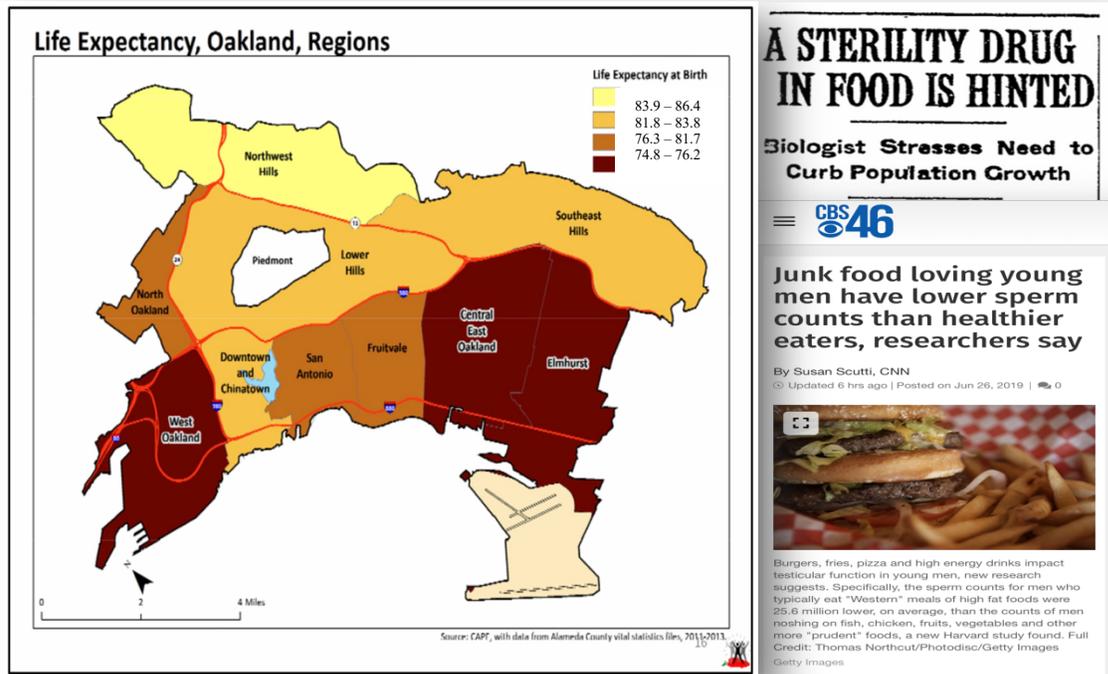


“The White man is a scientist. The Negro is a science project.”  
Dr. Wesley Muhammad

# Waging War By Zip Code

How *Food* in Black Neighborhoods  
is *Weaponized*

A Report  
By Wesley Muhammad, Ph.D. © 2019



***An Urgent Case for Separation***

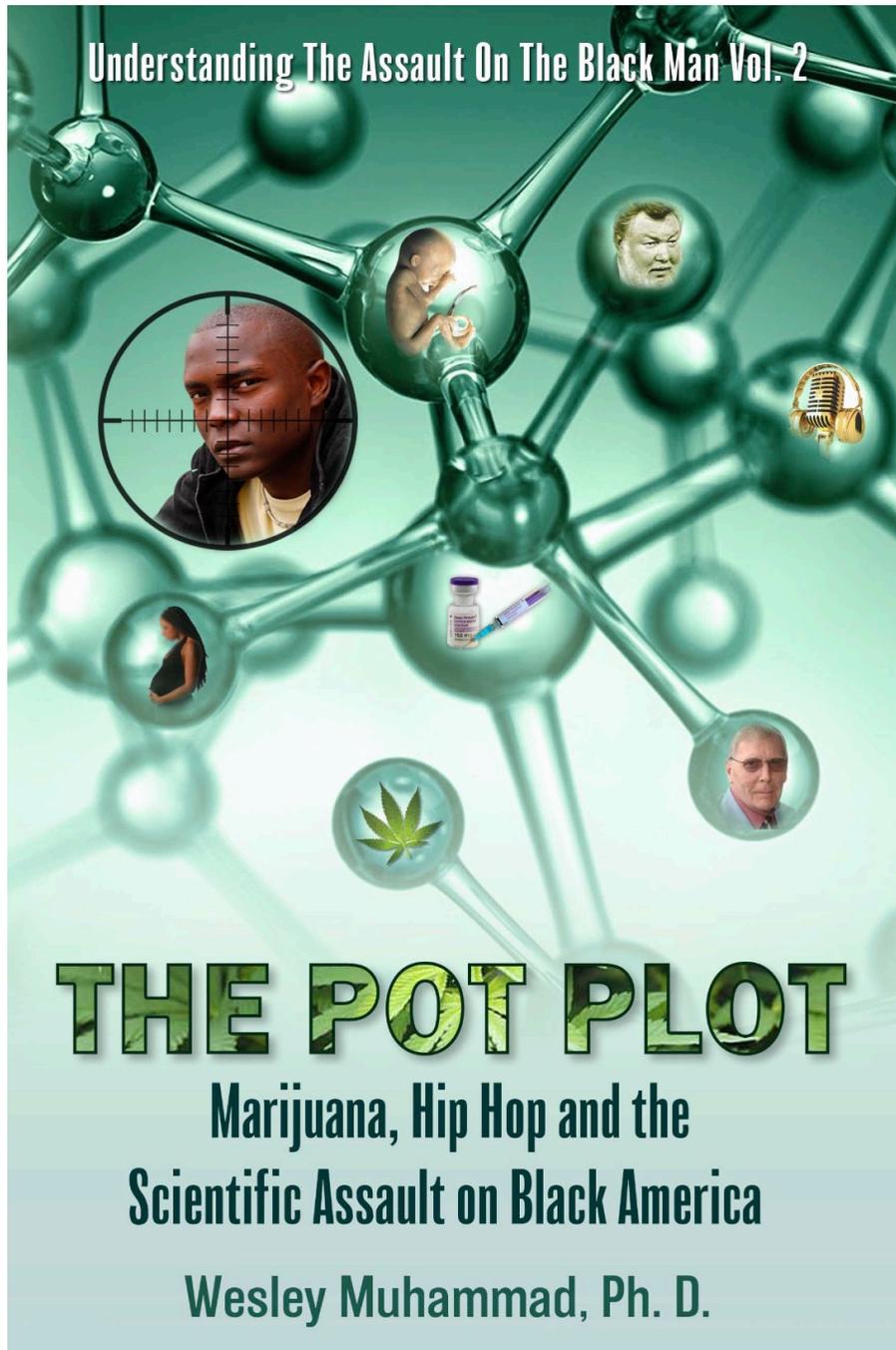
“Most health specialists agree that the loss of the health of Black people is directly related to the foods we consume.”

The Honorable Brother Minister Farrakhan

“Of all the crises that Black America is experiencing, none is comparable to our **Food Crisis.**”

Dr. Wesley Muhammad

Excerpt from



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I. *Scientific Genocide Through Food*

In January 1975 the Most Honorable Elijah Muhammad revealed in *Muhammad Speaks* a (coming) plot against Black people by our 400-year enemies in America:

At this very hour, eternal war against the Black man is planned as the Psalmist (Bible) prophesizes that they plan to destroy the poor secretly. All kinds of evil are planned against the once loyal slave of America today: in the drugs, in food and the water that the slave eats and drinks, to destroy his increase of his nation, making his women unproductive and turning her into the most disgraceful woman of the nations...<sup>1</sup>

Our former slave masters have secretly planned an eternal war against the Black man and woman in America, a plan that involves doing "all kinds of evil" to us through the food that we eat, the water that we drink and the drugs that we use. Speaking at the Chicago Coliseum on Saviour's Day 1966 the Honorable Elijah Muhammad gave us a little insight into *how* our enemies will execute this secret war against us:

This race of devils who has planned your destruction, who are leading you to total destruction, who want you to die and be destroyed with them, who are absolutely killing you daily and beating you for even asking them for justice...But their time is now up and they are doing everything to try to stay by planning the total termination of the Black man and they are practicing it on you today, the so-called American Negroes. I even heard talk of their planning mas murder of the so-called Negroes here in America. And planned to sterilize them to prevent them from continuing to produce a people like themselves. This is a plan that was made by Pharaoh (of Egypt)...they planned the total destruction of (the Children of Israel) by killing off the males. This *scientific* nation (inaudible) who have so much more *knowledge of chemistry* today (inaudible) and plan the total destruction of you and me (emphasis added – WM).

The secret war of destruction against Black America will thus be a *scientific* war that will utilize America's advanced knowledge of *chemistry* and the war aims to sterilize the Black woman and the Black man and *kill* the Black male (men and masculinity) *scientifically*, it appears from the words of the Messenger of God. Our food, water and drugs were to be chemically manipulated in such a way as to render the Black Nation infertile or *nonreproductive*.

In 2013, the Honorable Minister Louis Farrakhan delivered an historic series of revelatory broadcasts entitled "The Time and What Must Be Done." In Part No. 36, "Farming is the Engine of Our National Life," he documents that the secret war of which The Most Honorable Elijah Muhammad warned us in 1975 has now become official U.S. Government policy. The Honorable Minister Farrakhan said:

<sup>1</sup> The Honorable Elijah Muhammad, "The Fall and Break Up of the Old World," *Muhammad Speaks* January 1975



We are completely dependent on somebody else to feed us; and the Honorable Elijah Muhammad said, "No people can be free with their mouth in the kitchen of another, particularly, in the kitchen of our former slave masters and their children"... And you know, they don't know what to do with us. We've become a problem, nearly fifty million of us. They won't be able provide jobs for us. So many White scientists are thinking, what can we do with the Negroes?

Well, during my 2012 Saviours' Day message, we spoke on a plan by the government of the United States led by Dr. Henry Kissinger to engage in worldwide depopulation of the darker peoples of the world. Mr. Kissinger as Secretary of State under President Nixon signed National Security Study Memorandum 200 titled, "Implications of Worldwide Population Growth for U.S. Security Overseas Interests." It was adopted as official policy in 1975 by President Gerald Ford. Those who analyzed the report said, "Dr. Kissinger proposed that depopulation should be the highest priority of U.S. foreign policy toward the Third World." Think about that.

Although this plan of action was to be activated in developing countries, it was designed as a two-edged sword that could be swung with equal determination in both developed and developing countries alike because in developing countries, like America, a growing number of Third World people live.

This document was signed by Henry Kissinger and directed to the Secretaries of Defense, Agriculture, Central Intelligence and the Deputy Secretary of State, and the Administrator of the Agency for International Development with a copy to the Joint Chiefs of Staff. This was taken like a theatre of war and all factions of government were introduced to this to develop plans and activate plans internationally to cull between two to three billion people from the face of the earth.

Well, Kissinger prepared yet another depopulation manifesto for President Jimmy Carter called, "Global 2000," which detailed **using food as a weapon** to depopulate the Third World. So then Zbigniew Brzezinski, I think he was Carter's National Security Advisor said, "It's easier to kill a million people today than to control a million people." So the killing of millions is going on. Let's see what is happening to us.

These groups: The Department of Defense, Agriculture, CIA, Agency for International Development and the Joint Chiefs of Staff, I'm sorry to tell you, they're planning death on a worldwide scale. They have used a series of methods to affect global depopulation, depleted uranium bombs, genetically engineered and modified foods, chemical additives in foods, poison in vaccines, famine, AIDS, Chemtrails, illegal wars. This plan for culling the population is not only in the Third World, but it comes right back home to the United States of America...

The importance of this data is: When we juxtapose the decrease in farming with this Memorandum 200 by Kissinger and the culling of the population of the planet with a policy of population control

or depopulation in the United States, then we can see now **how food is used as a weapon** in that process. Then the control of the means of production of food and the methodology in producing the food, all of this is a part of the policy now of the Department of Agriculture, the FDA, the CIA, they are all linked together.<sup>2</sup>

This Report documents how the U.S. Government and allied interests actually *executed this plot* that the Most Honorable Elijah Muhammad warned us of in 1975 and the Honorable Minister Farrakhan shined great light upon for us in 2013. Specifically, it can be demonstrated that the food made available in Black neighborhoods – fast food, super market food, even fished food - has been deliberately, chemically poisoned. Poisoned by whom? By U.S. Government agencies (examples include the Department of Agriculture, the U.S. Army and the C.I.A.) and allied interests such as the Monsanto Chemical Company, just to name a single example. Black America is indeed being deliberately sterilized through our food, our water, our drugs, even our air. The result today is the many aspects of Black America’s current *Health Crisis*: a cancer crisis, autism spectrum disorder epidemic, ADHD, an obesity epidemic, a disproportionately high rate of infertility as well as male feminization and female masculinization in Black America (a Gender Bending Crisis), among other conditions. This can all, in large measure, be traced back to the food made available to Black communities and to which we avail ourselves. To put it bluntly, our food has been *weaponized* against us. This Report extensively documents this fact.

## II. *Food as Chemical Warfare*

In 1977 ***The New York Times*** published the first public exposé of one of the U.S. Government’s darkest and dirtiest secrets: the CIA’s MKULTRA program<sup>3</sup> which was “a secret, 25-year, \$25-million effort by the Central Intelligence Agency to learn how to control the human mind.”<sup>4</sup> The CIA sought “an offensive use for behavior control,” not defensive. “They wanted to reduce a man to a bewildered, self-doubting mass in order to ‘subvert his principles,’” the ***Times*** reported.<sup>5</sup>

[The CIA] sought to crack the mental defenses of enemy agents-*to be able to program them and its own operatives to carry out any mission even against their will* and “against such fundamental laws of nature as self-preservation.”<sup>6</sup>

By the 1960s the CIA was exploring “Ways for predictably influencing human behavior through the use of drugs.”<sup>7</sup> In 1966, the Agency established a “behavioral pharmacology program” in order to develop the “capability to manipulate human

<sup>2</sup> @ <https://www.youtube.com/watch?v=ZTEKpFjLYDc>

<sup>3</sup> Which we covered in some detail in Wesley Muhammad, ***Understanding The Assault on the Black Man, Black Manhood and Black Masculinity*** (Atlanta: A-Team Publishing, 2017) 213-218.

<sup>4</sup> Nicholas Horrock, “Private Institutions Used in C.I.A. Effort to Control Behavior,” ***The New York Times*** August 2, 1977.

<sup>5</sup> Mind-Control Studies Had Origins in Trial of Mindszentry,” ***The New York Times*** August 2, 1977.

<sup>6</sup> Nicholas Horrock, “Private Institutions Used in C.I.A. Effort to Control Behavior,” ***The New York Times*** August 2, 1977.

<sup>7</sup> CIA memorandum, *Influencing Human Behavior*, undated. (CIA), quoted in Allen M. Hornblum, ***Acres of Skin: Human Experiments at Holmesburg Prison*** (New York and London: Routledge, 1998) 139.

behavior in a *predictable manner* through the use of drugs”.<sup>8</sup> This was a *secret* program because the CIA was fully aware of the fact that *its methods and agendas crossed the line*. It was determined that the unwitting experimentation of citizens was unethical *but essential*.<sup>9</sup> Thus, there is always a “cover story” to hide the true operation.

One thread running throughout the documents was the need for extreme secrecy about the project, minimum documentation of planning and approval of test programs, and a realization that any disclosure could severely embarrass the CIA. Its inspector general said in his report that testing MKULTRA substances or devices on "unwitting subjects," while important, was not as important as the "risk of serious damage to the agency in the event of compromise of *the true nature of this activity* (emphasis added – WM)."<sup>10</sup>

The CIA assembled “an extensive network of non-governmental scientists and facilities” to conduct much of this unethical and even *illegal* research and weaponization of chemical and biological agents. This network involved 80 institutions, including 44 colleges and universities.<sup>11</sup> “The mind control experiments were conducted by a network of doctors that included leaders of psychiatry and the major medical schools.”<sup>12</sup> The CIA funded these “CIA Doctors” by clandestinely channeling money through private medical foundations and military offices, such as the Office of Naval Research.<sup>13</sup>

There was an “urgent need,” the C.I.A. and other agencies argued, to develop “effective and practical techniques” to “render an individual subservient to an imposed will or control.” The C.I.A. men, who led the way, enlisting the support of the Army, the Navy, the Air Force, *the Departments of Agriculture, Health, Education, and Welfare* and several other agencies, acknowledged among themselves that much of what they were setting out to do was “unethical,” bordered on the illegal and would be repugnant to the American people. So they made certain that these activities were tightly held, known only to the director, Allen W. Dulles, and a handful of operatives and high-ranking aides.<sup>14</sup>

The use of the Department of Health, Education and Welfare (HEW) by the CIA is important to our discussion, as is the use by the CIA of the Department of Agriculture. Not to be left out, the Food and Drug Administration (FDA), claiming to be “The Nation’s Foremost Consumer Protection Agency,” in fact assisted the CIA’s secret mind and

<sup>8</sup> CIA memorandum, Influencing Human Behavior, undated. (CIA), quoted in Hornblum, *Acre of Skin*, 139.

<sup>9</sup> “Mind-Control Studies Had Origins in Trial of Mindszentry,” *The New York Times* August 2, 1977: “The C.I.A. was fascinated by LSD and other psychochemicals that they thought might be useful in getting people to talk or in temporarily putting them out of action. They were aware that it was considered unethical to experiment on people with drugs without their knowledge, but they decided that “unwitting” testing was essential if accurate information on LSD and other substances was to be obtained.”

<sup>10</sup> John Jacobs, “CIA Papers Detail Secret Experiments on Behavior Control,” *The Washington Post* July 21, 1977.

<sup>11</sup> Jo Thomas, “Extent of University Work for C.I.A. Is Hard to Pin Down,” *The New York Times* October 9, 1977.

<sup>12</sup> Colin A. Cross, M.D., *The C.I.A. Doctors: Human Rights Violations By American Psychiatry* (Richardson, TX: Manitou, Inc., 2006) 33.

<sup>13</sup> Nicholas Horrocks, “Private Institutions Used in C.I.A. Effort to Control Behavior,” *The New York Times* August 2, 1977.

<sup>14</sup> “Mind-Control Studies Had Origins in Trial of Mindszentry,” *The New York Times* August 2, 1977.

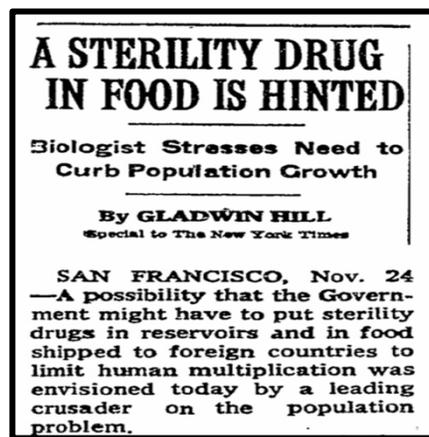
behavior control program; indeed, the FDA is described as the CIA's "junior partner."<sup>15</sup> The CIA's "junior partner" the FDA allowed the CIA to test its chemical and biological agents in its laboratories and testing facilities.<sup>16</sup> The Department of Agriculture aided the CIA mind-control program by importing "various botanicals" that could be tested as behavior modification agents. The CIA, the USDA, the FDA, the Department of HEW (now the Department of Health and Human Services), and the U.S. Army Chemical Corps are all *colluders*.

Why solicit the aid of the Department of Agriculture and the FDA? The CIA sought **"a way to manufacture food that looked and tasted normal but, when eaten, would create 'confusion-anxiety-fear'."**<sup>17</sup> We are talking about *weaponized food* here. We know that the CIA is squarely in the business of weaponizing food and releasing it upon an unsuspecting population. In August 1951 the inhabitants of the quiet village of Pont-Saint-Esprit in southern France suddenly fell ill, struck down with mass insanity and frightful hallucinations of terrifying beasts and fire. Five people died, dozens were interned in asylums, and hundreds were afflicted. For 50 years it was assumed that the outbreak was inadvertently caused by a local baker who unknowingly served the villagers bread contaminated with ergot, the hallucinogenic mould that infects rye grain. In fact, the local bread was *deliberately contaminated with LSD by the CIA and the US Army as part of a human chemical warfare experiment.*<sup>18</sup>

The U.S. Government has openly considered such chemical manipulation of food to increase infertility in populations of color, domestic and foreign, as a solution to the alleged "population crisis." A 1969 *The New York Times* article says enough:

A possibility that the government might have to put sterility drugs in reservoirs and in food shipped to foreign countries to limit human multiplication was envisioned today by a leading crusader on the population problem.<sup>19</sup>

On November 24, 1969 the 13<sup>th</sup> National Conference of the U.S. UNESCO (United Nations Educational, Scientific, and Cultural Organization) Commission was held in New York City. UNESCO is a 100-member commission consisting of representatives of Government, outside organizations, and the public, but appointed by the U.S. Secretary of State. This 13<sup>th</sup> National Conference was keyed by President Richard Nixon's chief science advisor Dr. Lee DuBridge, who introduced the discussion of the global and domestic "population crisis" and called for zero population growth rate. President Nixon had already pointed to the "underprivileged (read: "the poor" and "the Blacks") in America as birth control



<sup>15</sup> John Marks, *The Search for the "Manchurian Candidate": The CIA and Mind Control* (New York: W.W. Norton & Company, 1979) 73; Martin A. Lee and Bruce Shlain, *Acid Dreams. The Complete Social History of LSD: The CIA, the Sixties, and Beyond* (New York: Grove Weidenfeld, 1985) 26.

<sup>16</sup> John Jacobs, "CIA Papers Detail Secret Experiments on Behavior Control," *The Washington Post* July 21, 1977.

<sup>17</sup> "Mind-Control Studies Had Origins in Trial of Mindszentry," *The New York Times* August 2, 1977.

<sup>18</sup> H.P. Albarelli Jr., *A Terrible Mistake: The Murder of Frank Olson and the CIA's Secret Cold War Experiments* (Walterville, OR: Trine Day LLC, 2009).

<sup>19</sup> Gladwin Hill, "A Sterility Drug in Food is Hinted," *The New York Times* November 25, 1969.

targets.<sup>20</sup> Dr. DuBridge admonished that population control should be the prime task of every government. Dr. Paul Ehrlich of Stanford University declared,

Our first move must be to convince all those we can that the planet Earth must be viewed as a spaceship of *limited carrying capacity*. I think that 150 million people (50 million fewer than there are now) would be an optimum number to live comfortably in the United States.

So a reduction of the 1969 American population by 50 million is here envisioned. The methods entertained during the discussion included compulsory family regulation, changing tax laws to discourage reproduction, and even “*the addition of a temporary sterilant to staple food, or to the water supply*”.<sup>21</sup> Staple foods. This could be done by “doctoring foods sent to underdeveloped countries,” but other nations “already are suspicious of our motives,” said Dr. Ehrlich. But the American Negro is not sufficiently suspicious of his 400-year open enemy so that method will work domestically. In any case, according to Dr. Ehrlich these draconian methods are a better “alternative to Armageddon.” “Every human institution – school, university, church, family, government and international agencies such as Unesco – should set [retarding population growth] as its prime task.”

In 1977 Dr. Paul Ehrlich co-authored with his wife Ann and John Holdren the book, ***Ecoscience: Population, Resources, Environment*** in which they at least entertained or even endorsed the use of horrifying measures to reduce population such as compulsory abortions as well as the sterilizing of segments of the population by introducing drugs into the water supply and their staple foods. Who is John Holdren? He later became President Barack Obama’s Science Czar, appointed Director of the White House Office of Science and Technology and Co-Chair of the President’s Council of Advisors on Science and Technology.

We thus see that the Government has never been shy about “doctoring” food with chemicals that could induce infertility, just as the Most Honorable Elijah Muhammad warned us that our enemies would do.

### III. *Weaponized Food, Vaccines and the AIDS Epidemic: The U.S. and South African Collaboration*

In the early 1980s, fears of a “black tidal wave” drove white scientists to try to develop a variety of means that could ensure the survival of white South Africa...[R]eportedly part of Project Coast was genetic engineering research, which was being conducted to produce a “black bomb,” bacteria or other biological agents that would kill or weaken blacks not whites. The black bomb could be used to wipe out or incapacitate an entire area where an insurrection was taking place.<sup>22</sup>

If we *really* want to know what the U.S. Government is capable of vis-à-vis Black people, study the evils of apartheid South Africa, because the mind (and actions) of the apartheid regime mirror the mind (and actions) of its biggest allies, supporters and tutors: America and Israel. The US, Israel and South Africa worked closely together because they all shared the same problem: their most immediate enemy to be disposed of was not another

<sup>20</sup> Gladwin Hill, “A Sterility Drug in Food is Hinted,” ***The New York Times*** November 25, 1969.

<sup>21</sup> Gladwin Hill, “A Sterility Drug in Food is Hinted,” ***The New York Times*** November 25, 1969.

<sup>22</sup> Dr. Stephen Burgess and Dr. Helen Purkitt, ***The Rollback of South Africa’s Chemical and Biological Warfare Program*** (Maxwell Air Force Base, Alabama: Air University, 2001) 21.

nation-state threatening them from outside. Rather, in all three cases the real enemy threat came from *pockets of ethnic populations within their own borders*. The U.S. propped up the horrifically racist apartheid regime of South Africa (and Israel) for decades and the US repressed the anti-apartheid movement in South Africa. In fact, it was the CIA who tipped off the apartheid government of the whereabouts of Nelson Mandela, leading to his capture in 1962. The US had pegged Mandela as “the world’s most dangerous communist outside the Soviet Union.”<sup>23</sup>

Everything was fine in South Africa – from the Afrikaner rulers’ point of view – until the Soweto Uprisings in 1976, which initiated unrest throughout the country. The eruptions in the Black townships of South Africa put the regime in the mind of “total war” and “total onslaught” against the Black South Africans. In 1981 the regime initiated its chemical and biological weapons (CBW) program called Project Coast, headed by Dr. Wouter Basson, later known as “Dr. Death.” Why the nickname? Because: “There are many people who think Basson was a war hero—because he killed the blacks big time,”<sup>24</sup> in the words of Daan Goosen, Basson’s subordinate in Project Coast.

The South African CBW program was the protégé of the United States CBW establishment. During the 1940s and 1950s South African military officers were trained in CBW by the United States and the United Kingdom.<sup>25</sup> As William Finnegan in *The New Yorker* observes: “According to Basson, Project Coast was modelled on the American chemical-weapons program, which he first managed to penetrate in the early nineteen-eighties.”<sup>26</sup> Basson received his training in CBW at Fort Detrick in Maryland and Porton Down in the U.K. From the U.S. he got knowledge, equipment, and viruses to weaponize. Basson himself would later confess: “I must confirm that the structure of the [CBW program] project was based on the U.S. system. That’s where we learnt the most.”<sup>27</sup> Thus,

The South African bioterrorist campaign depended upon very close relationships with U.S. scientists...From 1981 to 1993, the United States supported Wouter Basson’s (sic) weaponization programs by financing close collaborations with U.S. scientists and by sponsoring Basson’s sojourns to the United States for conferences education.<sup>28</sup>

The close working relationship between the U.S. and the South African CBW programs is demonstrated here: In 1984, the Center for Disease Control and Prevention (CDC) in Atlanta, Georgia provided Project Coast’s original viral samples of the deadly hemorrhagic fevers Ebola, Marbug, and Rift Valley, which the regime weaponized. The CDC sent eight separate shipments to Pretoria and “suddenly, South Africa possessed

<sup>23</sup> Ben Norton, “How the CIA helped apartheid South Africa imprison Nelson Mandela for 27 years – and is now facing lawsuits,” *Salon* May 17, 2016.

