

**What is Guarcol?**

Guarcol is a low energy, high quality, fine grade, guar gum. It shows very fast hydration, high viscosity and excellent thermal stability. Guarcol is a natural soluble fibre. It forms a highly thick (viscous) gel on contact with water.

Guar Gum is obtained from the grinding of the endosperms of the seeds of the *Cyamopsis tetragonolobus*. This ground powder consists of guar galactomannan, which is composed of polysaccharides D-galactose and D-mannose.(1)



**Why and where should Guarcol be used?**

Poor coordination of swallowing foods, especially fluids can lead to these foodstuffs entering the lungs and causing complications such as pneumonia. Food thickeners can help decrease these difficulties and complications.

Guarcol is a thickener of all types of fluids. When added to fluids as per mixing instructions, it helps improve coordination of swallowing, reduces the risk of fluid entering the lungs and improves enjoyment of eating.

**Can Guarcol be mixed in hot and cold foods?**

Guarcol can be used to thicken all types of fluids, eg water, cordial, juices, milk, tea, coffee, carbonated beverages including beer etc. Guarcol can be mixed with hot or cold beverages. Hot drinks can be mixed cold and heated or re-heated, if desired.

**Average shelf life after mixing.**

Guarcol does not alter the life expectancy of food and drink. Products in which Guarcol has been added may either be consumed immediately or refrigerated for later use. It is recommended that food or drink is not consumed after three days of mixing with Guarcol.

**How do you mix it without it going lumpy?**

To ensure lumps do not form, Guarcol needs to be added slowly. If lumps are found it means that the fluid may not be thick enough as some of the Guarcol is undissolved. Please refer to our Guarcol Recipe Book.

**Maximum thickening time.**

Guarcol achieves excellent thickness within ten minutes by adding the desired amount and stirring vigorously as illustrated on the container.

**Does Guarcol cause constipation?**

No, if Guarcol is used according to directions it will not cause constipation. Guarcol has a mild laxative effect. Care should be taken at the start of treatment as it may cause mild gastrointestinal disturbance such as flatulence, diarrhoea or nausea but these usually pass (1,4).

**Does Guarcol cause dehydration?**

No. Guarcol is a soluble fibre. It will hold some water through the small intestine; the amount being dependent on how much Guarcol has been mixed with the fluid. When Guarcol reaches the large intestine it is broken down and fermented by bacteria to water, carbon dioxide and free fatty acids (2,4). In the large intestine most of the water Guarcol carried with it is reabsorbed into the body (3). Any water not reabsorbed is minimal and with normal daily fluid intake, dehydration is not experienced in practice.

**Does Guarcol have any residual water holding capacity?**

Guarcol has minimal residual water holding capacity meaning it does not irreversibly bind water. Residual water holding capacity of dietary fibre is affected by particle size, and solubility of the fibre (2). Guarcol is a soluble fibre with a very fine particle size and so has a small residual water holding capacity. Guarcol will hold a small amount of water through the small intestine but once it reaches the large intestine it is broken down and most of the water is released and reabsorbed back into the body. Any water that is not released is of a minimal amount ranging from 8mL to 22mL in 200mL (4).

**Does Guarcol affect the absorption of other nutrients?**

No. Studies have shown that in adults Guarcol does not affect the overall absorption of calcium, iron, zinc and protein (5,6,7).

**Can Guarcol be used in Diabetic patients?**

Yes. Many studies have shown that Guarcol reduces blood glucose levels (1,2,8). Unlike starch based thickeners, Guarcol does not adversely affect blood glucose levels.

**What is the Glycemic Index (GI) of Guarcol?**

It does not have a Glycemic Index of its own. GI values are measured for carbohydrate rich foods that cause a rise in blood sugar levels (glycemic effect). Guarcol is pure guar gum and as it is a fibre doesn't cause a glycemic affect of its own (9).

**What is Gluten?**

Gluten is a mixture of proteins, gliadin and glutenin present in wheat flour and to a lesser extent in barley, oats and rye (1).

**Guarcol is gluten free**

Guarcol should not affect people suffering from coeliac disease as guar gum (Guarcol) is made up of polysaccharides and not any Gluten proteins. Also Orion's Guarcol is of the highest quality, made from 100% guar gum with no fillers or additives and in accordance with the TGA's, TGO69 can be classed as gluten free.

**What happens to Guarcol along the Gastrointestinal Tract?**

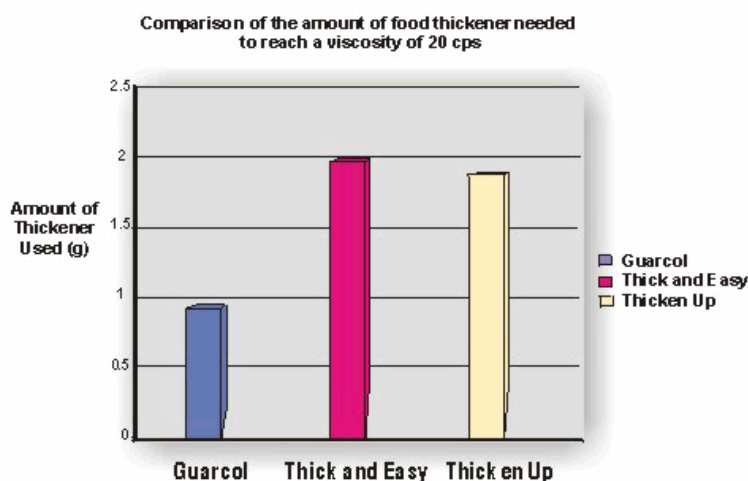
As Guarcol is a soluble fibre and forms thickened or viscous solutions it can slow the time taken for the contents of the gastrointestinal tract to travel along it. Guarcol is not absorbed itself but is broken down and fermented in the large intestine, by bacteria (2,4).

