Abbott Nutrition
Vital e-detail

March 23, 2010

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Believeinhealth.℠

stonefly
an inVentiv health company

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REFERENCE

none

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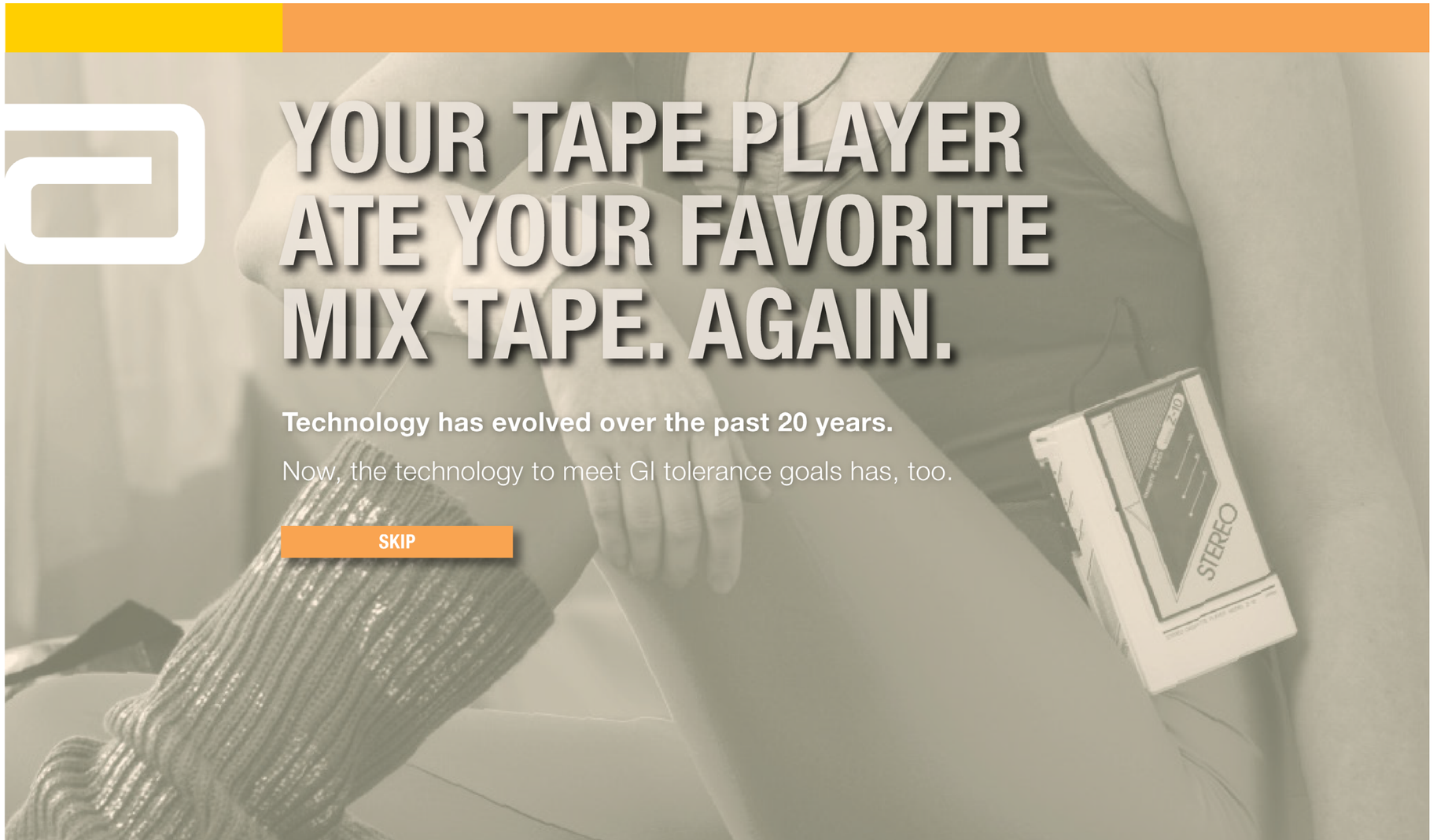
REFERENCE

none



REFERENCE

none

VITAL®

PROMOTING OPTIMAL NUTRITION FOR GI TOLERANCE HAS ALWAYS BEEN THE GOAL.