<sup>24</sup> Boateng Osei, “Did This Man ‘Kill Blacks Big Time’? (Special Report: south Africa),” *New African* November 2001.

<sup>25</sup> Stephen Burgess and Helen Purkitt, “The Secret Program: South Africa’s Chemical and Biological Weapons,” in *War Next Time: Countering Rogue States and Terrorists Armed with Chemical and Biological Weapons* (USAF Counterproliferation Center, 2004) 27-66 (28); Jerome Amir Singh, “Project Coast: eugenics in apartheid South Africa,” *Endeavour* 32 (2008): 5-9 (5).

<sup>26</sup> William Finnegan, “The Poison Keeper,” *The New Yorker* January 15, 2001: 58-74 (63).

<sup>27</sup> Washington, *Medical Apartheid*, 372.

<sup>28</sup> Washington, *Medical Apartheid*, 372.

viruses that could be used with devastating effect in surrounding countries.”<sup>29</sup> South Africa would return the favor. Soviet scientists developed and shared with Basson their nasty flesh-eating bacteria *necrotizing fasciitis* and its antidote. In 1994, Basson gave both to the U.S.<sup>30</sup> The programs – the US and South Africa – were close because they shared the same *mindset*.

The main aim of Project Coast was the development of a *kaffir-killer* or ethnic weapon designed to target Black people specifically. *Kaffir* is the N-word of choice for South African racists. An ethnic weapon is a genetically engineered virus that is coded to, upon entering an organism, scan cells looking for a specific genetic marker or specific combination of genetic markers. When a cell with such genetic markers is found, the virus would insert itself into the host DNA and start the process of infection. In this way the virus attacks only people who have these genetic markers. The South African Defense Force (SADF) Surgeon General Dr. Neil Knobel, who oversaw Project Coast, described the development of a bacterial ethnic weapon or “pigmentation weapon” that would specifically target pigmented or Black people as “the most important project for the country.”<sup>31</sup> This bacterial *kaffir-killer*, called a “black bomb,” was delivered to South Africa *by an American scientist that did CBW work for the U.S. government*, Dr. Larry Creed Ford.<sup>32</sup>

One of the *Kaffir-killing* viruses that Basson used to “kill the Blacks big time” was a version of HIV, the AIDS virus. In a safe in the director’s office there was a refrigerator that kept Basson’s personal bottle of freeze-dried blood in which was the weaponized HIV.<sup>33</sup> Basson deployed this weaponized HIV against Black South Africans through three primary ways:

1. Infect a person with the virus, and then send that person on a mission to sexually expose as many Africans as he or she can. As Stefan Elbe documents:

HIV/AIDS can be used as a weapon of war independent of the practice of rape. One highly disconcerting example involved the apartheid regime in South Africa. In 1998, following the transition to democracy, the country’s Truth and Reconciliation Commission heard testimony that the regime may have planned to use HIV against its political enemies. ...Bacteriologist Mike Odendaal has stated that the head of the Roodeplaat Research Laboratories near Pretoria, which functioned as a front company for the apartheid military, had given him a bottle with HIV-infected blood taken from a man who had died of AIDS in a military hospital. Odendaal testified that he had received orders to freeze-dry the blood for Wouter Basson, a chemical-warfare specialist who allegedly wanted to use it “against a political opponent.” ... Willie Nortje and Andries van Heerden, security officers under the apartheid regime, requested amnesty from the Truth and Reconciliation Commission for their part in a different plan. They tried to use four HIV-positive freedom fighters from the African National Congress and the Pan Africanist Congress, who had switched sides to work

<sup>29</sup> Burgess and Purkitt, *Rollback*, 29-30; Tom Mangold and Jeff Goldberg, *Plague Wars: The Terrifying Reality of Biological Warfare* (New York: St. Martin’s Press, 1999) 244.

<sup>30</sup> Stephen Burgess and Helen Purkitt, “The Secret Program: South Africa’s Chemical and Biological Weapons,” 34.

<sup>31</sup> Jerome Amir Singh, “Project Coast: eugenics in apartheid South Africa,” *Endeavour* 32 (2008): 5-9 (6).

<sup>32</sup> Edward Humes, “The Medicine Man,” *Los Angeles Magazine* July 2001, 94-99, 166-168; Marlene Burger and Peta Thornycroft, “Larry and the teabags of death,” *IOL* March 11, 2000; Arthur Allen, “Mad Scientist,” *Salon* June 26, 2000.

<sup>33</sup> “Basson had HIV blood freeze-dried,” *IOL* May 24, 2000; Tim Butcher, “South African ‘Dr Death’ learned from Saddam,” *The Telegraph* July 24, 2001; Tom Mangold and Jeff Goldberg, *Plague Wars: The Terrifying Reality of Biological Warfare* (New York: St. Martin’s Press, 1999) 253, 265.

for the state security forces, to spread HIV/AIDS among sex workers in two Hillbrow hotels in the 1990s. Nortje and Van Heerden apparently hoped that the sex workers would then spread the virus to their other clients.<sup>34</sup>

## 2. Under the cover of vaccinations.



One arm of the SADF which served Project Coast was the South African Institute of Maritime Research (SAIMR). SAIMR was not only linked to the country's CBW program, but also "operated with support from the CIA and British intelligence."<sup>35</sup> SAIMR was headed by Keith Maxwell. Maxwell had no medical qualifications but ran clinics in poor, mostly Black areas around Johannesburg while claiming to be a doctor. That gave him the opportunity for sinister experimentation."<sup>36</sup> He claimed that "AIDS would ultimately be good for humanity and would decimate the black population in South Africa," and to insure that that happens, Maxwell and SAIMR "used phony vaccinations in the early 1990s to spread H.I.V...in an attempt to wipe out the black population," according to former SAIMR intelligence officer Alexander Jones who worked for Maxwell.<sup>37</sup> This was an orchestrated

campaign to spread HIV/AIDS among Black people in Africa (including Mozambique as well).<sup>38</sup> "We were at war. Black people in South Africa were the enemy," Jones says. According to *The Independent* "The group's leader (Maxwell) is said to have posed as a philanthropic doctor to give impoverished black South African's 'false injections',"<sup>39</sup> injections containing Basson's weaponized HIV. Jones says:

Black people have got no rights, they need medical treatment. There's a white 'philanthropist' coming in and saying, "You know, I'll open up these clinics and I'll treat you." And meantime [he is] actually a wolf in sheep's clothing.

<sup>34</sup> Stefan Elbe, "HIV/AIDS and the Changing Landscape of War in Africa," *International Security* 27 (2002): 159-177 (170-171).

<sup>35</sup> "CIA-backed' mercenaries spread HIV in S. Africa, ex-member claims," *RT News* January 28, 2019.

<sup>36</sup> Emma Graham-Harrison, "Ex-mercenary claims South African group tried to spread Aids," *The Guardian* January 27, 2019; idem, "Coups and murder: the sinister world of apartheid's secret mercenaries," *The Guardian* January 20, 2019.

<sup>37</sup> Matt Apuzzo, "Quest to Solve Assassination Mystery Revives an AIDS Conspiracy Theory," *The New York Times* January

<sup>38</sup> Baffour Ankomah, "Former intelligence officer confesses: 'We Deliberately Spread AIDS in South Africa,'" *New African* March 2019: 17-20;

<sup>39</sup> Adam Lusher, "South African paramilitary unit plotted to infect black populations with Aids, former member claims," *Independent* January 27, 2019.

While Maxwell presented a public face of a benevolent philanthropist who was trying to discover a cure for AIDS, he was in actuality offering free “healthcare” in order to secretly infect Black people with HIV/AIDS through phony vaccinations. SAIMR was supported by the CIA, who also uses “phony vaccinations” in covert operations.<sup>40</sup>

### 3. Contaminating food sources.

Isak Niehaus and Gunvor Jonsson record:

Allegedly, Dr. Basson distributed HIV by various means. He put it in the food, water reservoirs, and clothes of black people; in the injections given to hospital patients; in TB and smallpox vaccines; and even in the free, government-distributed condoms. However, most informants saw black soldiers as the prime agents for transmitting HIV. Dr. Basson allegedly placed the virus in the rivers from which soldiers of the ANC ‘s [African National Council] military wing, *Umkhonto We Sizwe* (MK), drank, and he laced the malaria tablets given to black South African Defense Force soldiers with HIV. Dr. Basson purposefully created a slow virus so that the soldiers could spread it to as many women as possible.<sup>41</sup>

According to these reports. Basson secretly added the virus in *free, government-distributed condoms* and even *in the medicine* (malaria tablets) *made available to Black South Africans!* It was the U.S. – governmental CBW researcher Dr. Larry Ford in particular – who taught Project Coast operatives these techniques. How was HIV put in the food? Niehaus and Jonsson report as well:

ANC activists claimed that members of white right-wing movements distributed poisoned bread at the schools of Bushbuckridge and dumped poisoned milk in the forest. It was thought that the whites wished to ensure that few votes were cast for the ANC. At a series of meetings some ANC organizers warned civil servants and ordinary villagers that whites would employ any devious method to defeat the ANC. They alleged that the undergrade potatoes white farmers distributed free of charge in the villages were stained with invisible election ink. When people’s hands were scanned under ultraviolet rays at the polling stations it would appear as though they had already voted. The organizers also cautioned people against accepting T-shirts from seemingly generous whites as these were likely to have been doctored with dangerous chemicals. These allegations were widely accepted as truthful.

The advent of HIV/AIDS saw renewed scares. Some men claimed that in 1996 and 1997 white farmers dumped tons of undergrade oranges and sweet potatoes, which were doctored with blood containing HIV, at a shopping center and at schools. In the village of Brooklyn parents beat children who ate the oranges and warned them that they could contract AIDS. Parents were extremely suspicious of the motives of these farmers. They were hard pressed to believe that racist whites would all of a sudden give away tons of their produce. One informant, Ben Nyambi, raised the following questions: “It happened here. A white farmer brought us sweet potatoes for free. I saw the truck and the white man. How could this happen? The farmer does not pay his workers well and never transports them to work. But he spent lots of money on petrol and on his truck to bring us sweet potatoes. How can he rob his workers but give us sweet potatoes for free? I think he wants to kill us.”<sup>42</sup>

<sup>40</sup> “How the CIA’s Fake Vaccination Campaign Endangers Us All,” *Scientific American* April 16, 2013.

<sup>41</sup> Isak Niehaus with Gunvor Jonsson, “Dr. Wouter Basson, Americans, and Wild Beasts: Men’s Conspiracy Theories of HIV/AIDS in the South African Lowveld,” *Medical Anthropology* 24 (2005):179–208 (197-198)

<sup>42</sup>Niehaus with Jonsson, “Men’s Conspiracy Theories of HIV/AIDS in the South African Lowveld,” (195-196).

Many of Project Coast's chemical and biological weapons were covertly deployed through the food and beverages made available to Black South Africans. For example, at African National Congress meetings the food and beverages would be poisoned in order to disrupt the proceedings. Botulinum toxin, the most acutely lethal toxin known, laced chocolates and milk<sup>43</sup>; cigarettes and lipstick were injected with anthrax<sup>44</sup>; food was injected with Hepatitis A; tinned cans of corned beef fed to villagers was injected with thallium, a poison which can cause mental retardation; sugar cubes were laced with salmonella<sup>45</sup>; alcohol was mixed with the weedkiller paraquat as well as with thallium.<sup>46</sup> In fact, it is reported that Basson had thallium-infused beer passed out for free to Black Africans at bus stops.<sup>47</sup>

Thus, food, water, and alcohol were thoroughly – and grossly – weaponized against Black Africans of southern Africa by the chemical and biological weapons program of the apartheid regime. The U.S. supported the regime *and* the CBW program, tutoring the operatives in techniques and providing some chemical and biological weapons. The tactics used by the South African bioterrorists against Black people in Africa were also used by U.S. bioterrorists against Black people in America. *That's* the point.

#### IV. *WIC and the Mystery of the Missing Zinc*

Zinc (Zn) is an essential nutrient necessary in small amounts for health. As one of the most abundant biological trace metals, zinc is easy to get in developed countries in foods like beef, poultry, and beans. Zinc deficiency in humans can cause an assortment of pathological conditions such as growth retardation, cell-mediated immune dysfunction, among others.<sup>48</sup> Zinc deficiency is rare in the U.S. because, due to the easy access to zinc-containing foods, most diets provide more than the recommended dietary intake. So an important 2010 study seems then to reveal to us more than the circumstances of an exceptional case of zinc deficiency in an American population,<sup>49</sup> but also *hints of a scientific conspiracy*.

Scientists from Emory University, Grady Hospital and the Center for Disease Control and Prevention (CDC) studied a group of low-income Black and Hispanic pre-school children (1-5 years of age) in urban Atlanta, Georgia who were on government insurance and were enrolled in the Women, Infants, and Children (WIC) nutrition program 2006-2007. WIC is a federal assistance program that provides (among other things) free food packages to low-income pregnant and breastfeeding women, infants, and children under age 5 in order to supplement diets and provide nutrition. It is administrated by the U.S. Department of Agriculture (!). Annual Race/Ethnicity Data indicates that, in general, around 60% of WIC

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<sup>43</sup> Raymond Whitaker, "SA planned chemical war on blacks," *Independent* June 13, 1998; Chandré Gould and Peter I. Folb, "The South African Chemical and Biological Warfare Program: An Overview," *The Nonproliferation Review* (Fall-Winter 2000): 10-23 (18).

<sup>44</sup> Boateng Osei, "Did This Man 'Kill Blacks Big Time'?" (Special Report: south Africa)," *New African* November 2001.

<sup>45</sup> William Finnegan, "The Poison Keeper," *The New Yorker* January 15, 2001: 58-74 (62).

<sup>46</sup> Mangold and Goldberg, *Plague Wars*, 246, 257-259.

<sup>47</sup> "The deeds of Dr. Death," *The Guardian* October 4, 1999.

<sup>48</sup> Ananda S. Prasad, "Discovery of Human Zinc Deficiency: Its Impact on Human Health and Disease," *Adv. Nutr.* 4 (2013): 176-190.

<sup>49</sup> Conrad R. Cole et al., "Zinc and Iron deficiency and their interrelations in low-income African American and Hispanic children in Atlanta," *Am J Clin Nutr* 91 (2010): 1027-1034.

recipients are White and 20% are Black.<sup>50</sup> WIC participation is historically associated with good zinc levels. A 2003 study of a national sample of 7474 mostly non-urban (67%) Whites (61%) found “Less than 1% of (preschool) children had usual zinc intakes below the adequate intake or estimated average requirement” and that “WIC participation was positively associated with zinc intake”.<sup>51</sup> In other words, the food provided through the WIC program provided at least some of the zinc needed to achieve healthy levels. Fifteen years later a 2018 national random sample of 3,235 children found that WIC participants who received the food packages tested better for zinc intake than low-income *as well as high-income* non-WIC participants.<sup>52</sup> This suggests that the WIC package was a source of zinc for these participants. Jun et al. found that only 2% of this national sample of young infant (0- to 5.9-months-old) WIC recipients and 1.5% of toddlers (12- to 23.9-months-old) had zinc intakes below the estimated average requirement.

Even Black children have historically benefited from WIC in this regard. The Third National Health and Nutrition Examination Survey, 1988-1994 surveyed the zinc status of a nationwide sample of 29,103 (10,533 White, 8392 Black, 8421 Mexican American) aged two years and older and found that, while Whites do have a better zinc status than African Americans and Mexican Americans in part due to the larger percentage of Whites (mainly female) who can afford to use zinc supplements, “Mean *dietary* zinc intakes were not statistically different among non-Hispanic whites, non-Hispanic blacks, and Mexican Americans of the same age and sex group for age/sex groups aged < 51y.”<sup>53</sup> The national zinc status of African Americans (mean 9.5) did not depart significantly from that of the national mean (10.0). So a zinc deficiency is uncharacteristic in America, for both Whites and African Americans. Thus, what was discovered in Atlanta in 2006-2007 is indeed an anomaly that demands explanation.

Conrad R. Cole et al.’s 2010 report is an analysis of the zinc status of 280 Black and Hispanic children of urban Atlanta.<sup>54</sup> This is a study of a defined, single metropolitan area group of Black and Hispanic preschoolers dependent (to one degree or another) upon WIC food supplies. The authors found evidence of a zinc deficiency in *from 19.4% to upwards of 44% of the Black children*: “Mean serum zinc concentrations were significantly lower among African American preschool children than among Hispanic preschool children, and they were significantly lower among those covered by government-sponsored insurance programs than among those with private health insurance”.<sup>55</sup> The risk of zinc deficiency among these Black children was 4-fold that of the Hispanic children. This zinc-deficiency was so prevalent

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<sup>50</sup> Thorn, B., Kline, N., Tadler, C., Budge, E., Wilcox-Cook, E., Michaels, J., Mendelson, M., Patlan, K. L., & Tran, V., *WIC Participant and Program Characteristics 2016* (Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, 2018) 24-27.

<sup>51</sup> Joanne E Arsenault and Kenneth H Brown, “Zinc intake of US preschool children exceeds new dietary reference intakes,” *Am J Clin Nutr* 78 (2003): 1011-7.

<sup>52</sup> Shinyoung Jun et al. “Usual Nutrient Intakes from the Diets of US Children by WIC Participation and Income: Findings from the Feeding Infants and Toddlers Study (FITS) 2016,” *The Journal of Nutrition* 148 (2018): 1567S-1574S.

<sup>53</sup> Ronette R. Briefel et al., “Zinc Intake of the U.S. Population: Findings from the Third National Health and Nutrition Examination Survey, 1988-1994,” *Journal of Nutrition* 130 (2000): 1367S-1373S.

<sup>54</sup> Conrad R. Cole et al., “Zinc and Iron deficiency and their interrelations in low-income African American and Hispanic children in Atlanta,” *Am J Clin Nutr* 91 (2010): 1027-1034.

<sup>55</sup> Cole et al., “Zinc and Iron deficiency,” 1029.

among Black children on WIC that “African American” ethnicity as well as “government-sponsored insurance status” were deemed risk factors for zinc-deficiency.<sup>56</sup>

This unexpectedly high prevalence of zinc deficiency among Black preschool WIC recipients in Atlanta is remarkably contrary not only to the reported good zinc status of White WIC recipients nationwide but is contrary also to the zinc status of nationwide samples of African Americans as well. Our 2006-2007 Atlanta population of Black preschoolers with a high prevalence of zinc deficiency thus *stands out radically as a national outlier*.

The consequences of zinc deficiency are significant. Zinc deficiency can cause growth retardation, mental lethargy and endocrine disruption, specifically male hypogonadism (=low testosterone), testicular atrophy (shrinkage of testicles), and male and female infertility.

Zinc plays an essential role in the synthesis and secretion of luteinizing hormone (LH) and follicle-stimulating hormone (FSH), gonadal differentiation, action of the Müllerian inhibiting factor, testicular growth and development of seminiferous tubules, spermatogenesis, testicular steroidogenesis, androgen metabolism and interaction with steroid receptors (...). In zinc deficiency, testicular cells are able to take up cholesterol and neutral lipids which are precursors of sex steroids but are incapable of converting them into sex steroids, leading to the arrest of spermatogenesis and the impairment of fertilization...<sup>57</sup>

Not only does zinc deficiency cause male reproductive disruption, it causes male feminization. Zinc inhibits the process called *aromatization* i.e., the conversion of the male hormone testosterone into the feminizing hormone estrogen by the enzyme aromatase. Zinc deficiency therefore results in *excessive* aromatization, which leads to an excessive amount of testosterone converting into estrogen, thus an increased estrogen/testosterone ratio. Zinc deficiency also decreases the available number of *androgen receptors* necessary to potentiate the testosterone and increases the number of *estrogen receptors* that potentiate the extra estrogen: “Such (zinc) deficiency plays a pathogenic role in feminization and reproductive dysfunction,” reports Om and Chung.<sup>58</sup>

So a condition – zinc deficiency - that causes male feminization as well as reproductive dysfunction leading to infertility in males and females is a rare occurrence in America among African Americans and Whites, yet it “unexpectedly” occurs in a population of Black preschoolers in the CDC’s Atlanta, as “discovered” by a CDC funded study?! What is the cause of this “unexpected” find? Our authors don’t give us an answer, but they do offer us a hint:

Food intake was not a problem in either group (Black or Hispanic), as documented in the food diaries, especially those of the African American children who consumed very high mean daily energy. However, *the bioavailability of zinc in the foods consumed* and the interactions between zinc and other components of the diet might be responsible for the zinc status among these children.

<sup>56</sup> Cole et al., “Zinc and Iron deficiency,” 1027, 1030.

<sup>57</sup> Ae-son Om and Kyung-Won Chung, “Dietary Zinc Deficiency Alters 5 $\alpha$ -Reduction and Aromatization of Testosterone and Androgen and Estrogen Receptors in Rat Liver,” *Journal of Nutrition* 126 (1996): 842-848 (842). See also Ananda S. Prasad, “Discovery of Human Zinc Deficiency: Its Impact on Human Health and Disease,” *Adv. Nutr.* 4 (2013): 176-190; Ananda S. Prasad et al., “Zinc status and serum testosterone levels of healthy adults,” *Nutrition* 12 (1996): 344-348.

<sup>58</sup> Om and Chung, “Dietary Zinc Deficiency Alters 5 $\alpha$ -Reduction,” 847.

In other words, it is not the case that the Black children are not consuming the right foods in order to have a better zinc status. Rather, it is possible that the zinc in these foods is not rendered bioavailable when consumed by these Black children. Or: the food does not contain the zinc that it is *expected* to contain. Both can be accomplished scientifically.

Zinc deficiencies have been experimentally induced by diet in animals by scientists since 1967 and by 1983 it was “considered desirable to develop a *human model* which would allow a study of the effects of a mild zinc deficient state in man.”<sup>59</sup> In other words, after mastering the induction of a zinc deficiency in animals through manipulation of food sources, scientists were ready to try their

skills with human guinea pigs. The first human models were groups of volunteers enrolled in scientific experiments.<sup>60</sup> But *in vitro* (in the lab) results need *in vivo* (in real life) confirmation. Did the *in vivo* phase of the project to develop and study a human model of zinc deficiency involve those 146 Black children of metro Atlanta who participated in the 2006-2007 zinc study supported by the CDC and the National Institutes of Health? Were they unwitting human guinea pigs?

There are a variety of techniques capable of experimentally inducing a zinc deficiency in a human model through dietary means. Foods can be scientifically modified to deplete zinc in a human consumer and to cause a zinc deficiency without the consumer having a clue. This can be achieved via two primary methods of food manipulation: 1. Stripping a food item of its natural zinc content or 2. Introducing into the food a chemical inhibitor that reduces the zinc’s bioavailability once the food is consumed. In the case of Black WIC recipients in Atlanta, both of these methods could be performed by the food manufacturer before the food is packaged and shipped to the zip codes where the destination stores are located.

In terms of the first method, food can be stripped or “purified” of its zinc by being “washed” with the disodium salt of the chemical ethylenediaminetetraacetic acid (EDTA). Because EDTA binds to zinc, its disodium salt (Na<sub>2</sub>EDTA) acts as a chelator or *extractant* that “pulls out” all or most of the zinc in the food, which is then washed off of the food

### Dietary model for production of experimental zinc deficiency in man<sup>1-3</sup>

Parviz I Rabbani, PhD; Ananda S Prasad, MD, PhD; Rita Tsai, RD;  
Barbara F Harland, PhD, RD; and MR Spivey Fox, PhD

**ABSTRACT** A semipurified diet based on soy protein was developed to induce mild zinc deficiency in five male volunteers. Each of seven daily menus provided (mean ± SD) 2248 ± 128 kcal, 56.6 ± 5.7 g protein, 261 ± 30 g carbohydrate, 110 ± 21 g fat, 8.5 ± 1.4 g fiber, and 4.8 ± 1.3 mg zinc. The analytical value for phytate:zinc molar ratio was 21 ± 9. One subject, who received five of the menus for 28 wk, lost ~200 mg body zinc and 7% weight; zinc concentration declined 25% in plasma, 30% in lymphocytes, and 55% in neutrophils. This dietary model allowed simple formulation of new menus for subjects in diverse states of health. It caused no ill effects after prolonged consumption, and all deficiency symptoms were reversed by zinc supplementation of 30 mg/d for 20 wk. With simple manipulation, this dietary model may be used safely for gradual induction of zinc and/or other micronutrient deficiencies in humans. *Am J Clin Nutr* 1987;45:1514-25.

**KEY WORDS** Dietary model, zinc deficiency in humans, textured soy protein

#### Introduction

In 1974, the National Academy of Sciences (1) first published a recommended dietary allowance (RDA) for zinc. The recommendation was based on radioisotope and zinc-balance data. Radioisotope data (2) showed that zinc turnover was ~6 mg/d for adults. Daily obligatory zinc losses with no dietary zinc intake totaled 2 mg/d (3, 4). Assuming that 40% of the dietary zinc is biologically available (5), the recommended zinc intake for adults would fall between 5 and 15 mg/d.

Such a study would have to be monitored closely to reduce errors involved in estimation of zinc balance.

We developed a 2-d cycle diet for two groups of two volunteers each and fed it for ~1 yr (19). One of the most difficult problems we encountered was dissatisfaction with prolonged consumption of such a monotonous diet. To reduce the monotony of the diet and to increase its palatability, the original diet was extensively modified and new recipes were added according to the principles of the American Diabetic Association’s (ADA) ex-



<sup>59</sup> R.B. Williams and C.F. Mills, “The experimental production of zinc deficiency in the rat,” *Br. J. Nutr.* (1970): 989-1003; Ananda S. Prasad, “Experimental Zinc Deficiency in Humans: An Overview of Original Studies,” *Nutritional bioavailability of zinc*, ed. George E. Inglett (Washington, DC: American Chemical Society, 1983) 1-14; Parviz I. Rabbani et al., “Dietary model for production of experimental zinc deficiency in man,” *Am J Clin Nutr* 45 (1987): 1514-1525.

<sup>60</sup> Prasad, “Experimental Zinc Deficiency in Humans.”

with deionized water. Once dried, the food can be packaged and shipped, and the store personnel and the consumer of the food is none the wiser. EDTA-washed foods have been extensively used by scientists to induce zinc-deficiency. Thus, theoretically if the “purified-then-packaged” food is sent to stores in selected areas (zip codes) and purchased with a WIC voucher, only *those* WIC costumers in *that* area would show any signs of a zinc deficiency. This hypothetical is very consistent with what we actually find in our Atlanta cohort of 2006-2007.

The second method of modifying food to covertly induce a zinc deficiency is by inserting an *additive* into the food that, once consumed, inhibits the bioavailability of the zinc. Incidentally, it is public knowledge that WIC products – on a state-by-state basis - *contain such chemical inhibitors* which fall under the title “Functional Ingredients.” A “Functional Food” is a food that is modified by a functional ingredient, which is a substance added to a food through the manufacturing process and that is purported to improve bodily function or is intended to produce a desired physiological effect.<sup>61</sup> WIC offers such “Functional Foods” that have been modified by chemical additives, such as baby formula, infant cereal, eggs, juice, and bread.<sup>62</sup> One of the recognized “functional ingredients” used to modify food is soy protein isolate. Soy products have been a staple of the WIC package since 2009. But as a recognized *functional ingredient*, soy protein isolate can be added to any WIC-offered food by the manufacture. Even though WIC is a fully federally-funded program, the decision to offer modified or “enhanced” foods is not a national decision but is made on a state-by-state basis, and *not* by the state WIC office but by the manufacturers! Because soy protein isolate is a highly refined product processed to remove “off flavors,” beany tastes and flatulence producers and increase digestibility, it is much easier to conceal its presence in a food item.

