

Mighty mushrooms
THE X-FACTOR INGREDIENT FOR FOODSERVICE

Australian
MUSHROOMS



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MUSHROOMS

Neither plant nor animal

While often considered a vegetable, mushrooms are in fact neither animal or plant. Mushrooms are part of a separate biological kingdom called Fungi, from well before plants were on Earth.^{1,2}

With their unique culinary and nutrition benefits, mushrooms are truly the **X-factor ingredient** to *any* meal, but particularly plant-based menu options, a growth sector within the foodservice market.

The most consumed edible mushroom worldwide is the *Agaricus bisporus* species, commonly referred to as white mushrooms. **White Australian mushrooms** are cost effective and highly valued for their cooking versatility across many cooking methods and meal occasions.



In this e-book, **Chef Adam Moore** and **Nutrition Scientist Dr. Flav** share with you some of the fascinating culinary and nutritional properties of the mighty mushroom, including how they grow, the different varieties, and how to select and make the most of this **X-factor ingredient**.



Chef Adam Moore



Nutrition Scientist Dr. Flav

3 KEY BIOLOGICAL KINGDOMS:

While often considered a vegetable, mushrooms are in fact neither animal nor plant. They are part of a separate biological kingdom called Fungi, from well before plants were on Earth.^{1,2}



ANIMAL
(meat, dairy and eggs)



PLANT
(fruits, vegetables, seeds, oils, grains)



FUNGI
(mushrooms and yeast)

MUSHROOM

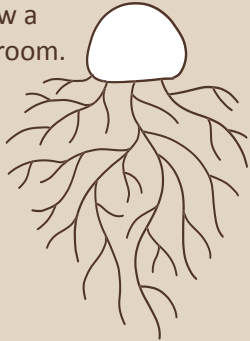
Grows into a mature mushroom, opening its veil to release spores for the growing cycle to continue.

PINHEAD

Pushing out of the ground, it grows into a miniature mushroom the size of a pinhead.

HYPHAL KNOT

Hyphae strands bundle together and prepare to grow a mushroom.



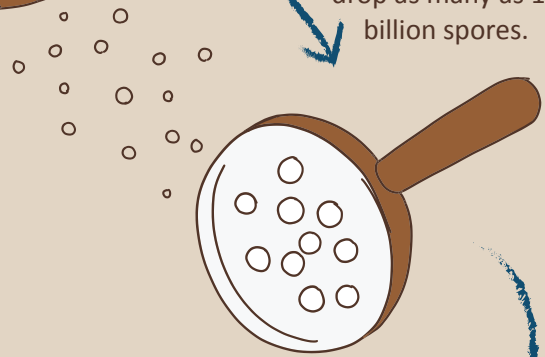
How do MUSHROOMS GROW?

Mushrooms grow in a unique & fascinating way.

STARTS WITH:

SPORES RELEASED FROM GILLS ON UNDERSIDE OF CAP

Mature mushrooms drop as many as 16 billion spores.



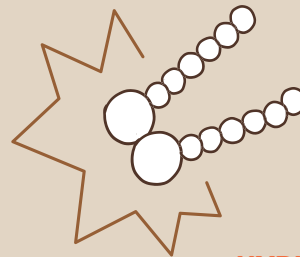
GROW INTO HYPHAE

Spores grow into fine white fibres (hyphae).



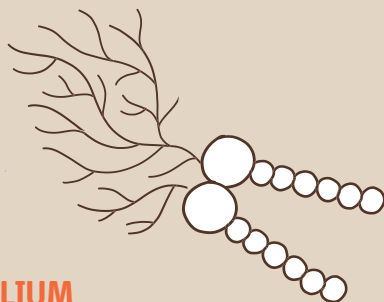
HYPHAE MEET AND COMBINE

A hyphae join, forming roots called mycelium.



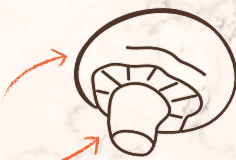
MYCELIUM

Consist of many super-thin threads that absorb nutrients from the environment.



Fun FACT:

The mushroom above the ground is called the fruiting body, consisting of a **cap** and **stem**.



THE INCREDIBLE AUSTRALIAN

White mushroom journey



Always in season

and grown indoors all year round.



