



# Hyabest<sup>®</sup> ( J )

## Hyaluronic Acid

**Kewpie Corporation**

“Hyabest<sup>®</sup>(J)” is a hyaluronic acid made by fermentation method and its easing effect on knee-pain has been confirmed by human oral administration test . Hyabest<sup>®</sup>(J) supports you to create healthy and active life .

### FUNCTIONS OF HYALURONIC ACID IN KNEES

- In knee joint ,hyaluronic acid
  - is a major constituent of cartilage.
  - is working on synovial fluid to keep its viscosity .
  - is diminishing by aging .
- In knee joint ,hyaluronic acid
  - acts as a cushion against shock.
  - helps the joint move smoothly (lubricant) .
  - protects cartilage from wear and tear .

### TEST RESULT OF ORAL ADMINISTRATION

Analysis of the oral administration test result on Hyabest<sup>®</sup>(J) has confirmed its effectiveness in improving pain in knee joints .

Test method : Double blind test  
Period of administration : 8 weeks  
Dosage : 200mg/day of Hyabest<sup>®</sup>(J)  
Assessment method : WOMAC \*

\* WOMAC : American standard of assessment of pains in knee joint ( Assessment standard commonly adopted by orthopedists ) .

### SAFETY

Safety tests result of our hyaluronic acid (by fermentation) for food use are as follows :

- Acute oral toxicity in mice ( LD<sub>50</sub> ) is not less than 10 g/kg .

## SPECIFICATIONS AND A TYPICAL ANALYSIS

	Specifications	Analysis
pH	5.0 ~ 7.0	6.1
Heavy Metals	NMT 20 ppm	NMT 20ppm
Arsenic	NMT 2 ppm	NMT 2ppm
Hemolytic Streptococcus	Negative	Negative
Hemolysis	A red blood corpuscle is precipitated and the top of the solution is clear . (Negative)	Passed
Assay (as Glucuronic Acid )	NLT 35 %	47 %
* Hyaluronic Acid	NLT 95 %	100 %
Moisture	NMT 10 %	5 %
Crude Fat	NMT 0.2 %	NMT 0.1 %
Residue on Ignition	15 ~ 20 %	18 %
Kinematic Viscosity	30 ~ 80mm <sup>2</sup> /s	64 mm <sup>2</sup> /s
Aerobic plate counts	NMT 300/g	NMT 20/g
Coliforms	Negative	Negative
Mold and Yeast	NMT 100/g	NMT 50/g

\* : Based on the Kewpie's internal analytical method .  
( As hyaluronic acid and/or salts of hyaluronic acid : dry basis)

## STORAGE AND EXPIRY

Storage : Store at ordinary temperature and keep it away from direct sunlight, high temperature and high humidity.

Expiry : 3 years from manufacturing date. (unopened, at ordinary temperature)

## PACKING

100 g (in aluminum pouch) × 1 ~ 10 = 1 carton

1 kg (in aluminum pouch) × 1 ~ 10 = 1 carton



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