### SOY THE ENEMY

Why is adding soy protein isolate to a food as a functional ingredient a problem and of potential relevance to our discussion of Black WIC recipients in Atlanta with an “unexpected” zinc deficiency? Because, in the case of the *in vitro* phase of the human experiment, in “the nature and composition of a diet that could be used to produce a deficiency of zinc...in man,” “[t]he principle ingredient used to formulate the [menu] was texturized soy protein.”<sup>63</sup> This is because soy contains a substance called phytate which is released in the body (after consumption) as phytic acid. Phytic acid has been referred to as an “anti-nutrient” substance because it promotes mineral deficiency. When soy is added to a food and that food is consumed, the phytic acid impairs the absorption by the body of iron, zinc, and calcium by binding to these minerals in the intestine, making them

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<sup>61</sup> Kristi M. Crowe and Coni Francis, “Position of the Academy of Nutrition and Dietetics: Functional Foods,” *Journal of the Academy of Nutrition and Dietetics* 113 (2013): 1096-1103; Institute of Food Technologies, “Functional Foods: Opportunities and Challenges,” March 2005. [http://www.ift.org/Knowledge-Center/Read-IFT-Publications/Science-Reports/Expert-Reports/w/media/Knowledge%20Center/Science%20Reports/Expert%20Reports/Functional%20Foods/Functionalfoods\\_expertreport\\_full.pdf](http://www.ift.org/Knowledge-Center/Read-IFT-Publications/Science-Reports/Expert-Reports/w/media/Knowledge%20Center/Science%20Reports/Expert%20Reports/Functional%20Foods/Functionalfoods_expertreport_full.pdf). Accessed June 23, 2019

<sup>62</sup> Zoë Neuberger, “WIC Package Should Be Based on Science: Foods with New Functional Ingredients Should Be Provided Only If They Deliver Health or Nutritional Benefits,” *Center on Budget and Policy Priorities* June 4, 2010.

<sup>63</sup> Prasad, “Experimental Zinc Deficiency in Humans”; Rabbani et al., “Dietary model for production of experimental zinc deficiency in man.”

less available to the body, i.e. not “bioavailable.” Soy-enhanced foods thus can cause zinc deficiency.

Soy is also a feminizer on its own. The soybean contains isoflavones like genistein that are estrogenic—they bind to and activate the estrogen receptors. Soy protein also depletes testosterone in men.<sup>64</sup> In addition, “Soy phytoestrogens have contraceptive effects,” impairing male and female fertility.<sup>65</sup> Nevertheless, soy is recognized by the FDA – the CIA’s own “junior partner” - as a “functional food” that can be added to foods, and today it is reported that 60% of foods found in the supermarket and natural food stores contain soy as an ingredient, often a “hidden” ingredient in products where soy would not ordinarily be expected, such as fast-food hamburgers.<sup>66</sup> According to Slate.com “A quick scan of a McDonald’s ingredients list revealed soy in more than 200 items—and not just in expected things like French fries and chicken nuggets, but also breakfast sausages, grilled onions, chicken patties, BBQ ranch sauce, sesame buns, liquid margarine, cinnamon melts, hash browns, griddle cakes, chocolate chips, and bagels.”<sup>67</sup>

Prior to this current *dominance* of labeled and unlabeled (hidden) soy-infused foods, it is not inconceivable that such a practice was piloted by programs that offered food to poor Black people in urban areas—the WIC program for example - in order to test the ability to dietarily induce a zinc deficiency in an *in vivo* human model. This would most certainly give context to the “discovery” of a rare prevalence of zinc deficiency among Black WIC recipients of urban Atlanta, 2006-2007 by the CDC.

At around this same time another isolated, captive population was punitively forced a soy-based diet. In 2010 prisoners from Danville Correctional Center sued the Illinois Department of Corrections (IDOC) in federal court alleging that the prisoners were being “tortured” by excessive soy in the diets. Well into the 1990s prisoners were fed a beef-based meat diet and even operated prison farms and abattoirs, producing much of their own food. But in 2003 when Rob Blagoyevich became governor of Illinois, he fired the Black woman in charge of food service and instituted a 60-70% soy-based diet: soy protein “meat,” soy cheese in the macaroni, soy sausage, sour flour used for baked goods, etc.<sup>68</sup>

The soy was provided to the IDOC by Archer Daniel Midlands, who reportedly was a big contributor to the Blagoyevich campaign. The prisoners were being fed as many as seven soy-enhanced “meat” entrées a week, amounting to as much as 100 grams of soy protein a day while the USDA (!) was recommending no more than 25 grams of consumption per day as safe. Some of the soy was Monsanto’s genetically modified soy. At the same time, the IDOC staff were provided soy-free food. The suit alleged that feeding a soy-laden diet constitutes cruel and unusual punishment in violation of the eighth amendment of the Constitution. Men were suffering from heart issues, thyroid damage, severe digestive problems, vomiting, constipation, debilitating diarrhea, and hormonal changes that caused men to grow breasts and become infertile. “The main problem was the high estrogen levels in the soy,” said Larry “Rocky” Harris, a “prisoner

<sup>64</sup> See Dr. Kaayla T. Daniel, *the whole soy story: the dark side of America’s favorite health food* (Washington, DC: New Trends Publishing, Inc., 2005).

<sup>65</sup> Daniel, *the whole soy story*, Chapter 28.

<sup>66</sup> Daniel, *the whole soy story*, 88.

<sup>67</sup> Rachel E. Gross, “Why Soy Is Everywhere?” *Slate.com* May 21, 2015.

<sup>68</sup> Andrea Billups, “Soy diet prompts prisoners’ lawsuit,” *The Washington Times* Tuesday February 28, 2012; Sally Fallon Morell, “State of Illinois Still Poisoning Male Prisoners with Soy Diet,” @ <http://nourishingtraditions.com/state-illinois-still-poisoning-male-prisoners-soy-diet/> ; “Illinois Prisoners Sue over Soy-Based Food,” *Prison Legal News* April, 2010.

lawyer” and one of the plaintiffs in the suit.<sup>69</sup> Yet, this same soy is classed as a *functional ingredient* and indiscriminately added to food. This soy can cause zinc deficiency.

Zinc deficiency can cause infertility in males and females and feminization of males. This is a rare condition in America, yet it made an “unexpected” appearance among Black children in Atlanta dependent upon government-issued food sources. Using secretly manipulated food to covertly induce a condition of infertility and male feminization would not have been a new idea in 2006-2007, as we saw. The spatial isolation of Black communities through segregation makes it easy to target this specific group.

## V. *Segregation and Scientific Racism Today*

Segregation is one of our nation’s most enduring and intractable problems. More than 60 years since the Supreme Court’s landmark *Brown v. Board of Education* decision denounced racial segregation in primary and secondary public schools, and 50 years since the enactment of the federal Fair Housing Act, our neighborhoods and schools have yet to reflect the rich diversity of our nation as a whole. In far too many cases, racial segregation is as severe or worse today than a generation ago. Racially segregated neighborhoods and schools are visible in every part of the United States. *Segregation seems embedded in our nation’s fabric...<sup>70</sup>*

Segregation is embedded in the fabric of America, not only for the purposes of the *social isolation* of White people from Black people but for the purposes of *scientific isolation* as well. In 1994 sociologist Dr. Robert D. Bullard rightly invoked the image and memories of South Africa to contextualize the situation in the U.S.

Residential apartheid is the dominant housing pattern for most African Americans—the most racially segregated group in the United States—and other people of color. Nowhere is this separate-society contrast more apparent than in the nation’s large metropolitan areas. Residential apartheid did not result from some impersonal super-structural process. White racism created American apartheid...The nation’s ghettos, barrios, and reservations, *are kept isolated and contained from the larger white society* through well-defined institutional practices, private actions, and government policies (emphasis added – WM).<sup>71</sup>

As Dr. Kenneth B. Clark saw also, the hood is a *colony* with subject peoples contained by *invisible walls*

The dark ghetto’s invisible walls have been erected by white society who have power both to confine those who have *no* power and to perpetuate their powerlessness. The dark ghettos are social, political, educational, and—above all—economic colonies. Their inhabitants are subject people, victims of the greed, cruelty, insensitivity, guilt and fear of their masters.<sup>72</sup>

While Black people in America, as a largely colonized group, live a life of imposed *segregation*, White people – the domestic colonizer – exist in *self-separated*

<sup>69</sup> “Larry ‘Rocky’ Harris Innocence Project,” @ <https://freelarryrockyharrisx2.com/>

<sup>70</sup> Stephen Menendian and Samir Gambhir, “Racial Segregation in the San Francisco Bay Area, Part 1,” Haas Institute for a Fair and Inclusive Society (October 29, 2018), <https://haas.institute.berkeley.edu/racial-segregation-san-francisco-bay-area>.

<sup>71</sup> Dr. Robert D. Bullard, “The Legacy of American Apartheid and Environmental Racism,” *Journal of Civil Rights and Economic Development* 9 (1994): 445-474 (445).

<sup>72</sup> Kenneth B. Clark, *Dark Ghetto: Dilemmas of Social Power* (New York: Harper & Row, 1965) 11.

communities. In 1995 Research Atlanta conducted a survey and found that 90% of Whites surveyed in metro-Atlanta expressed a willingness to move into an area with one Black household. As the number of Black households increased to eight, the percentage of willing Whites dropped to 26%.<sup>73</sup> The reality of life in America for Black and for White is not different today. The Brookings Institution has reported that, while the level of segregation characteristic of the “chocolate city, vanilla suburb” map has modestly declined, still “Most white residents of large metropolitan areas live in neighborhoods that remain overwhelmingly white”.<sup>74</sup> A segregation index (from 0 = complete integration to 100 = complete segregation) shows that the twelve largest metro areas still score numbers from 65 to 79. In 2013-2017, according to the Brookings Institution, the average White resident of the nation’s 100 largest metropolitan areas lived in a neighborhood that was 72 percent White.

**Metro areas with highest black-white segregation**  
2000 and 2013-2017\*

2000		2013-2017	
	Segregation Index**		Segregation Index**
1	Detroit 85.7	1	Milwaukee 79.8
2	Milwaukee 83.3	2	New York 76.1
3	Chicago 81.2	3	Chicago 75.3
4	New York 79.7	4	Detroit 73.7
5	Cleveland 78.2	5	Cleveland 72.9
6	Buffalo 78.0	6	Buffalo 72.2
7	St. Louis 74.0	7	St. Louis 71.7
8	Cincinnati 73.6	8	Cincinnati 67.3
9	Indianapolis 71.7	9	Philadelphia 67.0
10	Philadelphia 71.0	10	Los Angeles 66.8
11	Kansas City 70.8	11	Pittsburgh 66.1
12	Los Angeles 70.0	12	Hartford 65.7

\* Among 51 metro areas with populations exceeding one million and with black populations exceeding 3 percent of metro population (metro area names are abbreviated).  
 \*\* Segregation Index is a dissimilarity index, which represents the percent of blacks that would need to relocate to be fully integrated with whites across metropolitan neighborhoods.  
 A value of 100 indicates complete segregation; a value of 0 equals complete integration (See values for all metro areas and further details in Table A).

**THE BAY AREA AS ILLUSTRATIVE**

Illustrative of the intransigence of segregation in America and its ability to *hide in plain sight* is Northern California’s Bay Area. The Bay Area is remarkably diverse racially, geographically, and economically. This region of more than seven million people consists

<sup>73</sup> Chris Geller, Keith Ihlanfeldt, and David Sjoquist, *Atlanta in Black and White: Racial Attitudes and Perspectives* (Atlanta: Research Atlanta, Inc., 1995) 13.

<sup>74</sup>William H. Frey, “Black-white segregation edges downward since 2000, census shows,” The Avenue, Brookings Institution, December 17, 2018

of roughly 39% White, 26 % Asian, 24 % Hispanic, 6 % Black, and 5% “other” (Native American, Pacific Islanders, mixed-race, etc.). However, this remarkable diversity masks a severe segregation:

Only a handful of cities in the region are both diverse *and* highly integrated...The San Francisco Bay Area, like most of the United States, is deeply segregated...we find racial segregation in every county and MSA [metropolitan statistical area] in the region. Despite the racial diversity that exists through most of the Bay Area, segregated neighborhoods exist in every part of the region, from north to south, and east to west...far too few census tracts in the region resemble the populations in the Bay Area as a whole, let alone of the counties or MSAs in which they reside...Thus, although these cities are diverse in aggregate, they tend to contain some of the most racially segregated non-white neighborhoods in the Bay Area.”<sup>75</sup>

To the extent that integration *does* exist in the Bay, it is *people of color* that are more or less integrated with *each other*.<sup>76</sup> Whites on the other hand are the most (*self-*) *separated* and *segregating* (colonizing) racial group. Whites make up over 50% of the population in 1206 of the 1582 census tracts that characterize the region. In 543 of the census tracts Whites constitute from 66% to over 75% of the population. On the other hand, African Americans are the most racially concentrated and segregated group in the Bay Area: 75% of the Bay’s Black residents reside in just 26% of the region’s census tracts, such as Hunter’s Point in San Francisco and the flatlands of East Oakland and West Oakland. Oakland itself is exceptionally diverse (28% Hispanic, 27% White, 23% Black, 15% Asian) while containing “*some of the most segregated neighborhoods in the Bay Area*.”<sup>77</sup> These patterns of segregation are the consequence of exclusionary policies and private housing discrimination. This forced segregation allows for the easy targeting of the group.

## VI. *Life and Death in White and Black*

A recent report from City Lab is revealing: “Life Expectancy Is Associated With Segregation in U.S. Cities.”<sup>78</sup> It was found that in cities with the clearest lines of segregation, life expectancy shows the greatest gap between the segregated communities, a difference that can equal 20 to 30 years. For example, in Chicago which ranked just below Milwaukee and New York in the 2013-2017 Segregation Index with a score of 75.3 (between 0 = complete integration and 100 = complete segregation), there is a *30 year life expectancy gap between Whites on the North side and African Americans on the South and West sides!* This means that northside Whites live on average 30 years longer than south- and westside African Americans. In segregated San Francisco there is a 25 year

<sup>75</sup> Stephen Menendian and Samir Gambhir, “Racial Segregation in the San Francisco Bay Area, Part 1,” Haas Institute for a Fair and Inclusive Society (October 29, 2018), <https://haasinstitute.berkeley.edu/racial-segregation-san-francisco-bay-area>.

<sup>76</sup> Stephen Menendian and Samir Gambhir, “Racial Segregation in the San Francisco Bay Area, Part 1,” Haas Institute for a Fair and Inclusive Society (October 29, 2018), <https://haasinstitute.berkeley.edu/racial-segregation-san-francisco-bay-area>.

<sup>77</sup> Stephen Menendian and Samir Gambhir, “Racial Segregation in the San Francisco Bay Area, Part 1,” Haas Institute for a Fair and Inclusive Society (October 29, 2018), <https://haasinstitute.berkeley.edu/racial-segregation-san-francisco-bay-area>.

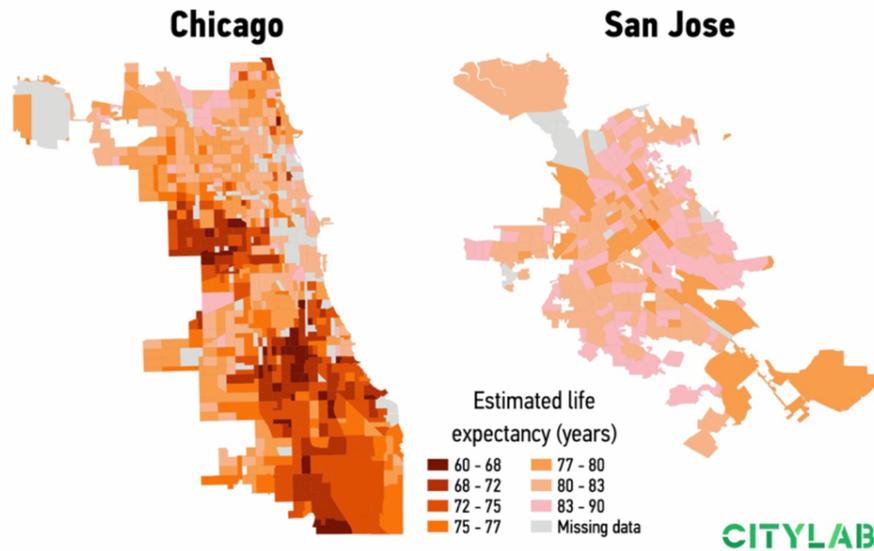
<sup>78</sup> Sarah Holder and David Montgomery, “Life Expectancy Is Associated With Segregation in U.S. Cities,” *CitiLab* June 6, 2016.



gap between segregated Black and self-seperated White populations. This is in contrast to San Jose, California - said to be the most-integrated metropolitan region in the Bay Area - where we don't see the same stark color divisions in terms of life expectancy gap, because even in the worst-off neighborhoods of San Jose the average lifespan is near 80 years old. This is because *the magnitude of racial/ethnic segregation leads to the life expectancy gap*.<sup>79</sup> There is a *cloud of living* that hovers over White communities and over "integrated" communities like San Jose, from which even poor people there benefit: "a Harvard analysis found that residents of rich neighborhoods live on average 15 years longer than residents of poor neighborhoods, and that even lower-income residents of wealthy

neighborhoods live longer than others in poorer ones."<sup>80</sup> That is because with this *spatial determinism* that characterizes American society the *determining* factor is race first, socioeconomic status second. "While there are some very poor white neighborhoods in Appalachia and some older rust belt cities, 75% of poor whites in the United States live in predominantly middle-income neighborhoods."<sup>81</sup>

Neighborhood life expectancy in...



Source: NYU School of Medicine's Department of Population Health (David H. Montgomery/CityLab)

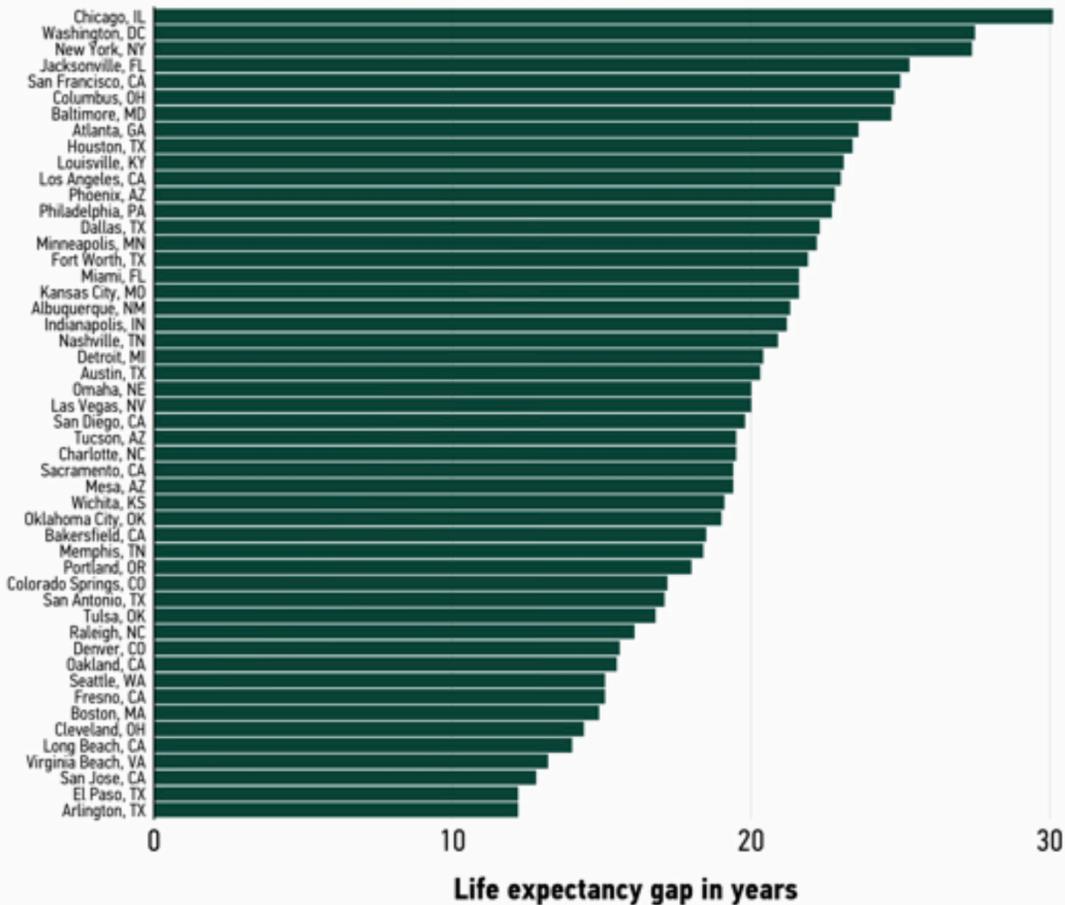
<sup>79</sup> Sarah Holder and David Montgomery, "Life Expectancy Is Associated With Segregation in U.S. Cities," *CitiLab* June 6, 2016.

<sup>80</sup> Sarah Holder and David Montgomery, "Life Expectancy Is Associated With Segregation in U.S. Cities," *CitiLab* June 6, 2016.

<sup>81</sup> Myron Orfield, "Segregation and Environmental Justice," 7 *Minnesota Journal of Law, Science & Technology* 7 (2005): 147-160 (148).

## Max life expectancy gap between neighborhoods

Among 50 largest U.S. cities.



Source: NYU School of Medicine's Department of Population Health (David H. Montgomery / CityLab)

In America, Whites have (scientifically) insured that *clouds of living* hover over their separated communities (even if they permit others within it) and *clouds of death* hover over segregated Black communities (with the poorest of whites who live there as acceptable casualties of war).

Segregation is so “embedded in the nation’s fabric” because it serves Whites not only a *social* purpose but also a *scientific purpose*. Segregation creates localized geographic areas that can be targeted. Segregation provides *concentrated Blackness*. When I use the language *cloud of death*, I am being quite literal. The concentration of Black and Brown people into segregated areas and the self-separation of White people from those areas allow for *the easy and efficient targeting of Black People with chemical poisoning of the air, food, and water while hermitically sealing affluent White (and “integrated”) communities off from the poisons and the consequences of the poisoning*. Thus, the life expectancy gaps between Black and White people.

VII. *Clouds of Death*

If one seeks evidence that Black zip codes have been scientifically targeted, we need go no further than the example of the *air* breathed in by the residents of segregated Black neighborhoods. And if the *air* is weaponized, how about the food? As ***Scientific American*** reported in 2012:

Tiny particles of air pollution contain more hazardous ingredients in non-white and low-income communities than in affluent white ones, a new study shows. The greater the concentration of Hispanics, Asians, African Americans or poor residents in an area, the more likely that potentially dangerous compounds such as vanadium, nitrates and zinc are in the mix of fine particles they breath.<sup>82</sup>

Dr. Robert Bullard documented in his important work ***Dumping in Dixie*** that communities of color *are deliberately and consistently sought out for toxic dumping*, thus hazardous waste sites and other polluting facilities are likely to be deliberately placed near poor, Black and Brown areas, resulting in heavily polluted local environments.<sup>83</sup> In 2012 Yale University researchers found that in segregated cities with concentrations of poor Black and Brown residents like Los Angeles, St. Louis, etc., the air is most polluted with fine *particulate matter* (PM), which is microscopic particles suspended in the air from diesel fuel emissions, smog, soot, oil, ash, construction dust, etc. and when inhaled can penetrate deep into the lungs and are linked to asthma, cardiovascular disease and cancer. The most pervasive air pollutant is called PM<sub>2.5</sub>. The researchers found that, of the 14 components<sup>84</sup> of PM<sub>2.5</sub>, “non-Hispanic blacks had higher exposures than whites for 13 of the 14 components” and “Non-Hispanic whites had the lowest estimated exposure for 11 of the 14 components.”<sup>85</sup> How convenient.

The researchers found that the profile of those with the highest exposure of PM<sub>2.5</sub> was “non-Hispanic black, the least educated, the unemployed, and those in poverty.” In an assessment of whether geographic areas are in compliance with the National Ambient Air Quality Standards (NAAQS) which regulates air pollutant emissions, Miranda et al. found in 2011 that “non-Hispanic blacks are consistently overrepresented in communities with the poorest air quality (re: PM<sub>2.5</sub> and ozone exposure).”<sup>86</sup> The Environmental Protection Agency (EPA) itself in 2018 also confirmed that “results at national, state, and county scales all indicate that non-Whites tend to be burdened [by fine particulate matter] disproportionately to Whites,” and that *race* is a stronger variable in this situation than

<sup>82</sup>Cheryl Katz, “People in Poor Neighborhoods Breathe More Hazardous Particles,” ***Scientific American*** November 1, 2012.

<sup>83</sup> Robert D. Bullard, ***Dumping in Dixie: Race, class, and environmental quality*** (Boulder, CO: Westview, 1990).

<sup>84</sup> The researchers investigated the levels of sulfate (SO<sub>4</sub><sup>2-</sup>), nitrate (NO<sub>3</sub><sup>-</sup>), ammonium (NH<sub>4</sub><sup>+</sup>), organic carbon matter (OCM), elemental carbon (EC), sodium ion (NA<sup>+</sup>), aluminum (Al), calcium (Ca), chlorine (Cl), nickel (Ni), silicon (Si), titanium (Ti), vanadium (V), and zinc (Zn).

<sup>85</sup> Michelle L. Bell and Keita Ebisu, “Environmental Inequality in Exposures to Airborne Particulate Matter Components in the United States,” ***Environmental Health Perspectives*** 120 (2012): 1699-1704.

<sup>86</sup>Marie Lynn Miranda et al., “Making the Environmental Grade: The Relative Burden of Air Pollution Exposure in the United States,” ***Int. J. Environ. Res. Public Health*** 8 (2011): 1755-1771.

poverty: *segregated* Black people<sup>87</sup> suffer long-term exposure to 1.5 times more particulate matter than Whites.<sup>88</sup> Very importantly it was found that, while people of color *suffer* air pollution, it is largely *affluent White people who cause* that air pollution in segregated Black and Brown areas! Christopher W. Tessum et al. found that

in the United States, PM<sub>2.5</sub> exposure is disproportionately caused by consumption of goods and services mainly by the non-Hispanic white majority, but disproportionately inhaled by black and Hispanic minorities.<sup>89</sup>



So it is affluent White society that created the clouds of death that hover over Black America, from which they themselves are largely separated and thus protected. As Bullard explains:

Environmental racism is real. It is just as real as the racism found in housing, education, employment, and the political arena...Environmental racism combines with public policies and industry practices to provide *benefits* for whites while shifting *costs* to people of color...In the United States, race has been found to be independent of class in the exposure to lead, harmful pesticides, location of municipal landfills and incinerators, abandoned toxic waste dumps, and environmental protection and cleanup of Superfund sites.<sup>90</sup>

Again, the Bay Area is illustrative. People of color (Black, Hispanic, Asian) comprise 93% of East Oakland and 85% of West Oakland. Whites are 6.7% and 15.4% respectively. It is the highest poverty neighborhoods of Alameda County (Oakland is the county seat) that are the *darkest* (ethnically) and suffer the poorest health outcomes. This is because “Low-income neighborhoods and communities of color are often unjustly burdened by a disproportionate number of hazardous facilities that pollute the air,

<sup>87</sup> Cheryl Katz, “People in Poor Neighborhoods Breathe More Hazardous Particles,” *Scientific American* November 1, 2012: “The risks (of exposure) increase with degree of segregation in all racial and ethnic groups”; “Cities that are more segregated, you see higher pollution burdens for residents of color.”

