



A Slõ Story

**We believe dysphagia only means
drink differently, not have different drinks**

We therefore strive to
inspire those living with Dysphagia
and provide innovative ways to
thicken* favourite drinks

**If you can make a drink, you can thicken
one with the confidence of a clinician*



A Slō Story

2005 Slō Drinks started because of a chance conversation our Founder, Mathew had with a Speech and Language Therapist on a Monday afternoon in a Manchester hospital.

Walking out of a puree tasting he asked her, *“Is there anything else your dysphagia patients would like?”* She replied, *“A pleasant thickened drink.”*

Mathew spent the majority of his working life in the food and drink industry, promoting brands and creating new products for them. Specializing in the Catering Sector for beer and restaurant brands, he started to work in the Healthcare sector. Focusing on special diets for the UK’s National Health Service (NHS) Hospitals.

During this time, he began to understand how important nutrition is for a patient’s recovery and wellbeing, which ultimately introduced him to people with swallowing difficulties – dysphagia and the meeting with the Speech Therapist that inspired the launch of Slō Drinks.

Swallowing difficulties can range from slight to severe and once diagnosed, its medical term is Dysphagia. It affects the epiglottis, the flap of skin at the top of lungs/stomach. This doesn’t close quickly enough, and so ordinary foods go into the lungs instead of the stomach and induce choking. Clinicians call this aspiration. It can lead to aspiration pneumonia, malnutrition and worse.

To prevent these complications, meals need to be pureed, mashed or just soft. It was after presenting these meals that Mathew had his conversation.

After leaving the hospital he Googled thickened drinks and discovered tins of thickener were the product of choice. These contain a modified maize starch which you spooned into a drink to thicken it up.

This format had been used for over decade with no developments and several brands providing the same product offering.

When thickener from tins is added to a drink, it doesn’t work straight away and so carers tend to add more. They then pass to the drinker a drink that looks like grey wallpaper paste. It can also turn the taste of a drink sour. The thickener may not have dissolved and will need sieving through teeth and leave a gritty sticky residue on their teeth.

He couldn’t believe in the 21st century those with dysphagia have to put up with drinks like this. They should still be able to have something enjoyable to drink – despite their condition. That started a research project.

2006 Initial research reviewed current preparation practice, what drinks were being served and how they could be improved.

Patients were given drinks too thick or too thin for their swallowing ability. Some drinks separated within minutes. Some got thicker. Drinks stirred with the end of a pen and passed to patients with iceberg-sized un-dissolved pieces of thickener floating on the top of them. One person was recorded making a thickened drink and spilling more thickener around the cup than it.

Over several months he met with clinicians, therapists and carers around the UK using tins of thickeners presenting his solution.

It was a cup containing a powdered drink flavouring and a specific volume of thickener. To make, water was added. It would always match the flow rate the patient needed and therefore be safer to swallow.

Some said, "You're wasting your time." Others said, "We've been using tins of thickener for years and it does the job. Why change now?" Despite that, he continued taking on useful opinions and suggestions, until thousands of miles, plenty of late nights, early mornings and weekends - Mid 2006 - success.

Slō Drinks in cups were presented to Manchester Royal Infirmary and no changes requested. The following day presented them to the Royal Liverpool and the same positive response.

Shortly after he received an order and both Hospitals started to use them. That led to the next development – putting Slō Drinks on prescription.

The UK's NHS provides a service called Continuity of Care. If a patient is provided a product in the hospital it should be available to them after discharge on prescription.

As result a prescription application had to be made to the ACBS (The Advisory Committee for Borderline Substances). After months of collecting the data required to prove their suitability and submit an application.

The Slō Cold Juice drinks were approved. Unfortunately, the hot drinks were not and required further evidence to prove their case.

Slō Hot Chocolate, Slō White Coffee and Slō White Tea were finally approved and available in 2009.

2007 Product development was put on hold on focus switched to selling Slō Drinks to hospitals.

2008 Sale continue to grow but slowly. Most hospitals have contracts with international Pharma companies.

An application was therefore made to the National Health Service' own supplier – NHS Supplies to be listed on the Enteral Feeds contract. Listed in the contract every NHS hospital ward can order Slō Drinks direct.

2009 Slō Hot Drinks are approved by the ACBS.

A very significant meeting happened this year.

For the first time a Dietitian attended a meeting organized by the Speech and Language Therapy team. She asked if we could provide savoury oral nutritional thickened drinks.

This led to research into the viability of producing a thickened high protein, high calorie soup. By mid-2010 one had been created. Using only natural ingredients, it was presented ready to use and only needed reheating.