Your patients need a tolerance formula that:

1. Reduces GI symptoms
2. Optimizes nutrition support to reduce catabolism
3. Improves absorption and tolerance of nutrients
4. Maintains GI integrity

PREV

YOUR VITAL EDUCATION HAS BEGUN.

NEXT

Your Vital Evolution

10% Evolved

Abbott Nutrition

REFERENCE

none

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VITAL®

TODAY, HOW YOU MEET THAT GOAL IS CHANGING.

	20 YEARS AGO:	TODAY:
	MCT	Structured Lipids
	100% hydrolyzed whey protein	100% hydrolyzed, whey-dominant, peptide-based protein
	Not available	NutraFlora® scFOS®

PREV

YOUR EVOLUTION IS 20% COMPLETE.

NEXT

Your Vital Evolution

20% Evolved

Abbott Nutrition

REFERENCE

none

Vital - e-detail

VITAL®

INTRODUCING VITAL.

Vital® 1.0 Cal and Vital® 1.5 Cal

Tolerance. Evolved.

With advanced-technology structured lipids, a whey-dominant peptide-based protein system, and prebiotic, Vital is a whole new approach to nutrition therapy for supporting excellent GI tolerance and absoption.

Learn how your treatment can be more evolved with Vital.

For tube or oral feeding
For supplemental or sole-source nutrition
Not for parenteral use
Use under medical supervision

PREV 3 EXT

IT'S TIME TO QUESTION **HOW** INTOLERANCE IS TREATED.

Your Vital Evolution — 30% Evolved

Abbott Nutrition

REFERENCE

none

Vital - e-detail

VITAL®

EVOLVED NUTRITION THERAPY WITH ADVANCED-TECHNOLOGY INGREDIENTS.

Tolerance nutrition needs haven't changed, but the technology for managing them has.

FEATURE	BENEFIT	VITAL® 1.0 CAL	VITAL® 1.5 CAL
Fat Blend Structured lipids include a balanced blend of polyunsaturated (omega-6 and omega-3) and monounsaturated fatty acids	Recommended by NCEP (National Cholesterol Education Program)	**Polyunsaturated: 4.56%** of energy	**Polyunsaturated: 4.55%** of energy
		Monounsaturated: 9.54% of energy	**Monounsaturated: 9.51%** of energy

PREV 4 of 11

40% EVOLVED AND GOING STRONG.

Your Vital Evolution — **40%** Evolved

Abbott Nutrition

REFERENCE

none

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FEATURE	BENEFIT	VITAL® 1.0 CAL	VITAL® 1.5 CAL
Fat Blend Structured lipids include a balanced blend of polyunsaturated (omega-6 and omega-3) and monounsaturated fatty acids	Recommended by NCEP (National Cholesterol Education Program)	**Polyunsaturated: 4.56%** of energy	**Polyunsaturated: 4.55%** of energy
		Monounsaturated: 9.54% of energy	**Monounsaturated: 9.51%** of energy
Omega-3 Fatty Acids Good source of plant-based omega-3 fatty acids (ALA: alpha-linolenic acids)	Support heart and circulatory health[1]	Contains **1.68 g/L** omega-3 fatty acids (ALA) from canola oil	Contains **2.4 g/L** omega-3 fatty acids (ALA) from canola oil
Fatty Acid Ratio Low n-6:n-3 ratio	Supports heart health[1]	**2.1:1** (0.9:1–10.9:1, RDI, IOM)	**2.1:1** (0.9:1–10.9:1, RDI, IOM)
Protein 100% hydrolyzed, whey-dominant, peptide-based protein	Promotes absorption, tolerance, and faster gastric emptying	**16%** of total calories	**18%** of total calories
Carbohydrate NutraFlora® scFOS® prebiotic		Contains **4.2 g/L**	Contains **6.0 g/L**
Carbohydrate level is consistent with DRI recommendations	Supports blood glucose levels	**51%** of total calories	**49%** of total calories
Antioxidants Elevated levels of vitamins C and E	Help reduce free-radical damage[2]	**Vitamin C: 350 mg/L** (RDI: 60 mg)	**Vitamin C: 500 mg/L** (RDI: 60 mg)
		Vitamin E: 70 IU/L (RDI: 30 IU)	**Vitamin E: 100 IU/L** (RDI: 30 IU)