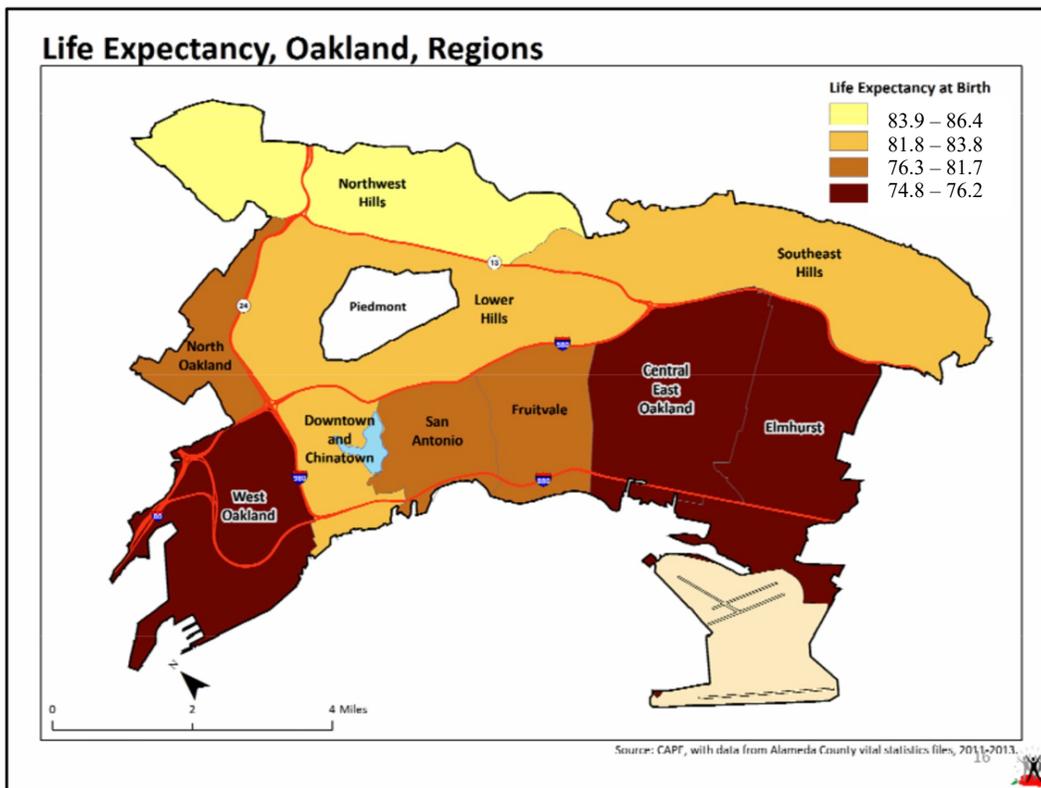
<sup>88</sup> Vann R. Newkirk II, “Trump’s EPA Concludes Environmental Racism is Real,” *The Atlantic* February 28, 2018.

<sup>89</sup> Christopher W. Tessum et al., “Inequality in consumption of goods and services adds to racial-ethnic disparities in air pollution exposure,” *PNAS* 116 (2019): 6001-6006.

<sup>90</sup> Bullard, “The Legacy of American Apartheid,” 452.

ground water and soil with toxic contaminants.”<sup>91</sup> In Alameda County the density of industrial chemical and fuel release sites in high poverty neighborhoods is 4 times higher than in affluent neighborhoods. Thus, low-income Black and Brown communities of East and West Oakland disproportionately suffer from chronic disease complications and deaths. “East and West Oakland have some of the highest Emergency Department (ED) and hospitalization rates than both Oakland overall and Alameda County overall for causes that are linked to air pollution, including childhood asthma, overall asthma, and congestive heart failure.”<sup>92</sup> Black people in East and West Oakland thus have the highest all-cause death rates in Oakland and in Alameda County overall. A White child born in the affluent Oakland Hills is expected to live 12.4 years longer than a Black child born in West Oakland and 14 years longer than a Black child born in East Oakland.

In Alameda County, the opportunity to live a long, healthy, and productive life is not evenly distributed throughout the County...with East and West Oakland populations living shorter lives on average. People living in the Northwest Hills can expect to live one decade or more longer than people living in West Oakland, Elmhurst, or Central East Oakland.



<sup>91</sup> *East and West Oakland Health Data Existing Cumulative Health Impacts*, Report from the Alameda County Public Health Department, September 3, 2015.

<sup>92</sup> *East and West Oakland Health Data Existing Cumulative Health Impacts*, Report from the Alameda County Public Health Department, September 3, 2015.

Atlanta, the “Black Mecca,” is likewise illustrative of this *chemical war waged by zip code*. Central Atlanta has become increasingly Black and poor, encircled by middle-income, largely White suburbs. Even in the suburbs, though, African Americans are segregated from and by Whites.<sup>93</sup> The Black neighborhoods scattered across the urban landscape of metro Atlanta are deliberately made “toxic”.

According to the EPA’s toxic release inventory data, African Americans and other people of color are disproportionately represented in the Atlanta region’s “dirtiest” zip codes. While people of color comprise 29.8% of the population in the five largest counties contiguous to Atlanta (Fulton, DeKalb, Cobb, Gwinnett, and Clayton counties), they represent the majority of residents in five of the ten “dirtiest” zip codes in these large counties. Atlanta metro residents living in predominantly white areas are exposed to an average of 38.2 pounds of toxic releases per person annually, compared to an average of 208.6 pounds of toxic releases per person in majority minority locales. The “dirtiest” area (*i.e.* zip code 30354) in the five-county area is located in Fulton County and receives over 1.55 million pounds of toxic releases annually. Over 69% of the population of this area is composed of people of color. Another area which is predominantly black (98.2%), zip code 30336, is subjected to 879.9 pounds of toxic releases *per person* annually (emphasis added).<sup>94</sup>

This is chemical warfare by zip code: “Overall, the zip codes with the highest percent minority population also had the highest total outputs of pollution per resident.”<sup>95</sup> Thus, while Fulton County, which is 60.5% Black and Brown, receives 4.7 million pounds of total toxic releases annually (7.23 pounds per person), Gwinnett County, which is 89.1% White, receives only 290,930 pounds of total toxic releases annually (0.82 pounds per person).

### *Understanding The Scientific Assault Against Black America!*

#### VIII. *Gender Neutering By Air*

And what are some of the health consequences of this excessive exposure (scientific assault) of segregated Black people to air pollution caused by self-separated White people? Among those listed above (asthma, cardiovascular disease, and cancer), we can add infertility, gender neutering, and less Black males being born into the world *viz-a-viz* Black females (an altered sex ratio at birth).

PM<sub>2.5</sub> is an endocrine disrupter. The Endocrine Society announced that particulate air pollution was linked with reduced sperm production in mice and this may be relevant to rising infertility rates among humans.<sup>96</sup> Exposure to PM<sub>2.5</sub> – which Black people in segregated America suffer disproportionately from – can cause testicular tubes to deteriorate and epigenetically alter genes related to testicular cell function, thus leading to poor sperm quality. A robust association has thus been reported between exposure to PM<sub>2.5</sub> and the decrease in normal sperm morphology.<sup>97</sup>

<sup>93</sup> Robert D. Bullard, Glenn S. Johnson and Angel O. Torres, “The Costs and Consequences of Suburban Sprawl: The Case of Metro Atlanta,” *Georgia State University Law Review* 17 (Summer, 2001): 935-998 (946)

<sup>94</sup> Bullard, Johnson and Torres, “The Costs and Consequences of Suburban Sprawl,” 958.

<sup>95</sup> Bullard, Johnson and Torres, “The Costs and Consequences of Suburban Sprawl,” 960.

<sup>96</sup> Endocrine Society, “Particulate air pollution linked with reduced sperm production in mice,” *Current Press Releases* March 24, 2019.

<sup>97</sup> Xiang Qian Lao et al., “Exposure to ambient fine particulate matter and semen quality in Taiwan,” *Occup Environ Med* 75 (2018): 148-154.

Testosterone “is at the root of what we call ‘masculinity’,” in the words of Dr. Joe Herbert, Emeritus Professor of Neuroscience at the University of Cambridge.<sup>98</sup> *The New York Times* writer Andrew Sullivan calls it “The He Hormone,”<sup>99</sup> citing an important embryological fact: “You need testosterone to turn a fetus with a Y chromosome into a real boy, to masculinize his brain and body.” The male brain is organized in a sex-specific manner by a surge of testosterone during the prenatal period. Testes begin secreting testosterone at around the eighth week of gestation. This testosterone surge – two actually<sup>100</sup> – is most important for the development of gender identity as it masculinizes the body *and the brain* of the fetus.<sup>101</sup> Gender identity develops as a result of an interaction between the developing brain and the sex hormones.<sup>102</sup> The latter act as a “fetal programming mechanism” imprinting gender identity as well as sexual orientation and behavior in the fetal brain.<sup>103</sup> Dick Swaab and Alicia Garcia-Falgueras point out regarding the fetal brain:

During the intrauterine period the fetal brain develops in the male direction through a direct action of testosterone on the developing nerve cells, *or in the female direction through the absence of this hormone surge*. In this way, our gender identity (the conviction of belonging to the male or female gender) and sexual orientation are programmed into our brain structures when we are still in the womb. However, since sexual differentiation of the genitals takes place in the first two months of pregnancy and sexual differentiation of the brain starts in the second half of pregnancy, these two processes can be influenced independently, *which may result in transsexuality* (emphasis added).<sup>104</sup>

Thus, by interfering with either of the two prenatal surges of testosterone, a male fetus can be feminized either neurologically (male body but feminized brain), somatically (feminized body but male brain) or both (feminized brain and body, though chromosomally male - XY). This describes the various possibilities in producing *transgenderism*.

Parental (maternal and paternal) exposure to air pollution derived from diesel exhaust, often a component of particulate matter, is associated with altered sexual

<sup>98</sup> Joe Herbert, *Testosterone: Sex, Power, and the Will to Win* (Oxford: Oxford University Press, 2015) 33.

<sup>99</sup> Andrew Sullivan, “The He Hormone,” *The New York Times Magazine* April 2, 2000.

<sup>100</sup> Dick Swaab and Alicia Garcia-Falgueras. “Sexual differentiation of the human brain in relation to gender identity and sexual orientation.” *Functional Neurology* 24 (2009): 17-28 (18): “The early development of boys shows two periods during which testosterone levels are known to be high. The first surge occurs during mid-pregnancy: testosterone levels peak in the fetal serum between weeks 12 and 18 of pregnancy (18) and in weeks 34-41 of pregnancy the testosterone levels of boys are ten times higher than those of girls.”

<sup>101</sup> D.F. Swaab, “Sexual differentiation of the human brain: relevance for gender identity, transsexualism and sexual orientation.” *Gynecol Endocrinol* 19 (2004): 301-312 (301, 302): “it is the prenatal testosterone surge that is most important for the development of gender identity”; “for the development of human male gender identity and male heterosexuality, direct androgen action on the brain seems to be of crucial importance.”

<sup>102</sup> Olaf Hiort, “The differential role of androgens in early human sex development,” *BMC Medicine* 11 (2013): 1-7 (1): “the main aspects of gender development arise from the endocrine induced differentiation of sexual organs including the brain.”

<sup>103</sup> Michael V. Lombardo et al. “Fetal Programming Effects of Testosterone on the Reward System and Behavioral Approach Tendencies in Humans,” *Biol Psychiatry* 72 (2012): 839-847.

<sup>104</sup> Dick Swaab and Alicia Garcia-Falgueras. “Sexual differentiation of the human brain in relation to gender identity and sexual orientation.” *Functional Neurology* 24 (2009): 17-28 (18). See further D.F. Swaab, “Sexual differentiation of the human brain: relevance for gender identity, transsexualism and sexual orientation.” *Gynecol Endocrinol* 19 (2004): 301-312.

differentiation of the fetus. It was shown that diesel exhaust inhalation by pregnant lab rats can disrupt the development of the immune system and the reproductive organs of the fetus as well as *masculinize the female fetus* by the excessive elevation of maternal testosterone and decrease of maternal estradiol and progesterone.<sup>105</sup>

This air pollution can interfere with sex distribution (number of males-to-females) by altering testicular function in pollution-exposed males leading to an excess of X sperm production and to a reduction in the proportion of Y/X bearing sperm, thus lowering the Y:X sperm chromosome ratio. This then results in *fewer Black male births*.<sup>106</sup> All of this, the air quality that characterizes segregated Black areas can cause and no doubt *does* cause.

Another example of a hazardous air pollutant that disproportionately affects Black zip codes and can often be traced to U.S. military activity is polychlorinated biphenyls or PCBs. Banned in 1979, PCBs were used in insulating fluids to prevent fire in transformers and other electrical equipment. Along with being linked with cancer, asthma, and immune suppression, PCBs are endocrine disruptors. They have been known to interfere with the action of the thyroid gland and hormone and cause thyroid disease and dysfunction.<sup>107</sup> In males PCBs are estrogenic and anti-androgenic (testosterone is the main “androgen” or *masculinizing* hormone) and in females they are anti-estrogenic.<sup>108</sup> “Exposure to PCBs has long been associated with reproductive dysfunction in humans, including decreased sperm motility, decrease in fecundity, earlier menarche, altered sex ratio, and altered gonadal hormones in newborns.”<sup>109</sup> Sexual differentiation of the female neuroendocrine systems can be masculinized/defeminized and reproductive maturation disrupted (by masculinizing the hypothalamic neurons of the female brain that control reproduction). In men PCB exposure is correlated with reduced testosterone<sup>110</sup> and it influences childhood play behavior: prenatal PCB levels were related with less masculinized play in boys later and more masculinized play in girls, indicating prenatal and perinatal disruption of neurological sexual differentiation.<sup>111</sup> Finally, maternal exposure to PCBs may decrease the sex ratio of offspring (less boys, more girls).<sup>112</sup>

<sup>105</sup> Nobue Watanabe and Masayuki Kurita, “The Masculinization of the Fetus During Pregnancy Due to Inhalation of Diesel Exhaust,” *Environmental Health Perspectives* 109 (2001): 111-119.

<sup>106</sup> Michał Radwan et al., “Air Pollution and Human Sperm Sex Ratio,” *American Journal of Men’s Health* 12 (2018): 907-912.

<sup>107</sup> Kelly J. Gauger et al., “Polychlorinated Biphenyls (PCBs) Exert Thyroid Hormone-like Effects in the Fetal Rat Brain but Do Not Bind to Thyroid Hormone Receptors,” *Environmental Health Perspectives* 112 (2004): 516ff; Valerie J. Brown, “Blocking Brain Development: How PCBs Disrupt Thyroid Hormone,” *Environmental Health Perspective* 113 (2005): A472–A473; R. Thomas Zoeller, “Polychlorinated Biphenyls as Disruptors of Thyroid Hormone Action,” in *PCBs* ed. Robertson and Hansen 2001, The University Press of Kentucky, 2001) 265-271.

<sup>108</sup> Risheng Ma and David A. Sassoon, “PCBs Exert an Estrogenic Effect through Repression of the *Wnt7a* Signaling Pathway in the Female Reproductive Tract,” *Environmental Health Perspectives* 114 (2006): 898-904.

<sup>109</sup> Margaret R. Bell, “Endocrine-disrupting actions of PCBs on brain development and social and reproductive behaviors,” *Curr Opin Pharmacol.* 19 (2014): 134-144.

<sup>110</sup> Sara M. Dickerson et al., “Endocrine Disruption of Brain Sexual Differentiation by Developmental PCB Exposure,” *Endocrinology* 15 (2011): 581-594.

<sup>111</sup> Hestien J.I. Vreugdenhil et al., “Effects of Prenatal Exposure to PCBs and Dioxins on Play Behavior in Dutch Children at School Age,” *Environmental Health Perspective* 110 (2002): A593-A598.

<sup>112</sup> Marc G. Weisskopf et al., “Decreased sex ratio following maternal exposure to polychlorinated biphenyls from contaminated Great Lakes sport-caught fish: a retrospective cohort study,” *Environmental Health: A Global Access Science Source* 2 (2003): 1-14.

Urban Black America is hit the hardest with PCB exposure. “Despite a ban on U.S. production since 1979, urban centers such as Chicago still provide a site for slow release of PCBs into the environment today.”<sup>113</sup> Indeed, “airborne PCBs in Chicago are widely present and elevated in residential communities,”<sup>114</sup> i.e. *Black residential communities*. In East Chicago, Indiana, which is 20 minutes from Downtown Chicago and 92% Black and Hispanic with 36% poor, the U.S. Army Chemical Corps dredged a highly contaminated canal along the shore of Lake Michigan consciously doubling the amount of PCB pollution in the air to which these poor Black residents are subjected.<sup>115</sup> In the Bay Area as well, “San Francisco Bay is facing a legacy of polychlorinated biphenyls (PCBs) spread widely across the land surface of the watershed, mixed deep into the sediment of the Bay, and contaminating the Bay food web to a degree that poses health risks to humans and wildlife.”<sup>116</sup> Thus, when a cohort study of 399 women who were pregnant between 1963-1967 was conducted, it was found that Black women from the San Francisco Bay Area had the highest level of PCBs detected in their blood.<sup>117</sup> Studies also found that pregnant Black women in Chicago also had a higher level of certain PCBs in their blood, indicating a greater level of airborne PCB exposure.<sup>118</sup>

### IX. *The Military Poisons the Air*

It can be proved that much of the toxic pollutants composing the *clouds of death* hovering over segregated Black neighborhoods was deliberately introduced there as chemical and biological agents of and by the U.S. Government. In 1952 the CIA entered into a partnership with the Army to produce *offensive* chemical and biological weapons. The joint CIA-Army program was codenamed MK-NAOMI and was a part of MK-ULTRA. In 1955 and 1956 MK-NAOMI targeted two black housing communities with offensive biological weapons. In Carter Village in Miami, Florida and in Carter Village in Chatham County, Georgia – both black housing complexes – swarms of *Aedes aegypti* mosquitos bred by the Army Chemical Corps at Fort Detrick, Maryland laboratories and carrying both yellow fever and dengue fever were unleashed into the air on the black residents.<sup>119</sup> The purpose of this experiment was to test the effectiveness of the mosquitos as disease vectors to be used as first-strike biological weapons against “the Soviets.” 1,080 Miami residents alone came down with whooping cough, some died. This spike in local disease and death convinced the MK-NAOMI operatives that the infected mosquitos indeed made effective bioweapons.

<sup>113</sup> Joseph E. McGraw Sr. and Donald P. Waller, “The Role of African American Ethnicity and Metabolism in Sentinel Polychlorinated Biphenyl Congener Serum Levels,” *Environ Toxicol Pharmacol* 27 (2009): 1-24.

<sup>114</sup> Dingfei Hu et al., “Atmospheric PCB congeners across Chicago,” *Atmos Environ* 44 (2010): 1550-1557.

<sup>115</sup> Brian Bienkowski, “Dredging Could Unleash PCBs in Indiana Community,” *Scientific American* December 5, 2012.

<sup>116</sup> J.A. Davis et al., “Polychlorinated biphenyls (PCBs) in San Francisco Bay,” *Environment Research* 105 (2007): 67-86.

<sup>117</sup> Rebecca A. James et al., “Determinants of Serum Polychlorinated Biphenyls and Organochlorine Pesticides Measured in Women from the Child Health and Development Study Cohort, 1963–1967,” *Environmental Health Research* 110 (2002): 617-624.

<sup>118</sup> J.E. McGraw and D.P. Waller, “Fish ingestion and congener specific polychlorinated biphenyl and p,p'-dichlorodiphenyldichloroethylene serum concentrations in a great lakes cohort of pregnant African American women,” *Environ Int.* 35 (2009): 557-565.

<sup>119</sup> Washington, *Medical Apartheid*, 359-365.

For sixteen years (1950-1966) U.S. Army scientists, as part of their germ warfare experiments, deliberately released the bacteria *Serratia marcescens* into the air of eight cities and military installations and then monitored the bacteria's spread. The bacterium was grown in Oakland, California at the U.S. Naval Biological Laboratory and tested in the Bay. In San Francisco, the Army scientists wanted to know if the Bay Area winds would carry the germs into the city. After the bacteria's release military personnel took air samples for testing. Within a week, San Francisco residents developed rare infections and at least one died. In another experiment conducted in the Bay code-named Operation Seaspray, the bacterium was put in a paste and then dropped into the water. The idea was to see if the breaking waves would toss the germs into the air where the winds would carry them into San Francisco or Oakland. The germs were carried into Berkeley and Oakland.<sup>120</sup>

In St. Louis, which has a 71.1 Segregation Index, the Army conducted secret biological weapons testing in impoverished Black neighborhoods in the mid-1950s and 1960s by using motorized blowers atop a low-income housing high-rise, at schools, and from the back of station wagons to send potentially dangerous chemical compounds – zinc cadmium sulfide - into the air in predominantly Black areas of St. Louis.<sup>121</sup> Residents also remember the Army using planes to drop a powdery substance down on the landscape *and on the inhabitants*. Thousands of people were unwillingly exposed so that the Army could “test” the health effects of one of their potential chemical-biological warfare agents. The Army used the claim of a “Russian-threat” as a smoke screen and lied even to local officials regarding the true nature of their activities in these segregated Black neighborhoods.

The point of all of this? If the U.S. Government would *deliberately poison the air* of segregated Black communities, it would not hesitate to deliberately poison the food that *they* provide to segregated Black neighborhoods. As we saw, the U.S. government has been in the business of poisoning food to cause infertility and sending poisoned food secretly to communities for a long time.

#### X. *Toxic Blood Through Poisoned Food*

**Scientific American** reported a startling finding in its December 2, 2009 edition, stating: "U.S. minority children are born carrying *hundreds* of chemicals in their bodies, according to a report released today by an environmental group."<sup>122</sup> The group is the watchdog Environmental Workers Group (ewg). In 2009 ewg partnered with Rachel's Network to commission five laboratories in the U.S., Canada and Europe to analyze umbilical cord blood from 10 anonymous African American, Asian and Hispanic infants born between December 2007 and June 2008 in Michigan, Florida, Massachusetts, California and Wisconsin. The tests found up to 232 toxic chemicals in *each of* the 10 cord blood samples. Their cord blood resembled a toxic mixing bowl and showed these non-white newborns to be "contaminated with an average of more than 100 chemicals known

<sup>120</sup> "Army Tested Biological War in S.F." **Newsday** December 22, 1976.

<sup>121</sup> "Secret Cold War tests in St. Louis cause worry," **CBS News** October 3, 2012.

<sup>122</sup> Sara Goodman, "Tests Find More Than 200 Chemicals in Newborn Umbilical Cord Blood," **Scientific American** December 2, 2009.

or suspected to cause cancer, birth defects or other health problems."<sup>123</sup> These stews of potential neurotoxins such as mercury, endocrine disrupters such as BPA, and carcinogens such as dioxin may have a synergistic effect, resulting in more significant adverse effects than single chemical exposures.

In 2013 the ewg in collaboration with Keep A Breast Foundation published a list of 12 of the "dirtiest" of the hundreds of chemicals that turned up in the cord blood of babies of color. ewg called them the "Dirty Dozen" Endocrine Disrupters, the twelve worst hormone-altering chemicals that pollute the environment today:

1. Bisphenol A (BPA)
2. Dioxin
3. Atrazine
4. Phthalates
5. Perchlorate
6. Fire Retardants
7. Lead
8. Arsenic
9. Mercury
10. Perfluorinated Chemicals
11. Organophosphate Pesticides
12. Glycol Esters

While natural and industrial products have poisoned almost the whole of the environment, ewg reports that "It is clear that minority populations in the U.S. have higher exposures to many chemical pollutants"<sup>124</sup> because "Racial and ethnic minority communities in the U.S. are often *bombarded* with environmental pollutants (emphasis added)."<sup>125</sup> As we showed above, this "bombardment" is deliberate. Philip J. Landrigan and colleagues in their 1999 study "Pesticides and Inner-City Children," likewise documented that poor children of color of the inner city, i.e. Black and Brown children, "are a group within the American population that is at disproportionately high risk of exposure to numerous environmental toxins," including some of the "Dirtiest" chemicals such as atrazine and organochlorines.<sup>126</sup>

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<sup>123</sup> Environmental Working Group, "Pollution in Minority Newborns," **ewg.org** November 23, 2009; "Toxic Chemicals Found in Minority Cord Blood," **ewg.org** December 2, 2009.

<sup>124</sup> Environmental Working Group, "Pollution in Minority Newborns," **ewg.org** November 23, 2009.

<sup>125</sup> Environmental working Group, "Toxic Chemicals Found in Minority Cord Blood," **ewg.org** December 2, 2009.

<sup>126</sup> Philip J. Landrigan et al., "Pesticides and Inner-City Children: Exposures, Risks, and Prevention," **Environmental Health Perspective** 107 (1999) Supplement 3: 431-437.

**Table 1.** Examples of pesticides found in the U.S. inner-city environment.

	Examples	Toxic effects
Chemical group		
Organochlorines (halogenated hydrocarbons)	DDT, lindane, dieldrin, chlordane	Carcinogenic, hormonal agonists, neurotoxic
Organophosphates	Parathion, chlorpyrifos	Neurotoxic, dermatotoxic
Carbamates	Malathion, aldicarb	Neurotoxic, dermatotoxic
Pyrethroids	Cyfluthrin, permethrin, fenvalerate	Possibly immunotoxic and neurotoxic, hormonal agonists, antagonist
Herbicides		
Dipyridyl	Paraquat, diquat	Pulmonary fibrosis
Other	Atrazine, alachlor	Carcinogenic

The developing human brain is exceptionally sensitive to injury caused by toxic chemicals. In 2014 scholars from the prestigious universities of Harvard and Mount Sinai School of Medicine announced that a “silent pandemic” of toxins has been damaging the brains of unborn children leading to widespread behavioral and cognitive problems.<sup>127</sup> Twelve chemicals were identified, the *in utero* and developmental exposure of which can help cause lowered IQ, ADHD, autism spectrum disorder, dyslexia, and increased

aggressive and anti-social behavior in young children – *our children*. Exposure to these neurotoxins was associated with changes in neuron development in the fetus and among infants. Other researchers even used MRI testing to show that these chemicals appear to change children’s brain structure, causing thinning of the cortex.<sup>128</sup> A growing body of research is finding links between higher levels of these chemicals in the blood and urine of expectant mothers and brain disorders in their children.<sup>129</sup>



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**A ‘silent pandemic’ of toxic chemicals is damaging our children’s brains, experts claim**

By Susan Perry | 02/17/2014

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Creative Commons/Neil Barnwell  
Used as flame retardants in children’s clothing, furniture and other products, PBDEs have been associated with neurodevelopmental deficits in children in both Europe and the United States.

<sup>127</sup> Philippe Grandjean and Philip J Landrigan, “Neurobehavioural effects of developmental toxicity,” *Lancet Neurol* 13 (2014): 330–38.

<sup>128</sup> James Hamblin, “The Toxins That Threaten Our Brains,” *The Atlantic* March 18, 2014.

