**Structured Triglyceride* Absorption and Utilization**

1. In the lumen, long-chain fatty acids (LCFAs) from fish oil triglycerides (TG) are absorbed into the mucosal cell.
2. These LCFAs are packaged into a droplet that is coated with a protein rendering it water-soluble, thus forming a chylomicron.
3. The chylomicron leaves the mucosal cell via lymphatic circulation and passes into systemic circulation (blood). Once in systemic circulation, peripheral tissues can take up the contents of the chylomicron.
4. LCFAs are a source of omega-3 fatty acids, which help support immune function.

**Long-Chain Triglycerides**

1. In the lumen, MCFAs from medium-chain triglycerides (MCTs) are easily absorbed into the mucosal cell.
2. The MCFAs are small in size and water-soluble, so chylomicron formation is not required.
3. MCFAs leave the mucosal cell, enter the portal vein (blood), and are transported to the liver. Within the liver, MCFAs are rapidly metabolized into energy.

**Medium-Chain Triglycerides**

1. In the lumen, MCFAs from medium-chain triglycerides (MCTs) are easily absorbed into the mucosal cell.
2. The MCFAs are small in size and water-soluble, so chylomicron formation is not required.
3. MCFAs leave the mucosal cell, enter the portal vein (blood), and are transported to the liver. Within the liver, MCFAs are rapidly metabolized into energy.

**Structured Triglyceride* Absorption and Utilization**

1. In the lumen, MCFAs and LCFAs from fish oil triglycerides (TG) are absorbed into the mucosal cell.
2. These LCFAs are packaged into a droplet that is coated with a protein rendering it water-soluble, thus forming a chylomicron.
3. The chylomicron leaves the mucosal cell via lymphatic circulation and passes into systemic circulation (blood). Once in systemic circulation, peripheral tissues can take up the contents of the chylomicron.
4. LCFAs are a source of omega-3 fatty acids, which help support immune function.


* As part of a structured lipid.
## Structured Lipids in Enteral Formulas
### A Ross Exclusive

### Pivot® 1.5 Cal

- **Calorically dense (1.5 Cal/mL)** to provide energy when volume is restricted
- **Very-high protein**, 25% of calories (93.8 g/L), to support protein synthesis and tissue repair
- **Peptide-based protein** for easier absorption and tolerance
- **Arginine** (13 g/L) to help support the immune system and wound healing
- **Omega-3 fatty acids (EPA, 2.6 g/L and DHA, 1.3 g/L)** to support immune function
- **Structured lipid**, 40% of fat, for enhanced fat and fat-soluble-vitamin absorption
- **Fructooligosaccharides (FOS)** (7.5 g/L) to help maintain GI-tract health and stimulate water and electrolyte uptake in the colon—important for diarrhea management

**Availability**
- 8-fl-oz cans; 24/case
  - Vanilla #54638
- Ross Ready-To-Hang® 1000-mL prefilled containers; 8/case
  - #58015
- HCPCS
  - Code B4154, applicant

### Optimental®

- **1.0 Cal/mL**
- **Elemental protein**, 20.5% of calories (51.3 g/L), for easier absorption and tolerance
- **Arginine** (5.5 g/L) to support the immune system and wound healing
- **Omega-3 fatty acids (EPA, 2.3 g/L and DHA, 0.97 g/L)** to support immune function
- **Structured lipid**, 60% of fat, for enhanced fat and fat-soluble-vitamin absorption
- **Fructooligosaccharides (FOS)** (5 g/L) to help maintain GI-tract health and stimulate water and electrolyte uptake in the colon—important for diarrhea management

**Availability**
- 8-fl-oz cans; 24/case
  - Vanilla #54638
- Ross Ready-To-Hang® 1000-mL prefilled containers; 8/case
  - #57045
- HCPCS
  - Code B4153