Can grow in light or darkness

Unlike plants, mushrooms don't need sunlight to grow, but when exposed to UV light, they can make over 100% of daily vitamin D needs*.³



A scientific marvel AND a precise art

- ✓ For a mushroom to grow, the temperature, humidity and carbon dioxide levels are varied and carefully monitored around the clock.
- ✓ Farmers respond as required.



Mushrooms are sustainably farmed, using circular farming methods

- ✓ Growers use solar power and recycled water.
- ✓ Recycled waste from other farms (straw and animal manure) is made into compost for mushroom growing, with the compost at end of production then sold to other farms or nurseries.
- ✓ Vertical growing = less land usage.
- ✓ Less water used compared to meat production.

Based on 100g

FROM THE FARM TO YOU *in 5 steps*

1. COMPOST (DAYS 1-30)

- ✓ Recycled waste from other farms (straw and poultry manure) is made into compost (which growers refer to as substrate) which is pasteurised before use for mushroom growing. At the end of mushroom production, compost is sold to other farms or nurseries for use as a growing medium for other crops.



2. SPAWNING (DAY 31)

- ✓ Commercial mushroom growers use spawn that is propagated from mycelium onto a sterilised cereal grain, which are produced under controlled conditions.
- ✓ The spawn is mixed through the compost. Mycelium then colonises the compost, after which, the mushrooms form.



3. GROWING (DAYS 31-58)

- ✓ Growing rooms have long shelves called growing beds, stacked 4 to 8 beds high.
- ✓ Colonised compost is extruded into the beds. A casing layer is applied on top, to promote the mushroom fruit body.

5. PACKAGING & SHIPPING

- ✓ Mushrooms are packed whole, or sliced and immediately refrigerated. Shipped within 24 hours of being harvested.



- ✓ Substrate removed and on sold as a growing medium for other crops.

- ✓ At harvest end, growing rooms are steamed at 65°C to eliminate pest contamination.

- ✓ Carefully harvested by hand.

- ✓ Mushrooms double in size daily.

4. HARVESTING (DAYS 58-79)



DID YOU KNOW?
Mushrooms keep growing a little after they have been picked.

Mushroom harvesting cycle is called a 'flush'.
There are 2-3 'flushes' from a growing cycle over a 3-week period.

Get to know THE DIFFERENT VARIETIES

There are more than 2000 varieties of mushrooms worldwide, with the white button mushroom from the *Agaricus bisporus* species the most common.⁵



White Mushrooms (*AGARICUS BISPORUS*)

Most common but ever so versatile variety making up 95% of Australian fresh consumption.

DID YOU KNOW?

Australian grown mushroom varieties (white, swiss brown and portobello) are the same species (*Agaricus bisporus*)! The difference is simply their age and stage of harvesting as mushrooms double in size in every day.



Button mushrooms
= Harvest day 3



Cup mushrooms
= Harvest day 4



Flat mushrooms
or Portobello
= Harvest day 5

Fun FACT: the longer a mushroom is allowed to grow, the more its flavour develops. So, a white button mushroom has a very mild flavour, and a 'flat' mushroom has a robust flavour.

THE *AGARICUS BISPORUS* Family

WHITE BUTTON



Great size and texture to use whole

- Being the first harvested, their veil is tightly closed and texture very firm.
- Almost pure white, with the mildest umami flavour.
- Perfect for any cooking application with a crisp bite raw.
- Great whole, skewered for the BBQ, or in stews and in slow cooking.
- Fantastic crumbed and as a deep fried snack.

WHITE CUP



Perfect raw or cooked, Australia's favourite all-rounder

- Being second stage harvest, gills can be slightly open.
- Mild and delicate flavour, perfect for any recipe.
- Firm texture maintained during cooking.
- Creamy white colour great for pasta and risotto.
- Most versatile - great raw in platters or salads, whole roasted, stuffed and baked or diced and blended with meat dishes.

WHITE FLAT



Perfect for the BBQ

- Dense spongy texture, slightly softer than buttons and cups.
- Rich intense umami flavour and dark colour to sauces.
- Great whole, simply brushed with olive oil and put on BBQ, stuffed and oven baked or crumbed whole and shallow fried.
- Great fine diced and added to blended meat dishes or cooked and blended in soups or sauces.

