

County wide change from predominantly starch-based thickeners to Resource® ThickenUp® Clear.

Alison Smith RD, Prescribing Support Dietitian,
Chiltern and Aylesbury Vale Clinical Commissioning Groups



Introduction.

Prescribed thickeners are used to thicken fluids to a more viscous consistency than normal, because drinking thicker fluids has long been thought to reduce the risk of aspiration for people with dysphagia. A recent systematic review has identified that thickening liquids can reduce risk of aspiration.¹ Many older people live with dysphagia, and a recent review study² found that dysphagia in older adults occurs in:

- 13% of free living population
- 25% of those in hospital
- 60% of those resident in nursing homes

The community prescribing costs of thickeners can therefore be significant, particularly when the ongoing growth in the older population is considered, but the costs of not prescribing thickeners or of using thickeners inappropriately could be of equal or greater significance if incidence of related health problems (e.g. chest infections, aspiration pneumonia) are also taken into account.

Overview of thickener prescribing in Buckinghamshire – where we were, and where we wanted to be.

I became aware of the variety of thickeners prescribed by the local GPs and discussed this with the Speech and Language Therapists (SLTs) and Dietetic leads. I was familiar with the greater palatability of gum-based thickeners compared with starch-based thickeners from joint working with SLTs in my previous post, and the countywide SLT service were also keen to use gum-based thickeners for patients who required thickened fluids. The community SLTs had been requesting prescription of Resource® ThickenUp® Clear from GPs for some time, but were aware that this was not always prescribed instead of a more familiar starch-based thickener. The SLTs had requested some training for care homes from the local Nestlé Health Science Dysphagia business representative, but despite these care homes subsequently requesting a change in thickener prescription, most GP practices did not make this change.

The acute hospital sites used a starch-based thickener, which did not form part of their enteral feeding contract, therefore they were agreeable to making a change to a gum-based thickener so that the same product could be used across the county.

The SLT team contacted other areas which had already made a change to a gum-based thickener for their advice, and gathered evidence in support of the change across Buckinghamshire. As a team they also trialled the 3 gum-based thickeners which were on the market at that time – Nutilis Clear (Nutricia), Resource® ThickenUp® Clear (Nestlé Health Science) and Thixo-D® Cal Free (Sutherland Health Group Plc). Based on all the evidence they could obtain, and their own trials, the SLTs' preferred option was Resource® ThickenUp® Clear. This was not the cheapest gum-based thickener on the market, but with the evidence provided by the SLT team, it was clear that it was going to be the most cost effective product for use across the county and it was also more cost effective than the starch-based thickener currently in use.

Guidance for GPs.

A plan was formulated to change the thickener used across the hospital sites first. Once this change was complete, a brief guidance document was produced for GPs, to alert them to the change in thickener type and to the quantity of thickener which would be required for each patient who required thickened fluids.

For Resource® ThickenUp® Clear and for the most commonly used starch-based thickener, the quantity required to thicken a minimum of 1600ml fluid intake each day³ to stage 1, 2 and 3 was calculated. This was then translated into the number of tubs of thickener, which would need to be prescribed per patient, per month. This information was compiled into prescribing guidance and is available to download via our trust website:

<http://www.bucksformulary.nhs.uk/chaptersSubDetails.asp?FormularySectionID=25&SubSectionRef=A2.05.02&SubSectionID=A100&drugmatch=3983#3983>

The reality for GPs

From ongoing GP notes, audits and communication from GPs, it was clear that many GPs did not understand the requirement for thickener prescription, and more particularly the amount of thickener required per month to ensure that all drinks could be thickened to the correct texture. Prior to the change of thickener type, many GPs prescribed only 1 tub of thickener per month only, even though this would be adequate for less than 1 week when used correctly. It was therefore clear that when requesting thickener prescription, SLTs need to advise the quantity of thickener which should be prescribed each month (i.e. minimum number of tubs per month), rather than expecting GPs to understand this without guidance.

Several GPs made contact to question the amount of thickener requested, as they were unaware that 5 tubs of Resource® ThickenUp® Clear per month is not an excessive amount. As a result of guidance, one GP advised that he now realised that he had never previously prescribed an adequate amount of thickener for any patient.

Community SLTs were not previously in the habit of advising GPs exactly how much thickener would be required each month, therefore it was suggested that this level of information should be included in all correspondence requesting thickener prescription.

Prescribing spend.

The Medicines Management Team was aware that implementing this guidance was likely to increase overall CCG spend on thickeners. This was still considered to be cost effective prescribing, because adequate prescribing of the most palatable and acceptable (to patients) thickener should help to minimise costs associated with prescribing inadequate amounts or a less palatable/acceptable product. For example:

- Prescribed antibiotics and/or acute admission due to chest infections or pneumonia caused by aspiration of unthickened fluids
- Prescribed antibiotics and/or laxatives and/or acute admission due to dehydration or constipation caused by inadequate fluid intake, because of dislike of fluids thickened with a starch-based thickener

Care Homes.

When the GP guidance was launched, the GPs were asked to let the Prescribing Support Dietitian know of any care home for whose residents they currently prescribed any thickener. Additionally, the community Dietitians and SLTs also highlighted care homes where starch-based thickeners were currently used. The local Nestlé Health Science Dysphagia business representative was asked to provide training for staff

in each care home identified on how to use Resource® ThickenUp® Clear . After the training had been undertaken, the Prescribing Support Dietitian contacted the GP practice/s for residents in that care home, to request them to change all thickeners prescribed. GPs were once again sent a link to the guidance document together with explanation regarding how many tubs of thickener would be required per month.