2010 To make Slō Soup available to patient after leaving hospital, it was trialed with patients. testing for safety, taste, ease of use and palatability. All the data required was collected over the next 10 months with positive results.

Unfortunately, by the end of 2010 additional research showed that whilst savoury nutritional supplements have a use, it would be limited. As a direct result, it was decided to terminate the project.

Slō Cold Hot and Cold Drinks are now being used across the Country.

2011 At a meeting with a diverse group of healthcare professionals, the benefits of using Slō Drinks to hydrate patients was discussed. One clinician started to laugh and suggested we should produce Sloe Gin - a British liquor.

She revealed that people with swallowing difficulties do want alcohol. As a company that focused on providing ways for this patient group to drink safely and maintain their hydration levels – it was dismissed as a joke.

Mathew believes every passing comment should be taken seriously and is always worth reviewing. Subsequent research highlighted there was a need to make alcohol safer to swallow. Those with swallowing difficulties don't want to drink to get drunk. They want to just enjoy the taste and the social side of drinking.

The possibilities of producing ways to make Slō alcoholic drinks were discussed but no action was taken.

2012 A Dietitian made contact to ask if we had an alcoholic range. Her elderly patient wanted to take Communion and couldn't because she was diagnosed with dysphagia.

After extensive research a tasteless, quick dissolving thickener that would thicken wine was found. A sample containing enough for one glass was packaged and sent – with great success.

Subsequently, the sachet and packaging was refined to contain enough of our thickener to change one UK standard pub measure (175ml) of red, white or rose wine into a Slō Wine suitable for any swallowing difficulty.

This led to a fundamental change in how Slō Drinks were made.

We would test our thickeners in a drink to decide which was most effective. Recording how the fats, sugars and pH levels of each drink affected the performance of the thickener. The volume

required to make a drink to a specific consistency was calculated and then put into a single serve sachet. To make a safe drink, the sachet contents simply needed to be mixed with the volume of liquid we specified.

2013 A Pediatric Dietitian heard about Slō Wine and wanted to know if we could make fizzy drinks safer to swallow. One of her clients wanted cola but could not thicken it.

Slō Fizzy was shortly available. It changes any carbonated drink into Slō Cola, Slō 7UP, Slō Sprite including Slō Carbonated water. It also trapped the bubbles in the drink which produced a pleasant popping sensation on the tongue.

Based on this success, attempts were made to thicken carbonated alcoholic drinks. Sachets were then made available to create Slō Beer and Slō Cider.

This year saw the start of the biggest research project undertaken. We were asked if we could create a milk based oral nutritional supplement (ONS) that is thickened

It would be another 3 years before it would finally make it to market

2014 Slō Drinks in cups and Slō Drinks sachets continue to sell.

Research continues to find ways to provide a palatable powdered pre-thickened oral nutritional supplement.

It highlights that current practice is to attempt to thicken supplements with starch and gum thickeners which do not work, (the high fat content of these supplements prevents these thickeners bonding to it) or use expensive ready to drink alternatives.

The first prototypes are produced ready for testing in 2015 and are called Slō Milkshakes+.

The Slō Drinkers Club is launched on the website entitling buyers to discounts.

2015 Slō Milkshakes+ testing begins with patients and proves successful. The data is collected, and an application made to the ACBS to make it available for Healthcare Professionals to prescribe. It is rejected. A revised application is submitted.

The first enquiry is received about how to use Slō Drinks with medicinal pills.

Taking solid dose medication is difficult to impossible for those with swallowing difficulties. There are many legal issues surrounding the crushing of pills and adding them to texture modified food and drinks. For many the only alternative is use liquid formulations which are expensive and don't match the flow rate that people need – ultimately making them unsafe.

A development plan is launched to source a solution.

The first order from America is received.

2016 Slō Milkshakes+ are approved and go on sale in March. They are the 1st and only powdered pre-thickened oral nutritional supplement in the world.

The first production run arrives unbranded to test the packaging design. All 40,000 sachets are labelled by hand, front and back. After making them ready just 7 sachets are sold. In April sales double to 14 sachets.

Research continues into how to make solid dose medication safer to swallow.

2017 Meetings with clinicians in an Acute and Community settings to introduce Slō Milkshakes+ take place throughout the year.

At one of these meeting a Dietitian highlights those with swallowing difficulties are deficient in vitamins and minerals. This is a direct result of not being able to consume large meals or eat in the quantities required to maintain a balanced diet. Vitamin and mineral pills are available but cannot be swallowed safely.

Our solution was to create oral nutritional sprays: Slō Vitamin Sprays.