<sup>129</sup> Alice Park, “Children Exposed to More Braain-Harming Chemicals Than Ever Before,” *Time* February

## XI. *The Plot to Target Black Women Through The Food They Buy*

At the top of the ewg's Dirty Dozen list is bisphenol A or BPA, which is a synthetic estrogenic/antiandrogen endocrine disrupter widely used in the production of plastics and the lining of canned goods. BPA is bad, bad news. BPA exposure has been linked to diabetes and cancer, particularly prostate cancer. It also is a gender-bending chemical. In a study of the effect of BPA on aromatase expression in rat testicular Leydig cells JY Kim et al. found that BPA induced and increased aromatization – thereby increasing estrogen levels - and reduced testosterone synthesis.<sup>130</sup> A 2015 study of painted turtles with BPA applied on their eggs found that BPA reversed sex (male turtles developed female sex organs) and reprogramed male turtle brains to show female-typical behavior.<sup>131</sup> Turtles are considered "indicator species" because they can be used as a barometer for the health of the entire ecosystem. In humans, adult exposure can lower natural hormone levels – testosterone in males and estrogen in females (it can be anti-estrogenic in females). Child and *in utero* exposure effects brain development, sexual differentiation, open-field and play behavior as well. In fact, early BPA exposure can interfere with the brain sex differentiation process and eliminate or reverse sexual dimorphisms in brain structure and behavior, making boys act like girls and girls act like boys. As Kundakovic et al. note:

This study provides evidence that low-dose maternal BPA exposure induces long-lasting disruption to epigenetic pathways in the brain of offspring...One of the most striking neurobiological effects of BPA is the loss of sexual dimorphism in brain structure and behavior illustrated by animal studies (...), findings concordant with human epidemiological studies (...).<sup>132</sup>

Every year over two million tons of BPA are used in the manufacture of epoxy resins (which line food cans) and polycarbonate plastics. As a result, BPA is ubiquitous in the environment and exposure is universal. The CDC suggests that BPA is in the body of 93% of Americans over 6 years old.<sup>133</sup> However, *poor Black people carry the greatest body burden*. “Urinary metabolites of BPA are detected in 90% of the U.S. population with higher exposures observed in non-Hispanic Blacks, children, females, and those of lower socioeconomic status...”<sup>134</sup> And the major source of the Black BPA body burden is *our food sources*. As *The San Diego Union-Tribune* reported:

Canned foods in grocery stores continue to contain the toxin BPA., according to a report by the Center for Environmental Health...Low-income people are more likely to face exposure to the chemical, since many live in areas with limited access to fresh produce and other food...”African Americans and

<sup>130</sup> JY Kim et al. "Bisphenol A-induced aromatase activation is mediated by cyclooxygenase-2-regulation in rat testicular Leydig cells," *Toxicol Lett* 193 (2010): 200-208.

<sup>131</sup> Lindsey K. Manshach “Effects of developmental exposure to Bisphenol A and ethinyl estradiol on spatial navigational learning and memory in painted turtles (*Chrysemys picta*),” *Hormones and Behavior* 85 (2016): 48-55; Caitlin M. Jandegian, "Developmental exposure to bisphenol A (BPA) alters sexual differentiation in painted turtles (*Chrysemys picta*)," *General and Comparative Endocrinology* 216 (2015): 77-85.

<sup>132</sup> Marija Kundakovic et al. "Sex-Specific epigenetic disruption and behavioral changes following low-dose in utero bisphenol A exposure," *PNAS* 110 (2013): 9956-9961 (9960); P. Negri-Cesi, "Bisphenol A Interaction With Brain Development and Functions," *Dose-Response* 2015: 1-12.

<sup>133</sup> <https://www.niehs.nih.gov/health/topics/agents/sva-bpa/index.cfm>

<sup>134</sup> Ami R. Zota et al., “Recent Fast Food Consumption and Bisphenol A and Phthalates Exposures among the U.S. Population in NHANES, 2003-2010,” *Environmental Health Perspective* 124 (2016): 1521-1528 (1521).

low income families have, on average, higher amounts of BPA in their bodies than people of other races and people of higher incomes," the report stated.<sup>135</sup>

In the first study to investigate maternal-fetal BPA concentrations by racial and ethnic group, Black pregnant women from a South Carolina cohort were found to have the highest maternal serum BPA concentrations, *10-fold higher than Caucasian mothers* (30.13 vs. 3.14 ng ml<sup>-1</sup>).<sup>136</sup> In a study of inner-city Black and Dominican mothers and their children from New York "widespread BPA exposure" was detected among this group: BPA detected in 94% of samples.<sup>137</sup> N. Ranjit and colleagues thus explains:

a growing body of evidence suggests that African Americans may be more likely to be at higher risk of exposure to EDCs. As noted, BPA has been shown to account for most estrogenic activity that leaches from landfills into the surrounding ecosystem i.e. *communities in which African Americans are more likely than Whites to reside*. Furthermore, *communities with higher proportions of African Americans have a disproportionate number of fast food restaurants* compared to communities with lower proportions of African Americans, and fewer sources of fresh food. Studies of the spatial distribution of fast food restaurants and supermarkets found that all African American areas, regardless of income, were less likely to have access to healthy food options than predominantly White higher income communities. Specifically, stores in predominantly black areas have been found to carry less fresh produce and higher proportions of canned foods than stores in predominantly white areas. African American households are overrepresented among the food insecure; in 2005, 23.6% of African American households were food insecure, compared with only 8.6% of White households. Given these high rates of food insecurity, *African American households are more likely to rely on cheap, energy dense fast food and on food banks, which typically distribute canned foods* as noted, a known and significant source of BPA exposure. *Food pantry use is more than twice as high among blacks than among non-Hispanic whites (7.8% vs. 2.7%)* (emphasis added - WM).<sup>138</sup>

Not only is the environment where poor Black people are forced to live made toxic by the intentional "dumping" of these chemicals nearby, but the food that is made available in Black areas which are deemed "food deserts" - fast food and canned foods – are contaminated with chemicals such as BPA.

When E.R. Unal et al. report that "findings show significantly higher serum BPA concentrations in pregnant African American women compared with Caucasians,"<sup>139</sup> there is evidence that this disparity is not accidental but the result of the deliberate targeting of pregnant Black women with BPA products. In May 2009 lobbyists for industry giants who use BPA in their products, such as Coca Cola and Del Monte, convened for five hours at the exclusive Cosmo Club in Washington D.C. to secretly collude and plot a major public relations campaign aimed at defeating legislative

<sup>135</sup> Deborah Sullivan Brennan, "Canned food still contains toxin BPA," *The San Diego Union-Tribune* March 17, 2017. See also Jessica W. Nelson et al. "Social disparities in exposures to bisphenol A and polyfluoroalkyl chemicals: a cross-sectional study within NHANES 2003-2006," *Environmental Health* 11 (2012): 1-15: "People with lower incomes have higher body burdens of BPA."

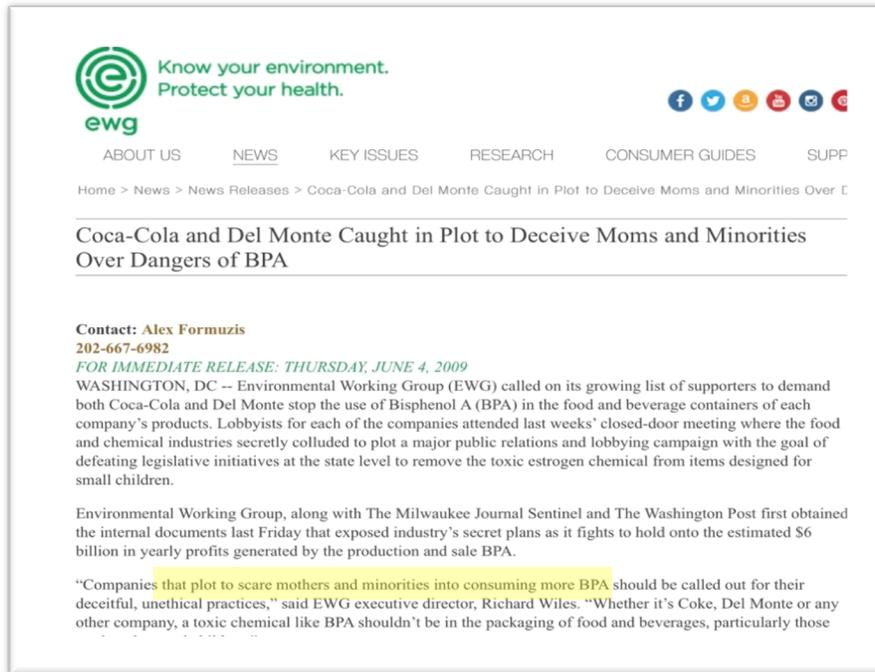
<sup>136</sup> E.R. Unal et al. "Racial disparity in maternal and fetal-cord bisphenol A concentrations," *Journal of Perinatology* 32 (2012): 844-850.

<sup>137</sup> Lori A. Hoepner et al. "Urinary Concentrations of Bisphenol A in an Urban Minority Birth Cohort in New York City, Prenatal Through Age 7 Years," *Environ Res.* 122 (2013): 38-44; Frederica Perera et al., "Prenatal Bisphenol A Exposure and Child Behavior in an Inner-City Cohort," *Environmental Health Perspectives* 8 (120): 1190-1194.

<sup>138</sup> N. Ranjit, K. Siefert and V. Padmanabhan, "Bisphenol-A and disparities in birth outcomes: a review and directions for future research," *Journal of Perinatology* 30 (2010): 2-9.

<sup>139</sup> Enal et al., "Racial disparity," 849.

initiatives to remove BPA from items designed for small children. The *Washington Post* obtained the internal notes from the meeting and published them along with the *Journal Sentinel*.<sup>140</sup>



The purpose of the meeting, as ewg reported, was to "plot to scare mothers *and minorities* into consuming more BPA."<sup>141</sup> In order to defeat efforts to ban BPA, the industry would target "young mothers" with a message to resist BPA-free products and remain loyal to BPA-use products. According to the notes, the lobbyists' "'holy grail' spokesperson would be a 'pregnant young mother' who would be willing to speak around the country about the benefits of BPA."<sup>142</sup> But it wouldn't be *any* pregnant young mother showcasing the "good" of BPA; according to the notes the focus of this campaign "to dissuade people from choosing BPA-free packaging" is specifically "minorities" or "Hispanic and African Americans."<sup>143</sup> The industry lobbyists were prepared to invest \$500,000 to come up with a message trying to sell BPA to Black people and frightening pregnant Black and Brown mothers into staying away from BPA-free food packaging for their children. As the *Journal Sentinel* reports:

Other strategies discussed at the meeting included focusing on how BPA bans would disproportionately put minorities at risk, particularly Hispanics and African Americans who are more inclined to be poor and dependent on canned foods. Committee members said they would try

<sup>140</sup> Lyndsey Layton, "Strategy Is Being Devised to Protect Use of Bisphenol A and Block U.S. Ban," *Washington Post* May 31, 2009, A02; Susanne Rust and Meg Kissinger, "BPA industry seeks to polish image," *Journal Sentinel* May 29, 2009.

<sup>141</sup> Environmental Working Group, "Coca-Cola and Del Monte Caught in Plot to Deceive Moms and Minorities Over Dangers of BPA," *ewg.org* June 4, 2009.

<sup>142</sup> Layton, "Strategy Is Being Devised."

<sup>143</sup> Meg Kissinger "What goes on behind closed doors," *Journal Sentinel* June 1, 2009.

to get stories in the media that spread the message that canned goods made without BPA would be more likely to become contaminated [with bacteria].<sup>144</sup>

It should be very clear now why Black pregnant women have serum BPA concentrations *10-fold higher than Caucasian women*. It is not an accident. Pregnant Black and Brown women are specifically targeted with BPA products so they could feed BPA-poisoned food to their fetus.

## XII. *Poisoned Catfish: Tuskegee Experiment Part II*

While airborne PCBs pollute the air of segregated Black communities, the main route of PCB exposure and poisoning is through the food, especially the fish. According to Max Weintraub and Linda S. Birnbaum, “For the 10% of the US population that remains most exposed to PCBs, fish consumption is the primary source. National Health and Nutrition Examination Survey (NHANES) data indicates that the highest remaining PCB levels exist in a non-Hispanic black population.”<sup>145</sup> But it is demonstrable that there is deliberate U.S. military involvement in the poisoning of fish and other food sources upon which Black people rely.

The small town of Anniston, Alabama has the unfortunate distinction of being known as “Toxic Town U.S.A.” Roughly half white and half Black, the races are segregated around a chemical plant of the Monsanto Chemical Company that produced PCBs. African Americans are concentrated downhill on the north and east of the plant, while Whites are concentrated uphill on the south and west sides. In 2002 an Alabama jury found Monsanto guilty on six counts including “outrage,” which the law describes as conduct “beyond all possible bounds of decency...atrocious and utterly intolerable in civilized society.” This is because Monsanto was found to have “knowingly poisoned Anniston residents and then had hidden the dangers from public knowledge.”<sup>146</sup> In documents Monsanto executives admitted to deliberately dumping large quantities of PCBs on a daily basis into Snow Creek, which flows downhill into the Black areas, polluting the soil, water, and food chain of the Black residents of West



<sup>144</sup> Susanne Rust and Meg Kissinger, “BPA industry seeks to polish image,” *Journal Sentinel* May 29, 2009.

<sup>145</sup> Max Weintraub and Linda S. Birnbaum, “Catfish consumption as a contributor to elevated PCB levels in a non-Hispanic black subpopulation,” *U.S. Environmental Protection Agency Papers* 23 (2008): 412-417.

<sup>146</sup> Ellen Griffith Spears, *Baptized in PCBs: Race, Pollution, and Justice in an All-American Town* (Chapel Hill: The University of North Carolina Press, 2014); Laura Dillon Burgess, Glenn S. Johnson and Steven C. Washington, “An African American Community and The PCB Contamination in Anniston, Alabama: An Environmental Justice Case Study,” *Race, Gender & Class* 21 (2014): 334-361.

Anniston, including the fish upon which the local residents depended.<sup>147</sup> Whites were uphill, and thus able to avoid the contaminated water. Black residents of Anniston had an average toxic body burden of PCBs that is four times higher than the national average and three times greater than the Whites of Anniston- some of the Black residents had a body burden *27 times higher than the national average*.<sup>148</sup> One Monsanto official candidly referred to the PCB work in Anniston as “quite a little human experiment,” and the racial differences in reaction to exposure were noted.<sup>149</sup> Monsanto also dumped tons of liquid mercury into its waste system, exposing the residents.

### MONSANTO AND THE MILITARY

Monsanto was held liable for the PCB poisoning and agreed to a \$700 million settlement.<sup>150</sup> However, that “little human experiment” using Black residents of Anniston was unquestionably a joint Monsanto-*Military* operation. Anniston was not only a highly *militarized* town, it was a *chemical weapons and warfare hub*. And as Ellen Griffith Spears notes, “In Anniston, as in the nation, chemical contamination has been inextricably linked with the machinery of war.”<sup>151</sup> By 1951 Camp McClellan, adjacent to the city of Anniston, was the home of the U.S. Army Chemical Corps Training School and from 1960 the Chemical Corps Command was in Anniston. The Army’s cache of nerve gas and mustard gas was stored at the Anniston Army Depot since 1963. In fact, more than 7% of the U.S. chemical weapons stockpile was housed in the Anniston Army Depot.

The lab at Camp/Fort McClellan was one of two sites in the U.S. - the other was Edgewood Arsenal in Maryland – authorized to make chemicals for use in *live agent testing*. Open air testing of chemical and biological agents was thus routine in Anniston. In 1952 the U.S. Army released a live biological agent, *Serratia marcescens*, into the air of Anniston (as well as major cities like San Francisco). This led to twice the normal pneumonia occurrence in Calhoun County for that year.<sup>152</sup>

The Monsanto-Military alliance is deep and intimate. Monsanto had extensive involvement in WWII and Cold War military projects. Monsanto did secret work in Anniston for the Chemical Warfare Service in the 1950s, work which included the production of offensive and defensive chemicals for the armed forces, specifically the “precursors for chemical warfare agents.” We know also from internal documents that Monsanto carried out “investigation and research” for the Army Chemical Corps.<sup>153</sup> So who is responsible for this “little human experiment” that turned Black Anniston into “Toxic Town U.S.A.”? The U.S. Government (the Army) and allied interests (Monsanto). The food upon which the people depended – fish from the creek, hogs, and any food grown from the soil – was deliberately contaminated with PCBs, mercury, and several other toxins. And the people suffered dearly. Anniston, Alabama = Tuskegee, Alabama.

<sup>147</sup> “In Dirt, Water and Hogs, Town Got Its Fill of PCBs,” *The Washington Post* January 1, 2002.

<sup>148</sup> Spears, *Baptized in PCBs*, 11; Brett Israel, “Pollution, Poverty and People of Color: Dirty Soil and Diabetes,” *Scientific American* June 13, 2012; Kevin Sack, “PCB Pollution Suits Have Day in Court in Alabama,” *The New York Times* January 27, 2002.

<sup>149</sup> Spears, *Baptized in PCBs*, 10.

<sup>150</sup> Michael Grunwald, “Monsanto Held Liable For PCB Dumping,” *The Washington Post* February 23, 2002; “\$700 Million Settlement in Alabama PCB Lawsuit,” *The New York Times* August 21, 2003.

<sup>151</sup> Spears, *Baptized in PCBs*, 7.

<sup>152</sup> “Army Tested Biological War in S.F.,” *Newsday* December 22, 1976.

<sup>153</sup> Spears, *Baptized in PCBs*, 7, 80, 81.

XIII. *What's In Your Salmon? Tuskegee Experiment Part III*

New Scientist 26 May 1983 527

### Triana: a town poisoned by DDT

**Kathleen Johnston, Washington DC**



**THE** TWELVE hundred poor, mostly black citizens of Triana, a small town in northern Alabama, have won an unprecedented \$19 million settlement from a chemical company that contaminated them and their town with DDT. But government scientists seem set to pass up the chance to study this unique population for the long-term effects of the pesticide.

The Olin Corporation, one of the world's largest manufacturers of chemicals, made DDT for many years at a plant on the army's Redstone arsenal near Triana, until the factory closed in 1971. Now it has agreed to compensate the townspeople, clean up the DDT in the soil and waters within 10 years, and spend \$5 million to monitor the health of local citizens.

The DDT ran from a waste ditch near the plant into the Indian Creek as it flowed past the arsenal and through the town, contaminating water, sediments, wildfowl, fish and, finally, the people that ate the fish. DDT levels in five species of fish in the creek averaged 204 parts per million and peaked at 450 ppm, according to a government survey carried out in the late 1970s.

Wildfowl in a nearby swamp were found with up to 2252 ppm of DDT in their flesh. The Tennessee Valley Authority claimed that at least 4000 tonnes of DDT had found its way into sediments in a local branch of the Tennessee river.

For several years, the population of Triana had eaten fish and drunk water contaminated by DDT from the Olin plant. In 1979, eight years after the plant closed, epidemiologists from the Centers for Disease Control in Atlanta, Georgia, first took blood samples from residents of the town. In one case, the results showed a level of DDT twice as high as any previously reported in the medical literature. Other samples were comparable to those previously seen only in the most heavily-exposed workers at pesticide plants. Thirty-three people were found with DDT levels in their blood above 500 parts per billion. Six had levels above 1000 ppb.

A spokesman for the army said it had insisted on the plant being closed and, after an initial clean-up, had assumed that the residues would degrade. But in 1977 army scientists found this had not happened. The Environmental Protection Agency (EPA) ordered the army to conduct a study of the effect of the DDT on the local population. But it refused, according to Howard Zeller, the EPA's second-in-command in the region. The two agencies settled on a study of the pollution and how to contain it—but not on the health effects.

THIS WEEK

Triana is a small, rural settlement in northern Alabama with a population that is 75% Black. The poor Black residents are largely subsistence anglers who depend on fish caught in the Indian Creek and Tennessee River. While the U.S. Army through Monsanto Chemical Company was poisoning the air, water, food and people of Anniston, Alabama with PCBs, the U.S. Army through Olin Chemical Corp was poisoning the air, water, food and people of Triana with DDT, which was introduced during World War II as an insecticide. The DDT that poisoned the town of Triana was manufactured six miles away on the grounds of the Army's Redstone Arsenal, adjacent to Huntsville, from 1947 to 1971. Olin Corp (who was leased the Redstone property in 1954) released DDT-contaminated water into brick-lined trenches that ultimately released into Huntsville Spring Branch and Indian Creek, both of which emptied into the Tennessee River. The polluted water contaminated the fish (catfish, perch, carp, goldfish, and gar) which the Black residents of Triana consumed. The residents got highly contaminated. 99% of the U.S. population has DDT in their blood, and the average DDT level in people 12 – 74 years old at that time was 15 nanograms per milliliter (ng/ml). A 1979 CDC analysis of Triana blood samples found that the average sample had a DDT level of 159.4 ng/ml: "They found that DDT was higher in Blacks than in Whites and higher in males than in females."<sup>154</sup> Of course.

The mayor of Triana from 1964 to 1984, Clyde Foster, who was also a NASA administrator (director of the Equal Opportunity Office at the NASA-George C. Marshall Space Flight Center in Huntsville from 1956 to 1957) and mathematician technician for the Army Ballistic Missile Agency at Redstone Arsenal itself, said that state and federal agencies knew of excessive levels in the fish consumed by Triana residents for years but refrained from making the information public *because they wanted to use them as guinea pigs*.<sup>155</sup> According to a 1979 *The New York Times* report in that year the CDC swooped in to conduct "the most extensive inquiry to date into the effects of longterm consumption of food contaminated with high levels of DDT."<sup>156</sup> The study was, according to the *Times*,

<sup>154</sup> Dorceta E. Taylor, *Toxic Communities: Environmental Racism, Industrial Pollution, and Residential Mobility* (New York and London: New York University Press, 2014) 11.

<sup>155</sup> Taylor, *Toxic Communities*, 10.

<sup>156</sup> Wayne King, "Tests in an Alabama Town Seek to Trace DDT's Effects on Humans," *The New York Times* May 12, 1979.

intended to determine what health problems, if any, could be correlated with high levels of consumption of DDT...in a previous study, a small number of volunteers were given an oral intake of 35 milligrams of DDT a day, about twice that of the highly exposed DDT industrial workers, for 21 months without measurable effects on health.<sup>157</sup>

This explains the indifference toward the wellbeing of the Triana residents. As Dorceta E. Taylor observes:

Though evidence of DDT contamination was identified as early as 1948 and research indicating that the chemical might be harmful to humans began surfacing in the 1950s, Blacks who lived close to the Olin plant and who drank the contaminated water and ate large quantities of toxic fish were not tested or alerted to the problem till three decades after the problem was identified.<sup>158</sup>

The Tuskegee Experiment all over again. Further evidence of deliberateness in this case is this small detail.

The (1980 CDC) study revealed that Triana residents had high levels of polychlorinated biphenyls (PCBs) in their blood stream. The discovery of PCBs in residents' bloodstream triggered a search for the source of the cancer-causing agent, *but no major source of PCBs were found.*<sup>159</sup>

The reason no major source was “found” is likely because the major source was the U.S. Army, who at the same time was poisoning Black residents of Anniston with PCBs.

During World War II DDT was a chemical weapon (U.S. Army Chemical Warfare Service field officers sprayed the insecticide) aimed at the elimination of bugs (lice and mosquitos) carrying malaria and typhus in the European and Pacific Theaters. “The atomic bomb and DDT were the two technological icons of the second World War.”<sup>160</sup> The War Production Board secured mass production of the insecticide, and DuPont and Monsanto were two of the biggest producers of DDT for the military during the war. After the war DDT was repurposed: “Quickly approved by the U.S. Department of Agriculture (USDA), stockpiles of DDT held by DuPont for military use...entered the domestic front largely *untested.*”<sup>161</sup> The Department of Agriculture again.

The *testing* seems to have occurred *covertly*, and with *Black test subjects*. DDT was released for public sale in 1945. In 1946 the U.S. Public Health Service (re: Tuskegee Experiment!) initiated a domestic use campaign that clearly targeted Black areas because by 1967, as shown in numerous studies, Black males nationally were reported as having two to four times the amount of DDT in their blood and tissue than Whites.<sup>162</sup> Triana,

<sup>157</sup> Wayne King, “Tests in an Alabama Town Seek to Trace DDT’s Effects on Humans,” *The New York Times* May 12, 1979.

<sup>158</sup> Dorceta E. Taylor, *Toxic Communities: Environmental Racism, Industrial Pollution, and Residential Mobility* (New York and London: New York University Press, 2014) 10.

<sup>159</sup> Taylor, *Toxic Communities*, 12; Mike Hollis, “The Persistence of a Poison,” *The Washington Post* June 15, 1980.

<sup>160</sup> James Erwin Schmitt, “From the Frontlines to *Silent Spring*: DDT and America’s War on Insects, 1941-1962,” *CONCEPT* 39 (2016): 1-29.

<sup>161</sup> John Wills, *US Environmental History* (Edinburgh: Edinburgh University Press, 2012) 89.

<sup>162</sup> Suzanne M. Snedeker, “Pesticides and Breast Cancer Risk: A Review of DDT, DDE, and Dieldrin,” *Environmental Health Perspectives* 109 (2001): 35-47 (42): “Survey studies conducted in the 1970s and 1980s consistently demonstrated that adipose tissue levels were higher in American blacks than in whites (...).” See further: Stephen A. Martin, Jr. et al., “DDT Metabolite and Androgens in African-American Farmers,” *Epidemiology* 13 (2002): 454-458; F.W. Kutz, A.R. Yobs, and S.C. Strassman, “Racial

Alabama *was no isolated phenomenon*. DDT poisoning “clustered” in Black areas around the country. In a national survey for the years 1973-1974 from 75 collecting sites in 48 states, Blacks had twice the level of serum DDT than whites. DDT was thus a chemical warfare weapon first targeting bugs and then, after the war, redeployed against Blacks.

### FOOD FROM GENDER-BENDING WATERS

And what are the consequences of sufficient DDT poisoning? For starters, arthritis, breast cancer, and diabetes. But also, hear the *Los Angeles Times*:

In the gender-bending waters of Lake Apopka, alligators aren't quite male. They aren't quite female either. They may be both. Or neither.

This sexual confusion in the wild, discovered in this steamy Florida swamp last year, is so disturbing to scientists that they keep performing test after test on the scaly reptiles, trying to prove themselves wrong. But the more they look, the more evidence they find. In fact, hardly any young alligators with normal sexuality can be found in this vast lake on the suburban outskirts of Orlando.

Elsewhere around the world, the same astonishing phenomenon is turning up in a menagerie of fish, birds and other wild animals. Testosterone levels have plummeted in some males, while females are supercharged with estrogen. Both sexes sometimes are born with a penis and ovaries, and some males wind up so gender warped they try to produce eggs.

"Everything is really fouled up. It is indeed real, and it is scary," said Tim Gross, a University of Florida wildlife endocrinologist on the team that discovered the feminized alligators. "We didn't want to believe it, in all honesty."

This is no fluke of Mother Nature, no quirk of evolution. *This is probably a legacy of pollution.*

Wildlife scientists have uncovered persuasive evidence that artificial pesticides and industrial chemicals are infiltrating wombs and eggs, where they send false signals imitating or blocking hormones, which control sexuality. Although the parents are unharmed, their embryo's sexual development is disrupted, and some male offspring are left chemically castrated and females sterile. The potential consequences, if unabated, are almost unthinkable.