REFERENCE

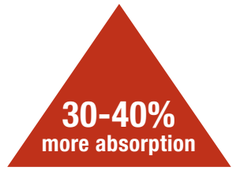
none

VITAL®

BUILD BETTER OUTCOMES WITH STRUCTURED LIPIDS

Next generation fats are now available for the first time in a tolerance formulation. Structured lipids:

- Are better absorbed and tolerated[1–4]
- Enhance absorption of fat-soluble vitamins and antioxidants 30%–40%[5]
- Increase delivery of essential fatty acids to peripheral organs and skeletal muscle 40%–50%[4]



PREV 5 of 11

HALFWAY EVOLVED AND STILL SO YOUNG.

STRUCTURED LIPIDS VIDEO

Your Vital Evolution — 50% Evolved

Abbott Nutrition

REFERENCES

1. Kenler AS, Swails WS, Driscoll DF, et al. Early enteral feeding in postsurgical cancer patients: fish oil structured lipid-based polymeric formula versus a standard polymeric formula. *Ann Surg*. 1996;223(3):316–333.

2. McKenna MC, Hubbard VS, Bieri JG. Linoleic acid absorption from lipid supplements in patients with cystic fibrosis with pancreatic insufficiency and in control subjects. *J Pediatr Gastroenterol Nutr*. 1985;4:45–51.

3. Tso P, Karlstad MD, Bistrian BR, DeMichele SJ. Intestinal digestion, absorption, and transport of structured triglycerides and cholesterol in rats. *Am J Physiol*. 1995;268 (*Gastrointest Liver Physiol*. 31):G568–G577.

4. Tso P, Lee T, DeMichele SJ. Lymphatic absorption of structured triglycerides vs. physical mix in a rat model of fat malabsorption. *Am J Physiol*. 1999;277 (*Gastrointest Liver Physiol*. 40):G333–G340.

5. Tso P, Lee T, DeMichele SJ. Randomized structured triglycerides increase lymphatic absorption of tocopherol and retinol compared with the equivalent physical mixture in a rat model of fat malabsorption. *J Nutr*. 2001;131:2157–2163.

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REFERENCES

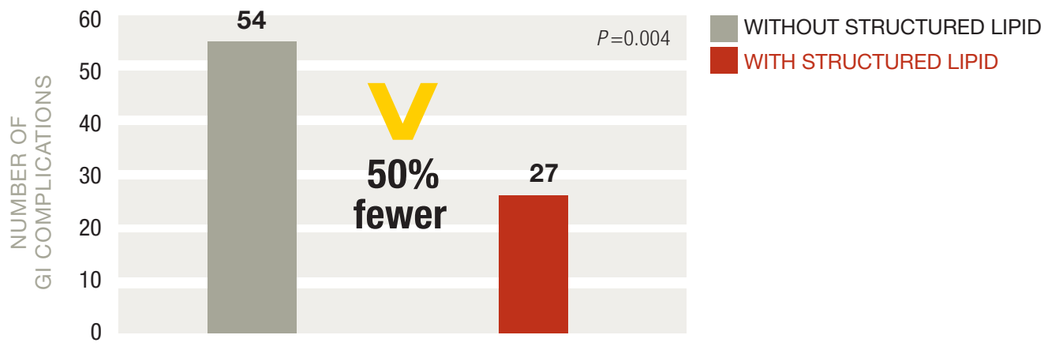
1. Kris-Etherton PM, Harris WS, Appel LJ. Fish consumption, fish oil, omega-3 fatty acids, and cardiovascular disease. *Circulation*. 2002;106:2747–2757.

2. Jacob RA, Burri BJ. Oxidative damage and defense. *Am J Clin Nutr*. 1996;985S–990S.

VITAL®

BUILD BETTER OUTCOMES WITH STRUCTURED LIPIDS

In clinical trials, structured lipids produced 50% fewer gastrointestinal complications[1]



PREV 6 of 11 N

YOU'RE **ALMOST** AS EVOLVED AS THE NEW VITAL FORMULATION.

