/555

(10)

Mercury

Mine

? QUARRY

Coal plant

Shark
Pike
Albacore
Halibut

Trout
Tuna
(can)



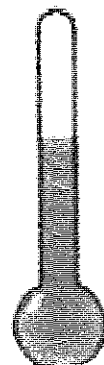
Ki

Salmon
Pollock
Oyster

Mercury level
advice for
consumption)



Eat only a few
times per month



Eat a few
times per week

WILD



Unlimited

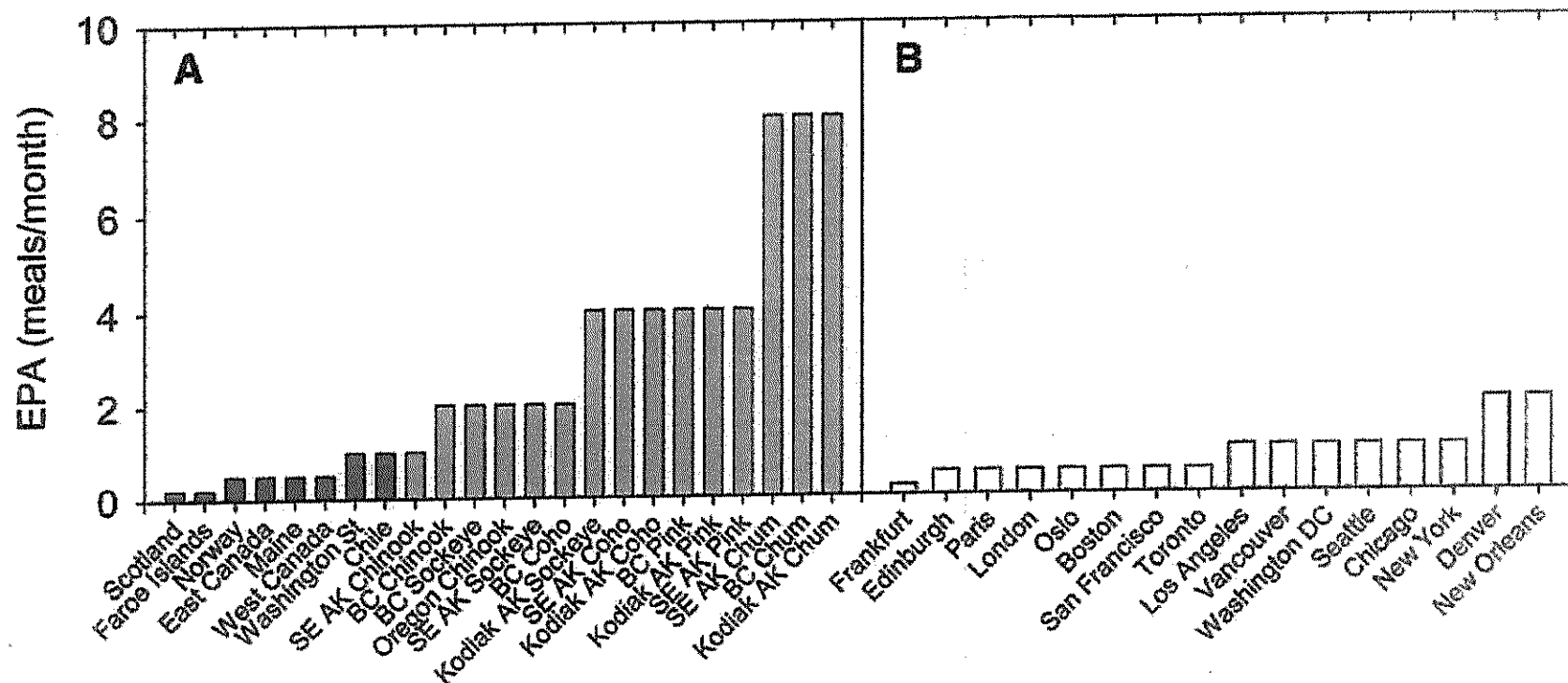
Polycyclic Aromatic Hydrocarbons (PAHs)

- Produced by burning organic matter; >100 different compounds
- Present in tobacco smoke, polluted city air, creosote, coal tar, charcoal-broiled & smoked foods
- Contain >2 benzene rings
- Examples: benzo[a]pyrene, benzo[a]anthracene
- Among the most ubiquitous procarcinogens
- Metabolized by aryl hydrocarbon hydroxylase in liver, GI tract, kidneys, skin and lungs (this enzyme is induced by cigarette smoking)
- Activated intermediates (e.g., epoxides are highly carcinogenic, e.g., benzo[a]pyrene diol[epoxide])

T5/555

16

Fig. 4. Consumption advisories (in meals per month) based on U.S. EPA cumulative risk assessment methods for PCBs, toxaphene, and dieldrin for (A) farmed (red) and wild (green) salmon and for (B) supermarket salmon (yellow).



