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LODZ UNIVERSITY OF TECHNOLOGY

EDUCATION, RESEARCH, INNOVATION



AppCup

Edible dishes
for hot drinks
based on fruit
and vegetable waste





Edible dishes replacing plastics and coated cardboard

The Institute of Food Technology and Analysis
at the Faculty of Biotechnology and Food Sciences
of the Lodz University of Technology
has developed fully edible dishes replacing plastics and coated cardboard,
which are widely used in food service.



Made from apple pomace, waste in the production of apple juices and ciders

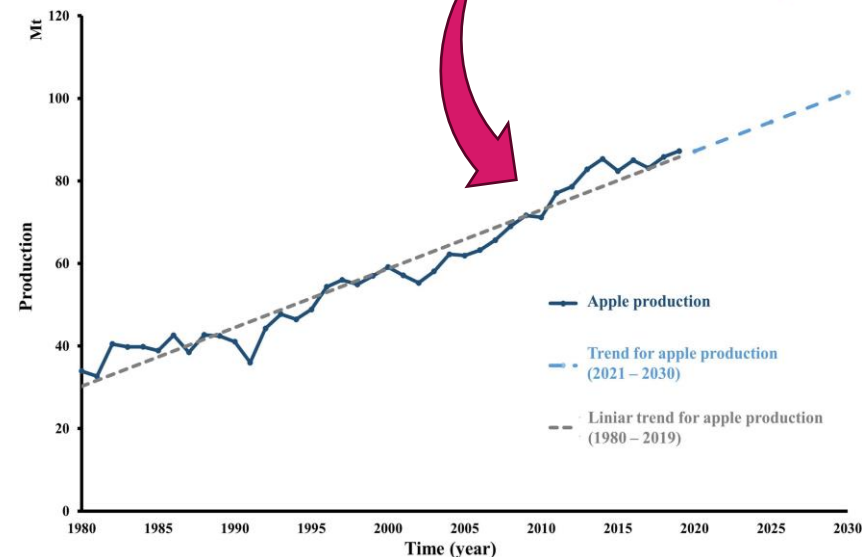


LARGE-SCALE PROCESSING OF APPLES

Annual apple production

- USA 5.1 mln tons
- POLAND 2.4 mln tons

- Waste management
- Ecological and economic challenge



In addition to apple pomace, three other plant wastes were used

The materials used to produce the dishes are known for their health-promoting properties.

The cup is a source in nutrients that are deficient in the diet.

- fiber 33.3 g/100 g
- antioxidants 78 mg/100 g
- calcium 91 mg/100 g
- potassium 170 mg/100 g

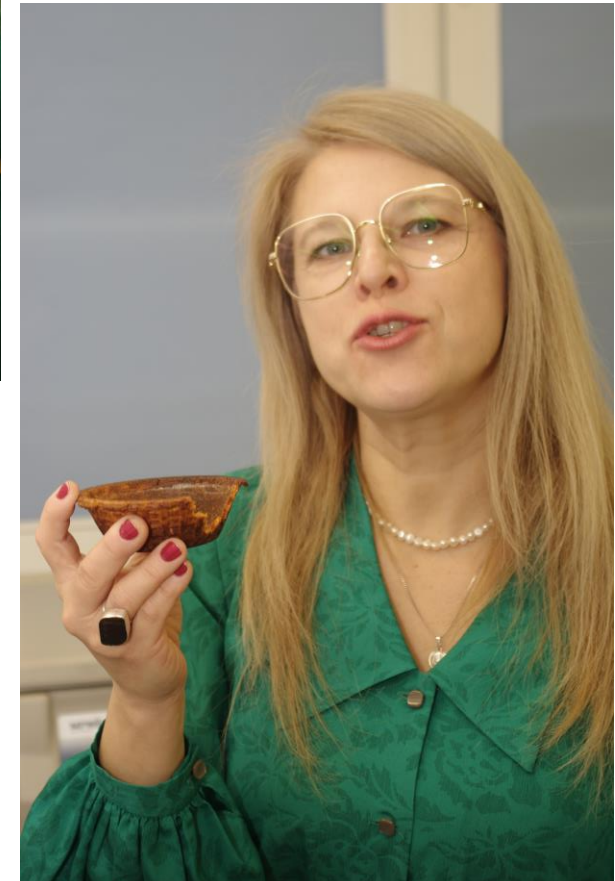




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The dishes have an attractive color and the desired taste, they are brittle and do not pose a problem to chew and swallow.