Your Vital Evolution — 60% Evolved

Abbott Nutrition

REFERENCE

1. Kenler AS, Swails WS, Driscoll DF, et al. Early enteral feeding in postsurgical cancer patients: fish oil structured lipid-based polymeric formula versus a standard polymeric formula. *Ann Surg*. 1996;223(3):316–333.

VITAL®

PEPTIDE-BASED PROTEIN LEADS TO BETTER TOLERANCE FOR YOUR PATIENTS.

Advanced technology has arrived, with peptide-based formulations that provide better absorption, tolerance, and maintenance of GI tract integrity[1] with:

- An advanced blend of hydrolyzed protein that meets the 2007 FAO/WHO/UNU Amino Acid Requirements[2]
  - Promotes nitrogen absorption, retention, and utilization[3,4]
- A peptide-based formulation that:
  - Reduces diarrhea associated with hypoalbuminemia and malnutrition[5–7]

PREV 7 of 11 NEXT

YOU'RE MORE THAN HALFWAY EVOLVED.

GUIDELINES SUPPORT

Your Vital Evolution — 70% Evolved

Abbott Nutrition

REFERENCES

1. Daniel H. Molecular and integrative physiology of intestinal peptide transport. *Ann Rev Physiol.* 2004;66:361–384.

2. World Health Organization. Technical Report Series; no. 935: *Joint FAO/WHO/UNU Expert Consultation on Protein and Amino Acid Requirements in Human Nutrition.* Geneva, Switzerland: World Health Organization; 2007.

3. Zaloga GP. Intact proteins, peptides, and amino acid formulas. In: Zaloga GP, ed. *Nutrition In Critical Care.* St Louis: Mosby; 1994:59–80.

4. Grimble GK. The significance of peptides in clinical nutrition. *Annu Rev Nutr.* 1994;14:419–447.

5. Brinson RR, Pitts VL, Taylor AE. Intestinal absorption of peptide enteral formulas in hypoproteinemic (volume expanded) rats: a paired analysis. *Crit Care Med.* 1989;17:657–660.

6. Ziegler F, Olliver JM, Cynober L, et al. Efficiency of enteral nitrogen support in surgical patients: small peptides v non-degraded proteins. *Gut.* 1990;31(11):1277–1283.

7. Brinson RR, Kolts BE. Diarrhea associated with severe hypoalbuminemia: a comparison of a peptide-based chemically defined diet and standard enteral alimentation. *Crit Care Med.* 1988;16:130–136.

VITAL®

PEPTIDE-BASED PROTEIN LEADS TO BETTER TOLERANCE FOR YOUR PATIENTS

Advanced technology has arriv
formulations that provide bette
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- An advanced blend of hydroly
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  - Promotes nitrogen absor
    and utilization[3,4]
- A peptide-based formulation
  - Reduces diarrhea associa
    hypoalbuminemia and ma

CRITICAL CARE GUIDELINES

Vital® 1.0 and Vital® 1.5 are supported by a recently published 2009 critical care nutrition guideline (Section E4):

- If there is evidence of diarrhea, soluble fiber-containing or small peptide formulations may be utilized, (Grade: E)[8]

Abbott Nutrition

REFERENCES

1. Daniel H. Molecular and integrative physiology of intestinal peptide transport. *Ann Rev Physiol.* 2004;66:361–384.

2. World Health Organization. Technical Report Series; no. 935: *Joint FAO/WHO/UNU Expert Consultation on Protein and Amino Acid Requirements in Human Nutrition.* Geneva, Switzerland: World Health Organization; 2007.

3. Zaloga GP. Intact proteins, peptides, and amino acid formulas. In: Zaloga GP, ed. *Nutrition In Critical Care.* St Louis: Mosby; 1994:59–80.

4. Grimble GK. The significance of peptides in clinical nutrition. *Annu Rev Nutr.* 1994;14:419–447.

5. Brinson RR, Pitts VL, Taylor AE. Intestinal absorption of peptide enteral formulas in hypoproteinemic (volume expanded) rats: a paired analysis. *Crit Care Med.* 1989;17:657–660.

6. Ziegler F, Olliver JM, Cynober L, et al. Efficiency of enteral nitrogen support in surgical patients: small peptides v non-degraded proteins. *Gut.* 1990;31(11):1277–1283.

