

## **Looking for the post-consumer recycled folding carton next time you buy a product!**

*Evaluation of post-consumer recycled material for folding cartons: A sustainable packaging study*

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**Are you one of the people who think a folding carton should be more sustainable? If you are and you would like to see your favorite brand using environmentally friendly packaging in your product, sustainable material may be one of the options. Instead of using virgin fibres to make packaging, how about using post-consumer recycled material for folding cartons?**

Reducing the environmental impact from packaging has become a highlight in both consumers and industrial interest. The paperboard from virgin fibres is commonly used in the folding carton packaging across various type of products, including health care products. It provides the premium perception to the product value yet less circulates the fibre economy. Paper packaging is well-known for its recyclability and seen as one of the most environmentally friendly materials. After the paperboard folding carton serves the end-consumer purpose, it becomes post-consumer wastes. To reduce the environmental impact from using virgin fibre paperboard and escalate the paper circular economy, using post-consumer recycled materials becomes more popular.

As part of the development process, new materials need to be evaluated by different stakeholders to see their potential before implementation. This research aim is to evaluate the post-consumer recycled material for folding cartons, specifically for a smoking cessation product, divided into two objectives: consumer perception towards post-consumer recycled packaging and post-consumer recycled material evaluation in different stakeholders. The basic design of the study is then divided into two parts according to the research purposes as; a qualitative consumer research on sustainability packaging in the United Kingdom and the post-consumer recycled material evaluation on four aspects, defined as desirability, viability, feasibility, and sustainability.

The consumer research compared the post-consumer recycled packaging to the current

virgin fibre packaging where the results showed that consumers expected the brand to use sustainable packaging and were willing to sacrifice their usual aesthetic preferences for more sustainable options. However, their perceptions on post-consumer recycled packaging diverse across product categories where in this case, the sustainability is less of a key purchase driver than the product efficacy. The finding from consumers also shows that promoting sustainability claims and messaging on a package can boost brand image and raise sustainability awareness.

Evaluating and comparing six post-consumer recycled materials to the current packaging reveals that potential post-consumer recycled paperboards should have the higher grammage and thickness to maintain packaging integrity. All four dimensions were evaluated together where feasibility plays an important role in the future implementation. Two post-consumer recycled materials were suggested to test in the production. While the demand of post-consumer recycled material is rising, material availability hinders the progress which could affect the business. On this basis, the balances between each dimension and stakeholder requirement should be taken into account when developing sustainable packaging.

The outcome of this study shows that small changes can lead to the great impact. The data can be used in the smoking cessation and other similar products to better develop sustainable packaging. Also, evaluation criteria provide more information on how to compare packaging materials in a holistic view.