If males aren't male and females aren't female, they cannot reproduce, and some outwardly healthy populations could be a generation away from extinction.<sup>163</sup>

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Stratification of Organochlorine Insecticide Residues in Human Adipose Tissue,” *Journal of Occupational Medicine* 19 (1977): 619-622; B.T. Woodard, B.B. Ferguson and D.J. Wilson, “DDT Levels in Milk of Rural Indigent Blacks,” *Am J Dis Child* 130 (1976): 400-3; J.E. Keil, C.B. Loadholt and S.H. Sandifer, “Sera DDT Elevation in Black Components of Two Southeastern Communities: Genetics or Environment?” in *Pesticides and the environment: A continuing controversy*. Vol. 2. ed. W. B. Diechmann, 203–213. New York: Intercontinental Medical Book Corp, 1973) 203-213; John Finkles et al., “Polychlorinated Biphenyl Residues in Human Plasma Expose a Major Urban Pollution Problem,” *AJPH* 62 (1972): 645-651; Walter F. Edmundson et al., “P,p'-DDT and p,p'-DDE in Blood Samples of Occupationally Exposed Workers: Community Studies on Pesticides, Dade County, Fla.,” *Public Health Reports (1896-1970)* 84 (1969): 53-58; John E. Davies et al., “A Epidemiologic Application of the Study of DDE Levels in Whole Blood,” *AJPH* 59 (1969): 435-441.

<sup>163</sup> Marla Cone, “Sexual Confusion in the Wild: From gators to gulls, scientists say, pollution may be playing havoc with animals’ hormones. Some males try to lay eggs; some females nest together. Certain species risk extinction,” *Los Angeles Times* October 2, 1994.

The alligator population of Lake Apopka, Florida crashed in 1990 because *the alligators were changing sex*. 80% of the male gators showed some form of sex-reversal. Blood tests revealed that the male alligators had high levels of estrogen and lowered levels of testosterone. The cause? In 1980 Tower Chemical let a waste pond overflow and spill into the lake, pouring *large amounts of DDT into the lake*. The alligators were exposed to DDE, a metabolite of DDT which is anti-androgenic. 90% of the alligators disappeared. The gator penis was 75% shorter than normal and the testosterone levels were so low that the gators hormonally resembled females. Nancy McVicar of the ***Sun-Sentinel*** referred to these gators as “nature in drag.”<sup>164</sup> Commercial DDT is a composite of two chemicals: *o,p'-DDT* which is estrogenic and *p,p-DDT* which is anti-androgenic.

So, in effect, DDT has a double action on the sex hormones. One of its component ingredients can act like an estrogen; the other is an anti-androgen and blocks the action of the male hormone.<sup>165</sup>

It is believed that DDT exposure lowers sperm counts in men and contributes to prostate and testicular cancer as well. DDT contamination off the coast of Los Angeles and in Lake Michigan crashed the sea gull and herring gull populations because the males were being born dead or *hermaphrodite* (having both testes and ovaries). DDT is blamed for the missing or neutralized males. Female gulls thus started pairing and nesting with each other in what we would call “lesbian” relationships.<sup>166</sup> Sound familiar? And it is *Black people* who are most exposed to DDT (as well as BPA, PCBs, PM<sub>2.5</sub>, and more).

Even more disturbing is the fact that DDT has epigenetic affects, which deliver their consequences to *future generations*.

In 2013, (Michael K. Skinner, a professor at Washington State University and the founding director of the Center for Reproductive Biology in the School of Biological Sciences) and his team published research showing that direct exposure to DDT left mice with a slightly elevated rate of certain diseases. But by the time those mice had grandchildren, more than 50 percent of the male mice developed obesity. In fact, Skinner's research found that DDT left 90 percent of the progeny of the mice originally exposed more likely to develop obesity, experience lower sperm counts, or contract other even more serious health conditions. This pattern continued through four generations, to the great-grandchildren of the mice originally exposed to DDT.<sup>167</sup>

Thus, the Most Honorable Elijah Muhammad was right on when he warned us as far back as 1967:

<sup>164</sup> Nancy McVicar, “Nature In Drag: Male Gators Becoming Female,” ***Sun-Sentinel*** September 3, 1994.

<sup>165</sup> Deborah Cadbury, ***Altering Eden: The Feminization of Nature*** (New York: St. Martin's Press, 1997) 83.

<sup>166</sup> D. Michael Fry, “Injury to Seabirds Caused by Estrogenic Effects of DDT Contamination in the Southern California Bright,” Report, September 30, 1994; Gary W. Shugart, Mary A. Fitch and Glen A. Fox, “Female Pairing: A Reproductive Strategy for Herring Gulls?” ***Condor*** 90 (1988): 933-935; David B. Peakall and Glen A. Fox, “Toxicological Investigation of Pollutant Related Effects in Great Lakes Gulls,” ***Environmental Health Perspective*** 71 (1987): 187-193; Michael R. Conover, “Female-Female Pairings in Caspian Terns,” ***Condor*** 85 (1983): 346-349; D.M. Fry and C.K. Toone, “DDT-induced feminization of gull embryos,” ***Science*** 213 (1981): 922-924; Glen A. Fox, Carl R. Cooper and John P. Ryder, “Predicting the Sex of Herring Gulls By Using External Measurements,” ***Journal of Field Ornithology*** 52 (1981): 1-9.

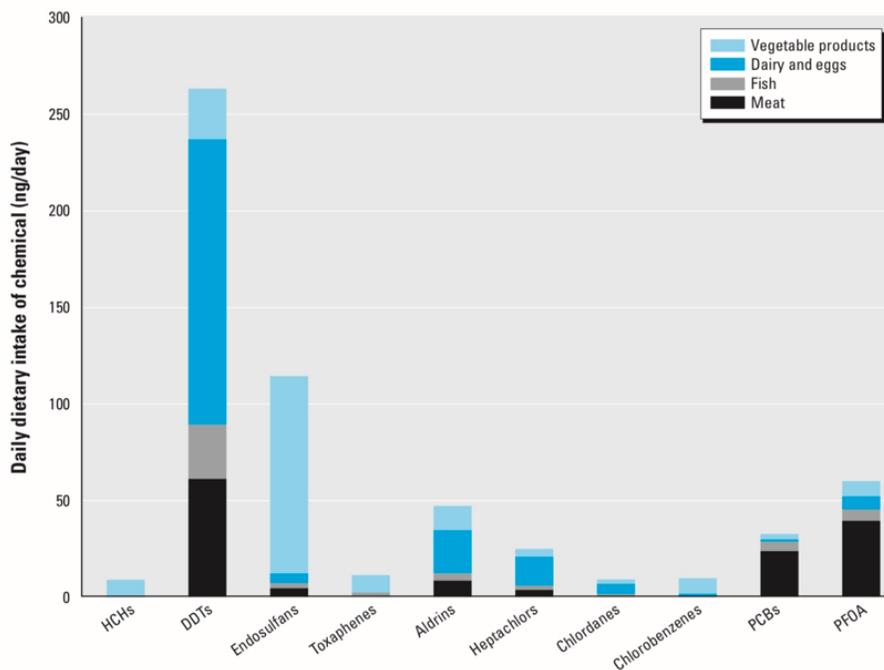
<sup>167</sup> Janell Ross, “Epigenetics: The Controversial Science Behind Racial and Ethnic Health Disparities,” ***The Atlantic*** March 20, 2014.



Poisonous food and drink we are now eating and drinking...D.D.T., which is sprayed on food while it is growing up from the earth, is also a poison that should not be put into the human body, regardless of the desire to kill the insects, that love to dine on the same food on which we dine.<sup>168</sup>

But DDT-poisoning is not restricted to Alabama catfish. Chicago salmon – and salmon in general - is even *more* contaminated. It was reported in 1969 that the Coho salmon of Lake Michigan was contaminated with DDT *and* PCBs!<sup>169</sup> We know that state governments were not averse to deliberately dumping such toxic chemicals near Lake Michigan.<sup>170</sup> Marla Cone reported in 2009: “The most contaminated wildlife on Earth-killer whales in the Pacific Northwest-are picking up nearly all of their chemicals from Chinook salmon in polluted ocean waters off the West Coast, according to new scientific study.”<sup>171</sup>

While PCBs are the main contaminant of the Pacific salmon that the killer whales dine on, DDT is the main contaminant of the salmon we land creatures consume. In 2009 Arnold Schecter of the University of Texas and colleagues studied the food contamination from five supermarkets in Dallas, Texas testing for 50 chemicals in 310 food samples representing 31 different food types.<sup>172</sup> They found



<sup>168</sup> Elijah Muhammad, *How To Eat to Live Vol. I* (Chicago: Muhammad’s Temple of Islam No. 2, 1967) 107-108.

<sup>169</sup> Ronald Kotulak, “DDT Killing Lake Michigan Coho, Scientist Says,” *Chicago Tribune* November 14, 1968; Gilman D. Veith, “Baseline Concentrations of Polychlorinated Biphenyls and DDT in Lake Michigan Fish, 1971,” *Pesticides Monitoring Journal* 9 (1975): 21-29; Stevenson Swanson, “DDT, PCBs Still Lurk in Lake Michigan Waters,” *Chicago Tribune* November 23, 1992.

<sup>170</sup> William Jones, “Fight Pesticide Use Near Lake Michigan,” *Chicago Tribune* November 11, 1967.

<sup>171</sup> Marla Cone, “Poisoned Killer Whales? Blame Salmon,” *Scientific American* January 20, 2009.

<sup>172</sup> Arnold Schecter et al., “Perfluorinated Compounds, Polychlorinated Biphenyls, and Organochlorine Pesticide Contamination in Composite Food Samples from Dallas, Texas, USA,” *Environmental Health Perspective* 118 (2010): 796-802.

that the highest level of chemical contamination of the food was from DDT and that salmon was the most contaminated food sample.

Emily Elert, writing in *Scientific American*, notes as well:

Farmed fish are even more contaminated. A 2004 study found that farmed salmon contained 10 times higher levels of [persistent organic pollutant] than wild salmon. The source of the pollutants, said Dr. David Carpenter, director of the Institute for Environmental Health at the University of Albany, New York...is the contaminated mixture of fish fats and proteins in fishmeal.<sup>173</sup>

#### XIV. *Fast Food and Food Oppression*

We know we are in a bona fide “Food Crisis” when it could be said that in Black neighborhoods “it is easier to get fried chicken than a fresh apple.”<sup>174</sup> Fast food has become “entrenched” in urban neighborhoods and diets. “NHANES [National Health and Nutritional Examination Survey] data indicate that non-Hispanic blacks are more likely than other racial/ethnic groups to eat fast food.”<sup>175</sup> As Dr. Chin Jou documents in her *Super Sizing Urban America. How Inner Cities Got Fast Food With Government Help*, “many urban,



NHANES data indicate that non-Hispanic blacks are more likely than other racial/ethnic groups to eat fast food. This raises questions about disproportionate exposures to phthalates found in fast food. © Finbarr O'Reilly/Reuters

low-income African-American neighborhoods are both saturated with fast food and disproportionately affected by the obesity epidemic.”<sup>176</sup> According to Dr. Andrea Freedman, fast food is “*oppression through poor nutrition*”:

Fast food has become a major source of nutrition in low-income, urban neighborhoods across the United States. Although some social and cultural factors account for fast food's overwhelming popularity, *targeted marketing, infiltration into schools, government subsidies, and federal food policy each play a significant role in denying inner-city people of color access to healthy food.* The overabundance of fast food and lack of access to healthier foods, in turn, have increased African American and Latino communities' vulnerability to food-related death and disease.' Structural perpetuation of this race- and class-based health crisis constitutes "food oppression."<sup>177</sup>

This “structural perpetuation” is obvious:

<sup>173</sup> Emily Elert, “U.S. Food Still Tainted with Old Chemicals,” *Scientific American* April 22, 2010.

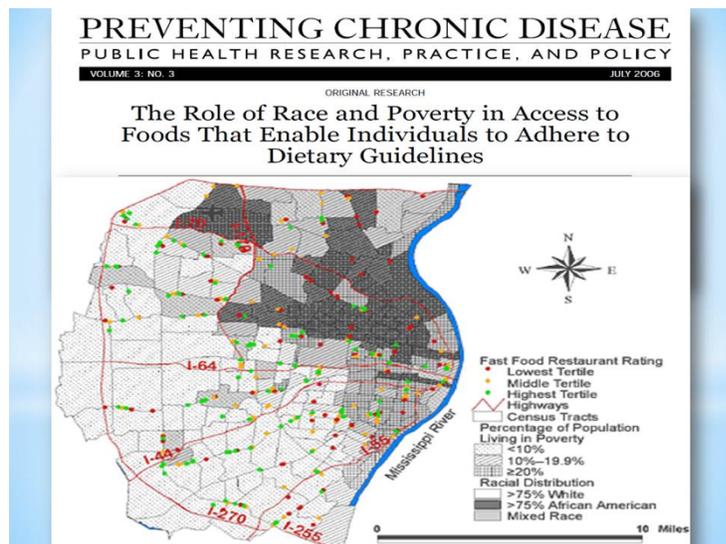
<sup>174</sup> Naa Oyo A. Kwate, “Fried chicken and fresh apples: Racial segregation as a fundamental cause of fast food density in black neighborhoods,” *Health & Place* 14 (2008): 32-44 (34).

<sup>175</sup> Wendee Nicole, “Phthalates in Fast Food,” *Environmental Health Perspective* 124 (2016): 191.

<sup>176</sup> Chin Jou, *Super Sizing Urban America. How Inner Cities Got Fast Food With Government Help* (Chicago and London: The University of Chicago, 2017) 17.

<sup>177</sup> Andrea Freeman, “Fast Food: Oppression through Poor Nutrition,” *California Law review* 95 (2007): 2221-2260 (2221-2222).

West Oakland, California, a neighborhood of 30,000 people populated primarily by African Americans and Latinos, has *one supermarket and thirty- six liquor and convenience stores*. The supermarket is not accessible on foot to most of the area's residents. The convenience stores charge twice as much as grocery stores for identical items. Fast food restaurants selling cheap and hot food appear on almost every corner. West Oakland is not unique. The prevalence of fast food in low-income urban neighborhoods across the United States, combined with the lack of access to fresh, healthy food, contributes to an overwhelmingly disproportionate incidence of food-related death and disease among African Americans and Latinos as compared to whites (emphasis added – WM).<sup>178</sup>



A 2006 audit by Elizabeth A. Baker et al. of food quality options in the St. Louis (!) area found that the highest quality supermarkets that provide the best options for meeting dietary guidelines (fresh fruits and vegetables, lean, low-fat and fat-free meats and dairy options) clustered in white higher-income communities and *none in Black census tracts*, while the poorest quality fast food restaurants and poor quality super markets – to the extent that super markets exists at all - that offer low quality food (high fat), disallowing

consumers to meet recommended dietary intake clustered in predominantly Black census tracks.<sup>179</sup>

In a 2004 study researchers mapped fast food restaurants in New Orleans and discovered that shopping districts in communities that were 80% Black were exposed on average to six fast food outlets more than majority white areas of the same size.

Fast-food restaurants are geographically associated with predominately black and low-income neighborhoods after controlling for commercial activity, presence of highways, and median home values. The percentage of black residents is a more powerful predictor of [fast food restaurant density] than median household income. Predominantly black neighborhoods (i.e., 80% black) have one additional fast-food restaurant per square mile compared with predominantly white neighborhoods (i.e., 80% white). These findings suggest that black and low-income populations have more convenient access to fast food. More convenient access likely leads to the increased consumption of fast food in these populations, and may help to explain the increased prevalence of obesity among black and low-income populations.<sup>180</sup>

<sup>178</sup> Andrea Freeman, "Fast Food: Oppression through Poor Nutrition," *California Law review* 95 (2007): 2221-2260 (2221-2222).

<sup>179</sup> Elizabeth A. Baker et al., "The Role of Race and Poverty in Access to Foods That Enable Individuals to Adhere to Dietary Guidelines," *Prev Chronic Dis* [serial online] 2006 Jul, 1-11.

<sup>180</sup> Jason P. Block et al., "Fast Food, Race/Ethnicity, and Income," *Am J Prev Med* 27 (2004): 211-217 (214-215).

## THE ORIGIN OF BLACK AMERICA'S FAST FOOD DEPENDENCY

While it true that Black and Hispanic communities disproportionately patronize fast food restaurants, this is a *new phenomenon*.

But despite its current popularity, there was a time not too long ago when fast food was *entirely absent from the diets of inner-city African-Americans*. McDonald's and most of the major fast food chains only opened in urban areas starting in the late 1960s and early 1970s. Brady Keys, a former pro-football player and African-American fast food franchising pioneer, recalls that before the emergence of fast food, African Americans consumed more meals at home; there was simply "no opportunity to eat anywhere else [relatively cheaply]."<sup>181</sup>

And believe it or not, Black People had *a better diet than Whites in many cases*. In a 1939 U.S. Department of Agriculture dietary survey it was revealed that during the summer months African Americans' diets contained more vitamins, minerals, and proteins than whites' diets in cases where households spent the same money on food. In 1965, African Americans were still consuming dietitians recommended quantities of fat, fiber, fruits, and vegetables at twice the rate of whites. However, by 1996 a near-reversal had occurred. "Dietary surveys indicated that 28 percent of African Americans, and only 16 percent of whites, now consumed unhealthy diets."<sup>182</sup> This diet revolution was caused largely by the new availability of fast food.

During the heyday of fast food in the United States-roughly the 1970s to 1990s-Americans' appetite for Big Macs and Whoppers seemed to cut across socioeconomic divides more than they do now...*Today's* typical fast food habitué is more likely to be relatively young, low-income, and African-American (emphasis added).<sup>183</sup>

It was the relentless targeting of the Black poor, with the aid of the U.S. Government, that transformed the urban food landscape: "federal programs were...part of a remaking of inner cities as fast food havens"<sup>184</sup>

Fast food companies' aggressive pursuit of African Americans since the early 1970s has been reflected in the inordinate share of their promotional budgets dedicated to reeling in minority consumers. One report in 1990 found that the three major fast food chains-McDonald's, Burger King, and Wendy's-earmarked up to one-fifth of their advertising budgets on African-American consumers even though African-Americans made up only about 12 percent of the total U.S. population at the time.<sup>185</sup>

The fast food industry is particularly "unrelenting in its appeal to young urban African Americans".<sup>186</sup> According to one 2012 report Black children (ages two through eleven) and teenagers viewed almost 60% more television advertisements for fast food than white children and teens. *The Washington Post* took notice of this "food oppression" in 2014 reporting "The disturbing ways that fast food chains disproportionately target black kids," noting the research that "fast food chains (such as **Popeye's** and **Papa John's**) in

<sup>181</sup> Jou, *Super Sizing Urban America*, 47.

<sup>182</sup> Jou, *Super Sizing Urban America*, 49.

<sup>183</sup> Jou, *Super Sizing Urban America*, 152-153.

<sup>184</sup> Jou, *Super Sizing Urban America*, 16.

<sup>185</sup> Jou, *Super Sizing Urban America*, 117.

<sup>186</sup> Jou, *Super Sizing Urban America*, 16.

predominantly black neighborhoods were more than 60 percent more likely to advertise to children than in predominantly white neighborhoods.”<sup>187</sup>

The concentration of African-Americans into segregated neighborhoods made us “compact sales targets,” in marketing jargon, and made the direct, geographic targeting of us easy and efficient: *waging war by zip codes*. As Naa Oyo A. Kwate points out:

A primary reason why Black neighborhoods have a high prevalence of fast food restaurants is because African Americans are actively sought by fast food companies, and segregation creates a ready, spatially concentrated target area. From a purely rational business perspective, the high prevalence of fast food restaurants in Black neighborhoods is itself suggestive of purposeful targeting. When opening a business, owners must consider location characteristics, including neighboring shops and local business climate, the crime rate, quality of public services, condition of homes, buildings, and lots, relationship to competition, and the spatial relationship to the target market (...). In many Black neighborhoods, such a location analysis would reveal: a retail climate that generates few customers; a relatively high crime rate; public services that have faced years of cutbacks and neglect; visibly deteriorated buildings; and several competing fast food restaurants. *In other words, there would be few incentives to open a store in a neighborhood with these characteristics, unless a primary goal was to target the individuals who reside there.*<sup>188</sup>

And it seems to be urban young Black men who are the real target audience.

Living near fast food restaurants may indeed constitute a “risky” physical environment, at least if one is low-income and male. A 2011 analysis of a longitudinal nationwide survey of 5,155 U.S. adults between the ages eighteen and thirty found that low-income men who lived within 3 kilometers (1.9 miles) of fast food chain restaurants consumed fast food more frequently than those who did not. These low-income men, researchers reasoned, were less likely to own cars, which made them more dependent on their immediate environs for meals and other services. This geographic constraint, coupled with limited cash for food, made it more likely that these low-income men would be ordering double cheeseburgers...off McDonald’s Dollar Menu.<sup>189</sup>

The Dollar Menu was targeted toward poor Black people, a strategy to ensnare African Americans into a fast-food diet. As McDonald’s vice president for United States business research Steve Levigne quasi-confessed: “The Dollar Menu appeals to lower-income, ethnic consumers...It’s people who don’t always have \$6 in their pockets.”<sup>190</sup> This disproportionate patronizing of fast food by Black and Hispanic communities is thus not an organic or natural phenomenon but the desired end of a government and industry process. And this process has contributed to the “obesity crisis” of Black America. According to the U.S. Department of Health and Human Services, in 2015 African Americans were 1.4 times as likely as Whites to be obese. 69.6% of Black men and 82% of Black Women are either obese (body mass index > 30.0) or overweight (body mass index > 25.0). “African American Women have the highest rates of being overweight or obese compared to other groups in in the U.S.,” HHS.gov reports.<sup>191</sup>

<sup>187</sup> Roberto A. Ferdman, “The disturbing ways that fast food chains disproportionately target black kids,” *The Washington Post* November 12, 2014.

<sup>188</sup> Kwate, “Fried chicken and fresh apples,” 35.

<sup>189</sup> Jou, *Super Sizing Urban America*, 16.

<sup>190</sup> Jou, *Super Sizing Urban America*, 154.

<sup>191</sup> @ <https://minorityhealth.hhs.gov/omh/browse.aspx?vl=4&vlid=25>

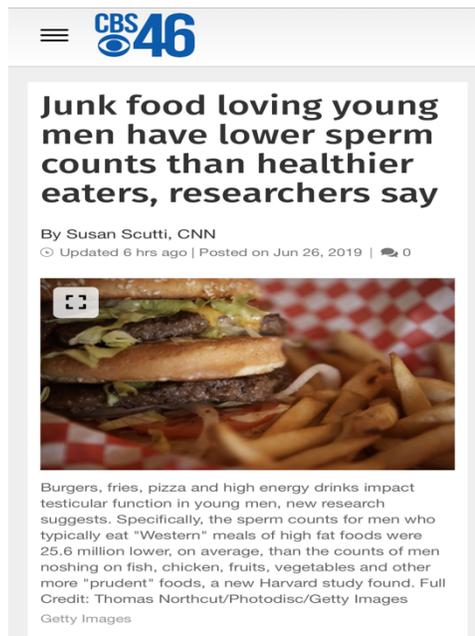
XV. *How McDonald's is making Us Sterile*

CNN reported recently under the title, “Junk food loving young men have lower sperm counts than healthier eaters, researchers say.”<sup>192</sup> The article continues:

Burgers, fries, pizza and high energy drinks impact testicular function in young men, new research suggests. Specifically, the sperm counts for men who typically eat “Western” meals of high fat foods were 25.6 million lower, on average, than the counts of men noshing on fish, chicken, fruits, vegetables and other more “prudent” foods, a new Harvard study found.”

The Harvard researchers believe that a high processed food diet characteristic of American fast food may be responsible for the trend that has been recorded over the recent past of progressively decreasing sperm counts and increasing male infertility. According to the World Health Organization (WHO) a normal sperm count is 39 million or more per ejaculation. Consumers of a Western diet (processed red meats, chips, fried foods, potatoes, snacks, pre-packaged foods, high-fat dairy, high-sugar drinks, sweets) have on average a slashed sperm count (25.6 million lower), while those with healthier diets (such as the “Mediterranean diet”: fruit, vegetables, fish, beans, extra-virgin olive oil, healthy grain, small amount of meat and dairy) showed an elevated sperm count (42.8 million more). Pizza, chips, and red meat increases oxidative stress on cells, while healthier foods are more anti-oxidant and associated with higher fertility.<sup>193</sup>

Researchers believe that processed foods irreversibly damage the sperm-producing Sertoli cells in males. In addition, a Taiwanese study in 2018 described an association between the high-fat diet characteristic of fast foods and diminished testosterone levels in men (hypogonadism), affirming results which suggests that “individuals who prefer Western-style food..., eat out, and eat fewer homemade foods, noodles, and dark green vegetables are more likely to have an unhealthy body composition (e.g. increased visceral fat and decreased skeletal muscle mass) and low serum total [testosterone] levels, and are likely to develop hypogonadism.”<sup>194</sup> Slashed sperm count and diminished testosterone levels contribute to *male* infertility. On the other hand, in a study of 5598 nulliparous (never given birth) women Jessica A. Grieger and colleagues presented an association between consumption of fast foods and *female* infertility.<sup>195</sup> Greater consumption of foods with a high glycemic index and a higher intake



<sup>192</sup> Susan Scutti, “Junk food loving young men have lower sperm counts than healthier eaters, researchers say,” *CBS46* June 26, 2019.

<sup>193</sup> Estefania Toledo et al., “Dietary patterns and difficulty conceiving: a nested case–control study,” *Fertility and Sterility* 96 (2011):1149-1153.

<sup>194</sup> Tzu-Yu Hu et al., “Testosterone-Associated Dietary Pattern Predicts Low Testosterone Levels and Hypogonadism,” *Nutrients* 10 (2018): 1-16.

<sup>195</sup> Jessica A. Grieger et al., “Pre-pregnancy fast food and fruit intake is associated with time to pregnancy,” *Human Reproduction* 33 (2018): 1063-1070.

of energy from trans fats as well as sodium and sugar are associated with increased risk of ovulatory infertility.

Thus, fast food consumption is believed to lead to infertility in men and women. And because, the National Health and Nutritional Examination Survey documents, “*non-Hispanic blacks are more likely than other racial/ethnic groups to eat fast food,*”<sup>196</sup> and because fast food is “entrenched” in Black neighborhoods today *not* because Black people have a cultural predilection to it but because Black communities are victims of *food oppression*, the reproductive capability of Black America is most effected.

As the United States hit a 40-year low in its fertility rate in 2018, “the decline in fertility has been *far* greater among minorities than among non-Hispanic whites,” according to the Institute for Family Studies, who admits that

in racial or ethnic terms, America’s ‘Baby Bust’ is kinda, sorta, a little bit racist: it’s hammered Native Americans and Hispanics particularly hard, and hit even African Americans harder than whites generally, and certainly harder than non-Hispanic whites.<sup>197</sup>

Black people are famously a very fecund people and White people have stopped reproducing themselves such that the “browning of America” is now an inevitability: Whites will become the minority in America in this century, it is predicted. Thus, one may be surprised to know that fertility rates have *decreased* for Black women over the past several years at a much greater rate than that of White women at the same time.<sup>198</sup> Fertility rates for Black women have dropped from 2.5 births per woman in 1990 to 2.0 births in 2010, while White women had 1.9 births per woman in 1990 and 1.8 in 2010.

