

ADDING MUSHROOMS TO THE MENU

Where are the **opportunities?**

By Paulette Baumgartl

The Australian food industry loves mushrooms. With their characteristic umami and meaty taste profile, mushrooms are a unique nutrient rich plant-based food, and while common on menus, they are rarely the main act, seldom featured nor celebrated.



To elevate mushrooms in the minds of food professionals, highlighting their benefits through impactful education and engagement could bring them out of the shadows and into the limelight.

The levy-funded research project MU20003: *Educating the food industry about Australian mushrooms* sought to identify and understand the existing barriers to featuring more mushrooms on Australian menus. Probing industry insiders through a series of one-on-one interviews, combined with quantitative data collected from more than 600 surveys, the objectives were to:

- **Understand existing knowledge** on mushroom nutrition within the Australian food industry
- **Identify pathways and opportunities** to increase this knowledge
- **Gather evidence on the level of impact** that increased knowledge may have on the inclusion of more mushroom-forward meals on menus
- **Identify which of the food industries** would provide the best opportunity to boost mushroom consumption and show benefit to that industry

- **Produce a 'road map' and resources** for mushroom growers to create their own successful business model with the food sector.

The success of this project in achieving these objectives has been greatly enhanced by a unique and fruitful collaboration of industry insiders. Leah Bramich, who leads the projects, has first-hand knowledge of the challenges and opportunities that exist in the industry through her role as General Manager of the Australian Mushroom Growers' Association. Leah has collaborated with two food industry leaders at each end of the hospitality equation, namely the Chief Executive Officer of Nutrition Research Australia Dr Flávia Fayet-Moore and chef Adam Moore.

"Working with Flávia and Adam, both of whom 'speak the language' of their respective industries and have shared expertise with the interviewees, has meant greater access, more openness and deeper and honest insights into the barriers that exist in regard to using mushrooms," Leah said.

"We can be confident that the data we have collected is a true reflection of the situation within the commercial and institutional sector."

Despite 'COVID chaos', twelve in depth interviews with key industry leaders were completed with food service managers, chefs and educators from across the commercial and institutional (health-care) sectors.

Interview questions explored opportunities to expand/feature mushrooms in catering and to include mushrooms in hospitality training curricula. The project team also inquired as to which health and nutrition messages would resonate with food service



Adam Moore



Dr Flávia Fayet-Moore

professionals, and what were the most effective and efficient ways to disseminate and distribute the educational materials.

Divided into two sectors, institutional and commercial, it was clear that the largest potential lay within the institutional sector, including hospitals, aged-care and other facilities.

Institutional sector message
Use mushrooms to add flavour & fortify whole foods
→ improved nutrient intake
→ higher vitamin D status
→ immune support
→ less need for supplements

Commercial sector message
Use mushrooms as a versatile flavour enhancer that is good for you
→ what mushrooms to use
→ how to use them
→ underpinned by fun nutrition facts

Although chefs and others within the commercial sector find the nutritional benefits of mushrooms fascinating, menus are nevertheless designed with flavour and texture as a priority. However, catering to dietary requirements does provide an avenue to incorporate more mushroom-forward dishes.

In contrast, nutrition is a key factor in menu creation for the institutional sector, especially in health-care catering. It is in this sector that further systematic studies are planned to provide evidence of tangible health outcomes resulting from 'eating more mushrooms'. An example could be addressing vitamin D deficiency in aged care residents.

Overall, the findings emphasised that while mushrooms were a much-loved ingredient, there was little knowledge among industry practitioners as to their nutritional, culinary, and health benefits. However, when properly informed of these benefits, interest increased dramatically. The insights are summarised on page 12.



Putting these results to work

Using these insights, the project will produce a series of resources confident that they are targeting the best people with right messages and in a useful format.

“We have put a lot of our efforts into sectors and leaders with a high quantum of influence,” Leah said.

“This means that achieving cut-through with one person can have a huge trickle-down impact, whether that be through the supply chain or via organisational change.”

As well as materials for industry, the team are creating a pack of materials to ensure growers are well equipped with resources and knowledge to run farm tours for nutrition education independently.