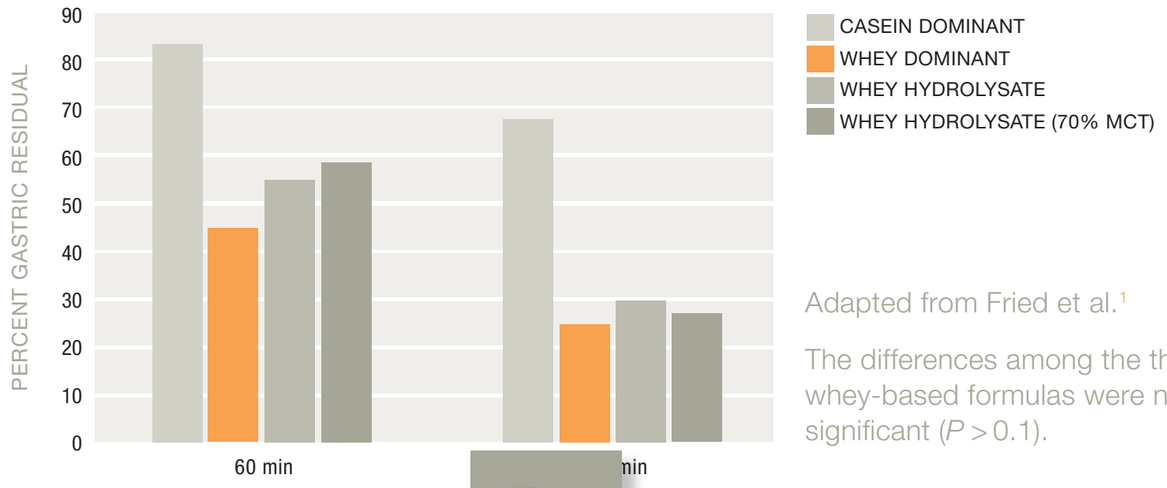
7. Brinson RR, Kolts BE. Diarrhea associated with severe hypoalbuminemia: a comparison of a peptide-based chemically defined diet and standard enteral alimentation. *Crit Care Med.* 1988;16:130–136.

8. McClave SA, Martindale RG, Vanek VW, et al. Guidelines for the provision and assessment of nutrition support therapy in the adult critically ill patient: Society of Critical Care Medicine (SCCM) and American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.). *JPEN J Parenter Enteral Nutr.* 2009;33(3):277–316.

VITAL®

PRODUCE BETTER RESULTS WITH WHEY.

Whey-dominant peptides promote faster gastric emptying (than casein-based peptide formulas, *P*<0.001).



Adapted from Fried et al.[1]

The differences among the three whey-based formulas were not significant ($P > 0.1$).

SOME PEOPLE ARE HAPPY WITH **80%.**

PREV 8 of 11 NEXT

Your Vital Evolution — **80%** Evolved

Abbott Nutrition

REFERENCE

1. Fried MD, Khoshoo V, Secker DJ, et al. Decrease in gastric emptying time and episodes of regurgitation in children with spastic quadriplegia fed a whey-based formula. *J Pediatr*. 1992;120:569–572.

VITAL®

SUPPORT YOUR PATIENTS' GI TRACTS WITH NUTRAFLORA® SCFOS®.*

Help support GI-tract integrity

Enhance calcium absorption (3 g/day)[3–5] FIND OUT HOW

Enhance water and electrolyte absorption FIND OUT HOW

Help support the immune system FIND OUT HOW

Help support GI-tract integrity

Short-chain fructooligosaccharides ferment to short-chain fatty acids, which are a preferred energy source for colon cells,[1,2] and do not contribute to residue.

AT THIS POINT, EVOLUTION IS POSSIBLY IMMINENT

Your Vital Evolution — 90% Evolved

Abbott Nutrition

REFERENCES

1. Mitsuoka T, Hidaka H, Eida T. Effect of fructo-oligosaccharides on intestinal microflora. *Nahrung*. 1987;31:427–436.

2. Gibson GR, Roberfroid MB. Dietary modulation of the human colonic microbiota: introducing the concept of prebiotics. *J Nutr*. 1995;125:1401–1412.