In addition, in multiple recent semen analysis studies of Black and White men, Black men are found to have lower average sperm counts (92.43 million vs. 175.23 million), lower average sperm motility (39.87% vs. 49.22%), and a lower amount of normal sperm (4.89% vs. 7.28%) than White and Hispanic men and are more likely today to suffer from azoospermia (no sperm in the ejaculate).<sup>199</sup> In another, multi-city study

total sperm count and total motile sperm count were almost 50% lower for Black men compared to men in the other two groups (P<0.0001)...The percentage of men with semen volume, sperm concentration and total sperm count below current WHO reference values (...) was greater for Black men compared to White and Hispanic/Latino men.<sup>200</sup>

Thus, in a study of infertility among U.S. active service men between 2013 and 2017, crude overall incident infertility rates were highest among Black men vs. Whites and Hispanics.<sup>201</sup> This is quite astounding. The whole Western world is currently experiencing

<sup>196</sup> *Environmental Health Perspective* 124 (2016): 191.

<sup>197</sup> Lyman Stone, “Baby Bust: Fertility is Declining the Most Among Minority Women,” *Institute for Family Studies* May 16, 2018.

<sup>198</sup> Melissa F. Wellons et al., “Racial Differences in Self-Reported Infertility and Risk Factors for Infertility in a Cohort of Black and White Women: The CARDIA Women’s Study,” *Fertil Steril* 90 (2008): 1640-1648.

<sup>199</sup> American Society for Reproductive Medicine, “Ethnicity Affects sperm Quality in Infertility Patients,” Press Release, October 9, 2018.

<sup>200</sup> J. Bruce Redmon et al., “Semen Parameters in Fertile US Men: The Study for Future Families,” *Andrology* 1 (2013): 1-21.

<sup>201</sup> Valerie F. Williams, Irene Atta, and Shauna Stahlman, “Brief Report: Male Infertility, Active Component, U.S. Armed Forces, 2013-2017,” *Health.mil* March 1, 2019.

a “male fertility crisis,” and the U.S. is smack dab in the middle of it. Sperm concentrations fell by 52% between 1973 and 2011 among Western men, from 99 million per milliliter to 47.1 million.<sup>202</sup> And in the midst of all of this male infertility, *this relatively small subpopulation of Black men has developed the highest infertility rates of all other U.S. groups!* The number of live births per woman must be roughly 2.1 in order to keep a country’s population stable through birth alone. The U.S. fertility rate has drastically dropped to 1.8 births per woman. Black America’s fertility rate, having dropped from 2.5 to 2.0, has thus dropped below the number (2.1) of births per woman necessary for our national stability.

## XVI. *How Papa John’s Is Making Us Feminine*

Black America’s “obesity epidemic” and fertility crisis are not the only consequences of a heavy fast food diet. So too is *gender disruption*, including the feminizing of Black boys and the masculinizing of Black girls. Yes, through Whoppers and Big Macs. And also a Papa John’s Large.

CNN said it succinctly: “A new study finds that those fast food drive-thru hamburgers and take-out pizzas could increase your exposure to hormone-disrupting chemicals called phthalates.”<sup>203</sup> According to a recent report, people who eat fast food have higher levels of these chemicals called *phthalates* in their urine.

Phthalates are chemicals commonly used to soften plastic. Phthalates exposure has been associated with breast cancer, diabetes and insulin resistance, obesity, and metabolic disorders in adults, as well as adverse child neurodevelopment (e.g. ADHD, ASD, lower cognitive and motor development).

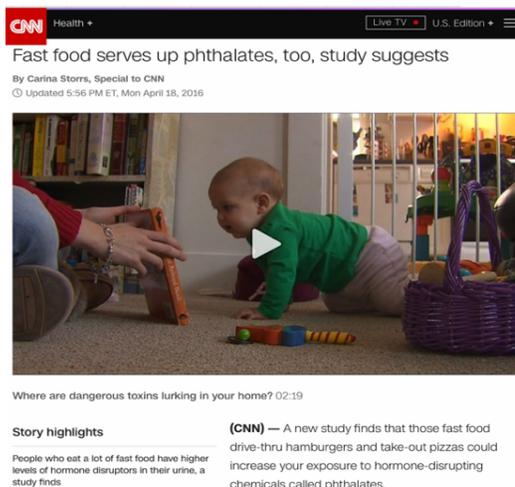
Like BPA, PCBs, and DDT, phthalates are endocrine disrupters. Phthalates are anti-androgen chemicals that inhibit the synthesis of testosterone by Leydig cells, thereby reducing fetal testosterone,<sup>204</sup> and that interfere with androgen signaling during the critical periods of sexual differentiation prenatally and perinatally. Prenatal, neonatal and peripubertal exposure can disrupt testis structure and function, reduce testosterone production, delay pubertal onset, and reduce androgen-dependent male organ weights (i.e. cause “shrinkage”),<sup>205</sup> thus producing a “phthalate syndrome”: reduced anogenital distance, impaired testicular descent and reduced genital size. Phthalates target a key pregnancy hormone made by the placenta, human chorionic gonadotropin (hCG). hCG is

<sup>202</sup> Bryan Walsh, “Male Infertility in the U.S. Has Experts Baffled,” *Newsweek* September 12, 2017

<sup>203</sup> Carina Storrs, “Fast food serves up phthalates, too, study suggests,” *CNN* April 18, 2016.

<sup>204</sup> S.H. Swan et al., “Prenatal phthalate exposure and reduced masculine play in boys,” *Int J Androl.* 33 (2010): 259-269.

<sup>205</sup> Andrew K. Hotchkiss et al., “Of Mice and Men (and Mosquitofish): Antiandrogens and Androgens in the Environment,” *BioScience* 58 (2008): 1037-1050, 1046-1047; S.H. Swan et al., “First trimester phthalate exposure and anogenital distance in newborn,” *Human Reproduction* 30 (2015): 963-972; Lung-Cheng Lin et al. “Associations between maternal phthalate exposure and cord sex hormones in human infants,” *Chemosphere* 83 (2011): 1192-1199.



essential to the normal differentiation of fetal testes. Phthalates exposure raises hCG in women carrying a female fetus and lowers hCG in women carrying a male. This lowered hCG in the male placenta disrupts male sexual differentiation and masculinization of the genitals. In males this also results in a shortened (feminized) anogenital distance which is associated with decreased sperm count and infertility. Because exposure can reduce fetal and maternal testosterone secretion, brain sexual differentiation (of which testosterone is a critical mediator) may be altered. This demasculinizing of the neurology of the male fetus leads to a feminization of his *behavior* as early as adolescence, or “make little boys behave a bit more like little girls.”<sup>206</sup>

Phthalates are thus *very scary contaminants*. But it is *Black People* who are disproportionately exposed to these nasty chemicals – and largely through fast food. An important study was published in 2016.<sup>207</sup> With a study population of nearly 9000 people and using data from the National Health and Nutrition Examination Survey (NHANES) collected by the CDC between 2003 and 2010, researchers looked at the relationship between how much fast food people consume and the level of certain phthalates (DEHP and DiNP) in their urine. One-third of the participants in the study – and 43.8 % of the Black respondents - said they had eaten fast food in the last 24 hours and those who consumed a modest or a high amount of fast food had 15.5 - 23.8% (DEHP) and 24.8 - 39% (DiNP) higher levels than those who did not consume. Young Black men were both the greater consumers of fast food and the group with the highest levels of phthalates in their body.

Participants who ate fast food were more likely to be < 40 years old, male, and non-Hispanic black and to have higher [total energy intake] and total fat intake. Fast food consumers had higher levels of  $\Sigma$ DEHPm, DiNPm, and BPA than did nonconsumers.<sup>208</sup>

Exposure to  $\Sigma$ DEHPm was positively associated with fast food intake in all three racial/ ethnic groups; however, the association did not reach statistical significance among Hispanics. Moreover, the highest tertile estimate for fast food intake was greater in magnitude for non-Hispanic blacks compared to non-Hispanic whites or Hispanics.<sup>209</sup>

Wendee Nicole reports:

<sup>206</sup> Ford Fox, M.D., “Phthalates Threat: Les Boy, More Girl,” *U.S. News & World Report* November 7, 2009; S.H. Swan et al., “Prenatal phthalate exposure and reduced masculine play in boys,” *Int J Androl.* 33 (2010): 259-269;

<sup>207</sup> Ami R. Zota et al., “Recent Fast Food Consumption and Bisphenol A and Phthalates Exposures among the U.S. Population in NHANES, 2003-2010,” *Environmental Health Perspective* 124 (2016): 1521-1528.

<sup>208</sup> Zota et al., “Recent Fast Food Consumption,” 1523.

<sup>209</sup> Zota et al., “Recent Fast Food Consumption,” 1524.



The authors also found that the associations between phthalates and fast food *were not uniform across the population*. They speculate that *the pronounced association they saw between fast food consumption and DEHP in black consumers* could reflect higher overall consumption of fast food and/or different food choices among this population. *Prior research suggests that predominately black neighborhoods in urban areas have a greater density of fast food restaurants than white neighborhoods*. “The fact that non-Hispanic blacks showed a steeper dose–response curve to fast food and DEHP is an important contribution to the environmental justice field since it suggests a potential *connection between neighborhood environments, food choices, and phthalates exposure*,” says lead author Ami Zota, an assistant professor of environmental and occupational health at George Washington University. Environmental justice research has found that minority populations often have greater environmental exposures to potentially harmful agents than other groups (emphasis added – WM).<sup>210</sup>

But this “pronounced” association between the Black fast food consumer and a high phthalates body burden needs further consideration. The theory is advanced that the food was contaminated on secondarily, when the phthalates from the vinyl gloves (that all food handlers wear) or from the packaging leaches onto and contaminates the food. However, there is evidence that *the food itself was contaminated independent of the plastic gloves and wrappings*. Using data from the 2003-2004 NHANES a 2010 study by University of Michigan researchers to determine which food types are most contaminated with phthalates demonstrated that poultry – chicken – is specially associated with high levels of DEHP and high molecular weight phthalates and that consumers of a lot of chicken – a hood staple - tend to have a heavy phthalate body burden.<sup>211</sup> They also note:

Additionally, the finding that egg consumption is significantly associated with levels of MEHP suggests that *chickens themselves may be contaminated with phthalates and that food is not being contaminated just through packaging and processing* (emphasis added – WM).<sup>212</sup>

### XVII. *Food and Black America’s Health Crisis*

Black people in America are the subpopulation that suffers the greatest exposure to and body burden of a deadly cocktail of nasty industrial chemicals: PM<sub>2.5</sub>, Atrazine, PCBs, BPA, DDT, phthalates, and more. We have demonstrated that the over-exposure is *not* accidental or circumstantial, but consciously and deliberately created by the U.S. Government (military) and allied (industrial) interests, who have more or less successfully separated and quarantined White Americans from these poisons. The body burden of these chemicals that Black people disproportionately carry in our blood is likely at the root of many of the symptoms of our “Black Health Crisis.” For example:

### **BLACK AMERICA’S AUTISM EPIDEMIC**

Autism was once a White disorder, but several studies have demonstrated that Black boys are disproportionately suffering from the neurological disorders that

<sup>210</sup> Wendee Nicole, “Phthalates in Fast Food,” *Environmental Health Perspective* 124 (2016): 191.

<sup>211</sup> Justin A. Colacino, T. Robert Harris and Arnold Schechter, “Dietary Intake Is Associated with Phthalate Body Burden in a Nationally Representative Sample,” *Environmental Health Perspectives* 118 (2010): 998-1003.

<sup>212</sup> Colacino, Harris and Schechter, “Dietary Intake,” 1002.

characterize the Autism Spectrum.<sup>213</sup> While it has been persuasively demonstrated that the ethylmercury preservative used in the MMR vaccine, thimerosal, is the cause for much of the autism epidemic that Black America suffers from, studies also make clear that *another cause* of certain phenotypes on the Autism Spectrum is the chemicals that segregated Black communities have been deliberately *bombarded* with. Links have been established between autism and the prenatal exposure to environmental pollutants.<sup>214</sup> These chemicals cause neurological damage prenatally that manifests later as childhood disruptive behavior, such as ADHD. A direct association has been established between maternal exposure to BPA and childhood ASD,<sup>215</sup> as has an association between phthalates exposure and ASD been established.<sup>216</sup>

### BLACK AMERICA'S CANCER CRISIS

Black America, it can be said, is right now experiencing a Cancer Crisis. Black men and women die from cancers (all combined) 24% and 14% higher respectively than White men and women. According to the Cancer Facts & Figures for African Americans 2016-2018 Report:

Blacks have the highest death rate and shortest survival of any racial/ethnic group in the US for *most cancers*...Although the overall racial disparity in cancer death rates is decreasing in 2012, the death rate for all cancers combined was 24% higher in black men and 14% higher in black women than in white men and women, respectively.<sup>217</sup>

According to this report, *about 1 in 2 Black men and 1 in 3 Black women will be diagnosed with cancer in their lifetime*. The lifetime probability of dying from cancer is about 1 in 4 for Black men and 1 in 5 for Black women. Why are Black people so cancerous? While breast cancer is the most commonly diagnosed cancer in Black women and prostate cancer is the most common in Black men, we also have high rates of colorectal and lung cancer. Since 2005, colorectal cancer death rates have been 50% higher in Black men than

<sup>213</sup> Wesley Muhammad, *Understanding the Assault on The Black Man, Black Manhood and Black Masculinity* (Atlanta: A-Team Publishing, 2016) 309-313.

<sup>214</sup> Philippe Grandjean and Philip J. Landrigan, "Neurobehavioural effects of developmental toxicity," *Lancet Neurol* 13 (2014): 330-338; Kathryn Doyle, "Study links pesticide exposure in pregnancy to autism," *Reuters* June 23, 2014; Nicholas Kristof, "Do Toxins Cause Autism?" *The New York Times* February 24, 2010.

<sup>215</sup> T. Peter Stein et al., "Bisphenol A Exposure in Children with Autism Spectrum Disorders," *Autism Res.* 8 (2015): 272-283; Zaleh Md. Nor et al., "Does Bisphenol A contribute to autism spectrum disorder?" *Current Topics in Toxicology* 10 (2014): 63-73; D. Sarroulhe and C. Dejean, "Autism spectrum disorders and bisphenol A: Is serotonin the lacking link in the chain?" *Encephale* 43 (2017): 402-404; Mia de Graaf, "The plastic plaque: Hormone-disrupting chemicals in everyday things like water bottles DO cause cancer, diabetes, ADHD and autism – and cost US \$340 Billion a year," *Daily Mail* October 18, 2016.

<sup>216</sup> Fatih Kardas et al., "Increased Serum Phthalates (MEHP, DEHP) and Bisphenol A Concentrations in Children With Autism Spectrum Disorder," *Journal of Child Neurology* October 8, 2015; Chiara Testa et al., "Di-[2-ethylhexyl] phthalate and autism spectrum disorders," *ASN NEURO* 4 (2012): 223-229; Marla Cone, "Scientists Find 'Baffling' Link between Autism and Vinyl Flooring," *Scientific American* March 31, 2009.

<sup>217</sup> American Cancer Society, *Cancer Facts & Figures for African Americans 2016-2018* (Atlanta: American Cancer Society, 2016) 1.

in White men<sup>218</sup> and lung cancer is 36% more common in Black than in White men. Black women have now closed the gap with White women in terms of breast cancer incidence rate and still are more likely to die from it and develop the disease much younger. What's more, breast cancer is becoming epidemic *among Black men!* In 2007 ABC News reported: "Black men are more likely than white men to die of breast cancer, concludes a study that urges more research into racial disparities in male breast cancer."<sup>219</sup> *Breastcancer.org* also announced that "African American Men Hit Harder by Breast Cancer," noting:

And like African American women, African American men are hit harder by breast cancer than their white counterparts. After diagnosis, African American men are three times more likely to die from breast cancer than white men. This difference is probably due to the same factors suggested by research involving African American women.<sup>220</sup>

The study, by Dawn L. Hershman and colleagues, noted that "The male-to-female breast cancer incidence ratio is higher among black patients than among white patients, and black men have higher age-adjusted incidence rates (1.65/100,000) than do white men (1.31/100,000)."<sup>221</sup>

What is the cause of all of this cancer among Black men and women? Black America's Cancer Crisis is not a natural phenomenon. BPA and the other xeno-estrogens that Black America's blood has been deliberately contaminated with are major culprits. As Evanthia Diamanti-Kandarakis et al. explain:

exposure to estrogens throughout a woman's life, including the period of intrauterine development, is a risk factor for the development of breast cancer. The increased incidence of breast cancer noted during the last 50 yr may have been caused, in part, by exposure of women to estrogen-mimicking chemicals that have been released into the environment from industrial and commercial sources. Epidemiological studies suggest that exposure to xenoestrogens such as DES during fetal development, to DDT around puberty, and to a mixture of xenoestrogens around menopause increases this risk. Animal studies show that exposure *in utero* to the xenoestrogen BPA increases this risk. Moreover, these animal studies suggest that estrogens act as morphogens and that excessive perinatal exposure results in structural and functional alterations that are further exacerbated by exposure to ovarian steroids at puberty and beyond. These altered structures include preneoplastic lesions, such as intraductal hyperplasias, and carcinomas *in situ*.<sup>222</sup>

Prostate cancer among Black men has been directly linked with BPA exposure.<sup>223</sup>

<sup>218</sup> See also Ian M. Paquette et al., "African Americans should be screened at an earlier age for colorectal cancer," *Gastrointest Endoes* 82 (2015): 878-883.

<sup>219</sup> Robert Preidt, "Male Breast Cancer Deadlier for Blacks," *ABC News* March 23, 2007.

<sup>220</sup> "African American Men Hit Harder by Breast Cancer," *Breastcancer.org* April 6, 2007.

<sup>221</sup> Dawn L. Hershman et al., "Racial Disparities in Treatment and Survival of Male Breast Cancer," *Journal of Clinical Oncology* 25 (2007): 1089-1098.

<sup>222</sup> Evanthia Diamanti-Kandarakis et al., "Endocrine-Disrupting Chemicals: An Endocrine Society Scientific Statement," *Endocr Rev.* 30 (2009): 293-342. (IV.E.2.)

<sup>223</sup> Shuk-mei Ho et al., "Prostate "Exposure to Bisphenol A Correlates with Early-Onset Prostate Cancer and Promotes Centrosome Amplification and Anchorage-Independent Growth *In Vitro*," *PLOS* 9 (2014): 1-11; Zoë Schlanger, "BPA Levels Higher in Men with Prostate Cancer: Study," *Newsweek* March 3, 2014; Laura Sanders, "Estrogen may reprogram prostate cancer gene in Black men," *ScienceNews* Vol. 176 #1, July 4, 2009, p.13; John Schieszer, "Estrogen May Explain Higher PCa Risk in Blacks," *Renal & Urology News* September 18, 2009; Wesley Muhammad, "Prostate Cancer: Waging Chemical War Against Black Androgenicity ("Manness")," Report, May 22, 2018.

XVIII. *Is Our Food Making Us Gay? D.C. As Compelling Evidence*

Gwynne Lyons has observed:

Feminization of the males of numerous vertebrate species is now *a widespread occurrence*, with many males of egg laying vertebrate found to be abnormally producing the egg yolk precursor protein, vitellogenin. Vitellogenin (VTG) is synthesized by the liver of nonmammalian vertebrates and induced in response to oestrogen. A decrease in male sex hormone, or in the ratio of the male:female sex hormones can lead to weak male secondary sex characteristics including intersex reproductive organs (part female ovary, part male testis), small penis, ineffective mating behaviour, and possibly low fertility.<sup>224</sup>

What is the cause of this widespread phenomenon of males across species being demasculinized and feminized? Susan Jobling and Richard Owen informs us that “A large body of scientific data built up over many decades indicates a cause-effect link between *exposure to a complex cocktail of chemicals* and the feminization and demasculinization of wildlife species, particularly those living in or around the aquatic environment.”<sup>225</sup> We have demonstrated that more than *any* other American demographic Black babies are born with a “complex cocktail of chemicals” in their blood. The chemicals are the very ones feminizing males and masculinizing females of lower species, and we know that these chemicals also disrupt the endocrine system of humans as well. “A huge body of data,” reports P. Negri-Cesi, “demonstrate that developmental exposure to low BPA interferes with the brain sex differentiation process with enduring effects on brain structure and function.”<sup>226</sup> Prenatal BPA exposure can even “reverse sex differences in brain morphology, function and behavior,”<sup>227</sup> thereby reprogramming a male brain to show female typical behavior.<sup>228</sup> Prenatal exposure to PCBs, as we saw above, defeminizes and masculinizes the female neuroendocrine system.<sup>229</sup> DDT, phthalates, atrazine, etc. – *all* of these “gender bending” chemicals mix in *Black blood* to an extent that they do not in other groups in America, and our *food* is the main source of these chemicals. With so much “gender bending chemistry” running through our veins, how in the world *could* Black America escape having a “Gender Bender Crisis”?

<sup>224</sup> Gwynne Lyons, *Effects of Pollutants on the Reproductive Health of Male Vertebrate Wildlife – Males Under Threat* (UK: CHEM Trust, n.d.) 1-2.

<sup>225</sup> Susan Jobling and Richard Owen, “Ethinyl oestradiol in the aquatic environment,” in European Environment Agency, *Late lessons from early warnings: science, precaution, innovation* (Copenhagen, Denmark: European Environment Agency, 2013) 279-307.

<sup>226</sup> P. Negri-Cesi, “Bisphenol A Interaction With Brain Development and Functions,” *Dose-Response: An International Journal* (2015): 1-12 (4).

<sup>227</sup> Frederick S. vom Saal, “Bisphenol A Eliminates Brain and Behavior Sex Dimorphisms in Mice: How Low Can you Go?” *Endocrinology* 147 (2006): 3679-3680.

<sup>228</sup> Marija Kundakovic et al., “Sex-specific epigenetic disruption and behavioral changes following low-dose in utero bisphenol A exposure,” *PNAS* 110 (2013): 9956-9961.

<sup>229</sup> Sarah M. Dickerson et al., “Endocrine Disruption of Brain Sexual Differentiation by Developmental PCB Exposure,” *Endocrinology* 152 (2011): 581-594.

And “Gender Bender Crisis” we *do* have. When Historian Allan Bérubé every year (up to 2001) asked his students what they think of when envisioning a gay man, the response was always the same: “white and well-to-do.”<sup>230</sup> For a long time gay *was* an “Affluent White Thing” in America. But when the 2012 Gallup Poll revealed its results, we learned that now “Nonwhites are more likely than white segments of the U.S. population to identify as LGBT.” Specifically, “Poor blacks and Asians are more likely to be gay than whites.”<sup>231</sup> African Americans made up the largest individual percentile of LGBT at 4.4%; Asian 4.3% Hispanic 4.0%; White 3.2%. Between 2013 and 2017, Hispanics took and consistently held first place in terms of largest percentile.<sup>232</sup> Nevertheless, the Black adult LGBT population grew to 5.0 in 2017, while the White adult LGBT population was only 4.0 in that year. Whites now consistently register *the lowest percentile group*. Such a wide pendulum swing – from “rich White thing” to “poor Black thing” - *cannot* be considered a natural phenomenon or organic process. And when we now consider all of the gender bending chemicals that poison the blood of Black (and Brown) people due to the deliberate targeting of Black America by the U.S. government and allied interests, this state of affairs makes much sense.

An illustrative case is Washington D.C. One of the most segregated metropolitan areas in the country, the District of Columbia has a Segregation Index for 2013-2017 of 61.3, considered “severe black-white segregation.” According to the 2017 census, 47.1% of D.C. is Black, overwhelmingly concentrated in the census tracts on the east side of D.C., and 45.1% is White, overwhelmingly concentrated in the west side census tracts. Segregation “almost divides the city right down the middle,”<sup>233</sup> as we see from the map below. There is a high level of poverty in Black D.C. Census findings indicate that 27.9% of African Americans are in poverty, which is four times higher than the White poverty rate of 7.9%. The median income for White households was in 2017 \$125,747, compared to the median household income of Black D.C., \$37,891.<sup>234</sup>



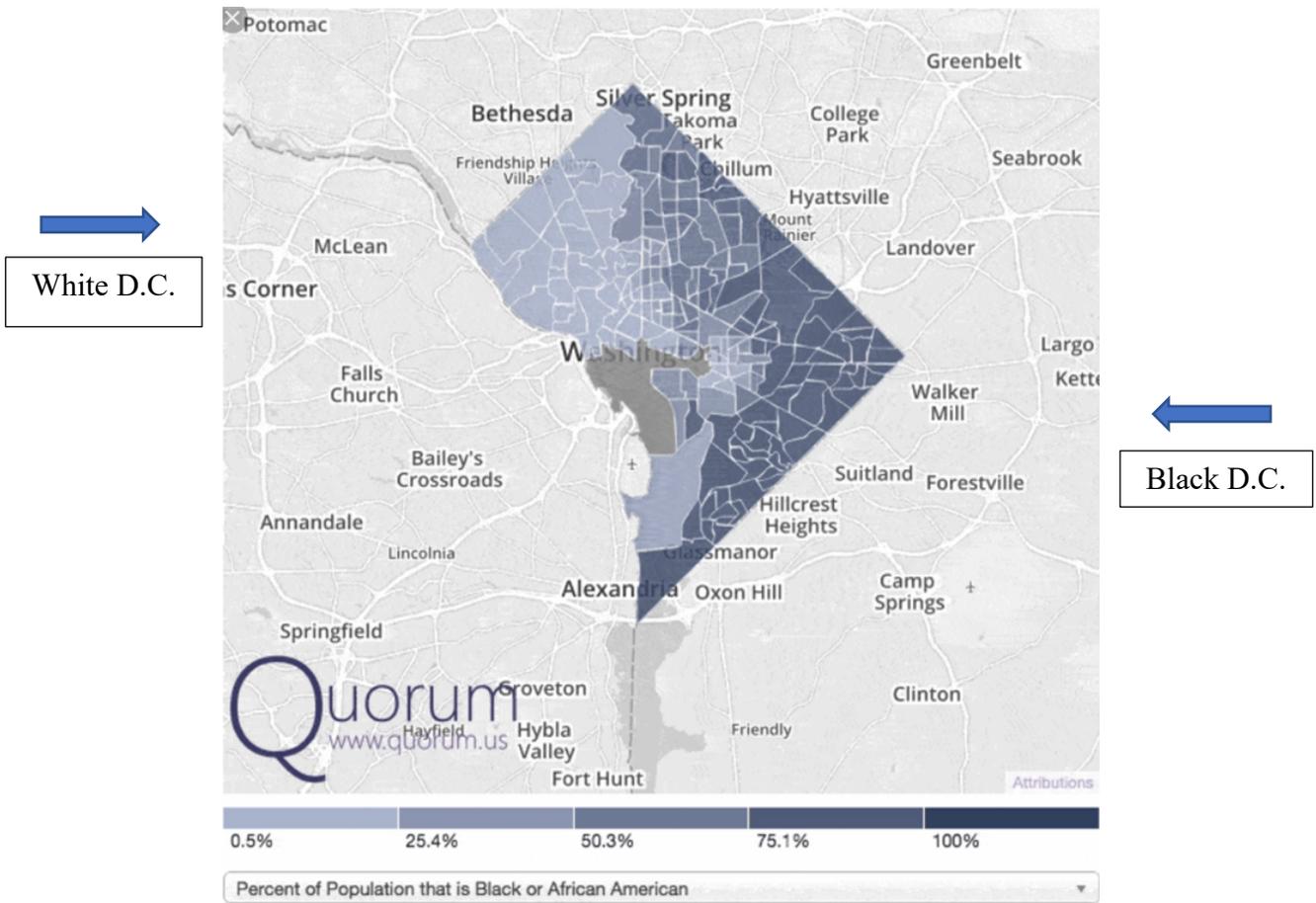
<sup>230</sup> Allan Bérubé, “How Gay Stays White and What Kind of White it Stays,” in *The Making and Unmaking of Whiteness*, ed. (Durham: Duke University Press, 2001) 234-265.

