

# Mushrooms

## THE X-FACTOR INGREDIENT FOR PLANT-BASED EATING



Plant-based eating:  
BIGGEST GLOBAL TREND OF THE PAST DECADE



**SUSTAINABILITY AND/OR HEALTH = key reasons to reduce or eliminate animal products.**



**>1/3 of Australians are eating less meat, or no meat at all.**

### Key future growth strategy

Recent Australian research indicates that the food service sector is not tapping into the opportunity<sup>1</sup>.

A lack of variety of plant-based options is a key frustration for clientele when eating out.



## What is a PLANT-BASED DIET?

'Plant-based' diet is either **mostly or entirely** comprised of plant foods, with limited to no animal-derived products.

### DID YOU KNOW?

Some people choose to reduce meat intake and not label their dietary choice, while others consider themselves vegan, vegetarian, flexitarian or plant-based. All identify as following a plant-based diet.

**Research shows Australians enjoy eating meat** but want to eat less and enjoy more plants.<sup>1</sup>

**Most popular plant-based approaches include some meat.** Vegan and vegetarians make up less than 10% of population.<sup>2</sup>

### TYPES OF PLANT-BASED EATING:



	VEGAN	LACTO-VEGETARIAN	LACTO-OVO-VEGETARIAN	PESCATARIAN	FLEXITARIAN
PLANT	✓	✓	✓	✓	✓
DAIRY	X	✓	✓	✓	✓
EGGS	X	X	✓	✓	✓
FISH	X	X	X	✓	✓
MEAT	X	X	X	X	✓

**FLEXITARIAN =**  
Flexible approach to eating

- ✓ Aim to eat 'vegetarian' most of time but occasionally include animal-based foods when confident in quality and sourcing.
- ✓ Driven by health, environment and ethical reasons.

**VEGAN =**

Often a lifestyle choice based on environment, health, ethical and animal welfare concerns.

# Mushrooms

## A DELICIOUS MEAT SUBSTITUTE



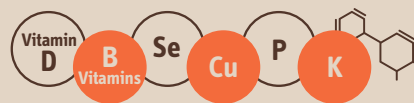
### The X-Factor **INGREDIENT**

Unique umami taste and texture  
= delicious meaty flavour



- ✓ Contributes moisture = improved mouth-feel and sensory appeal<sup>3</sup>
- ✓ Enhances flavour<sup>3</sup>
- ✓ Reduces salt<sup>4</sup>
  - Umami sensitises tastebuds to salt, meaning you can use less salt but still maintain flavour<sup>4</sup>
  - Research shows you can reduce salt by 25% but still maintain flavour<sup>4</sup>

Unique package of nutrients and bioactives  
= nutrition boost to any meal



- ✓ Vitamin D<sup>5</sup>
- ✓ B-vitamins (B3, B5, B7, B9), copper, potassium, phosphorus & selenium<sup>5</sup>
- ✓ 3 unique bioactives (ergothioneine, ergosterol, chitin)<sup>6-8</sup>

Based on 100g<sup>5</sup>

### DID YOU KNOW?

Mushrooms are not a good source of protein, but can be easily combined with legumes, nuts or soy products to create a plant-based meal that delivers adequate protein if required.



### Key foods in a plant-based diet



Fungi such as mushrooms



Legumes (e.g., lentils, chickpeas, soybeans)



Vegetables



Oils (e.g., extra virgin olive, avocado, canola)



Fruit



Nut and seeds



Whole grains (e.g., quinoa, barley, rye, wheat, oats)

# Mushrooms = VITAMIN D SUPERSTAR!

Like humans, clever mushrooms produce vitamin D on sunlight exposure.<sup>9</sup>

100g of mushrooms provides 20% of daily vitamin D needs.<sup>5</sup>

But placing a serve of mushrooms in the sun for about 15 minutes can provide **over 100% of daily vitamin D needs.**<sup>9</sup>



20%  
OF DAILY  
VITAMIN D NEEDS



OVER 100%  
OF DAILY  
VITAMIN D NEEDS



1 x PORTOBELLO



3 x CUP



5 x BUTTON

## GETTING ENOUGH *protein?*



Aside from legumes, vegetables and mushrooms are not a good source of protein.

**BUT...** Mushrooms are great when reducing or substituting meat as they deliver richer, meatier flavour and texture to dishes with other added nutrition benefits.

### Protein rich plant foods:



legumes such as soy, lentils, chickpeas, nuts and seeds and wholegrains such as quinoa and amaranth.



Soy products including soy milk, tempeh, tofu



**Watch out:** Most plant-based 'milks' such as almond, rice and oat are not a source of protein.

### Protein is important for\*:



cell growth, repair and function



building muscles and healthy bones

## Fun FACTS

Mushrooms are unique as they are a **non-animal and natural source of vitamin D.**



**With 1 in 4 Australians deficient in vitamin D,** choosing foods like mushrooms that provide vitamin D is important.<sup>10</sup>



Vitamin D\* =



✓ Supports healthy bones



✓ Immunity

\*As part of a healthy balanced diet



# The Blend: THE BENEFITS OF MORE PLANTS BUT WITH LESS MEAT

**'The Blend'** is an easy cooking technique that can be adopted with any minced meat recipe. There's no need to change the recipes you already know and love... just make room for mushrooms!

Mushrooms can substitute from 25% up to 70% of minced meat in your favourite recipes, like spaghetti, lasagne, tacos, burgers and meatballs, without changing the meaty flavour and texture. Simply adjust the ratio of mushrooms to mince for each recipe, to allow for the extra moisture from the mushrooms.

- ✓ Enhanced flavour<sup>4</sup>
- ✓ Reduced calories, fat and salt<sup>4</sup>
- ✓ Added nutrition<sup>4</sup>
- ✓ Higher yield and cost effective

## SUBSTITUTE:

25% mushrooms for burgers or meatballs, 50% mushrooms for bolognese or lasagne, 70% mushrooms for chilli con carne or ragu.

**Making meals delicious, nutritious and sustainable with mushrooms is as easy as chop, blend and COOK!**

### 1 CHOP



- ✓ Chop the mushrooms into approx 2mm x 2mm up to 5mm depending on the grind size of the mince.
- ✓ This can also be easily done by quickly pulsing in a food processor.

### 2 BLEND



- ✓ Blend the mushrooms with any type of mince (beef, pork, chicken, lamb or turkey) and cook the recipe as standard.
- ✓ If mincing the mushrooms in with meat, the recipe may need to be adjusted due to excess water.

### 3 COOK



- ✓ Cook your delicious blended mushroom-meat!

**References:** 1. Latrobe Uni, Health and environmental concerns reduce meat intake in Australia. 2022. <https://www.latrobe.edu.au/news/articles/2022/release/health,-environment-drops-meat-eating>. 2. Statista. 2019. <https://www.statista.com/statistics/1232881>. 3. Feeney, M. Nutr. Today, 2014. 49 (6): 301-307. 4. Myridal, A., et al, Mushrooms. J. Food Science, 2014. Vol.79, Issue 9. 5. Australian Food Composition Database, 2019. 6. Pusztahelyi T. Mycology. 2018;9(3):189-201. 7. Weete et al. PLoS One. 2010;5(5). 8. Halliwell et al. FEBS Lett. 2018;592(20):3357-66. 9. Phillips, J Nutr Food Sci 2013;3:236. 10. Dunlop et al. J Hum Nutr Diet. 2022 Mar 7.

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