Biatain® Silicone combines superior absorption with gentle and secure fit

In the uncertain process of healing wounds, we all want to know we make every day count. At Coloplast Wound Care, we listen and respond to what you experience when caring for wounds. That is why we designed Biatain Silicone in collaboration with Health Care Professionals.1

Biatain Silicone has the unique Biatain 3D polymer foam, which absorbs exudate vertically, locks away fluid even under pressure, and conforms to the wound bed, ensuring superior absorption.2,3,4

The perforated, soft silicone adhesive wound contact layer ensures a gentle fixation to wound and body, for a comfortable and secure fit with minimal pain upon removal of dressing.5,6

Welcome to JCN’s ‘snapshot’ learning, which, in this issue, introduces Biatain® Silicone. Read the feature, then go online and complete the accompanying e-learning module to find out more about using this silicone adhesive foam dressing in day-to-day clinical practice — the CPD points gained count towards revalidation.

(www.jcn.co.uk/learning-zone/units/lesson/77/91).

**WHAT IS BIATAIN SILICONE?**

Biatain Silicone, which is available both in normal and lite versions, is a multilayered soft silicone adhesive foam dressing which can be used on a wide range of exuding wounds for moist wound healing and exudate management.

The dressing consists of:

- **Outer film** — the top film is vapour permeable, bacteria- and shower-proof. An *in vitro* analysis found that the Biatain dressing had higher permeability when compared with nine other silicone adhesive dressings (Anderson et al, 2014)

- **Lock-away layer** — the fluid-handling properties of the dressing ensure that exudate is locked away, thus minimising the risk of maceration to periwound skin and leakage. In two recent evaluations, 96% and 90% of the clinicians involved respectively gave the dressing the highest score for fluid-handling capability (Cartier et al, 2014; Chadwick et al, 2014)

- **Conformable Biatain Foam** — the soft and flexible design of Biatain Silicone ensures a close fit to the wound and body. The foam pad at skin level makes the dressing comfortable, even under pressure or compression therapy (Barrett and King, 2014). In a case series evaluation involving 39 patients, 87% gave Biatain Silicone the highest score on a five-point scale (where 0=very uncomfortable and 5=very comfortable) (Chadwick et al, 2014)

- **Silicone adhesive layer** — this wound contact layer provides a secure fit to keep the dressing in place (Chadwick et al, 2014), while also ensuring minimal pain on dressing removal

- **3-piece non-touch release liners** — the 3-piece non-touch opening provides aseptic and easy application, helping to reduce any dressing waste. Indeed, in a 300-patient evaluation, 94% of the clinicians involved found the dressing easy to apply and 97% said it was easy to remove (Markey et al, 2015); findings which mirror those of other evaluations (Cartier et al, 2014; Chadwick et al, 2014).
HOW BIATAIN SILICONE WORKS

When in contact with exudate, the 3D foam structure of Biatain Silicone conforms to the wound bed and absorbs exudate vertically. This, together with the lock-away layer, locks away fluid within the dressing’s structure, while still leaving the wound moist for optimal healing conditions.

The acronym **c.a.r.e.s.** can be used to explain how the dressing works to provide an optimal wound-healing environment by considering the patient, wound and outcome, namely:

- **c** **Conformability.** Biatain foam absorbs exudate vertically and swells to conform closely to the wound bed.
- **a** **Absorption.** Biatain foam’s 3D structure restricts exudate to the wound bed, reducing the risk of maceration of the wound edges and excoriation of the surrounding skin. The semi-permeable top film allows for moisture vapour transfer to further combat the build up of excess exudate.
- **r** **Retention.** The 3D foam structure locks exudate away from the wound and surrounding skin even under compression.
- **e** **Exudate management.** The combination of conformability, absorption and retention properties of Biatain foam provides the optimal wound-healing environment. This dressing can improve patient quality of life by preventing exudate-related problems such as maceration and excoriation, dressing leakage, malodour and the potential for wound infection.
- **s** **Simple choice.** Biatain Silicone is consistent across its range of non-adhesive, adhesive, soft hold, silicone and silver and Ibu products. The 3-piece non-touch release liners provide an easy-to-use range of products suitable for a variety of wound types, making it a simple choice for patients and wounds to gain good outcomes.