3. Uenishi K, Ohta A, Fukushima Y, et al. Effects of malt drink containing fructooligosaccharides on calcium absorption and safety of long-term administration. *Jpn J Nutr Diet*. 2002;60:11–18.

4. Fukushima Y, Jun CJ, Kegai K, et al. Calcium absorption of malt drink containing fructooligosaccharides and safety in humans. *J Nutr Food*. 2002;5:49–60.

5. Ohta A, Sakai, K, Takasaki M, Tokunaga T. The advantages of calcium supplement tablet (candy) containing fructooligosaccharides for the healthy human being. *J Nutr Food*. 1999;2:37–43.

* Short-chain fructooligosaccharides.

VITAL®

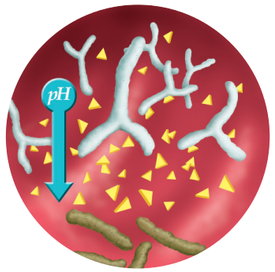
SUPPORT YOUR PATIENTS' GI TRACTS WITH NUTRAFLORA® SCFOS®.*

Help support GI-tract integrity — FIND OUT HOW

Enhance calcium absorption (3 g/day)[3–5]

Enhance water and electrolyte absorption — FIND OUT HOW

Help support the immune system — FIND OUT HOW



Enhance calcium absorption (3 g/day)[3–5]

scFOS increase calcium-binding protein, which allows more calcium to pass through the colon wall.

PREV 9 of 11 NEXT

AT THIS POINT, EVOLUTION IS POSSIBLY **IMMINENT**

Your Vital Evolution — 90% Evolved

Abbott Nutrition

REFERENCES

1. Mitsuoka T, Hidaka H, Eida T. Effect of fructo-oligosaccharides on intestinal microflora. *Nahrung*. 1987;31:427–436.

2. Gibson GR, Roberfroid MB. Dietary modulation of the human colonic microbiota: introducing the concept of prebiotics. *J Nutr*. 1995;125:1401–1412.

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* Short-chain fructooligosaccharides.

VITAL®

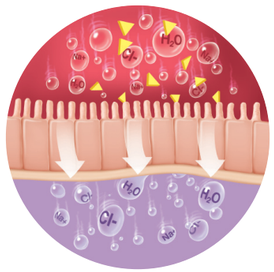
SUPPORT YOUR PATIENTS' GI TRACTS WITH NUTRAFLORA® SCFOS®.*

Help support GI tract integrity — FIND OUT HOW

Enhance calcium absorption (3 g/day)[3–5] — FIND OUT HOW

Enhance water and electrolyte absorption

Help support the immune system — FIND OUT HOW



Enhance water and electrolyte absorption

Short-chain fructooligosaccharides enhance water and electrolyte absorption in the colon,[6] important in the management of diarrhea.[6]

PREV 9 of 11 NEXT

AT THIS POINT, EVOLUTION IS POSSIBLY IMMINENT

Your Vital Evolution — 90% Evolved

Abbott Nutrition

REFERENCES

1. Mitsuoka T, Hidaka H, Eida T. Effect of fructo-oligosaccharides on intestinal microflora. *Nahrung*. 1987;31:427–436.

2. Gibson GR, Roberfroid MB. Dietary modulation of the human colonic microbiota: introducing the concept of prebiotics. *J Nutr*. 1995;125:1401–1412.

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6. Bowling TE, Raimundo AH, Grimble GK, Silk DB. Reversal by short-chain fatty acids of colonic fluid secretion by enteral feeding. *Lancet*. 1993;342:1266–1268.

* Short-chain fructooligosaccharides.

VITAL®

SUPPORT YOUR PATIENTS' GI TRACTS WITH NUTRAFLORA® SCFOS® *

Help support GI tract integrity — FIND OUT HOW

Enhance calcium absorption (3 g/day)[3–5] — FIND OUT HOW

Enhance water and electrolyte absorption — FIND OUT HOW

Help support the immune system

Help support the immune system

scFOS feed beneficial bacteria in the GI tract[7–9].