These deposit the Recommended Daily Allowance of 12 essential vitamins on the inside of the cheek. There they are absorbed quickly through the buccal mucosa - inside of the cheek wall.

Whilst this worked well, it wasn't popular and was removed from sale at the end of 2018. However, it may just be ahead of its time. It provides a safe method of providing essential nutrients and may therefore re-appear in the future.

2018 A new way of describing flow rates was launched in the UK called the International Dysphagia Diet Standardization Initiative (IDDSI).

All packaging is revised, and we become the first company to print these terms on our packaging.

Reducing cross contamination in hospitals and care facilities becomes a priority for the NHS. Working with our sachet supplier, we become the first company to apply an antibacterial varnish to all our sachets. This prevents pathogens sticking to the packaging to reduce the risks of contamination.

2019 Working with a specialist manufacture, we create our latest Slō Drink - a liquid that makes pills easy to swallow.

Pill-Eze is a pre-thickened liquid which wraps around a tablet and holds it allowing it to be safely swallowed. It has a sweet cherry flavour to hide the taste of the pill or capsule in it. On arrival at the stomach it quickly dissipates leaving the pill to provide its intended relief.

Importantly, it is virtually chemically inert and compares to the Ph level of the stomach (4.2pH).

Subjected to over 100 scientific compatibility studies and as a result with the exceptions of: effervescent and crushed tablets; rapid dissolving, sustained release medication or those containing Iodine - Pill-Eze is compatible with pills, tablets and (liquid containing) capsules, vitamin preparations, food supplements and other solid dosage forms meant to be swallowed

Pill-Eze will dramatically reduce the need to use expensive liquid medicine preparations, however it will take time to be accepted. Liquid preparations have been used for a long time. But the UK's NHS and other Health Authorities around the world are under huge financial pressure to reduce spend on medication. As Pill-Eze can be used with off-licence generic medications it will be reviewed as an affordable and viable alternative.

There trend towards milk alternatives that are suitable for a Vegan diet, kick starts research into producing a water based oral nutritional supplements.

2020 Slō Juice+ is created. The first pre-thickened and powdered oral nutritional supplement which is suitable for Vegans. A program of patient testing is started.

Slō Milkshake+ Banana flavour is created and a program of patient testing starts.

When the IDDSI flow rates were introduced they included a new category IDDSI 1- Slightly Thick. Never used before it was slow to be adopted by prescribing clinicians, but demand for it is growing.

All Slō Drinks can therefore now be made at this level and an application to the ACBS has been made to approve Slō Milkshakes+ at this level.

2021 Slō Milkshake+ Banana is approved for prescription and sales start to climb of IDDSI Level 1.

Our founder starts searching for innovative ways to thicken hot and cold drinks. The aim, it must be quicker, cleaner and more reliable to use than thickener from tins.

Slō Juice+ formula is complete. However, ingredient prices start to increase. The decision is made to focus on maintaining supply of our existing products and re-visit this in the future.

2022 Sales of our Slō Milkshakes+ continue to climb and we are helping an increasing number of people here in the UK and overseas.

Research suggests that Soya is the #1 allergen in the world. We review our formula and decide to remove it. At the same time we change our artificial ingredients for natural ones.

We are now the only company in the world producing ONS for dysphagia and flavouring them with real bananas, strawberries and cocoa. We also have the lowest number of E numbers.

We review how to reduce waste after our products are used.

The sachet size is halved and are made of recyclable plastic film. The same film is used to make the pouch that holds the sachets. One pouch is created for each flavour and can be used for all IDDSI Levels. It's printed with the nutritional content, removing the need for a paper insert. After making a Slō Drink, no packaging is left.

We partner with a distributor in Belgium and start the process of gaining approving approval by the Belgian Health Authority.

Progress continues on a new Slō Drink, but is frustratingly slow.

2023 Slō Milkshakes+ sales indicate we are helping more and more people. For an unknown reason sales increase of Slō Wine, Beer and Fizzy (Soda) drinks.

Like all – we see a dramatic increase in prices of our ingredients. Having absorbed the price increase for a long time, we finally have to increase our prices to keep going. Despite this we still provide a more cost effective way to thicken drinks.

The Belgian Health Authority application is still awaited.

There is a breakthrough on the new way to thicken drinks and change them into Slō Drinks. It's called Slō Syrup and is a thickener in suspension – a liquid thickener. Work starts finalize the formula and test it. If successful, we hope it will end “Scoop-Stress” and over thickening.

2024 @ June

The Belgian Food Authority – 2 years on – approves Slō Milkshakes+. Our partner starts to sell.

Slō Syrup formula is finalized and will be available to buy at the end of the month.