Ronald A. Hites et al. Science 2004;303:226-229



T5/555

(16)

"masterly and implacable investigation."

- *Madame Figaro Magazine*

"Can be watched like a thriller."

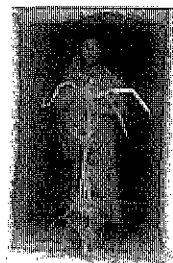
- *Terra Eco*

"The research brought forth by Marie Monique Robin - in particular on the role of independent research centers - deserve a real debate."

- *Challenges*

"...richly documentary...complete and well researched."

- *Reforme*



According to the World Health Organization, the incidence of cancer has doubled over the last thirty years, with an increase in leukemia and brain tumors in children by around 2% per year. The WHO has observed a similar trend for neurological diseases and autoimmune disorders, and for reproduction dysfunctions. What explanations can be found for this worrying epidemic, which is hitting the "developed" countries particularly hard?

Haunted by that question, director Marie-Monique Robin launches an in-depth investigation into everyday products and the system charged with regulating them. Robin digs through the United States Food and Drug Administration (FDA) and the European Food Safety Authority (EFSA) archives, manages to talk her way into secret meetings, and meets with regulators and respected renegade researchers throughout North American and Europe.

The result is OUR DAILY POISON—a shocking documentary film that reveals a broken safety system concerned more with protecting trade secrets than human health. The film shows that the main cause of the epidemic is environmental: it is the result of the 100,000 chemical molecules that have invaded our environment, and primarily our food, since the end of the Second World War.

