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ALM-Journalism Capstone Proposal-DRAFT
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DIRT DON'T HURT: The Consequences of a Quarter-Century of Cleanliness

In 1989, an immunology researcher named David Strachan published a short paper in the British Medical Journal discussing his research into chronic diseases in children like asthma and certain allergies. He coined the term “hygiene hypothesis” to describe his theory that certain acute bacterial infections were necessary for the body’s defense against chronic inflammatory disorders.

Fifteen years later, in 2004, a University College of London professor named Graham Rook took the hygiene hypothesis a bit further, describing a specific list of bacteria as “old friends.” These microbes, Rook explains, evolved along with mammals over millions of years, becoming an integral component of mammalian immune systems. Like other species, these little dirt-bugs grew alongside and inside people, helping their human immune systems learn the ropes of keeping the body alive.

And then we started killing them.

From the invention of penicillin to the invention of Purell, mankind has made an extraordinary effort to eliminate infections by eradicating bacteria. And for the most part, it has worked very well. Vaccination, antibiotics, and even the basic hygiene of hand washing, has helped reduce acute infections and illness by astounding rates in the last century. In 1980, because of a global vaccination effort, the third World Health Assembly declared smallpox officially eradicated. There is no question that hygiene is a good thing.

But too much of a good thing can become a bad thing.

The indiscriminate destruction of bacteria inside and outside the human body carried with it some unintended consequences. Those “old friends” may be the baby thrown out with the bathwater, and there are some compelling arguments, of late, that this has led to a recent rise in chronic problems like allergies and asthma.

Helicopter parents, bathing their kids in anti-bacterial gel and lathering them up in jasmine and lavender-scented baby wash every night, may be unwittingly cleansing their children of some microscopic friends who were there to teach young immune systems how to fight some nastier bugs.

In different journalistic forms, I’d like to explore the “hygiene hypothesis” as it relates to modern society’s obsession with cleanliness and sterilization.

A profile of the Senior Health Editor of The Atlantic, James Hamblin, who recently explored this topic on his web-series “If Our Bodies Could Talk,” would highlight his attempts to regrow his microbiome by cutting out showers. Dr. Hamblin has agreed, via email, to a face-to-face interview sometime this fall in New York City. I would also try and talk to a co-worker of his (to see if there’s any difference in his...odor), and I plan to try and contact Julia Scott, the NYTimes

journalist whose experiment with a month of not showering inspired Dr. Hamblin to give it a try. I would pitch this story to WBUR's CommonHealth Blog.

A historical feature on the discovery of bacteria, by Antoni VanLeeuwenhoek, would provide interesting context into how science, often by accident, can make huge strides. This article will make use of historical papers and letters, describing VanLeeuwenhoek's accidental discovery of bacteria using a homemade microscope. I would pitch this story to the MIT Knight Science Journalism site, UnDark (www.undark.org).

A service article will tackle a list of things that tend to cause the average parent germ anxiety, but are actually mostly harmless. This article would explain the recent FDA ban on antibacterial soap and the overuse of hand sanitizers. Some items would include utensils falling on the floor, letting a cold run its course, and actual soil/dirt. I would try to interview some mommy bloggers, including Katy Mack Clark who writes the *ExperiencedBadMom* blog. I would pitch this story to a parenting magazine like *Parents* or even *Good Housekeeping*.

A trend story on some modern American parents' tendency to wash babies and toddlers every night will explore the overall benefits and detriments to young burgeoning biomes of repetitive exposure to wash cloths and sodium laurel sulfate. I will contact Christina Antus, contributor to the *ScaryMommy* blog, who advocates for bathing her children every night, and for this article, I would try and contact Dr. David Strachan at St. George's University of London, to talk about his original "hygiene hypothesis" and the lengths that we have gone to keep our children free of dirt and disease. This might also be appropriate for a parenting magazine.

Finally, a short movie review of a movie that, in some way, tackles the extreme of germ phobia (*As Good As It Gets*, *The Aviator*, *e.g.*) will take a look at our modern society and the way fears have become such a major motivator for actions.

Because of her background in science writing and editing, I would like to request Karen Weintraub as my Capstone Advisor. I enjoyed her Profile Writing class immensely and have enlisted her help with independent pieces published on WBUR's CommonHealth blog.

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