# Excipients: What are the general considerations for vegan patients?

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## Background

### According to the Vegan Society, in 2018 there were approximately 600,000 vegans in the UK. Veganism is ‘a philosophy and way of living which seeks to exclude – as far as is possible and practicable – all forms of exploitation of, and cruelty to, animals for food, clothing or any other purpose’ [1].

## Answer

### The active medicinal ingredient may account for a relatively small proportion of the contents of the final product formulation. Excipients are involved in the manufacture of the medicine (e.g. to ensure homogeneity of powders, flow of granules and compression of tablets) and used to modulate the solubility and bioavailability of active pharmaceutical ingredients. They also act as antioxidants, emulsifying agents, aerosol propellants and colourants [2]. Animal-derived ingredients may be included as excipients.

Common animal-derived excipients found in medicines [3]:

|  |  |  |
| --- | --- | --- |
| **Ingredient** | **Source** | **Use** |
| Gelatin | From the skin and bone of cattle and pigs | Capsules, tablets and modified release preparations of some medicines. May be used to thicken liquids or as a coating agent for drug powder |
| Shellac | Resin secreted from the female lac bug | Binding powders/medications |
| Cochineal / carmine | Dye made from crushed insects | Colouring of capsules |
| Lactose | From milk  | Diluent for tablets / medications |
| Lanolin | From sheepskin / wool | Used as a lubricant, for producing cholecalciferol, in some lip/skin products |
| Magnesium stearate | May be derived from plants or bovine tallow | Used in production of some tablets / powders to aid delivery |

The Summary of Product Characteristics (SPC) and Patient Information Leaflets (PIL) for licensed medicines, which are usually available at <https://www.medicines.org.uk/emc>, include a list of excipients. However it may not be possible to determine which ingredients are derived from animals from this information. Manufacturers in the EU are currently prohibited from making statements in product information leaflets about suitability for vegetarians or vegans as these are deemed to be ‘lifestyle’ choices [4].

Whilst a specific excipient may not be listed by the manufacturer as present in a particular product, it cannot be guaranteed that the product has not been in contact with animal derived products during the manufacturing process [5].

To confirm the suitability of a product for use by a vegan involves checking the licensed product information and contacting the manufacturer directly. Sometimes, pharmaceutical companies cannot guarantee or differentiate the specific sources of animal-derived ingredients, as various suppliers are used in the manufacturing process and the sources can change. Manufacturers may also change the formulation or the suppliers of their active ingredients or excipients making it important to regularly check suitability. Numerous drugs are available from various generic pharmaceutical manufactures; each generic may contain different excipients and it is therefore important to confirm suitability for each brand or generic formulation [5].

There are two Medicines Q&As discussing the suitability of specific medicines for vegans on the SPS website, which may be helpful:

* [Choosing an oral vitamin D preparation for vegetarians or vegans](https://www.sps.nhs.uk/articles/choosing-an-oral-vitamin-d-preparation-for-vegetarians-or-vegans/#:~:text=vitamin%20d)
* [Choosing a calcium and vitamin D preparation for vegetarians or vegans](https://www.sps.nhs.uk/articles/choosing-a-calcium-and-vitamin-d-preparation-for-vegetarians-or-vegans/)

The Vegan Society website states that vegans avoid using animals ‘as far as is practicable and possible’. They acknowledge that it isn’t always possible to make a choice that avoids the use of animals, and sometimes there may not be an alternative to taking a prescribed medication containing animal-derived ingredients. They do not recommend that people avoid taking medicines prescribed by their doctor but encourage discussion about possible alternatives to medicines containing animal-derived ingredients with healthcare professionals [1].

Patients are more likely to adhere to prescribed medicines if they have been actively involved in prescribing decisions, and if their views and preferences have been recognised and taken into account [2].

## Summary

* Excipients are used in the manufacture of medicines for various purposes and may be derived from animals.
* It may not be obvious from the SPC or PIL which excipients are animal-derived.
* The manufacturer can be contacted for information regarding the suitability of the product for vegans, although they may not be able to guarantee or differentiate the specific sources of animal-derived ingredients.
* Veganism avoids using animals ‘as far as is practicable and possible’ and sometimes there are no alternatives to prescription medicines containing animal-derived ingredients.

Limitations

* Animal-derived active ingredients and the use of animals in the testing of medicinal products are not discussed in this Q&A.

### References

1. The Vegan Society. Accessed online via <https://www.vegansociety.com/> on 19/3/2019
2. Implications of religious and cultural beliefs on selection of medicines. Drug and Therapeutics Bulletin 2016;54(4):45-48
3. Strickland S. Dietary restrictions: implications on medication choice.Br J Gen Pract 2014; DOI:10.3399/bjgp14X681865
4. Tatham KC, Patel KP. Why can’t all drugs be vegetarian? BMJ 2014;348:g401
5. Mersey Care NHS Trust. Medicines and Vegetarians. Medicines Information e-bulletin. 2013 Issue No.66.

## Quality Assurance

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### Search strategy

* The Vegan Society accessed via: <https://www.vegansociety.com/>
* In-house database/resources:
MiDatabank
* NHS Evidence accessed via: <https://www.evidence.nhs.uk/> Search terms: excipients/beliefs
* Google accessed via: <https://www.google.co.uk/> Search terms: vegan/excipients