One of the primary responsibilities of the modern American pharmacy is to properly count and dispense pills. As the over-50 population of the United States swells to record numbers over the next 20 years, pharmacies will find themselves hard pressed to keep up with the number of prescriptions that need to be filled. A perhaps unnoticed side consequence of the increasing volume of pills being counted will be cross-contamination.

Cross-contamination occurs when a large volume of pills makes contact with a given pill counter in the pharmacy. Tiny bits of medication shear off from the surface of the pills. Eventually these tiny bits can accrue in volume to a point where they will cling to the surface of other pills going through the device. Many different kinds of pills routinely make their way through the device. And this can cause problems for the customer. If a pill has even a tiny quantity of another medication on it that the patient is allergic to, it is possible for health consequences could result.

The idea of disposable, one-use pill counters has been proposed. Plastic trays that can be used once and then thrown away could perhaps be considered a solution. However, there are two problems with this approach. The first is that a busy pharmacy will have to throw money away to keep a constant supply of these trays on hand. And heaven forbid that the pharmacy misses a shipment of them: no pill counting can be done. Furthermore, the toll that all these extra discarded plastic trays would have on the environment is unpleasant to consider.