Future work on this project will include the development of two case studies: *Improving Vitamin D in an aged care facility through mushrooms* and *Improving health outcomes with mushrooms in ‘made to order in room dining’ of a private hospital*.

Leah says, “We wanted to achieve some very specific outcomes from the project. Specifically, that food industry professionals will have increased knowledge of the nutrition and health benefits of mushrooms and therefore use them more often, and that the mushrooms industry gains insights into the food industry landscape and the opportunities that exist within.”

This research project has provided a unique opportunity to mutually benefit growers, the food industry, and their shared stakeholders, bringing together resources that will have a legacy and help growers work with the food industry.

MU20003 Educating the Food Industry is led by the Australian Mushroom Growers' Association together with Nutrition Research Australia and chef Adam Moore. The project aims to develop ways to educate food industry professionals, uncovering ways that the mighty mushroom can solve some of the nation's biggest nutrition problems.



NUTRITION

Nutrition is not a focus in the National Commercial Cookery Curriculum, with taste being the top priority across the industry.

COMMERCIAL SECTOR

- Nutrition and health are rarely considered
- Nutrition focus limited to catering for dietary intolerances and trends, for which they seek/are open to inspiration

INSTITUTIONAL SECTOR

- Nutrition and health are central to the sector
- Current existing national nutrition standards are sub-standard in the sector



KNOWLEDGE

Mushrooms are best known for their culinary benefits, with most cooking professionals also surprised and delighted that mushrooms were a good source Vitamin D. Education around nutrition and health benefits sparks motivation and interest.

COMMERCIAL SECTOR

- Nutrition and health knowledge are lacking
- Common misconception that mushrooms are a 'meat protein equivalent'

INSTITUTIONAL SECTOR

- Dietitians are the professional group most confident in their ability to talk about nutrition, health and culinary benefits of mushrooms, with management the least confident



USAGE

Mushrooms are considered a highly versatile ingredient and used right across the menu to add flavour and are leveraged in plant based menu items. Barriers to usage were shelf life, lack of top-of-mind awareness and inspiration. Cost can be a barrier but also seen positively when are used as a substitute for meat. For specific sub-sectors, food safety constraints and poor performance when thawed from frozen were identified.

COMMERCIAL SECTOR

- Favoured for texture and flavour, not nutrition
- Viewed as a meat replacement

INSTITUTIONAL SECTOR

- Valued for nutritional benefits, including ability to reduce sodium & fat when using mushrooms
- Usage needs to incorporate a cost benefit story for cut through, particularly in institutional sector



COMMUNICATION

HOW

- Materials that are practical, visual, tactile and easy to understand
- Tangible materials that can be used in the kitchen, e.g. posters in the kitchen with QR code
- A digital go-to hub for information and resources
- 'Train the trainer' has potential as high quantum of influence strategy, e.g., master-classes, supply chain educators, executive chef events

WHAT

- Messaging should be targeted
- Irrespective of sector, leading with culinary benefits is key
- Taste, flavour, texture = greater food intake/less waste - common to both sectors
- 'Exploit' plant-based food trends.



OPPORTUNITIES

CATERING ORGANISATIONS

- Plant-based, vegetarian and flexitarian diets are a key opportunity, as well as 'the blend', which offers nutrition & cost saving benefits
- Tapping into 'Food as Medicine' and the provenance story could foster greater uptake
- Inspiring chefs to use mushrooms more, while supporting with fun nutrition and health facts

CULINARY EDUCATION

- Develop proposal to update national curriculum to have mushrooms acknowledged as a separate food group to vegetables
- Individual TAFE or RTO can develop materials that can be used to support the new unit SITHCCC031 - Prepare vegetarian & vegan dishes
- The Learning Vault is currently developing materials to support SITHCCC031



EDUCATION

- Mushrooms are not part of the national culinary education curriculum
- While registered training organisations (RTOs) for commercial cookery need to show evidence of achieving performance criteria and assessment guidelines, they are free to teach the curriculum how they wish
- RTOs often develop their own education materials and many value and utilise the materials produced by leading digital education training company, *The Learning Vault*.
- In practice, while not formally specified in curriculum, mushrooms are an ingredient often chosen to teach various units and different preparation styles due to its versatility.

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