Charcoal has been widely used in various commercial products due to its multifunctional physiochemical characteristics including porous structure, gas adsorption, and antibacterial effect. In this study, we established a manufacturing process of charcoal plastic chips which are used as starting polymeric materials for the production of plastic wares. In order to manufacture the charcoal plastic chips, we combined charcoal powders and conventional polymer materials including PE, PP, PVC, and PET. Using these complex materials, several types of plastic wares were fabricated for the package and storage of foods. By culturing bacteria with charcoal plastic chips, we found that these package materials exerted an antibacterial activity as charcoal particles killed 98% of harmful bacteria including *Staphylococcus aureus*. Analysis of surface topology using SEM and AFM revealed the protrusion of charcoal particles on the plastic ware with various range of size from 10 to 1000 nm, which enabled bacterial cells to be killed during the culture. These results strongly suggest that the polymers containing charcoal particles have a great potential for the food package and storage by killing harmful bacteria or inhibiting the growth of foodborne bacteria.