They can be an excellent healthy snack after drinking coffee or tea.



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Benefits of the solution

- resistant to hot drinks
- waterproof for over 50 min

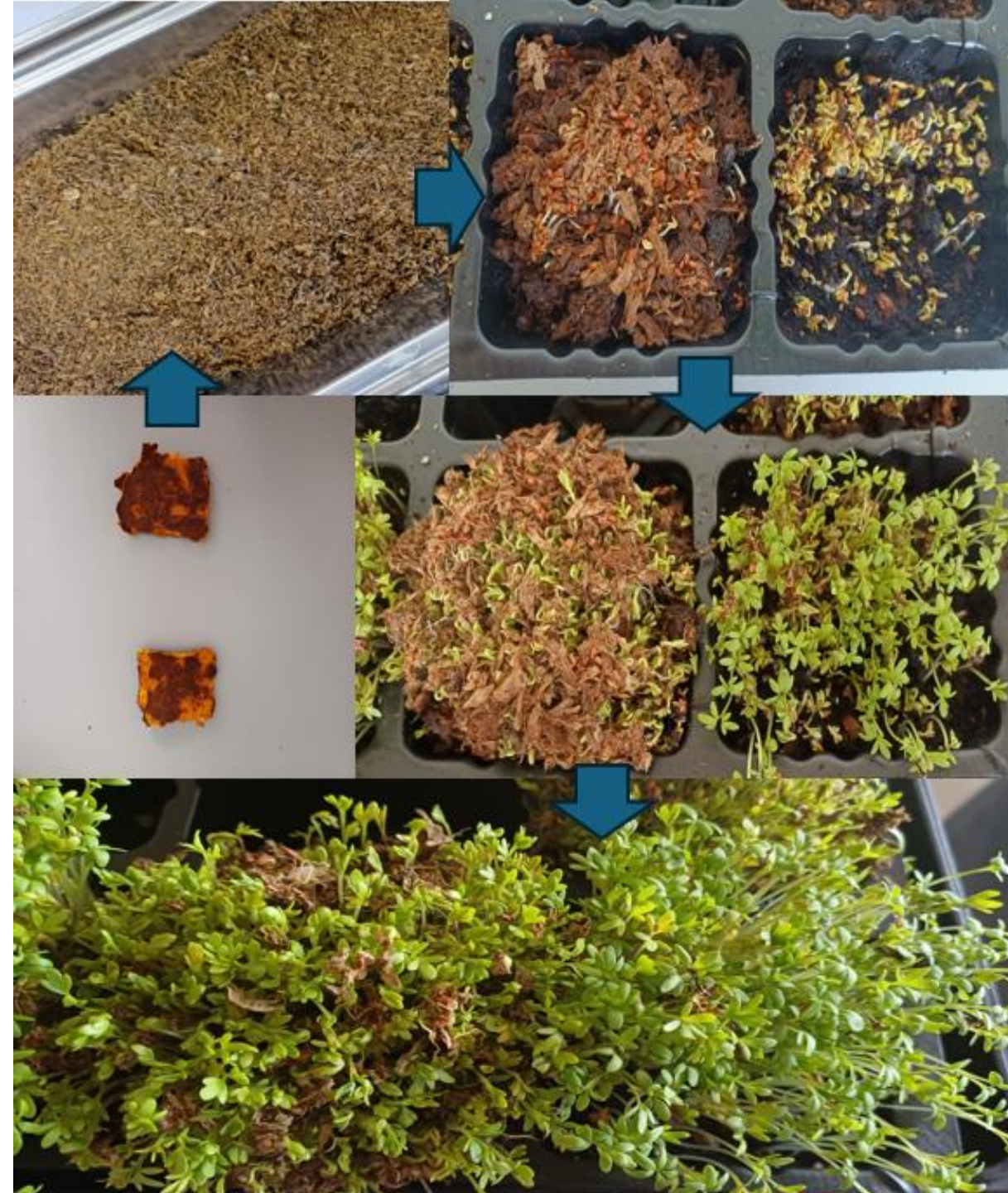




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Benefits of the solution

- If not eaten, could be composted
- The composting takes only 7 days
- The compost perfectly enriches the soil with the necessary ingredients for plant growth





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A team of AppCup Inventors



AppCup

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