To date, training has been provided for 56 care homes, with many care homes requiring more than 1 training session to capture all staff, or because staff changes left few staff who understood how to use Resource® ThickenUp® Clear appropriately.

More than a year on from the start of this process, there are still care home residents whose GPs prescribe an inadequate amount of thickener for them, therefore reminders in SLT letters of the amount of thickener required per patient, per month continues to be essential.

The reality in Care Homes

In one care home a resident was reported to have frequent chest infections, and on closer questioning it was found that only one tub of thickener was prescribed per month. Staff in this care home were unaware that they needed to raise this inadequate amount of thickener with the patient's GP, therefore once the tub had run out they gave the resident unthickened fluids for the remainder of the month. Once training had been provided for staff in this care home, with the correct amount of thickener being prescribed each month, the resident ceased to have regular chest infections, saving the cost of regular antibiotic prescription and reducing the likelihood of the resident developing antibiotic resistance and/or requiring acute admission.

In another care home, where a number of new staff were employed, 3 different thickeners (Resource® ThickenUp® Clear, Resource® ThickenUp® and another starch- based thickener) were prescribed for 3 residents on 1 unit. The staff were using all three thickeners in the same way, and reported that the resident for whom Resource® ThickenUp® Clear was prescribed found it unpalatable. As gum-based thickeners have a different mode of action from starch-based thickeners, mixing the former with fluid in the same way as the latter will not achieve a palatable or consistent result. Once training had been provided for care home staff, all 3 residents were changed to Resource® ThickenUp® Clear, and there were no further reports of unpalatable thickened fluids in this home.

Joint working.

Joint working between the Nestlé Health Science Dysphagia business representative, the SLTs and the Prescribing Support Dietitian has been key to changing over the prescribed thickener in care homes. Although training had been provided for some care homes before the above process was in place, in most cases this had not resulted in a change of thickener prescription, because GPs are often wary of changing a prescribed product when requested to do so by either a company representative or a care home staff member. Having the CCG Medicines Management Team approval of this changeover was essential to making sure that the change occurred.

Other issues.

Another issue which came to light related to the name of the product itself. Most GPs were unaware that there are 2 different products produced by Nestlé Health Science with almost identical names - Resource® ThickenUp® (starch-based thickener) and Resource® ThickenUp® Clear (gum-based thickener). Due to this lack of awareness, some GPs prescribed the former product instead of the latter – a problem which is not only seen for these products, but for other makes of thickener and for many oral nutritional supplements as well.

It was therefore necessary to make it very clear to GPs that there are 2 almost identical sounding products available, one of which should not be prescribed. This was another area where SLTs could help GPs by using the exact name of the thickener required when requesting a prescription, and to state which product not to prescribe, rather than making any assumptions that the GP knows which product is required.

Future plans.

Discussion is now taking place regarding those patients in the wider community, who are no longer under the care of a SLT, but for whom starch-based thickeners continue to be prescribed due to previously diagnosed dysphagia, and whether it is appropriate to change them over to Resource®ThickenUp® Clear as well.

The potential for reviewing antibiotic prescriptions for chest infections/UTIs for care home residents for whom a thickener is prescribed, and comparing spend both before and after introduction of adequate amounts of Resource®ThickenUp® Clear, is also being considered by the Medicines Management Team.

Conclusion.

The prescribing of thickeners is an area about which most GPs admit to having little expertise or knowledge. SLTs trained in dysphagia diagnosis and management have both the knowledge and expertise regarding these products, but may not be aware of how little GPs know about appropriate use of thickeners, which can mean SLT requests for prescription do not contain all the information that GPs need.

This case study demonstrates the importance of multidisciplinary working and of understanding and supporting different groups of health and care staff. Groups who are likely to require support and advice include:

- GPs - to ensure that thickeners are prescribed cost effectively, taking into account the wider costs of inappropriate prescription and its potential impacts on other prescribing (e.g. antibiotics) and even acute admission
 - Care home staff - to ensure that thickeners are used correctly, and that enough thickener is provided to thicken all drinks as advised
 - SLTs - to ensure that letters requesting thickener prescription give GPs all the information (including product name and quantity) that they require to enable them to prescribe appropriately
-

References.

1. Steele CM, Alsanei WA, Ayanikalath S, Barbon CEA, Chen J, Cichero JAY, Coutts K, Dantas RO, Duivestijn J, Giosa L, Hanson B, Lam P, Lecko C, Leigh C, Nagy A, Amasivayam AM, Nascimento WV, Odendaal I, Smith CH, Wang H (2015). The Influence of Food Texture and Liquid Consistency Modification on Swallowing Physiology and Function: A Systematic Review. *Dysphagia* 30: 2 – 26
2. Badoui. L. et al (2013). Intestinal cryptosporidiosis in HIV-infected patients in the department of infectious diseases. *BMC Infectious diseases*. Vol. 14 (sup. 2) P. 52.
3. Cichero JAY (2013) Thickening agents used for dysphagia management: effect on bioavailability of water, medication and feelings of satiety. *Nutrition Journal* 2013, 12: 54.
3. Hodkinson B, Evans D, Wood J (2003) Maintaining oral hydration in older adults: a systematic review. *Int J Nurs Pract*. Jun 9(3): S19 – 28.