

There are many reasons that the potential growth of aseptic packaging could be a disruptive event for participants in the current PET packaging value chain in the U.S. For current merchant suppliers of PET packaging for high-acid beverages would replace hot filling and thereby disrupt sales of profitable heat set custom PET bottles. If the expansion of aseptic processing incorporates the self-manufacture of PET bottles, it would be a distinct benefit to equipment suppliers by developing new markets for their 'standard' (non-heat-set) stretch blow molding equipment. Finally, the acceptance of aseptic processing has the potential to develop new options and opportunities for copackers.

The purpose of the current study is to determine whether, as a result of the several developments noted above, there is now a better opportunity for aseptic to replace traditional processing formats than there was previously. To do this, a series of Primary Potential Conversion Scenarios were developed and analyzed, in which there is the opportunity for existing processing and filling operations for high and low acid beverages to convert to aseptic fill for PET bottles. There are five of these Primary Potential Conversion Scenarios, one for high acid beverages and four for low acid beverages, as specified in Table 2 below.

Table 2
PRIMARY POTENTIAL CONVERSION SCENARIOS

SCENARIO	BEVERAGE PRODUCT	CURRENT PACKAGE/PROCESS	PROJECTED PACKAGE/PROCESS
1. High Acid	Juices, Sweetened or Flavored Tea, Isotonics, Functional Waters	PET/Hot Fill	PET/Aseptic
2. Low Acid	Dairy-Based Beverages, Other	PET/ESL	PET/Aseptic
3. Low Acid	Dairy-Based Beverages, Other	PP/ESL	PP/Aseptic
4. Low Acid	Nutritional Beverages	PP/Retort	PP/Aseptic
5. Low Acid	Coffee/Milk Beverages	Glass/Retort	PET/Aseptic

KEY:

PP – Polypropylene

ESL – Extended Shelf Life

In all cases, bottles in the “Current” column are purchased. All of the bottles in the “Projected” column are self-manufactured, in order to optimize the efficiency of the aseptic operations. There are two basic economic reasons that self-manufacture is appropriate in conjunction with aseptic processing. The first is that self-manufacture eliminates the need for palletization, depalletization and the burden of freight associated with the delivery of purchased bottles. The second is that self-manufacture,