SWISS BROWN



Great for casseroles or slow cooking

- Slightly nutty and richer umami flavour than white mushrooms.
- Brown mushrooms have less water content than white mushrooms, resulting in a firmer texture that allows it to hold together better in slow cooking.
- Good for beef, wild game and vegetable dishes.
- Best for high heat and long cooking applications.
- Great for casseroles, stew and skewering on BBQ as they hold their shape in slow cooking.

PORTOBELLO



Great for stuffing and slow cooking

- Largest cultivated mushroom.
- Hearty, savoury and meaty with lots of umami.
- Great for both meat and meatless dishes.
- Delivers hearty juiciness, rich flavour and firm, steak like texture, that keeps shape when cooked whole.
- Great for burgers and excellent for grilling, sautéing and roasting or diced and used in blended meat dishes.

Speciality MUSHROOMS

ENOKI



Flammulina velutipes Perfect for stir-fries

- Very mild and sweet slightly fruity taste when cooked.
- Firm crisp texture.
- Trim roots at base, discard and gently separate each strand.
- Must always be cooked and best cooked briefly before eating as becomes chewy if overcooked.
- Great sauteed and added cooked to salads, attracting flavours from the dressing/sauces, or added at the end of cooking for stir-fries, soups or risottos.

KING TRUMPET



Pleurotus eryngii Add to stir-fries or simply sauté. Great seafood substitute

- Delicate, nutty flavour and a firm, meaty texture.
- When cooked, texture mimics seafood, like scallops, particularly when stem sliced crosswise.
- Large size and savoury flavour can feature as centre for any entrée for any cuisine.
- Versatile for slicing and serving from large-to-small dice to slicing lengthwise to shredding.
- Cut lengthwise for slices -ideal for grilling, sautéing, roasting.
- Fork-shred for serving as a meaty option for barbecue sandwiches, tacos, or serving atop grilled meats.

LION'S MANE



Hericium erinaceus Great accompaniment to seafood

- Seafood-like with mildly sweet flavour and tender texture like scallops, crab, or lobster.
- Can be seared and served centre of plate.
- Accompaniment or alternative to seafood.
- Dry sauté in a hot skillet until water releases and edges brown, then add butter and seasonings.

MAITAKE



Grifola frondosa Distinct rippling fan, provides visual appeal to any dish

- Delicate, rippling fan shape that almost resembles feathers.
- Distinct aroma, rich, woodsy flavour with a succulent texture.
- Cooked as a whole cluster or torn into smaller pieces to suit any recipe.
- Lends itself to any dish - great for mains, side dishes and soups.
- Delicious sauteed in butter or oil, browning its delicate edges to desired degree of crispness.

MOREL



Morchella esculenta Delivers rich flavour in sauces and soups

- Distinctive savoury flavour.
- Rich earthy flavour.
- Best sautéed but can add a rich flavour to soups or sauces.
- Great in slow cooked dishes.

OYSTER



Pleurotus osreatus Velvet but firm, best sauteed

- Velvety and dense in texture.
- 'Briny' or delicate seafood flavour.
- Colourful dish addition - found in grey, yellow, pink and blue.
- Trim stems and discard.
- Can be sliced and stir-fried or gently cooked in large pieces to preserve unique appearance.
- Best lightly sauteed. When pan-fried, edges turn crisp.

SHIITAKE



Lentinula edodes Great for stir-fry, pasta and risotto

- Earthy, woody flavour and a rich meaty-yet-buttery texture when cooked.
- Dense, meaty flesh with slightly chewy texture.
- Tough stems can be removed and saved for soups and stocks.
- Good for pizza, pasta and dishes that call for bold flavours.

SHIMEJI



Lypohylium or Pleurotus species Perfect hero for stir-fry

- Firm texture with meaty but mildly sweet, nutty flavour.
- Separate from clumps at base.
- Perfect as hero in stir-fry. Loves sauce and can be added whole to soups, salads or pasta.

Fun FACT:

Mushrooms boast a delicious savoury flavour, known as **UMAMI** - the Japanese word for 'tasty' or 'meaty', which is considered the fifth basic taste along with sweet, salty, sour and bitter.





YOUR GUIDE TO *White mushrooms* (*AGARICUS BISPORUS* FAMILY)



SELECT



'Veil' should be attached to stalk on smaller mushrooms



Gills intact and moist on larger ones

- ✓ Smooth appearance, firm (not slippery) dry and plump surface, with uniform colour.

