

Background

A medical food (MF) (Seracal™) consisting of pre-digested fat with essential fatty acids, monoglycerides, and choline-containing phospholipids, has been developed to enhance fat/nutrient absorption across a variety of malabsorption conditions. The proprietary active ingredient, Lym-X-Sorb®, has been clinically shown to enhance weight gain in patients with cystic fibrosis (CF). The MF comes in a taste-neutral powdered form, can be mixed with soft foods, and should be consumed throughout the day or used as part of a tube feeding regimen. The MF has now been applied to patients with gastrointestinal (GI) symptoms in non-CF, malabsorption diagnoses. These pediatric and adult patient case studies demonstrate increases in body weight and improvements in GI symptoms with the MF.

Science of Lym-X-Sorb®

A precise blend of 3 lipid ingredients that self-assemble into in a unique crystalized form, enhancing absorption.

- Long-Chain Fatty Acids, including omega-3 alpha-linolenic acid (ALA) and omega-9 oleic acid
- Monoglyceride high in omega-6 linoleic essential fatty acid
- Choline-containing lecithin that the body recognizes as a bile component and recirculates for increased absorption

Nutrition Facts	
15 servings per container	
Serving size 1/4 cup, leveled (13g)	
Amount Per Serving	
Calories	70
% Daily Value*	
Total Fat 4g	8%
Saturated Fat 0.5g	1%
Trans Fat 0g	0%
Polyunsaturated Fat 2g	4%
Monounsaturated Fat 1g	2%
Cholesterol 0mg	0%
Sodium 110mg	5%
Total Carbohydrate 7g	14%
Dietary Fiber 0g	0%
Total Sugars 0g	0%
Includes 0g Added Sugars	0%
Protein 0g	0%
Vitamin D 0mcg	0%
Calcium 0mg	0%
Iron 0mg	0%
Potassium 0mg	0%
Choline 160mg	30%

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

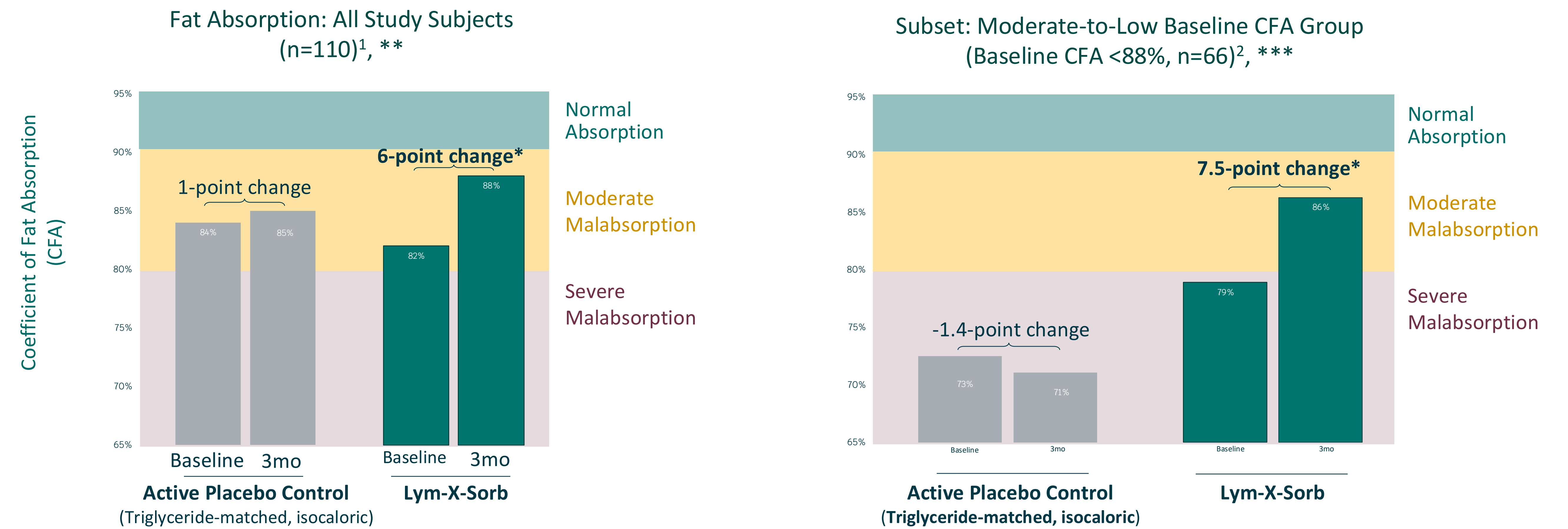
INGREDIENTS: TAPIOCA, MALTODEXTRIN, MONOGLYCERIDES, SOY LECITHIN, WATER, NATURAL FLAVORS, LINOLENIC ACID, BAKING SODA, OLEIC ACID, CALCIUM CHLORIDE, MIXED TOCOPHEROLS AND ROSEMARY EXTRACT (FOR FRESHNESS)

CONTAINS: SOY

Suggested serving size: ¼ cup = 4 T
 Pediatric (1 -11 yrs) - up to ½ cup per day
 Adult – up to ¾ cup per day

Medical Food Efficacy Data

Lym-X-Sorb Significantly Improves Fat Absorption



*p<0.05 (difference from baseline within randomization group)

**All Subjects: n = 41 and 36 for the control group, and n = 35 and 27 for the Lym-X-Sorb group at baseline and 3 months respectively

***Higher-Need Subjects: n=12 and 14 for the control group and Lym-X-Sorb group respectively Stallings et al, JPGN, Dec 2016

Pediatric Case Study

- 8-year-old with a history of VACTERL, short gut syndrome due to necrotizing enterocolitis.
- Previous parenteral nutrition dependence and G-tube dependence, currently receiving home blended enteral formula and an oral diet, MF added to regimen.
- After adding the MF, an immediate improvement in bowel movement frequency and consistency and improvement in appetite and tolerance to home blended formula through G-tube was seen.
- During initial 4 weeks of MF consumption, patient gained weight appropriate for catch-up growth and improvement from 2.3rd%ile weight for age to 3.3rd%ile weight for age growth curve (CDC 2-20 growth curve).
- 3 months after the first follow-up on the MF, weight gain for catch-up needs continued and weight %ile increased to the 6.45%ile - at this time he increased from 1 serving to 2 servings per day.

Adult Case Study

- 74-year-old adult male, 5 years s/p pancreatic cancer and s/p Whipple procedure.
- Oral diet with pancreatic enzymes. Eating well but could not gain weight.
- He began consuming the MF for 5 weeks.
- He consumed the MF 3 times per day using 3 T for a serving size. He found that mixing it with applesauce was the best way for him to consume it.
- The patient gained 8 lb., his GI symptoms improved, and he reported less severe GI pain.
- Over the past 4 months he has received a short-course of chemotherapy.
- He has continued to consume the MF daily and reports that it continues to help with symptoms and weight maintenance.

Summary and Implications for Practice

A unique medical food designed originally for people with cystic fibrosis; recent case studies show positive outcomes for people with other diagnoses associated with malabsorption – especially fat malabsorption.



Oral
Meals/Snacks/Soft foods



Enteral
via Tube Flush



Parenteral
to increase calories, help wean from PN