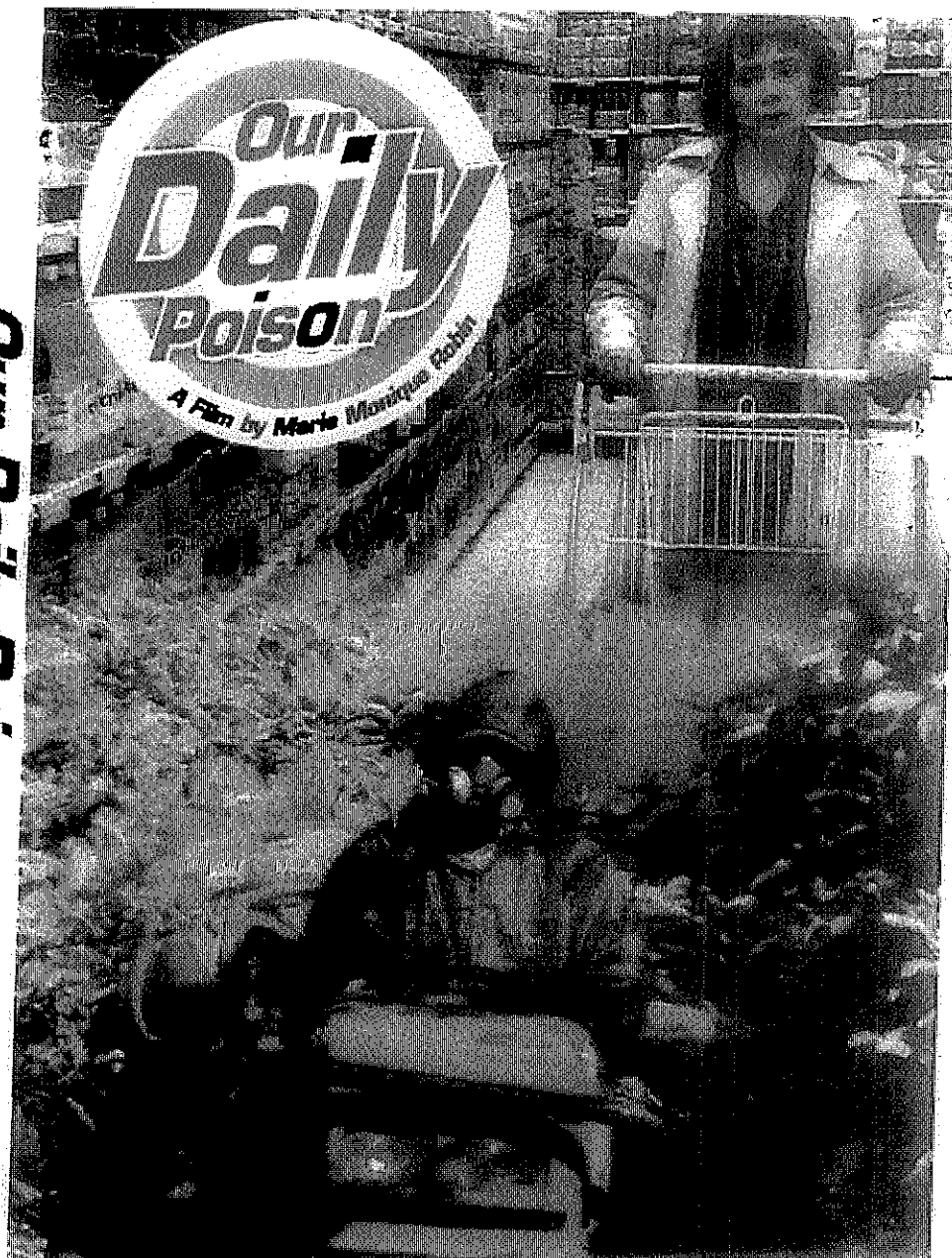
112 minutes / color / 2011

ICARUS FILMS

32 Court Street, 21st Floor, Brooklyn, NY 11201
(718) 438 8400 / (800) 876 1770 / F (718) 438 8642
www.icarusfilms.com / mail@icarusfilms.com



Our Daily Poison



WITH A NEW EPILOGUE BY THE AUTHORS

"A POWERFUL, HAUNTING DRAMA... AN ENVIRONMENTAL THRILLER."

— *Washington Post Book World*

Over thirty years ago, Rachel Carson's *Silent Spring* first warned that man-made chemicals were taking a deadly toll on birds and wildlife. Only now, however, are we recognizing the full consequences of this insidious threat, which is derailing sexual development and reproduction—not only in a host of animal populations but, it appears, in humans as well.

Written by two leading environmental scientists and an award-winning environmental journalist, *Our Stolen Future* has already become one of the most controversial and talked-about books of the decade. Picking up where *Silent Spring* left off, this groundbreaking work gives an utterly gripping account that traces birth defects, sexual abnormalities, and reproductive failures in wildlife to their source—synthetic chemicals that mimic natural hormones, upsetting normal reproductive and developmental processes. And humans appear far from immune to the effects of these "hormone impostors." Male sperm counts have dropped as much as 50 percent in recent decades, while women have suffered a dramatic rise in hormone-related cancers, endometriosis, and other disorders. By threatening the ability to reproduce, these chemicals may be invisibly undermining the human future. Piecing together the clues, the authors detail how these industrial pollutants have spread with ease through the web of life from the equator to the poles, and explore what we can and must do to combat this invasion. Timely, urgent, and scrupulously reported, this riveting story of scientific detection will have a major impact on public debate for decades to come. It is indispensable for those concerned about the profound human impact on the environment, the well-being of our children, and the survival of our species.

"Fascinating, provocative . . . a dramatic and important cautionary tale that will be the catalyst for environmentalism in the 21st century." —*Boston Globe*

"A frightening, detective-style narrative that details for the lay public many of the research studies under discussion in Washington." —*Wall Street Journal*



A PLUME BOOK
Science/Current Affairs
www.penguin.com

Cover design by Megan Reitz
Cover photographs by TONY STONE IMAGES

USA \$17.00

ISBN 0-730-452-274-3



51700



EAN

"... so important and its story so powerful that it
should be read by the widest possible audience."

— *New York Times Book Review*

AL GORE

OUR FERTILITY,

AND SURVIVAL?

DETECTIVE STORY

15/555

100

The risks are worse than you think. But the solution is in your hands.

Featuring Vandana Shiva, Jeffrey Smith, Andrew Kimbrell, Percy Schmeiser and others.

Disc 1 Unnatural Selection (DVD)



A failed GM cotton crop prompts farmer suicides in India. GM pigs are born with ghastly mutations in the US. Wind borne GM canola threatens farms in Canada, forcing one farmer to the Supreme Court. A company breeds giant GM salmon, despite its threat to natural fish populations. Alarming

findings convince a scientist that GMOs may lead to a catastrophe. And corporations deceive the public, while trying to patent and control the food supply. By Bertram Verhaag and Gabriele Kröber.