**Comparison to other products.**

Guarcol represents an economical thickening option when compared to starch based products. Gums have a higher molecular weight than starches and their molecules are more interactive. This is why less guar gum is needed to thicken liquids than starch (4), as it has five to eight times the thickening power (10).

Guarcol has been shown to provide a higher viscosity, weight for weight, when compared with other thickening products (11)

There are several grades of guar gum available, ranging from coarse to fine powder, with various rates of viscosity. Guarcol is a very fine, high quality, off-white powder, with a high rate of viscosity.



**Can Guarcol be mixed with alcohol?**

Guarcol can be mixed with alcohol. However, as with liquids and beverages Guarcol should be added slowly, otherwise excessive frothing can occur.

**Amounts of Guarcol required to thicken different consistencies.**

The amounts required for thickening are:

	<i>Fluid Thickness</i>	<i>Quantity required to achieve optimum thickness</i>
	<i>New Description(14)</i>	<i>Old Description</i>
	<b>Level 150</b> <b>Mildly Thick</b>	Level 1 Nectar or Pouring Cream or Thick
	<b>Level 400</b> <b>Moderately Thick</b>	Level 2 Honey or Thick Syrup or Thicker
	<b>Level 900</b> <b>Extremely Thick</b>	Level 3 Pudding or Thick Puree or Thickest

*½ metric teaspoon approximately 1.5g*

1/4 level teaspoon per 200mL

1/2 level teaspoon per 200mL

3/4 level teaspoon per 200mL

Maximum amount is 1/2 teaspoon per 100mL fluid.

**Can Guarcol be used for Gastro-oesophageal Reflux (GOR)?**

Yes. The thickening of feeds for infants has been shown to relieve simple GOR and improve infant comfort, to allow sleep (12, 13). Feed thickeners are an important first line treatment measure in relieving GOR in many affected infants. Guarcol is used as an infant feed thickener. The use of Guarcol as an infant feed thickener should be on medical or dietetic advice.

**Suggested Use Of Guarcol in Infants with GOR.**

<i>Type of feed:</i>	<i>Formula</i>	<i>Breastfeeding</i>
<b>Amount of Guarcol to be used:</b>	¼ level metric teaspoon to 300mL.	½ level metric teaspoon to 100mL cooled boiled water.
<b>Directions on how to use:</b>	Mix Guarcol with the formula powder before adding water. For liquid milks, mix Guarcol in with a whisk	Mix to a thick gel. Cover and store in fridge. Give 1/3-1 teaspoon before, during and after feeds. Discard after 24 hours.

- Availability**
- Guarcol is available in a range of presentations, which will support patient's needs from institutional through to home use.
- An economical, hygienic and Occupational Health and Safety friendly, 3kg jar is available for use in institutional catering setting. Handy grip tabs at the back of the container make it easy to manipulate and of a weight that does not exceed safe lifting levels. The screw top lid helps ensure the freshness and integrity of the product by sealing out moisture and other contaminants.
- The re-sealable 500g tin is suitable for use in both institutional settings and the home and is available nationally through retail pharmacies.
- The 25g sachet is ideal for patients with transient symptom and also makes an ideal discharge pack. It is available to hospitals on request for discharge patient use.
- Guarcol is GST exempt.
- Guarcol is available on an Authority prescription for Veteran Affairs card holders through retail pharmacies. This authority is only granted if the patient has consulted a dietician or speech pathologist, who can make a 'Recommendation for Nutritional Support/Supplement' to both the Department of Veteran Affairs and the prescribing doctor.
- Contact Point**
- Drug Information Pharmacist  
 ORION Laboratories Pty Ltd ABN 56 009 293 136  
 25-29 Delawney Street, Balcatta, Western Australia 6021 AUSTRALIA  
**Telephone (all hours): +618 9441 7800**  
 FREE PHONE: 1800 805 546 FREE FAX: 1800 004 110  
 EMAIL: customerservice@orion.net.au; WEBSITE: www.orion.net.au  
 ORION® is a registered trademark of Orion Laboratories Pty Ltd
- Prepared By**
- Updated by Allison Rieck B.Pharm FSHP, MPS  
 Consultant Clinical Pharmacist, June 2004
- Amended by Robert Kimpton, B.Pharm MSHP FPS  
 Managing Director, August 2008
- Other Information Available**
- Guarcol User Guide  
 Material Safety Data Sheet  
 Guarcol Mixing Guide Book
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  14. Speech Pathology Australia (SPA) and Dieticians Association of Australia (DAA) released The Australian Standards for Texture Modified Foods and Fluids in May 2007, changing the description by which the textures of modified fluids are named.

**Revision Information**

Date	Document Name	Superseded Document	Revision Information
7 May 2007	GUA00726_FAQ_003	GUA00726_FAQ_002 25 June 2004	Pack size 25g sachet replaced 50g sachet
May 2008	GUA00726_FAQ_004 May 2008	GUA00726_FAQ_003 7 May 2007	Change in <i>Naming Convention</i> of <i>thickness level</i>
August 2008	GUA00726_FAQ_005 August 2008	GUA00726_FAQ_004 May 2008	Inclusion of List of References to FAQ