STORE

- ✓ Original packaging or ventilated cardboard box.
- ✓ Never freeze fresh mushrooms.
- ✓ Sautéed mushrooms can be frozen up to one month.

- ✓ Keeps for up to 1 week in the fridge



PREPARE



Whole mushroom can be used with no waste.



Whole mushrooms can be washed but should be quickly dried before use.



Stems contain flavour and nutrition. Finely chop if a little tough or use in sauces, soups or stocks.



Don't soak in water or wash sliced mushrooms.



Gently wipe with a damp cloth.



Cook to order and serve immediately. Cooked mushrooms (other than sauces) should not be left to sit in a bain-marie.



































A soft pastry brush is best to remove any dirt.



Leave room in the pan for the moisture to evaporate when cooking.

WHICH MUSHROOM IS BEST *when cooking?*

													
Perfect for...	WHITE BUTTON	WHITE CUP	WHITE FLAT	SWISS BROWN	PORTOBELLO	ENOKI	KING TRUMPET	LION'S MANE	MAITAKE	MOREL	OYSTER	SHIITAKE	SHIMEJI
BBQ 		✓	✓	✓	✓		✓						
BURGER 	✓	✓	✓	✓	✓		✓		✓		✓		
CRUMB & FRY 	✓	✓					✓				✓		
FLASH FRY 						✓		✓			✓		
GRILL 		✓	✓	✓	✓		✓	✓	✓				
PASTA 	✓	✓		✓			✓				✓	✓	
PICKLED 	✓	✓		✓			✓		✓		✓	✓	✓
PIZZA 	✓	✓	✓	✓	✓		✓				✓		
RAW 	✓	✓	✓	✓									
RISOTTO 	✓	✓		✓			✓				✓	✓	✓
ROAST 	✓	✓	✓	✓	✓		✓	✓	✓		✓	✓	
SALAD 	✓	✓		✓			✓						
SAUCE 	✓	✓	✓	✓	✓					✓			
SAUTE 	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SEAR 	✓	✓	✓	✓	✓		✓	✓	✓		✓	✓	
SLOW COOK 	✓	✓	✓	✓	✓	✓							
SOUP 	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
STIR-FRY 	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓
STUFFED 	✓	✓	✓	✓	✓								

“ White mushrooms are one of the most cost-effective and versatile mushrooms across all cooking methods and meal occasions.

CHEF ADAM MOORE



Mushrooms

CULINARY & NUTRITION BENEFITS

Delicious
umami-rich flavour

B-group vitamins
(B3, B5, B7, B9)

Meaty flavour
and texture

Gluten-free

Natural flavour
enhancer enabling
less added salt

Copper, Potassium,
Phosphorus &
Selenium

Low-carb

- **FACTOR**
INGREDIENT

Fat &
cholesterol-free

Vegan source of
vitamin D

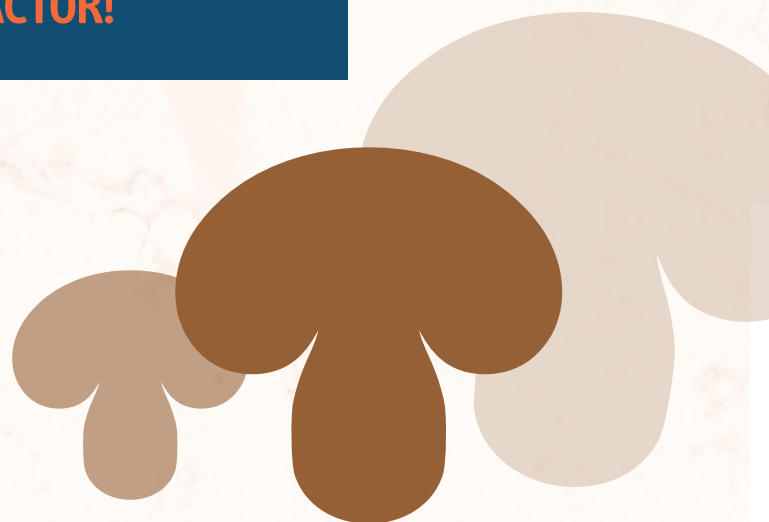
Low-sodium

3 unique bioactives
(ergothioneine,
ergosterol & chitin)

Low-calorie
/kilojoule

Based on 100g ^{4, 6-8}

Boost the nutrition and flavour of any
meal with **MUSHROOMS** to deliver
that **X-FACTOR**!