AT THIS POINT, EVOLUTION IS POSSIBLY **IMMINENT**

Your Vital Evolution — 90% Evolved

Abbott Nutrition

REFERENCES

1. Mitsuoka T, Hidaka H, Eida T. Effect of fructo-oligosaccharides on intestinal microflora. *Nahrung*. 1987;31:427–436.

2. Gibson GR, Roberfroid MB. Dietary modulation of the human colonic microbiota: introducing the concept of prebiotics. *J Nutr*. 1995;125:1401–1412.

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4. Fukushima Y, Jun CJ, Kegai K, et al. Calcium absorption of malt drink containing fructooligosaccharides and safety in humans. *J Nutr Food*. 2002;5:49–60.

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6. Bowling TE, Raimundo AH, Grimble GK, Silk DB. Reversal by short-chain fatty acids of colonic fluid secretion by enteral feeding. *Lancet*. 1993;342:1266–1268.

7. Bornet FRJ, Brouns F. Immune-stimulating and gut health-promoting properties of short-chain fructo-oligosaccharides. *Nutr Rev*. 2002;60(11):326–334.

8. Tokunaga T, Nakada Y, Yasuhito T, et al. Effects of fructooligosaccharides intake on the intestinal microflora and defecation in healthy volunteers. *Bifidus*. 1993;6:143–150.

9. Hidaka H, Eida T, Takizawa T, et al. Effects of fructooligosaccharides on intestinal flora and human health. *Bifidobacteria Microflora*. 1986;5:37–50.

* Short-chain fructooligosaccharides.

VITAL®

VITAL SUMMARY.

Advanced-Technology Ingredients

- Structured Lipids Better absorption and tolerance[1–4]
- 100% Hydrolyzed, Whey-Dominant, Peptide-Based ProteinBetter absorption, tolerance, and maintenance of GI-tract integrity[1]; faster gastric emptying[5]
- NutraFlora® scFOS® Help maintain GI-tract integrity and manage diarrhea
- Elevated Levels of Vitamins C and E Help reduce free-radical damage[6]

PREV 10 of 11 NEXT

DON'T QUIT NOW. YOU'RE **ALMOST** COMPLETELY EVOLVED.

Your Vital Evolution — 95% Evolved

Abbott Nutrition

REFERENCES

1. Mitsuoka T, Hidaka H, Eida T. Effect of fructo-oligosaccharides on intestinal microflora. *Nahrung*. 1987;31:427–436.

1. Kenler AS, Swails WS, Driscoll DF, et al. Early enteral feeding in postsurgical cancer patients: fish oil structured lipid-based polymeric formula versus a standard polymeric formula. *Ann Surg*. 1996;223(3):316–333.

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6. Jacob RA, Burri BJ. Oxidative damage and defense. *Am J Clin Nutr*. 1996;985S–990S.

Vital - e-detail

VITAL®

VITAL AVAILABILITY.

Item	Flavor	List Number
Ready-To-Hang® 1000-mL pre-filled containers; 8/case	1.0 Cal Vanilla	56281
	1.5 Cal Vanilla	56283
8-fl-oz cans; 24/case	1.0 Cal Vanilla	56277
	1.5 Cal Vanilla	56279

Call (800) 551-5838 to speak with an Abbott Nutrition a Sales Representative.

Not for IV use
Use under medical supervision
Gluten-free; suitable for lactose intolerance

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CLICK HERE TO REQUEST YOUR **FREE** DVD— "CLINICAL PERSPECTIVES IN GI INTOLERANCE."

Your Vital Evolution — Evolved

Abbott Nutrition

REFERENCE

none

Vital - e-detail

VITAL®

VITAL AVAILABILITY.

Item	Flavor	List Number
Ready-To-Hang® 1000-mL pre-filled containers; 8/case	1.0 Cal Vanilla	56281
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Not for IV use
Use under medical supervision
Gluten-free; suitable for lactose intolerance

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CONGRATULATIONS! YOU ARE NOW FULLY EVOLVED.

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CLICK HERE TO REQUEST A FREE DVD—"CLINICAL PERSPECTIVES IN GI INTOLERANCE."

CLICK HERE TO REQUEST YOUR **FREE** DVD— "CLINICAL PERSPECTIVES IN GI INTOLERANCE."

Your Vital Evolution

100% Evolved

Abbott Nutrition

REFERENCE

none