



Oligosaccharide that holds nature as it is

Organic Isomaltooligosaccharide

Isomaltooligosaccharide(IMO)

Isomaltooligosaccharide (isomaltose, panose, isomaltotriose, isomaltotetraose, isomaltopentaose), which was manufactured from organic rice, is a prebiotics that acts as a growth factor for beneficial bacteria in the intestines, such as Bifidobacterium and Lactobacillus, by reaching the intestines without being decomposed by digestive enzymes.

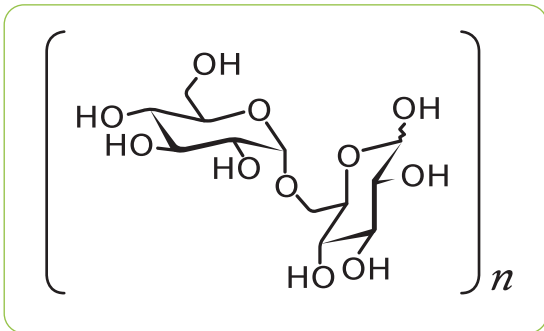


Figure 1 Structure of isomaltooligosaccharide

Characteristics of Organic Isomaltooligosaccharide

- An organic processed food produced from organic certified ingredients
- Promotes absorption of minerals (calcium, magnesium, iron, zinc, etc.) in the body
- Low calories (2.8 ~ 3.2 kcal/g)
- Inhibits the growth of harmful bacteria / Induce proliferation of beneficial bacteria
- Improves intestinal bacterial colony
- Helps with bowel movements
- Inhibits the occurrence of cavities

Lactobacillus Growth Effect of Organic Isomaltooligosaccharide(In-vitro)

As a result of observing the growth of lactobacillus through anaerobic culture by mixing 1% and 2% organic isomaltooligosaccharide in a sugar availability comparison medium, lactobacillus growth effect of organic isomaltooligosaccharide was confirmed (Source :In house data)

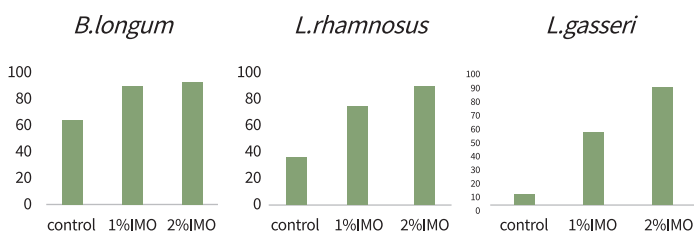
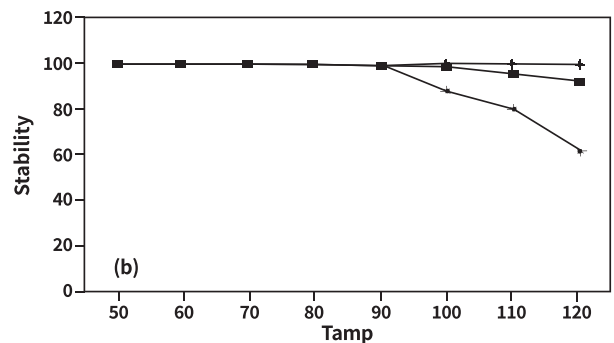
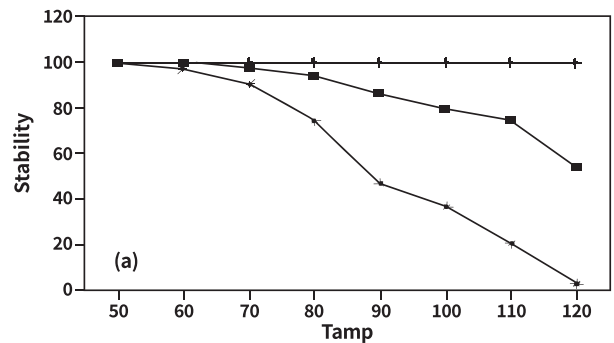


Figure 2. Effect of isomaltooligosaccharide on the growth of *Bifidobacterium* & *Lactobacillus*

Isomaltooligosaccharide's pH & temperature stability

It was confirmed that isomaltooligosaccharide is stable without decomposition after being diluted to 10% and adjusted to pH 3-4, maintained at 60-120°C for 15 minutes, and then cooled rapidly.



(a) pH 3, 15 mins (b) pH 4, 15 mins

■—■, Sucrose; +—+, IMO; *—*, FO

Figure 3. Acid stability of isomaltooligosaccharide (Reference : Korean journal of food science and technology 27(2), 1995.4, 170-175)

Product Specification

Item	Quality specification	
	Organic Neo-IMO-L	Organic Neo-IMO-P
Appearance	Liquid	Powder
Solid content	≥ 75.0 Brix	-
Moisture	-	≤ 5.0%
Total isomaltooligosaccharide content (DB)	≥ 35.0%	≥ 10.0%
pH(10% solution)	4.0~7.0	4.0~7.0
Lead	≤ 1.0 mg/kg	≤ 1.0 mg/kg
Total plate count	≤ 1,000 cfu/g	≤ 1,000 cfu/g
Coliform group	Negative	Negative
Packing unit	24 kg / 1.2 Ton	20kg