"BEST FILM"
CineEco, Portugal
"BEST LONG PRODUCTION"
IEFF, Brazil

"BEST JOURNALISTIC ACHIEVEMENT"
IEFF, Germany

"Meticulously researched, excellently photographed."
—Okomeia

Disc 2 Hidden Dangers in Kids' Meals (DVD)

Shocking research results, inadequate regulations and warnings from prominent scientists explain why GM foods are dangerous and should be removed from kids' meals. The dramatic story of how student behavior in a Wisconsin school was transformed with a healthy diet provides added motivation to make a change.



"It pierces the myth that our government is protecting our food supply."

—John Robbins, *Diet for a New America*

"It will change the way you look at food forever."

—Howard Lyman, *Mad Cowboy*

"The revelations make our choice clear—take needless risks with genetically engineered food or just say no to this madness."

—Frances Moore Lappé, *Diet for a Small Planet*

"Watch this video and start educating yourself."

—Candace Pert, Ph.D., *Molecules of Emotion*

Disc 3 You're Eating WHAT? (Audio CD)



Jeffrey M. Smith, author of *Seeds of Deception*, the world's bestselling book on GM foods, describes how biotech companies rigged research, hid health dangers and pressured government regulators to approve food that even FDA scientists said was unsafe.

"The most powerful presentation I have ever heard on the issue of genetically engineered foods."

—Craig Winters,
The Campaign to Label
Genetically Engineered Foods

Includes more than 100 minutes of additional material.

THE GMO TRILOGY IS SPONSORED BY:

Eden Foods, Nature's Path, French Meadow Bakery, Ery Organic Wines, Organic Valley Family of Farms, Nutiva, NOW Health Group, Organic Consumers Association, Sweet Wheat, Seventh Generation, and The Institute for Responsible Technology.

www.seedsdeception.com

For more information, visit
www.HealthierEating.org



The GMO Trilogy

Why
GENETICALLY
MODIFIED
ORGANISMS
threaten your
health, the
environment
and future
generations

The GMO Trilogy

Why GENETICALLY MODIFIED
ORGANISMS threaten your
health, the environment
and future generations

3 Disc Set

Unnatural Selection DVD:

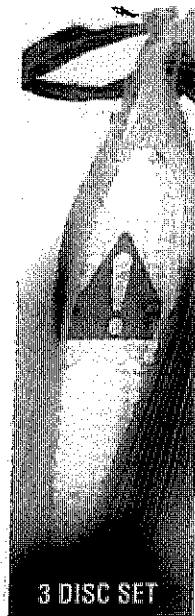
A stunning, award-winning film shows the impact of genetically modified (GM) crops and animals.

Hidden Dangers in Kids' Meals

DVD: Children are at risk and what you can do.

You're Eating WHAT?

Audio CD: Bestselling author Jeffrey M. Smith explains how industry manipulation allowed dangerous GM foods to be approved.



3 DISC SET



Non-GMO Shopping Guide Inside!
(recommended by O, The Oprah Magazine)

International Bestseller!

Seeds of Deception

Exposing Industry and
Government Lies
About the Safety of the

**GENETICALLY
ENGINEERED FOODS**
You're Eating

Jeffrey M. Smith

FOREWORD BY FRANCES MOORE LAPPÉ

(5) D

T5/555

(26)

PEW CHARITABLE TRUST FOUNDATION FINDINGS.

Health Risks Associated with Consuming Farm-Raised Salmon

Page 1 of 1



Institute for Health and the Environment

University at Albany

- PRESS RELEASE

- Contact an expert who can comment on the study
- The complete study
- Summary of the study
- Consumption recommendation data at a glance
- Frequently asked questions and answers about the new study
- What can consumers do to limit their exposure?
- Some of the contaminants found in farmed salmon
- How the study's farmed salmon consumption recommendations were determined
- Background information about world salmon production and consumption
- Several small, peer-reviewed pilot studies on farmed salmon
- About the study's authors
- Introduction

First Global Sampling Study Reveals Health Risks Associated with Consuming Farm Raised Salmon

In the most comprehensive analysis of farmed and wild salmon to date, researchers analyzed toxic contaminants in approximately 700 farmed and wild salmon (totaling 2 metric tons) collected from around the world to be representative of the salmon typically available to consumers. The study, which was sponsored by the Pew Charitable Trusts, examined salmon produced in eight major farmed salmon producing regions and obtained from retail outlets in 16 major North American and European cities.

The study found that concentrations of several contaminants associated with serious health risks from neurological effects to cancer are significantly higher in farmed salmon than in wild salmon.

