

Managing requests for gluten-, lactose-, and animal-free medications

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Patients may ask their psychiatrist to prescribe gluten-, lactose-, or animal-free medications because of concerns about allergies, disease states, religious beliefs, or dietary preferences. Determining the source of non-active medication ingredients can be challenging and time-consuming, because ingredients vary across dosages and formulations of the same medication. We review how to address requests for gluten-, lactose-, and animal-free medications.

Gluten-free

Although the risk of a medication containing gluten is low,¹ patients with Celiac disease must avoid gluten to prevent disease exacerbation. Therefore, physicians should thoroughly evaluate medication ingredients to prevent inadvertent gluten consumption.

Medication excipients that may contain gluten include:

- starch
- pregelatinized starch
- sodium starch glycolate.¹

These starches can come from various sources, including corn, wheat, potato, and tapioca. Wheat-derived starch contains gluten and should be avoided by patients with Celiac disease. Advise patients to avoid any starch if its source cannot be determined.

Some sources may list sugar alcohols, such as mannitol and xylitol, as gluten-containing excipients because they may be extracted from starch sources, such as wheat; however, all gluten is removed during refinement and these products are safe.²

Lactose-free

How to respond to a patient's request for lactose-free medication depends on whether the patient is lactose intolerant or has a milk allergy. The amount of lactose that patients with lactase deficiency can tolerate varies.³ Most medications are thought to contain minimal amounts of lactose. Case reports have described patients experiencing lactose intolerance symptoms after taking 1 or 2 medications, but this is rare.³ Therefore, it is reasonable to use lactose-containing products in patients with lactose intolerance. If such a patient develops symptoms after taking a medication that contains lactose, suggest that he (she):

- take the medication with food, if appropriate, to slow absorption and reduce symptoms
- take it with a lactase enzyme product
- substitute it with a medication that does not contain lactose (switch to a different product or formulation, as appropriate).

Compared with patients who are lactose intolerant, those with a milk allergy experience an immunoglobulin E-mediated reaction when they consume milk protein. Milk proteins typically are filtered out dur-

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Disclosures

The authors report no financial relationships with any company whose products are mentioned in this article or with manufacturers of competing products.

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It may be reasonable to prescribe lactose-containing oral products to a patient with a milk allergy

Table

Resources for identifying medication ingredients

Resource	Uses/comments
DailyMed https://dailymed.nlm.nih.gov	<ul style="list-style-type: none"> • Use the search engine to find package inserts to review list of medication ingredients • National drug code or specific manufacturer, drug, dose, and formulation is required to review ingredient list for specific product
Pillbox https://pillbox.nlm.nih.gov	<ul style="list-style-type: none"> • Find medications without certain ingredients • Lists dosage strength, formulation, and manufacturer
Gluten Free Drugs http://www.glutenfreedrugs.com	<ul style="list-style-type: none"> • Lists medications that are gluten-free including over-the-counter products
Manufacturer	<ul style="list-style-type: none"> • Call to obtain a list of excipients and verify sources of excipients • Only way to truly verify that medication is safe to use because electronic databases may not be up-to-date • May use a Drug Facts and Comparisons manufacturer index to obtain contact information (registration required)
Pharmacist	<ul style="list-style-type: none"> • Assists with product review • May help identify alternative medications for use

ing manufacturing, but a small amount can remain. Although it has not been determined if oral medications containing milk protein can cause an allergic reaction, some researchers have hypothesized that these medications may be tolerated because acid and digestive enzymes break down the milk protein. However, because the respiratory tract lacks this protection, inhaled products that contain lactose may be more likely to cause an allergic reaction and should be avoided if possible. Because oral medications do not usually contain milk proteins, it may be reasonable to prescribe lactose-containing oral products to a patient with a milk allergy. If the patient experiences a reaction or wishes to avoid lactose, an alternative non-lactose-containing product or formulation may be prescribed.

Animal-free

Individuals who are members of certain religions, including Judaism, Islam, Orthodox Christianity, and the Seventh Day Adventist Church, typically avoid pork, and those who are Hindu or Buddhist may avoid beef products.⁴ Gelatin and stearic acid, which can be found in the gelatin shell of capsules and within extended-release (ER) tablets,

frequently are derived from porcine or bovine sources. The source of gelatin and stearic acid may change from lot to lot, and manufacturers should be contacted to assist with identifying the source for a specific medication. Consider these options to reduce a patient's exposure to animal-containing products:

- change from an ER to an immediate-release (IR) product (confirm that IR is gelatin- and stearic acid-free)
- use a non-capsule formulation
- remove the content of a capsule before ingestion, if appropriate
- try an alternative route of administration, such as transdermal.

How to best help patients

Before taking steps to accommodate a request for a gluten-, lactose-, or animal-free medication, which can be time-consuming, verify the reason for your patient's request. It may be sufficient to explain to your patient that typically exposure to excipients within oral medications is small and does not cause problems for a patient with lactose intolerance or a milk allergy. The resources listed in the **Table** can help provide further education on these concerns; however, due to potential delays in



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Pearls
continued from page 48

updating a Web site, it may be necessary to contact the medication manufacturer directly to verify ingredients.

If your patient still has concerns about ingredients, consider the following steps:

- Use the National Library of Medicine's Pillbox Web site (<https://pillbox.nlm.nih.gov>) to search for a medication, dose, or formulation that does not contain the concerning ingredients
- If the concerning ingredient is not listed, either prescribe the medication or contact the manufacturer for further information, depending on the patient's reason for the request
- If the concerning ingredient is listed, work with the pharmacist to contact the manufacturer.

There are 2 additional points to consider regarding medication excipients. Be aware that generic medications are produced by multiple manufacturers, and each may use different excipients. Also, a manufacturer may not guarantee that a medication is gluten-free because of the potential for cross-contamination during manufacturing, although the risk is extremely low.

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