

What is Chyme Reinfusion?



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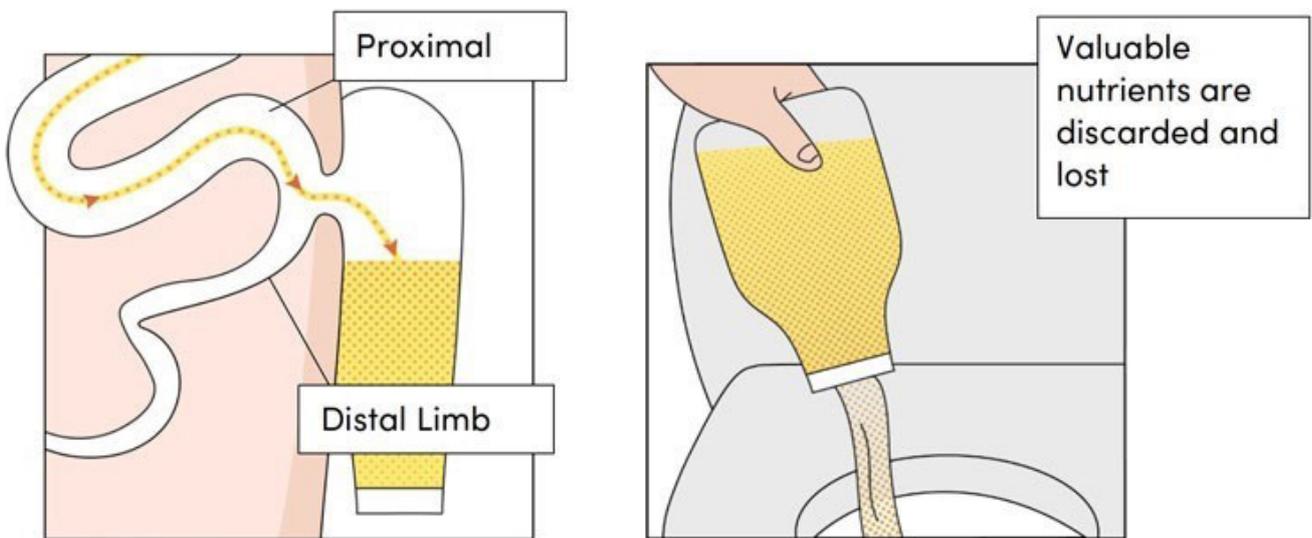


Figure 1. Chyme is collected in the Ostomy Appliance and discarded.
The Distal Limb experiences atrophy (shown) from inactivity

Chyme Reinfusion (CR) is a practice in the management of patients with High-Output Enterocutaneous Fistulas, and High-Output Enterostomies. Chyme Reinfusion enables patients to reestablish oral feeding and wean off the Parenteral Nutrition (PN) in as little as 3 days (1), resulting in significant health economic benefits and improvements in quality of life (QoL).

Compared to the standard approach of Parenteral Nutrition (PN) which provides nutritional support intravenously, Chyme Reinfusion maintains gut continuity and prevents gut atrophy (i.e. wasting away) by continuing to use all the functional gastrointestinal (GI) tract to deliver a person's caloric requirements (enteral nutrition) (2,3). The process involves returning chyme (partially digested food) collected in the ostomy appliance from the proximal (i.e. upstream) limb of the fistula or stoma, back into the distal (i.e. downstream) limb (4).

Traditional Approach to Handling Chyme

Chyme is traditionally referred to as 'waste output' that is discarded, but is in fact, a natural composition of valuable digestive secretions, nutrients and electrolytes from oral food that is crucial in maintaining fluid and electrolyte balance, and gut microbiome (2). There is now a growing body of literature which describes the benefits of Chyme Reinfusion for reestablishing intestinal function in High-Output Enterocutaneous, and High-Output enterostomy and Ileostomy patients (1-5).

Chyme Reinfusion Improves Patient Outcomes through Gut Rehabilitation

Chyme Reinfusion was first described in detail by Dr Etienne Levy in 1977, and has gained increasing traction from clinical bodies such as ESPEN (European Society for Clinical Nutrition and Metabolism), being recommended as an alternative therapy for patients presenting with high intestinal output losses of stomal or fistula contents (6,7).

The process is clinically proven to improve patient outcomes and nutrition by promoting the absorption of valuable contents in Chyme that would have otherwise been discarded. By maintaining gut continuity and function, Chyme Reinfusion allows for the preservation of liver enzymes which minimizes the risk of liver injury (5). By restoring the function of the distal gut which is primarily responsible for water reabsorption, Chyme Reinfusion allows for fluid and electrolyte balances to be maintained, reducing the risk of short and long-term kidney injury (8).

The physiological and overall clinical benefits of Chyme Reinfusion continue to be recognized by international leaders around the world in regard to its importance on gut health and the microbiome. There is a growing consensus that Chyme Reinfusion has a significant cost saving effect as it reduces length of stay in hospital and readmissions, and prevents complications associated with Parenteral Nutrition such as Catheter-line associated blood stream infections (CLABSI) (5,9).

The Insides Company, a leader in this therapeutic space, has developed “The Insides™ System” for the effective chyme reinfusion treatment of enteroatmospheric fistulas and high-output enterostomies. To learn more about our innovative system for chyme reinfusion, please see the following link or contact us via:

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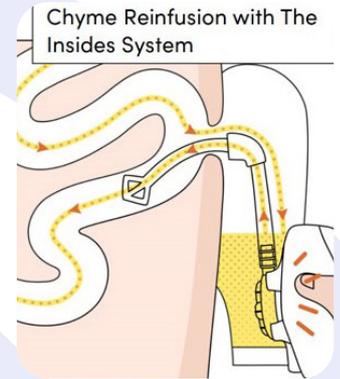


Figure 2. Chyme Reinfusion with The Insides System enables patients to recycle Chyme at both hospital and home, when needed.

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