The authors concluded that concentrations of several cancer-causing substances are high enough to suggest that consumers should consider restricting their consumption of farmed salmon. In most cases, consumption of more than one meal of farmed salmon per month could pose unacceptable cancer risks according to U.S. Environmental Protection Agency (EPA) methods for calculating fish consumption advisories.

Because of the rapid growth of farmed salmon production, consumption of farmed salmon now exceeds consumption of wild salmon in U.S. and European diets.

This site contains information from the study's authors.

This study in the news:

- Study finds health risks in farmed salmon (Scripps-Howard)
- Study raises salmon chemical fears (Reuters)
- Report Cites Health Risks of Farm-Raised Salmon (pdf) (LA Times) [linked article - requires registration]
- Study: Salmon Contains Higher Amounts of Contaminants (Washington Post)

oil. In many cases, aquaculture, or the practice of fish farming, places enormous amounts of LA into the top bucket of those salmon. In humans, eating lots of LA isn't such a big deal, because, as we discussed, we aren't good at turning LA into AA. But because the salmon are so very good at moving those fatty acids through those conversions, when salmon eat a lot of LA, a great deal of AA ends up in that last bucket. And, of course, when we eat that AA-loaded salmon, we end up with lots of AA in our own buckets.

Joan might find the following piece of news even more upsetting: while fatty fish like mackerel and salmon are a rich source of the heart- and inflammatory-healthy fatty acids EPA and DHA, the farmed varieties contain considerably *lower* ratios of EPA and DHA to AA than the wild ones. In the example above, four ounces of the farmed salmon contains 700 mgs of beneficial EPA, while the wild Chinook salmon has 893. So in addition to getting huge levels of AA, Joan's not even balancing the health benefits of this AA with the beneficial EPA or DHA that she thought she was getting.

It's important to point out that I'm not against aquaculture, per se. Clearly, this industry arose at a time when our waters were overfished and there was an acute need for more fish. It's also important to note that not all fish farming results in "bad" fish. For example, according to the USDA, wild oysters contain more AA than farmed ones (they also contain more EPA). There are even circumstances where the farmed fish have *better* fatty-acid characteristics than wild fish. For example, farmed rainbow trout contains 260 milligrams of EPA and 25 milligrams of AA. Wild rainbow trout has less of the good EPA (167 milligrams) and four times *more* AA (109 milligrams) per serving.

So the objective of this book is certainly not to dismiss aquaculture out of hand. My only interest is to zero in on those fish that are likely to be the most pro-inflammatory because they contain very high levels of AA, and those fish that are likely to be the least inflammatory because they contain high levels of omega-3 fatty acids such as EPA and DHA, and have low AA-to-EPA ratios.

Barking Up the Wrong Tree

In many ways, the "health" industry has done Americans a tremendous service.

They've been telling us that salmon in general is one of the healthiest of our choices—and, in so doing, I believe they've contributed to an epidemic of inflammatory disease.

In the meantime, they've raised a tremendous alarm about issues with much less of a direct impact on our health. You can't turn on the news without hearing about PCBs and mercury in the fish we eat, and there has been a revolution in the food industry to meet the astonishing demand for organic vegetables and free-range, hormone- and antibiotic-free meat.

Nobody wants less pollution in our water, cleaner beef, and safer pesticides more than I do. I am, however, concerned that our single-minded focus on these problems has distracted us from the real culprit was right in front of our noses.

It's as if a gang of thugs has driven a moving van right up to our back door and is systematically stripping us of everything we own, even while we're installing the best and most high-tech burglar alarm on the market.

This is one of the primary reasons I'm writing this book. I can no longer stand by while cardiologists continue to recommend the "Inflammation Blue Plate Special" to someone with heart disease and already elevated levels of inflammation. We have to turn a close eye on the way we eat, and we have to change what's on our plates.

Nearly 50 percent of the people in this country suffer from inflammatory disease, and yet we consume more than a million metric tons of farmed Atlantic salmon a year.

The Incredible Inflammatory Egg

While levels of AA are astronomically high in fish like farmed Atlantic salmon, salmon is far from the only scoundrel in the *Inflammation Nation* story.

No other food source has been as hotly contested by nutritionists as

500

The following items can be viewed
at the ALAB Offices, Kilminchy Court,
Portlaoise by appointment

Contact Mary O'Hara @ info@alab.ie or
057 8631912

GMO Myths and Truths – Online PDF
submitted by email

Items 15, 16, 17, 18, 19

