Polymer aging affects the bioavailability of micro-plastics associated contaminants in sea urchin embryos

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Received: *01-Nov-2022; Manuscript No: JAEFR-22-81162;* ***Editor assigned:*** *03-Nov-2022; Pre QC No: JAEFR-22-81162 (PQ);* ***Reviewed:*** *17-Nov-2022; QC No: JAEFR-22-81162;* ***Revised:*** *22-Nov-2022; Manuscript No: JAEFR-22-81162 (R);* ***Published:*** *29-Nov-2022;* ***DOI:*** *10.3153/JAEFR.22.8.002*

Introduction

Chemicals can accidentally or intentionally contaminate water, land, or air through industrial, commercial, and residential activities. These pollutants can enter the air we breathe, the water we drink, the food we eat, and the places we live, work, and play [1]. They are then said to have been exposed to a contaminant. Anyone can be exposed to contamination, but some people are more likely to experience health effects. Children, pregnant women, and people with pre-existing medical conditions may be exposed to increased risk of health problems [2]. Low-income and black, indigenous, and people of color are more likely to live in more polluted places and, therefore, are more likely to be exposed to pollution and through collaborative agreements with the Centers for Disease Control and Prevention's Disease Registry to assess human exposure to chemicals in the environment, educate the public on health measures to reduce those exposures, and respond to public inquiries [3]. Environmental health concerns. Studies on chemical contaminants have traditionally documented a limited number of endpoints. The most common are laboratory post-exposure mortality studies and testing of the effects of a single contaminant on a single species under standardized laboratory conditions [4].

Description

Although these approaches are logistically manageable and reproducible, they have been criticized for their simplicity, especially when such experiments do not take into account chemical or biological complexity [5]. Behavior, on the other hand, is the result of a multitude of complex developmental and physiological processes, linking physiological functions with ecological processes [4]. Behavioral changes therefore provide a comprehensive measure of the direct and indirect effects of chemical contaminants on individuals relevant to population-level processes and, more importantly, are more effective than traditional toxicological endpoints. Here we show how behavioral responses can provide powerful, highly quantifiable, biologically relevant indicators of environmental impact [1]. The impact of contaminants on water depends on the properties of the water itself and the amount and characteristics of the contaminants. Any body of water can be described by its physical, chemical and biological properties. Taken together, these properties give any body of water the ability to absorb or absorb pollutants without breaking them down. For example, large streams can pick up more pollutants than small streams. Many human activities can change or affect water quality [3]. These activities typically increase the concentration of dissolved or suspended contaminants, change the acidity of the incoming water, and/or increase the water temperature.

Conclusion

The United States has made development over the past 30 years in decreasing the human affects to our water assets, but a large and extreme hassle nevertheless exists from non-factor sources. When contaminants threaten or damage aquatic species, cause them to hazardous to eat, or degrade their habitat, NOS professionals paintings with companions to assess dangers and injuries, broaden techniques to lessen contaminant loads, and decrease the chance to species. The professionals additionally screen the effectiveness of cleanup movements and layout and put into effect tasks to repair herbal assets. At large waste web sites and after oil spills, NOS scientists and economists behavior herbal useful resource harm tests to decide the character and quantity of damage to herbal assets and healing essential to deliver the assets to a more fit state. NOS works with the events answerable for the infection to make sure that injured coastal and marine assets are restored.

Acknowledgement

None.

Conflict of Interest

The author declares there is no conflict of interest in

publishing this article.

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