Prescribing Tip No. 246 Date: 20<sup>th</sup> June 2019



## **Prescribing for lactose intolerant adults**

Some degree of lactose intolerance is reported to occur in approximately 25% of Europeans, 50-80% of people of Hispanic origin, people from south India and black people, and nearly 100% of Asians. The degree of lactose malabsorption varies widely among patients, but most individuals do not need a severely restricted or lactose-free diet<sup>(1)</sup>.

Lactose is widely used in pharmaceutical formulations as a diluent or filler in tablets or capsules. It is also used in lyophilized products, as a carrier in dry-powder inhalation products and in combination with sucrose to prepare sugar-coating solutions. Liquid preparations may also contain lactose.

In people with primary lactase deficiency the development of symptoms depends on how much lactose needs to be ingested before the available lactase is saturated. It has been suggested that 240ml of milk (**12g of lactose**) can be ingested by most people without developing symptoms. However, some individuals may develop gastrointestinal (GI) symptoms with lactose doses as low as 100mg to 200mg<sup>(1)</sup> with one RCT suggesting that lactase deficiency should not be considered a contraindication to the use of medicines containing 400mg lactose or less<sup>(1)</sup>.

The lactose content of oral medications is generally small in comparison to the amount of lactose in many dietary substances, particularly dairy products. The dose of lactose in most pharmaceuticals is usually less than 2g per day. Therefore, unless an adult has severe lactose intolerance, it is unlikely that lactose in a conventional oral solid-dosage form will cause severe GI symptoms. Patients often take more than one medication so cumulative exposure to lactose needs to be considered<sup>(1)</sup>.

UKMi pharmacists have produced a Q&A document on this topic for NHS healthcare professionals

## Advice for prescribers;

- Healthcare professionals should be aware of the possible effects of lactose in medications. The
  presence of lactose in a medicinal product, together with medical assessment, should be
  considered as a possible underlying cause of apparent GI intolerance to medications
- For patients with severe lactose intolerance, the lactose content of any medications should be determined prior to prescribing by consulting the relevant manufacturer of the product.
- Liquid preparations of most medicines are lactose-free and may provide an alternative option

## References:

1. UKMi; What factors need to be considered when prescribing for lactose intolerant adults? Q&A 131.7 Aug-16

To contact the Medicines Optimisation Team please phone 01772 214302

**Prescribing tip for information only** 

