

MEDIA RELEASE

UP Consumer and Food Sciences students impress at first UP-Cycled food experience

Final-year students from the University of Pretoria's (UP) Department of Consumer and Food Sciences impressed industry leaders, academics, friends and family members at the first UP-Cycled food experience, a practical exam and exhibition that incorporated academic research, innovation and social impact. The purpose of the event was to highlight how, with innovative product development, food waste could be rescued and recreated into new food products that still have value for communities.

The global food insecurity challenge has not spared South Africans; this includes underprivileged university students. As such, students who are planning to embark on careers in culinary sciences, hospitality and food retail management sciences used their final exam to demonstrate how food that could have become waste was salvaged and transformed into high-quality food that could be served as starters, mains and dessert at restaurants and retail stores.

"We decided to host a practical exam instead of a theoretical one to give students an opportunity to demonstrate to industry that they can turn their research into real, practical solutions," said Dr Adeline Pretorius, a lecturer in the Department of Consumer and Food Sciences. "Our colleague Dr Nadene Marx-Pienaar, whose research is focused on food waste management, approached NGO [SA Harvest](#) and proposed the idea of using or managing food waste products and serving that to people. We then involved Food Retail Management, Hospitality Management and Culinary Science students to develop products and a menu from salvaged foods that would be served at the event."

Dr Pretorius added that the COVID-19 pandemic brought with it many challenges in terms of teaching, one of which was rethinking the traditional mode of assessment.

"Last year's assessment was similar to this one in the sense that students had to plan an event and pop-up stores, though they did not do it physically, as it was all on paper," she explained. "This is definitely the start of many other projects to come, and with creative educators like Dr Hennie Fisher in culinary art, I am confident that we will do great things, working closely with SA Harvest. Dr Marx-Pienaar said that as academics, we need to be involved in research, teaching and community engagement – this kind of project brings it all together."

Preparing for the event

Dr Fisher trained Culinary Science students on advanced food preparation, presentation techniques, event planning and banqueting, while Dr Marx-Pienaar trained Food Retail Management students on the practical application of the principles in visual merchandising of food and food retailing.

For the exam, these students were tasked with planning and setting up a pop-up retail store that highlighted the issue of food waste and innovative ways to address the problem. This entailed planning and producing innovative upcycled food items, and drawing up a business plan and a marketing strategy, among others. Culinary Science students focused on drinks and canapés; Hospitality Management students created the menu for the dining experience; and Food Retail Management students produced 100 units of food products.

Dr Pretorius trained students on professional food service management. This included organisational planning and production management for all fourth- and final-year students enrolled in BSc (Food Management) Culinary Science, BConSci Hospitality Management and BConSci Food Retail Management. The students were tasked with planning and designing an organisational structure, and relevant job specifications and descriptions. They were also required to interview and employ the relevant staff required to host the event.

All the modules included theoretical and practical components that were assessed throughout the semester. Students were also given an exam assignment towards the end of the semester that included the planning and execution of the event. Additionally, they were requested to submit a report about the event to evaluate the theoretical knowledge that was applied in planning the event.

On the menu

Among other creations, one set of students created a product called Boost, a dehydrated powder made out of “imperfect” fruit and vegetables that contained all the nutrients of fresh produce.

Culinary and Hospitality Sciences students served as starters butternut panna cotta with a basil and bone marrow pesto vinaigrette and Parmesan crisp. As mains, they served roasted smoked pork cheek with a garlic rub; the vegetarian option was roasted smoked aubergine cheek with a black garlic rub. This was served with charred onion potato mash, fondant carrot, a fresh corn salad and apple *beurre blanc* (a white wine reduction). The final course was a multi-layered dessert: orange and almond sponge, strawberry and lemon curd, honey mousse and orange gelée, with blueberry sorbet and mixed fruit sambal. Lemon and orange ice tea and ice water accompanied the food.

Looking forward

“As Food Retail Management students, we have gained knowledge on business, marketing, nutrition, food service management as well as visual and retail merchandising, and over the years, we’ve learned how to integrate these skills in practice,” Thando Dlamini said. “We know that 20% of food is wasted in the retail industry in South Africa. Of this waste, 50% is lost in the primary production stage, and a further 25% in consumption and distribution. Retailers aim to provide consumers with the best quality product; consequently, lower-grade products are not used effectively. However, we have the opportunity to influence the value chain and the supply chain through upcycling, a process of rescuing food.”

Alan Browde, CEO and founder of SA Harvest, commended UP and the students for the initiative. He said it would contribute to the challenge of hunger in South Africa, which is caused and exacerbated by other societal challenges such as poverty and unemployment.

In South Africa, 20 million people, or one-third of the population, including adults and children, are on the spectrum of serious food vulnerability, Browde pointed out. This includes running out of money to buy food every month and going to sleep hungry every night.

“About 10 million tons of food goes to waste every year in South Africa,” he said. “Not all food that goes to waste can be rescued, yet if we had decent policies and government intervention, we could feed people just from the waste that can be rescued, let alone from the surplus food that we are exporting. These are things we have to do urgently.”

ENDS

Captions

High-quality meals made from rescued food products were served at the UP-Cycled food experience.

Joyous students celebrate after hosting the UP-Cycled food event on Hatfield campus.

Students prepare food to serve to industry leaders, academics, friends and family members who attended the first UP-Cycled food experience.

Media enquiries

Please email Liesel Swart at liesel@roundtree.co.za / liesel.swart@up.ac.za, Cell: 082 672 0067

ABOUT THE UNIVERSITY OF PRETORIA

The University of Pretoria (UP) is one of the largest contact and residential universities in South Africa, with its administration offices located on its Hatfield Campus in Pretoria. This 115-year-old institution is also one of the largest producers of research in South Africa.

Spread over seven campuses, it has nine faculties and a business school, the Gordon Institute of Business Science (GIBS). It is the only university in the country with a Faculty of Veterinary Science, which is ranked the best in Africa.

UP has 120 academic departments and 92 centres and institutes, accommodating more than 56 000 students and offering about 1 100 study programmes. It has the most academic staff with PhDs (70%), NRF-rated researchers (613).

The 2023 QS World University Rankings by Subject ranked UP first in South Africa in Accounting and Finance, Law, Economics and Econometrics, Mechanical Engineering, Electrical and Electronic Engineering, Chemical Engineering, Mathematics, and Veterinary Science.

For more information, please go to www.up.ac.za