

**Letter to Editor****PACKAGE GREEN FOR A GREENER FUTURE****Nripsuta O. Saxena****Author's Affiliation:** 1<sup>ST</sup> Year , Information Technology, Indira Gandhi Institute of technology**Corrspondecne:** Nripsuta Saxena, E mail: nripsuta@yahoo.co.in

Sir,

A kid takes a chocolate from the fridge, opens the wrapper and eats it. He then goes on to eat the wrapper. In a few years' time, this could be a scene in any of our homes. I kid you not!

Scientists have been trying to figure out how to make edible packaging for years now, with little success until now. In an effort to reduce the billions of tons of waste choking up the landfills of our planet, several companies and research institutes are trying to do just that. The novel idea is to create food wrappers and containers that are edible, soluble and even tasty. Imagine drinking a cold drink from a cup and then eating the cup itself. Or dropping a packet of coffee into hot water and watching its plastic-like casing dissolve to give a cup of coffee without having to bother with throwing the packet away afterwards. Companies like Indiana's MonoSol are racing to get this innovative technology into stores as soon as 2013.

But before they can hope to make any profits from this revolutionary technology, first they have ahead of them the herculean task of convincing the consumers that it is OK to eat the wrapper. One major factor in favor of edible packaging is that the idea has been inspired by nature. After observing water retaining fruits like grapes, David Edwards, a biomedical engineer at Harvard University created WikiCells, a pliable skin that combines small particles of dried fruit, chocolate shavings or other edibles and is held together by purely electrostatic forces. The idea was to use the model of how nature wraps foods. It's a completely new way of packaging and eating.

They're not using anything that hasn't been used for human consumption before. MonoSol uses the same compounds in its edible skin that

polymers drug companies employ to make pills. The New York-based Loliware's edible biodegradable cups are molded from natural pectins and cane juice, then infused with flavors.

On its website, MonoSol claims that its edible packaging film can be used to encase everything from ready-made breakfast meals to rice. It further states that it can tailor its edible film to suit anybody's requirements'. Certain companies are further developing technology that would eventually enable a person to make the edible film at home!

David Edwards' team has developed a range of yogurt pots, juice cartons, water bottles and ice cream containers that mimic natural packaging by enclosing food and liquid in an edible membrane. (Samples of WikiCells-wrapped ice cream are available at the Lab Stores in Paris. It will be for sale there this fall.)

Getting this technology into the mass market may take five years, or it may take twenty. But one thing is certain; when it does, it will revolutionize the way we eat. Though all edible items would still have to be protected by a non-edible covering for hygiene purposes, the benefits to the environment and financial savings are significant. This could be a huge step in reducing the planet's yearly garbage production, which is estimated to be somewhere in the vicinity of 4 to 5 billion tons. Eventually all wrapping materials could be replaced by an easily recyclable material.

The future looks green.

**REFERENCES**

1. <http://wyss.harvard.edu/viewevent/183/wicicells-bottles-that-we-eat>
2. <http://www.monosol.com/>