*Mushrooms can be used
for most dietary needs*

- ✓ Flexitarian
- ✓ Gluten-free
- ✓ Halal
- ✓ Limiting/reducing animal foods
- ✓ Keto
- ✓ Kosher
- ✓ Low-carb
- ✓ Low-fat
- ✓ Low-salt
- ✓ Low-sugar
- ✓ Nut-free
- ✓ Plant-based
- ✓ Vegan
- ✓ Vegetarian



“ Adding mushrooms with its natural umami flavour can help bump up the taste and make it easier to use less salt in cooking.

DR FLAVIA FAYET-MOORE ”

UMAMI Power

Mushrooms contain distinctive flavour compounds including glutamates, ribonucleotides, and several synergistic volatiles.⁹

Together, they give the characteristic ‘umami’ savoury taste associated with cooked mushrooms and can enhance flavour of meals with less salt.⁹

Umami is found in:



Mushrooms



Tomatoes



Cheese



Soy sauce



Miso paste



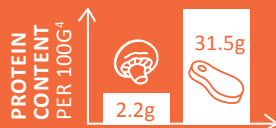
Fish sauce

DID YOU KNOW?

With their fabulous meaty flavour and texture, and lower salt and fat content, **mushrooms are a great meat replacer.**



Mushrooms are not an equivalent protein replacement for animal protein as they are lower in protein.



Mushrooms are unique as they are a vegan and natural source of *Vitamin D*.



With 95% of Australians not meeting daily vitamin needs and 1 in 4 deficient, choosing foods like mushrooms that provide vitamin D is important.¹⁰



Vitamin D* =

*As part of a healthy balanced diet



✓ Supports healthy bones



✓ Immunity

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 and 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

*As part of a healthy balanced diet

Mushrooms = VITAMIN D SUPERSTAR!



Like humans, clever mushrooms produce vitamin D on sunlight exposure.³

100g of mushrooms provides 20% of daily vitamin D needs.⁴

But placing a 100g of mushrooms in the sun for about 15 minutes can provide **over 100% of daily vitamin D needs.**³



**OF DAILY
VITAMIN D NEEDS**



**OF DAILY
VITAMIN D NEEDS**



1 x PORTOBELLO



3 x CUP



5 x BUTTON

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.¹¹

Key future growth strategy

Recent Australian research indicates that the food service sector is not tapping into the opportunity¹¹.

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.¹¹

Most popular plant-based approaches include some meat.
Vegan and vegetarians make up less than 10% of population.¹²

TYPES OF PLANT-BASED EATING:



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

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.



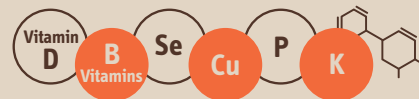
The X-Factor **INGREDIENT**

Unique umami taste and texture
= delicious meaty flavour



- ✓ **Contributes moisture = improved mouth-feel and sensory appeal¹³**
- ✓ **Enhances flavour¹³**
- ✓ **Reduces salt¹⁴**
 - Umami sensitises tastebuds to salt, meaning you can use less salt but still maintain flavour¹³
 - Research shows you can reduce salt by 25% but still maintain flavour¹⁴

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



- ✓ **Vitamin D⁴**
- ✓ **B-vitamins (B3, B5, B7, B9), copper, potassium, phosphorus & selenium⁴**
- ✓ **3 unique bioactives (ergothioneine, ergosterol, chitin)⁶⁻⁸**

Based on 100g[†]



Key foods in a plant-based diet



Fungi such as mushrooms



Vegetables



Fruit



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



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



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



Nut and seeds



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.

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!**

- ✓ Enhanced flavour¹⁴
- ✓ Reduced calories, fat and salt¹⁴
- ✓ Added nutrition¹⁴
- ✓ Higher yield and cost effective

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!

GETTING THE MOST *flavour* FROM MUSHROOMS



Sauté mushrooms with butter or oil and caramelise until golden brown to unleash their flavoursome meaty umami flavour.