<sup>231</sup> Tom Leonard, “‘White people are less likely to be gay’: Poll reveals African-American community has highest percentage of ‘LGBT’ adults in U.S.,” *Daily Mail* October 19, 2012; Gary J. Gates and Frank Newport, “Special Report: 3.4% of U.S. Adults Identify as LGBT,” *Gallup* October 18, 2012, 1-10.

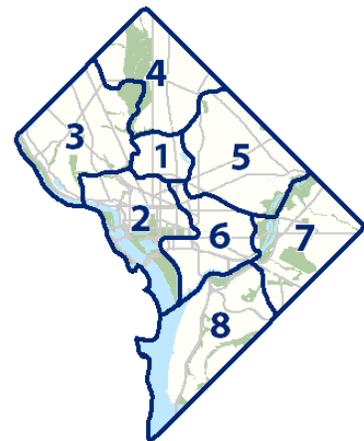
<sup>232</sup> Frank Newport, “In U.S., Estimates of LGBT Population Rises to 4.5%,” *Gallup* May 22, 2018.

<sup>233</sup> Aaron Blake, “The remarkable racial segregation of Washington, D.C., in 1 map,” *The Washington Post* June 19, 2015.

<sup>234</sup> Courtland Milloy, “Even in a prosperous city like D.C., many still go hungry, report finds,” *The Washington Post* September 19, 2007; Randy Smith, “Food access in D.C. is deeply connected to poverty and transportation,” *D.C. Policy Center* March 13, 2017.



Black D.C. is also a very “food insecure” place. Food insecurity is defined by the USDA as the limited or uncertain availability of nutritionally adequate and safe food or the limited or uncertain ability to acquire such food for a household. People living in food insecure areas are often forced to turn to quick marts, gas stations, convenience stores and fast-food restaurants for their primary nutrition. In D.C. 1 in 7 households experience some form of food insecurity. These food insecure areas are usually what’s called “food deserts,” geographic areas where people have limited access to healthy food. In Washington D.C. 14.5% of the residents are food insecure and 11 percent of the District’s total area – 6.5 square miles – is food desert. D.C.’s food deserts are almost all concentrated in the southeast side of the District, the Black side, particularly the poorest and Blackest Wards 7 and 8 where more than three-fourths of D.C.’s food deserts are located. In contrast, the very White Ward 3 has no food desert. There are 49 full-service grocery stores in D.C., and only three are located in Wards 7 and 8. By comparison, in the Whiter and more affluent Ward 6, at least 10 full service grocery stores service an

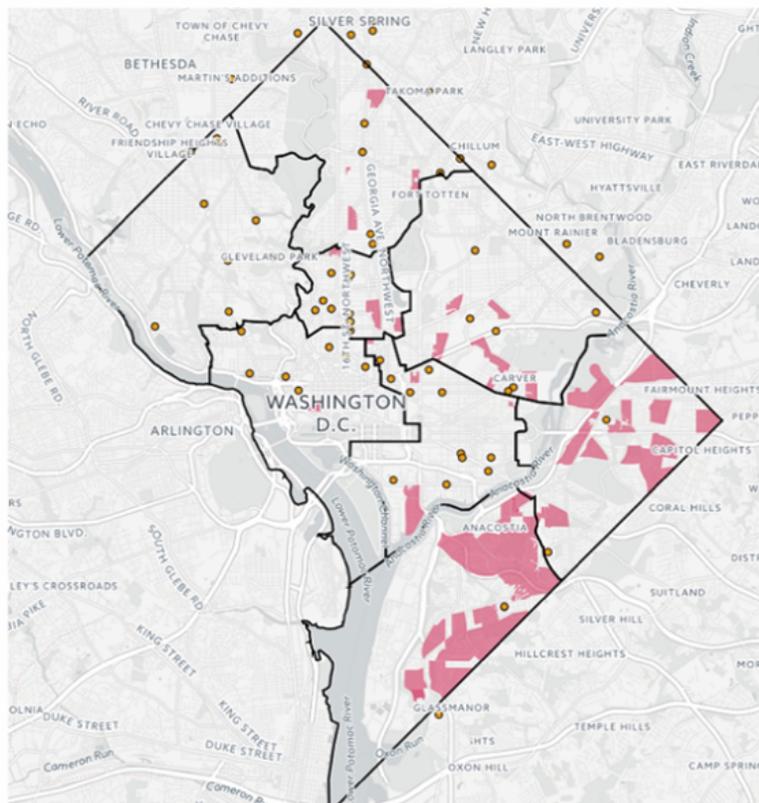


Washington D.C. Wards. Wards 7 and 8 are the poorest and the Blackest, while Wards 6 and 3 are affluent and White.

estimated 80,000 residents.<sup>235</sup> D.C. has one of the highest fast-food restaurant densities, and Black D.C. is the densest. Thus, there is a lot of fast-food consumption by poor, Black residents and this means a lot of phthalates exposure. The high poverty and food insecurity in Black D.C. mean a lot of canned foods are procured which thus means a lot of BPA exposure.

#### Food deserts in D.C.

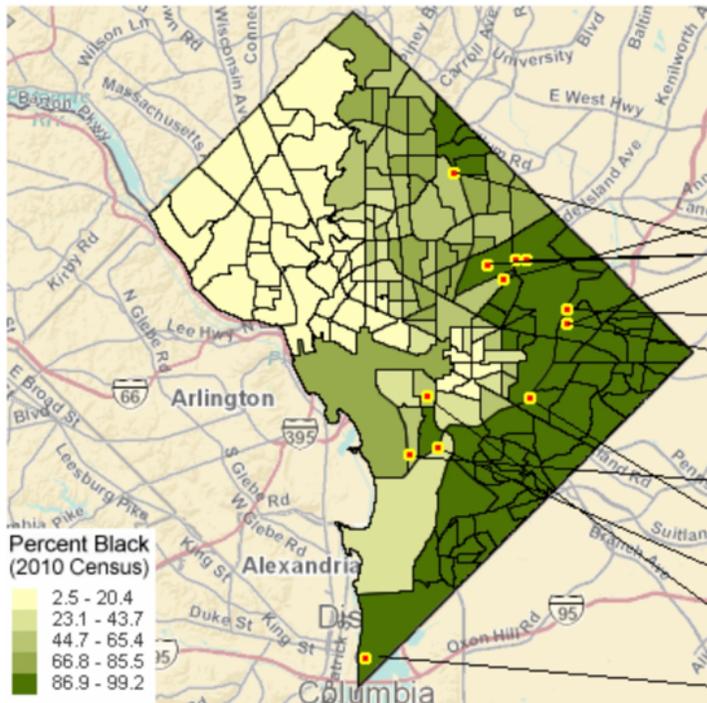
Areas of limited food access in the District (in red) based on grocery or supermarket location, household income, and transportation access.



Black D.C. is the victim of profound environmental injustice.<sup>236</sup> The map below definitively documents the reality of “environmental racism.” Toxic sites are concentrated in the *Black side* of Washington D.C.: waste transfer stations, landfill/Superfund site, power plant, trash incinerator, all situated in Black D.C., polluting the air, land, and people with a host of noxious chemicals, many of which are endocrine disrupting.

<sup>235</sup> Courtland Milloy, “Even in a prosperous city like D.C., many still go hungry, report finds,” *The Washington Post* September 19, 2007; Randy Smith, “Food access in D.C. is deeply connected to poverty and transportation,” *D.C. Policy Center* March 13, 2017.

<sup>236</sup> David Alpert, “Environmental justice for Ivy City,” *The Washington Post* December 14, 2012; Naomi Todd, “Of Rubbish and Injustice: Environmental Racism in DC,” *The Beacon* February 8, 2019; Editorial Board, “A Tale of Two Rivers: Environmental Injustice in D.C.,” *The Georgetown Voice* April 22, 2016.



Toxic Sites Concentrated in Black D.C.

- Ivy City historic Crummel School threatened by bus depot
- 5 trash transfer stations
- Kenilworth Landfill / Superfund Toxic Waste site (park next to public housing)
- Benning Road site: power plant (closed in 2012) incinerator (closed in 1994), likely new incinerator site also, a contaminated site, affecting groundwater
- Buzzard Point Power Plant (closed in 2012)
- Anacostia River polluted by military sites, landfills, and raw sewage from combined sewer overflows
- Navy Yard toxic waste sites and contamination of Anacostia
- Capitol Power Plant
- Blue Plains Sewage Treatment Plant (world's largest)

Flowing through Black D.C. is the Anacostia River, which essentially separates the Federal Buildings and upscale housing from the poor, Black communities to the south. These communities have historically depended on the Anacostia River as a food source. As *National Geographic* reports:



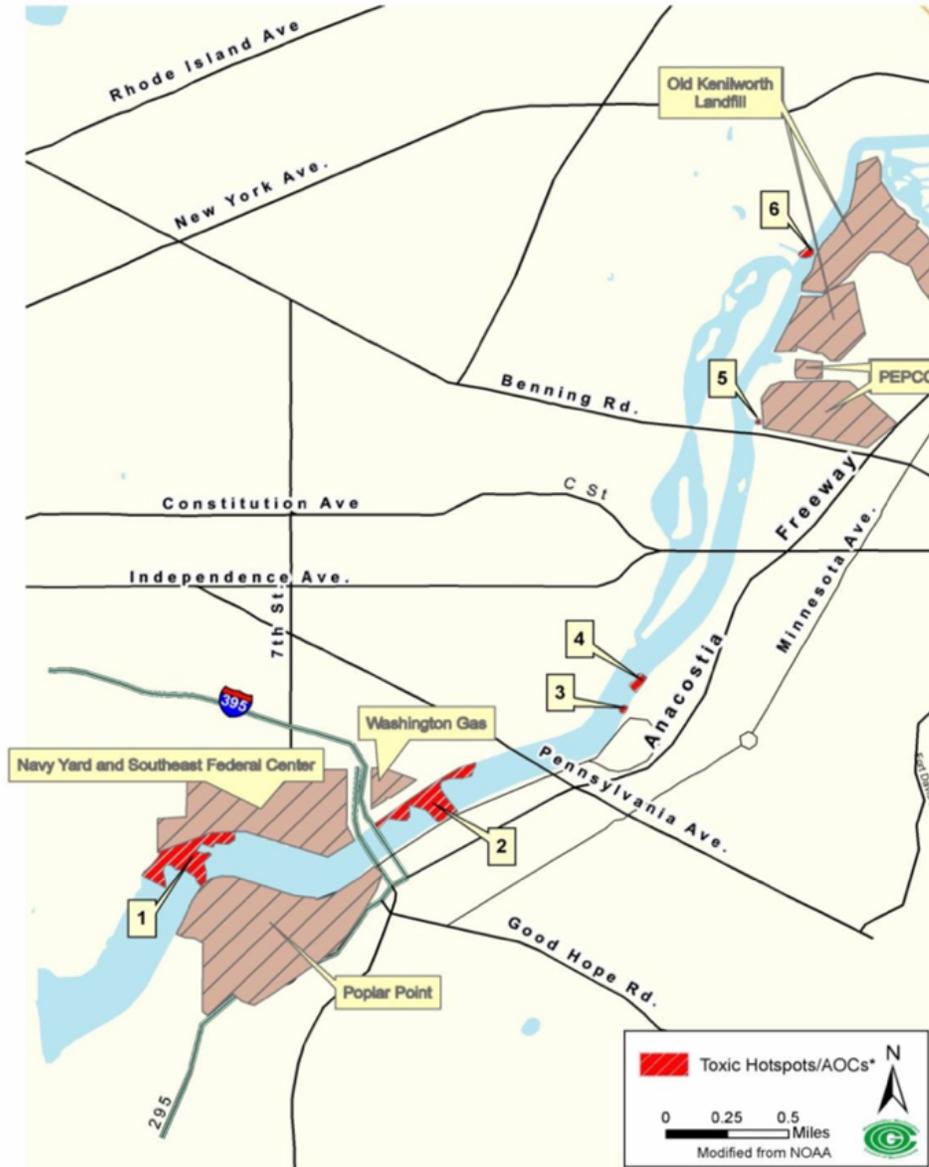
Fish from the river have fed some of the city's African Americans for many generations from bonded Africans sold on the shores of the Chesapeake Bay to refugees of the Civil War South, to some of today's unemployed and poor residents east of the river. They are joined by recent immigrants, mostly Spanish-speakers who have continued their custom of fishing for dinner from the rivers of Central America.<sup>237</sup>

The Potomac River is not surrounded by poor, Black neighborhoods,<sup>238</sup> and unlike Rock Creek, which is in the suburbs, the Anacostia River is highly toxic. In fact, it is notorious as one of the nation's dirtiest. Industry but mainly the federal government (military) "was largely responsible for despoiling" this historical food source of Black people in D.C.<sup>239</sup> Runoff from the adjacent Washington Navy Yard pollutes the river. Landfills were deliberately situated near it and factories discharged waste into the

<sup>237</sup> Krista Schlyer, "Fishing the Forgotten River in the Nation's Capital," *National Geographic* July 24, 2012.  
<sup>238</sup> Editorial Board, "A Tale of Two Rivers: Environmental Injustice in D.C.," *The Georgetown Voice* April 22, 2016: "The neighborhood surrounding the Anacostia is largely poor and black. The neighborhood surrounding the Potomac is not."  
<sup>239</sup> Schlyer, "Fishing the Forgotten River"; Editorial Board, "A Tale of Two Rivers: Environmental Injustice in D.C.," *The Georgetown Voice* April 22, 2016.

Anacostia. As Mike Bolinder, the Anacostia Riverkeeper acknowledged: “We’ve been dumping toxic waste in there for 100 years.”<sup>240</sup> The map below shows these military, government and industrial toxic sites along the Anacostia River.

Toxic Sites along the Anacostia River – D.C. Side



<sup>240</sup> Schlyer, “Fishing the Forgotten River.”

It is the marginalized, Black communities along the borders of the Anacostia that are most impacted by this *targeted toxicity*. The river “has all the markings of a Superfund site,”<sup>241</sup> and the fish are thoroughly contaminated (upwards of 68% of the bullhead catfish have liver tumors), yet as many as 17,000 Black and Brown residents (65% of the anglers are Black) are believed to be consuming the contaminated fish of the Anacostia River.<sup>242</sup> In contrast,



Black children fishing at the Anacostia River. Most of the local consumers of this fish are poor, Black residents dependent on the fish for subsistence

as *National Geographic* points out, “In the more affluent neighborhoods of the (northwestern) Washington, D.C., metro area, the idea that anyone would eat a fish caught in the Anacostia seems unthinkable.”<sup>243</sup> But most of D.C.’s neighborhoods with the highest poverty rates and greatest food insecurity are located east of the Anacostia River. Black D.C. has among the highest rates of food insecurity among children in the country. In 2013, there were 31,000 children who did not know where their next meal was coming from.<sup>244</sup> The poor communities of the Anacostia watershed have only three alternatives to relying on this poisoned river fish: fast food, food bank, or hunger. But even the food banks may lead these food insecure residents to the same poisoned fish because “Even fishermen who don’t eat the fish themselves, who understand there are health risks, will share the fish with others in need.”<sup>245</sup> So benevolent.

The health toll of this dependency on Anacostia fish by poor Black and Brown residents is great. As Dr. Harriette Phelps reports,

There is a high incidence of cancer and other diseases in this minority community, where there is also subsistence fishing in the Anacostia in spite of a fishing advisory. Anacostia estuary catfish have tumors related to high polycyclic hydrocarbon (PAH) levels in sediment (...), and dangerous tissue levels of polychlorinated biphenyls (PCBs) and chlordane which can be associated with cancer.<sup>246</sup>

What exactly has the military and industry poisoned the water and the food with? The river and its fish host a cocktail of toxic and gender bending chemicals to *an astounding degree*. The number of these chemicals in the toxic stew is scary, and some of these are *the same chemicals that the military and allied interests* (Monsanto, for example) were poisoning Black communities to in the South. Jeff Day notes:

<sup>241</sup> Schlyer, “Fishing the Forgotten River.”

<sup>242</sup> Catherine Krikstan, “New Study shows Anacostia fishermen are sharing, consuming contaminated fish,” *Chesapeake Bay Program* November 8, 2012.

<sup>243</sup> Schlyer, “Fishing the Forgotten River.”

<sup>244</sup> Kelly Vandersluis Morgan, Ph.D., “Food Insecurity and its Effects in Washington, D.C.,” *Roots For Life* November 12, 2018.

<sup>245</sup> Schlyer, “Fishing the Forgotten River.”

<sup>246</sup> Dr. Harriette L. Phelps, “Identification of PCB, PAH and Chlordane Source Areas in the Anacostia River Watershed.” (DC Water Resources Research Center Report, 2005) 1-9 (1).

Polychlorinated biphenyls, or PCBs, are the main contaminant in locally caught fish...But the legacy pesticides DDT and chlordane...were detected in carp or eel at levels that exceed safe-consumption limits recommended by the Environmental Protection Agency.<sup>247</sup>

In the Anacostia River PCBs are above FDA action (!) levels. Sediment from the Anacostia River is contaminated with PCBs but also DDT, polycyclic aromatic hydrocarbons (PAHs), chlordane, *phthalates*, lead and mercury.<sup>248</sup> A 2007 government report (U.S. Geological Survey Open-File Report 2006-1392) analyzed the ground-water quality in the Anacostia River watershed within Washington D.C. and also found the water contaminated with, among other pollutants, PCBs, *phthalates*, *atrazine* and even *cyanide*.<sup>249</sup> Cyanide? Really?! PCBs, DDT, phthalates, and atrazine are notorious gender bending chemicals in their own right (as we saw).<sup>250</sup> Polycyclic aromatic hydrocarbons (PAHs) are toxic particulate air pollutants that have mutagenic (causing DNA mutations) and/or carcinogenic (cancer causing) properties as well as gender bending properties. “The testis is an important target for PAHs” and “disruption of testosterone production by these chemicals can result in serious defects in male reproduction,” reports Seunghoon Oh.<sup>251</sup>

*The Georgetown Voice* writes: “The neighborhood surrounding the Anacostia is largely poor and black. The neighborhood surrounding the Potomac is not.”<sup>252</sup> It is this *poor, Black community* that is exposed to water and food sources so contaminated with this *toxic stew* of gender bending and cancer-causing chemicals. The consequences of this chemical targeting of Black D.C. are:

- Black and Brown residents breathe air that has been poisoned with particulate matter which negatively effects testosterone production and sperm quality in boys and men and masculinizes the neurology of female fetuses;
- Black D.C., having one of the highest fast food densities in the country, has a high exposure to and dependency on fast food that is laced with phthalates;
- The high level of food insecurity in Black D.C. means a high level of dependency on canned foods and thus an excessive exposure to BPA.

<sup>247</sup> Jeff Day, “PCB Levels in Some DC-Caught Fish Decline, But Rockfish Are Off Limits,” *Bay Journal* February 19, 2016.

<sup>248</sup> David J. Velinsky et al., “Historical contamination of the Anacostia River, Washington, D.C.,” *Environ Monit Assess* 183 (2011): 307-328.

<sup>249</sup> Cheryl A. Klohe and Linda M. DeBrewer, *Summary of Ground-Water-Quality Data in the Anacostia River Watershed, Washington, D.C., September-December 2005* (Reston, Virginia: U.S. Geological Survey, 2007).

<sup>250</sup> On atrazine see Tyrone B. Hayes, “There Is No Denying This: Defusing the Confusion about Atrazine,” *BioScience* 54 (2004): 1138-1149; Tyrone B. Hayes et al, “Atrazine induces complete feminization and chemical castration in male African clawed frogs (*Xenopus laevis*),” *PNAS* 107 (2010): 4612-4617; Tyrone B. Hayes et al, “Demasculinization and feminization of male gonads by atrazine: Consistent effects across vertebrate classes,” *Journal of Steroid Biochemistry and Molecular Biology* 127 (2011): 64-73; Wesley Muhammad, *Understanding The Assault on the Black Man, Black Manhood and Black Masculinity* (Atlanta: A-Team Publishing, 2016) 376-379.

<sup>251</sup> Seunghoon Oh, “Disturbance in Testosterone Production in Leydig Cells by Polycyclic Aromatic Hydrocarbons,” *Dev. Reprod.* 18 (2014): 187-195.

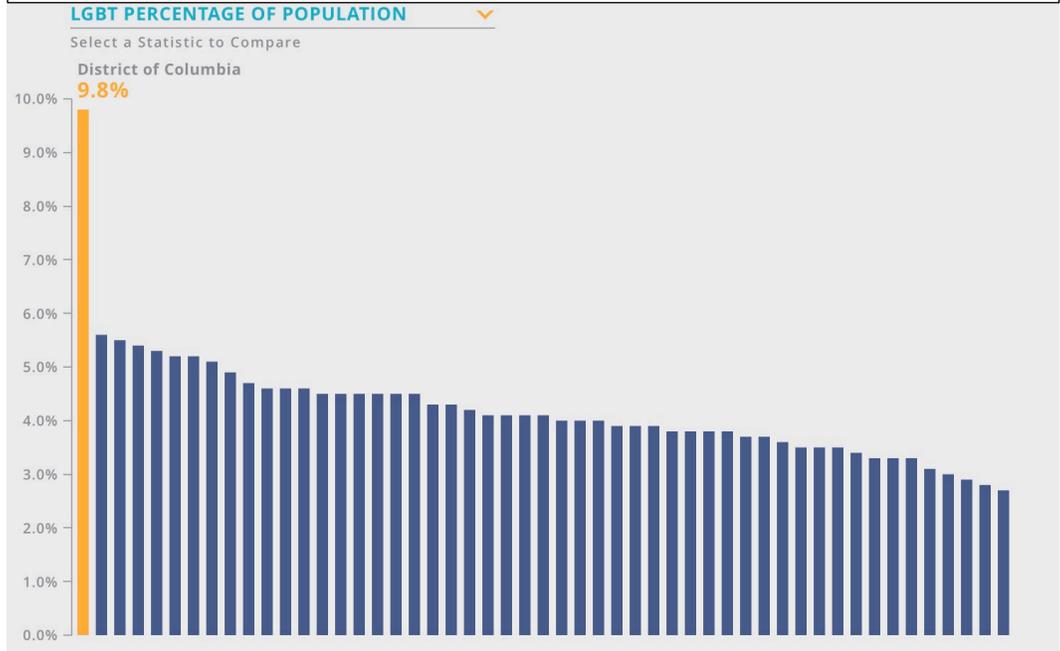
<sup>252</sup> Editorial Board, “A Tale of Two Rivers: Environmental Injustice in D.C.,” *The Georgetown Voice* April 22, 2016.

- The high concentration of food deserts east of the Anacostia River means poor Black residents must consume the river’s poisoned fish, fish from water contaminated with a “Who’s Who” of chemical gender benders: PCBs, DDT, atrazine, PAHs, chlordane.
- Pregnant Black and Brown mothers may eat contaminated fish exposing their unborn child to a cocktail of DDT, PCB, PAH and atrazine.

What would we expect from a community so heavily *bombarded* by such a cocktail of gender-bending chemistry? Maybe we would expect this:

LGBT People Rankings: United States		AREA RANKINGS	
RANK	STATE	% OF LGBT INDIVIDUALS WITH CHILDREN	LGBT PERCENTAGE ↓
1	District Of Columbia	9%	9.8%
2	Oregon	23%	5.6%
3	Nevada	22%	5.5%
4	Massachusetts	21%	5.4%
5	California	24%	5.3%
6	Washington	28%	5.2%
7	Vermont	23%	5.2%
8	New York	22%	5.1%
9	Maine	21%	4.9%
10	New Hampshire	31%	4.7%
11	Hawaii	30%	4.6%
12	Florida	24%	4.6%
13	Colorado	25%	4.6%
14	Rhode Island	19%	4.5%
15	New Mexico	29%	4.5%
16	Indiana	34%	4.5%
17	Georgia	27%	4.5%
18	Delaware	35%	4.5%
19	Arizona	25%	4.5%
20	Ohio	30%	4.3%

States with the Highest LGBT Percentage Ranked 2014



In 2013 *The New York Times* crowned Washington D.C. “The Gayest Place in America.”<sup>253</sup> In a Gallup ranking of the states with the greatest percentage of adult LGBT self-identifiers it was concluded that “Residents in the District of Columbia were most likely to identify as LGBT.” The District topped the rankings with 10% of adults identifying as LGBT at the time, which was 3 times the national percentage of 3.5% and double the percent of the second-placed state of Hawaii with 5.1%.<sup>254</sup> How did it happen that D.C. would be so head and shoulders and even waist above every other state in the country in terms of percent of gay and transgender persons, *a disproportionate percentage of whom are Black and Brown?*

Not only does D.C. stand out in terms of numbers, but it also defies national trends. In 2017, for example, 4.5% of the U.S. population (11 million people) identified as LGBT; 58% female and 42% male, because “Women continue to be more likely to identify as LGBT than men,” which has remained consistent since recording started in 2012.<sup>255</sup> As 61% of the U.S. population, Whites constituted 58% of the LGBT population. African Americans were 12% of the U.S. and 12% of the LGBT population, which is at least proportionate.

In D.C. 57% of self-identified LGBT were White in 2017 and 26% were Black, with 65% male and 35% female, which contradicts the national trend: males were more gay in D.C. than females. The *transgender* numbers are much more revealing. In 2014 Whites constituted 66% of the U.S. adult population and 55% of the adult transgendered population; this is proportionate. African Americans, on the other, constituted 12% of the U.S. adult population and 16% of the adult transgender population; this is disproportionate. In D.C. 2.8% of all adults were transgender. Whites constituted 39% of D.C. adults and 22% of adult transgenders. At the same time, 46% of D.C. adults were Black and 62% of adult transgenders were Black. Thus, of the 14,550 transgenders in D.C. in 2014, 3,150 were White and 9,000 were Black!<sup>256</sup> While nationally it is the *American Female* who is representative of the LGBT, in Washington D.C. *it is the Black Male (transgendered)!*

Such a high proportion of Black transgenders can easily be – and no doubt is – a direct or indirect result of the neurological gender-bending and gender-reversing characteristics of *each* of the chemicals that make up the toxic stew that Black D.C. is so heavily assaulted by through the air, the food and the water. In fact, just as we *must* expect the high level of cancer that we see among this population given the prevalent exposure to carcinogens, we also *must* expect a high level of transgenderism and homosexuality in this population given the same prevalence of exposure to these gender-bending toxins. And our expectations were in no ways disappointed.

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<sup>253</sup> Jeremy W. Peters, “The Gayest Place in America?” *The New York Times*

<sup>254</sup> Gary J. Gates, “LGBT Percentage Highest in D.C., Lowest in North Dakota,” *Gallup* February 15, 2013.

<sup>255</sup> Frank Newport, “In U.S., Estimates of LGBT Population Rises to 4.5%,” *Gallup* May 22, 2018.

<sup>256</sup> Andrew R. Flores, Taylor N.T. Brown and Jody L. Herman, *Race and Ethnicity of Adults who Identify as Transgender in the United States* (Los Angeles: The Williams Institute, 2016); The Williams Institute, “LGBT Data & Demographics. Area Selection: United States,” 2017; The Williams Institute, “LGBT Data & Demographics. Area Selection: District of Columbia,” 2017.