

Dietary restrictions: implications on medication choice

GMC guidance on personal beliefs and medical practice states:

*'In assessing a patient's conditions and taking a history, you should take account of spiritual, religious, social and cultural factors, as well as their clinical history and symptoms. It may therefore be appropriate to ask a patient about their personal beliefs. However, you must not put pressure on a patient to discuss or justify their beliefs, or the absence of them.'*¹

Many people will choose to avoid certain products in their diet on ethical or religious grounds. Vegetarianism is a lifestyle choice advocated by many spiritual disciplines including Buddhism, Hinduism, and Jainism as well as several less mainstream religions. Vegetarianism is defined by the Vegetarian Society as:

*'Someone who lives on a diet of grains, pulses, nuts, seeds, vegetables and fruits with, or without, the use of dairy products and eggs. A vegetarian does not eat any meat, poultry, game, fish, shellfish or by-products of slaughter.'*²

Some may take this ethical choice further and embrace a vegan (complete avoidance of animal products) lifestyle. In addition to this, Islam and Judaism follow strict dietary laws of Halal and Kosher respectively, both of which promote the avoidance of porcine products, and for Judaism, avoidance of shellfish too.³

It is an unavoidable fact that all medication will at some stage in its development

Table 1. Estimated percentage of the UK population which may have dietary restrictions

Dietary group	Estimated %
Vegetarian ^a	2 (n = 1.2 million)
Vegan	<1
Muslim (Halal)	4.8 (n = 2.7 million)
Jewish (Kosher)	0.5
Buddhist	0.4
Total	8.7

^aIncluding Hindu/Buddhist vegetarians.

Table 2. Common animal-derived excipients found in medications

Ingredient	Source	Use
Gelatin	From the skin and bone of cattle and pigs	Capsules of medication and tablets, modified release preparations of some medications 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: may be acceptable to vegetarians but not to vegans	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

have been tested on animal subjects, but inadvertent ingestion of animal products is something that can potentially be avoided. A survey of 500 urological patients⁴ revealed that 40% of these patients had a dietary restriction which required avoidance of animal products and up to 50% of this subgroup had inadvertently been prescribed gelatine-containing medication. These proportions are far in excess of the figures in Table 1, based on estimates from the Office for National Statistics⁵ and the Vegetarian Society website.⁶

Although the number of people prepared to uphold their dietary principles even at great risk to their life and/or health may be small, very few prescribers pay consideration to the animal products contained in medication they prescribe. Pharmaceutical companies are beginning to pay heed to dietary choices within mainstream medicine. Some products are now being marketed by pharmaceutical representatives as vegetarian and some companies are sourcing halal gelatine. In contrast to food, which is often clearly labelled as 'suitable for vegetarians' excipients (non-active substances in medication) can be difficult to identify as animal derived although it is a legal requirement for them to be listed on the packaging.⁷ Table 2 shows some examples of non-vegetarian excipients.

Where alternatives to animal-derived ingredients are becoming increasingly available, and although the shelf life of such medications is likely to be shorter, we have already seen that a significant number of patients would choose non animal-derived medications if they are offered the choice.⁴ Doctors and other prescribers should be mindful of non-active ingredients in the medications they prescribe, especially when

ADDRESS FOR CORRESPONDENCE

Serena Strickland

North Devon District Hospital Barnstaple. Raleigh Park, Barnstaple, Devon EX31 4JB

E-mail: serena105@doctors.org.uk

they are made aware of a patient's ethical or moral principles.

In order to identify animal ingredients in medications, doctors and patients can check product labelling and information or contact the manufacturer directly where uncertainty exists. However, manufacturers may not always be able to guarantee non-contamination during the manufacturing process or in some cases may be unable to identify the source of excipients.

Prescribers have a duty to discuss medication options with patients and to respect their ethical and dietary beliefs. While we would not advise abstaining from life-sustaining treatment out of principle, by asking the right questions and putting pressure on manufacturers to provide clearer labelling of products regarding suitability for patients' preferred dietary requirements, we can encourage a move towards ethical prescribing, fully informed choice, and improved patient compliance with medication.

Serena Strickland,

Medical Registrar, North Devon District Hospital.

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