Roast mushrooms to get more sweet, salty and umami tastes with caramelised, nutty and buttery flavours.



Sear mushrooms for a more intense roasted, charred and smoky flavour and overall aroma.

Roasted **WHOLE** mushrooms are perfect for:

- ✓ vegetarian dishes such as lasagnes or coated as a schnitzel
- ✓ marinated with balsamic and topped with goats cheese for an entrée
- ✓ coated in a tandoori marinade for an alternative burger

“Mushrooms offer a nutritious, lower salt but still flavoursome way to provide the savoury ‘umami’ taste that can help drive palatability of other foods.”

CHEF ADAM MOORE



For more flavoursome, meaty and plumper mushrooms:

PRO TIP

1. In a hot fry pan add the fat (10g), mushrooms (200g), seasonings (1g), and water (50ml)
2. Bring to a boil until water absorbs
3. Sauté until golden brown in the residue

Try this flavour bomb! Coat mushrooms in miso paste and sauté or sear them for the ultimate in savoury umami flavour.

PRO TIP

Use bigger mushrooms for enhancing flavour in any recipe!

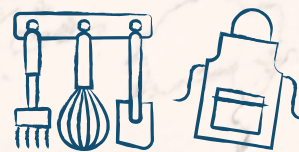
As mushrooms mature, their cell walls break down more easily and release their flavour compounds.

Drying, freezing and boiling are also good methods to degrade cell walls.

Flat and portobello are more mature mushrooms, often considered the tastiest.



MUSHROOM *Inspiration*



Make a mushroom **duxelle** with onion, parsley, thyme and butter for a great breakfast addition or function canapé.



Use mushrooms as a **stuffing** in a chicken instead of bread crumbs for a great flavour boost and gluten free option or a tasty accompaniment.



Mushrooms **perfectly pair with** apples, asparagus, bacon, balsamic or cider vinegar, beef, Brussel sprouts, burrata, butter, cabbage, carrots, cashews, cauliflower, charcuterie, cheese, chicken, chickpeas, chilli, coconut, coriander, cream, eggs, garlic, lamb, leeks, lettuce, limes, oysters, paneer, parsley, peanuts, peas, pork, potatoes, prawns, parsley, salmon, seafood, sourdough and bread, spinach, sweet potato, thyme, white wine, wasabi, and zucchini.



Mushrooms make an amazing **savoury custard** called a chawanmushi, which is a Japanese steamed egg custard that is full of flavour.

DID YOU KNOW?

If you put mushrooms straight in the pan with fat, the water coming out of the mushrooms will buffer the temp of the oil and keep it low so you won't get that Millard reaction.



GETTING THE MOST *nutrition* FROM MUSHROOMS



Looking to reduce meat or sodium in a meal?



Simply replace $\frac{1}{4}$ to $\frac{1}{2}$ of the meat with mushrooms

- ✓ Umami taste and unique meaty texture = Great meat substitute
- ✓ Pasta sauce, stews, casseroles, mince and other mixed dishes

Need to create a delicious plant-based dish with enough protein?



Pair mushrooms with a good source of plant protein

- ✓ When replacing meat with mushrooms, add extra plant protein - at least 1 cup legumes or $\frac{1}{4}$ cup nuts per person.

The entire mushroom is edible from CAP to STEM!

While the **cap** of mushrooms is a richer source of bioactives,¹⁵ its **stem** contains 40% more of the soluble fibre beta-glucan.¹⁶



Exposing one portobello mushroom to about 15 minutes of sunlight can provide the same amount of vitamin D as a low dose vitamin D supplement (1000 IU).

DR. FLAVIA FAYET-MOORE



GETTING THE MOST VITAMIN D *in your mushrooms*

You can buy UVB exposed mushrooms or easily do it yourself!



1 Spread out the mushrooms



2 Put in the sun for about 15 minutes



Increasing surface area to UVB light helps increase the amount of vitamin D that is made, so face 'gills' (the underside of the mushroom) to the sun or slice mushrooms for maximum vitamin D.¹⁷



Vitamin D is stable during cooking mushrooms, particularly at low temperatures, and for up to 8 days refrigeration.^{17,18}



Adding lemon juice to mushrooms when cooking can help to retain their vitamin D content.¹⁹



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