In short, the properties of Biatain Silicone include those that are recognised as managing exudate effectively, such as (Stephen-Haynes, 2011; Barrett and King, 2014):
- The ability to ‘lock-away’ exudate
- The ability to be used under compression
- The ability to prevent maceration/excoriation of periwound skin
- Being comfortable and acceptable to patients
- Conforming to the wound site
- Minimising trauma and pain on removal.

REFERENCES

Anderson MB, Marburger M (2014) Comparison of absorption and fluid handling between ten dressings with silicone adhesive. Poster presentation, Wounds UK, Harrogate


**Snippet**

Maceration can be caused by excess exudate which saturates the periwound skin, causing wet, boggy edges which prevent epithelial cell migration. Excoriation can also occur, as enzymes present in wound fluid cause breaks in the skin and a red-coloured appearance, which can be painful and lead to infection.

Foam dressings with the ability to bubble and conform to the wound bed reduce the risk of maceration and excoriation and provide an optimal wound healing environment.

**Learn more about Biatain Silicone and gain CPD points with the JCN learning zone**

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Improving the Dysphagia Experience

Tracy Wothers
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The importance of nutrition for hospital patients cannot be overestimated; it aids wound healing, helps reduce falls due to loss of strength/muscle mass, reduces incidences of pressure ulcers and helps to reduce length of stay. However, achieving adequate nutrition in hospital can be challenging with many different obligations vying for priority on a hospital ward. In addition, certain medical conditions can make meeting a person’s nutritional needs even more difficult. Dysphagia or swallowing difficulties is one such condition and its impact on a person can be significant.

In an acute hospital it is estimated that 15% of all inpatients are affected by dysphagia, this number can be as high as 50% of people with acute stroke and up to 74% of nursing home residents. Dysphagia is not a condition limited to older patients; it can occur as a result of a number of conditions across the lifespan, including learning disabilities or head and neck cancers. For some people, dysphagia will resolve as their associated medical condition improves, however for many dysphagia will be a permanent and lifelong condition.

Dysphagia can have a number of significant adverse consequences and complications for the individual, as outlined in the figure below:

![Figure 1: Consequences of dysphagia](image)

One management strategy recommended for people with the diagnosis of dysphagia is to follow a texture-modified diet. This type of diet can involve thickening drinks and/or modifying the consistency of food to varying degrees, as recommended by a speech and language therapist. Changing the consistency of foods and fluids can help the individual to control the food and/or fluids more safely during the swallowing process. Although this type of diet has been shown to be safer for individuals with dysphagia, it can have an impact on the person’s quality of life, an aspect that no healthcare professional should forget.

Historically, a traditional starch-based thickening agent has been used in my acute hospital Trust. This type of
thickening agent has been in commercial use for dysphagic patients for a number of years\textsuperscript{11} however it is not without its drawbacks. Starch-based thickeners are known to react differently with different types of liquids, to continue to thicken over time and can have an unappealing appearance.\textsuperscript{14} In addition to this, starch-based thickeners are sensitive to salivary amylase - an enzyme found in saliva which can begin to break down the starch in the mouth and thin the liquid.\textsuperscript{15} This is a risk as it can mean that patients do not always receive a drink at the recommended consistency.

A meeting with our new local Nutricia Representative was an opportunity to review the current product and it was during this meeting that we were introduced to Nutilis Clear, a gum-based thickening agent. Gum-based thickening agents are a new generation of thickeners that have many improved properties – clearer appearance, improved stability and, perhaps most importantly, amylase resistance features.\textsuperscript{16} This meeting gave us the opportunity to see the new product and opened our eyes to a potential way of improving our patients’ experiences. The guidelines for mixing our previous thickener did not lend themselves to easy mixing, by stating a range of scoops for each stage within the guidelines, i.e. 2-3 scoops for Stage 1 and 3-4 scoops for Stage 2 etc. In our experience, this ambiguity increased the risk of staff preparing a drink which was too thick and no longer the recommended consistency. This in turn could lead to patients drinking less and having an increased risk of dehydration. As a Trust we had no significant reports of any problems with the thickening agent we were using and so it would have been easy to have left things as they were. However, we also knew that many such errors could go unnoticed and as such unreported. Conversely, the guidelines for Nutilis Clear are simple, 1 scoop for Stage 1 and 2 scoops for Stage 2 etc. and therefore it was apparent that there would be a number of improvements if we changed to this new product.

