

Taryn Book
Does the Filter Matter?

Research has shown that inhaled cigarette smoke presents a great health risk for the smoker. The purpose of the investigation was to determine if there is a difference in the tar and smoke particles inhaled from the cigarette smoke of different types of filtered cigarettes. Because the perforations in the cigarette filter would be covered with the finger, it was felt that the residue left on the cotton batting from different types of 10 smoked cigarettes would be the same. As a side note, at no time was the actual smoking of cigarettes a part of this investigation. A lung was constructed from a pickle jar, plastic tubes, and cotton batting. Then, an old vacuum cleaner was used to suck the cigarette smoke through the cotton batting in the pickle jar lung. This was completed three different times using 10 cigarettes from three different brands of filtered Marlboro cigarettes. Following the testing, all three samples looked similar, so a bag of white batting was made to use as comparison, a control. Then, on closer inspection, it was observed that the smoke from Marlboro Reds had stained the cotton more noticeably than the Golds or the Silvers, and the smoke from Golds left more of a residue than that of the Silvers. Therefore, in contrast to my hypothesis, the type of filters in the different varieties of Marlboro cigarettes did make a difference in the amount of residue potentially inhaled into the lungs. Marlboro Reds left the greatest residue, the Golds leaving a lesser amount, and the Silvers leaving the least amount of residue which is probably tar and smoke solids.