

MIRCOPLASTICS: A HIDDEN THREAT IN HISPANIC COMMUNITIES

BY K.C.F. AND H.N.

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As you know, plastics are all around us- found in everything from packaging and toys to furniture and then tossed away without a second thought. But did you know they've even entered our brains? This happens when plastics break down into tiny particles, such as when you microwave a premade meal, allowing them to enter our bodies. In a recent study, it was found that microplastics from contaminated air traveled into an individual's brain resulting in memory loss- which highlights the severity and expansion of plastics invading our body. The long-term effects of microplastics on our health are still uncertain, but the outlook is grim. Plastic pollution doesn't just affect the planet- it leads to long-lasting inequities that disproportionately harm low-income and Hispanic neighborhoods. The most dangerous part of this problem is that the majority of the targeted communities are unaware of this growing issue and how to deal with it.

Microplastics invade our bodies through the air we breathe, the water we drink, and the soil that grows our food. In the air, plastic particles circulate and are inhaled. In water, our trash breaks down, releasing microplastics that end up in the very water bottles we drink from; further microplastics come from the packing itself. In the soil, trash is left behind and decomposes affecting crop growth and seeping into crops. Despite regulations, companies prioritize low expenses and high profits, continuing to use plastics and intensifying the plastic crisis.

Hispanic communities are particularly at risk of microplastic exposure, due to several socio-economic factors and therefore bear the brunt of the plastic waste crisis. Many reside in affordable housing located near factories and polluted waterways, which are hotspots for microplastic pollution. These facilities spew toxic chemicals during the breakdown or burning of plastics, exposing residents to increased risks of respiratory diseases, cancer, and developmental issues. According to the American Lung Association, Hispanic populations in the U.S. experience higher levels of air pollution exposure, compounding the health risks of living near such sites.

Hispanic communities also often face limited access to resources like health advisories and community awareness about plastic hazards. They frequently lack proper waste management, leading to plastic accumulation. Globally, low-income regions become dumping grounds for plastic waste exported by wealthier nations. Additionally, reusing plastic containers for food storage and other household uses, can lead to increased degradation and release of plastics. Insufficient information and infrastructure heighten the risk of plastics, leaving residents unaware or unable to mitigate the dangers.

A staple within Hispanic communities, fish is one of the most common food sources for low-income communities. Now, we can see many species of marine wildlife, including fish, being negatively affected by microplastics, which leads us to believe we will meet the same fate. Additionally, since fish is at the bottom of the food chain, the spread of microplastics is bound to escalate up the chain, affecting all wildlife. This contamination suggests a concerning outlook for ecological stability and public health.

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Awareness is the first step towards meaningful change. But it also takes accountability on our part to ensure sustainable change. Policies that reduce plastic production, invest in equitable waste management systems, and enforce stricter environmental regulations are essential. California's SB 54, which mandates a 25% reduction in single-use plastics by 2032, offers a model for other states to follow. Additionally, grassroots organizations like East Yard Communities for Environmental Justice in Los Angeles are empowering marginalized communities to hold polluters accountable and advocate for safer environments. By advocating for robust regulations like those proposed in the Paris Agreement Act and demanding corporate accountability, we can protect our health and that of our communities.

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