Nutricia helped in many ways with the change process, they produced a cost comparison chart and posters, and offered to help with the changeover of products on the wards. Additionally, we felt that education would be a key part of the change process as it is known that involving ward staff in change is a helpful approach to engaging staff in changing practice.\textsuperscript{17} We targeted key staff groups that are involved in the delivery of nutrition and hydration to patients on the wards – Registered Nurses, Health Care Assistants and Ward Housekeepers. We opted for a mix of both classroom and ward sessions that were attended by a mix of staff giving people a chance to learn from each other. Teaching sessions were carried out by a Speech and Language Therapist and Nursing staff with the support of Nutricia Representatives.

Positive outcomes from the introduction of Nutilis Clear were seen surprisingly quickly, with both staff and patients giving positive feedback the day of introduction. Previously patients and their families would comment about having to have “wallpaper paste” drinks and unappetising drinks can have a detrimental effect on patient’s oral fluid intake.\textsuperscript{6} The verbal feedback on the day was very positive with both staff and patients mentioning the improved appearance and taste. We collected verbal feedback from staff, patients and families
and also produced a short questionnaire so we could compare our previous thickening agent to Nutilis Clear. Details of the results from the staff questionnaire can be seen in the table below:

Table 1: Results from staff questionnaire

<table>
<thead>
<tr>
<th>Gum-based</th>
<th>Starch-based</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% very easy to thicken drinks</td>
<td>40% very easy or easy to thicken drinks</td>
</tr>
<tr>
<td>92% no problems with mixing</td>
<td>65% drinks often become lumpy during mixing</td>
</tr>
<tr>
<td>88% reported no change to thickness of drinks over time</td>
<td>100% reported changes to thickness of drinks over time</td>
</tr>
<tr>
<td>85% easy or very easy to thicken foods</td>
<td>100% difficult or very difficult to thicken foods</td>
</tr>
</tbody>
</table>

**Patient Centred Care**

*‘Good coordination between the hospital and the home or community is needed when patients are transferred between settings’*

The above quote, from The Kings Fund, highlights the next step of our work; we decided to go on to look at our discharge process for dysphagic patients. Previously, when we discharged patients on a thickening agent we generally sent them with a copy of the Speech and Language Therapist’s recommendations and any supporting advice from the ward staff. We felt that it would be beneficial to offer patients and/or their families more information on their diagnosis and why they were being discharged on a thickening agent. We compared the information we supplied to patients post bowel surgery with a new stoma or new diabetics with the information supplied to our patients with dysphagia. The first two patient groups receive information and supportive leaflets from companies who provide products or services to support with those diagnoses. It was clear that patients with dysphagia and their families could similarly benefit from receiving written information that they could refer to after discharge. To facilitate this, Nutricia shared with us some of their Nutilis Clear supporting information and patient leaflets.

To implement this, we currently have a trial of a discharge home support bag for all patients that are being discharged from the Trust on Nutilis Clear. The full contents of the bag are listed below:

**Nutilis Clear discharge home bags**
- Dysphagia information booklets
- Nutilis Clear guide
- Shaker
- Cup
- Tub of Nutilis Clear

This trial is currently ongoing with the support of Nutricia and we are following all patients supplied with the Nutilis Clear Discharge Home Bags with a short telephone questionnaire to gauge their thoughts on the bag. The diagnosis of dysphagia is never given lightly as it can have a profound impact on the patient. Patients that need to follow a modified consistency diet due to dysphagia can find that it has a negative impact on their quality of life. For the majority of us eating and drinking is an enjoyable part of life and a dysphagia diet can deprive people of this enjoyment. However, dysphagia should not be a disabling condition and one that isolates people due to fear of choking and embarrassment. Anything that we can do as healthcare professionals that can help support and improve the quality of life for our patients whilst in our care and post discharge should be implemented.

**References**


NUTRICIA

Nutilis Clear

• Choose your thickener with clarity
• Collaborate with us for your dysphagia training needs
• To receive your Dysphagia Working Pack contact resourcecentre@nutricia.com

Which one would you choose?

SUPPORTING YOU TO SUPPORT YOUR PATIENTS