Overview of the Japanese Market

Japanese Consume 90% of World Uni Consumption

But・・・？

Uni in the 100g pack in the brine

Red and White

Yoshi Oyama, Director of Japan International Food & Aquaculture Society
Tukiji Fish Market was closed on 6th Oct. 2018 since 1935

Click the link left to see the view of auction
Control + click
Daily wholesale Price - Toyosu Fish Market, Red Uni

![Chart showing daily wholesale price for Red Uni in Toyosu Fish Market, comparison with prices from the same period a year ago.](image)

Big Price Differences
Daily 8,000 pieces sold

Daily wholesale Price - Toyosu Fish Market, White Uni

![Chart showing daily wholesale price for White Uni in Toyosu Fish Market, comparison with prices from the same period a year ago.](image)

Domestic Uni

- High: $243
- Low: $82

Branded Uni

- High: $1011
- Low: $19

250g~300g
$230
Luxury Food- Uni in local areas

well-balanced sweetness and no bitterness and astringency plus color and texture

**Anthocidaris crassispina**
*Heliocidaris crassispina*
Widely found in Japan

**Puicherrimus**
Northern Japan

**Pseudocentrotus Depressus**
Southern Japan

**Tripneustes gratilla**
Okinawa
White Moustache Uni
Variety of Processed Uni

- 1,399円
- 1,280円
- 1,100円
- 1,280円
- 1,980円
- 1,300円
- 1,026円
- 1,380円
- 648円
- 3,999円
- 2,980円
- 1,000円
- 1,180円
- 880円
- 4,980円
- 4,309円
Variety of Processed Uni in Hokkaido

- 北方四島産 エゾパフンウニ 100g 4298円
- 塩うに 290g 1500円
- 生ウニ(板) 100g 4298円
- 殻付バフンウニ 3個 3300円
- 塩水ウニ 100g 5370円
- ねここの貝焼 1410円
- うにの貝焼 80g 2980円
- ウニイカ 500g 3240円
◆ Drastic change of Uni demand & Supply

- Japanese Uni production has been declining (chart 1) (No Uni ingredients for further processing by Uni processor.
- No Uni resources found in Okinawa regardless of huge efforts.
- There may be danger Uni disappeared from Hokkaido!
- There is no chance to increase Uni harvest without aquaculture.

Chart 1: tone
White Moustache Uni in Okinawa (*Tripneustes gratilla*) was disappeared!

- 2000 tones Uni catch in 1974. This was a down to nearly zero in 2014.
- Release of Uni spat started in 1994 but did not achieve good result at all.
Imports has been increasing but demand of other countries also has been increasing. Quality & DI in Chili was worsened in 2018.

Unit: tones, import statistics

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>Share</th>
<th>Growth%</th>
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<tbody>
<tr>
<td><strong>Live</strong></td>
<td></td>
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<td></td>
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<tr>
<td>Russia</td>
<td>8,016</td>
<td>8,129</td>
<td>95.73%</td>
<td>101.40%</td>
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<td>122</td>
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<td>102.30%</td>
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<td>210</td>
<td>242</td>
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<td>115.00%</td>
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<td>Others</td>
<td>8</td>
<td>0</td>
<td>0.00%</td>
<td></td>
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<tr>
<td><strong>Total</strong></td>
<td>8,363</td>
<td>8,492</td>
<td>101.70%</td>
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<tr>
<td><strong>Fresh</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Canada</td>
<td>218</td>
<td>175</td>
<td>33.59%</td>
<td>80.30%</td>
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<tr>
<td>U.S.A.</td>
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<td>70</td>
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<td>53.50%</td>
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<tr>
<td>Others</td>
<td>176</td>
<td>183</td>
<td>35.12%</td>
<td>103.70%</td>
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<tr>
<td><strong>Total</strong></td>
<td>655</td>
<td>521</td>
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<td>79.60%</td>
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<td><strong>Frozen</strong></td>
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<td>1,637</td>
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<td>86.60%</td>
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<td>41</td>
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<td>95</td>
<td>5.36%</td>
<td>112.40%</td>
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<tr>
<td><strong>Total</strong></td>
<td>2,008</td>
<td>1,772</td>
<td>100.00%</td>
<td>88.20%</td>
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Uni Exports from Japan?
Demand for Uni has been increasing in overseas.

- Japanese cuisine is becoming very popular particularly in Asian countries and North America.
- Hence, many Japanese Sushi chains go abroad.
- Fresh Uni if shipped in day 1, this will be available next morning in Asian countries which is served on that day.
- Can export much higher prices than Japanese prices.

Australia can also look at other Asian countries as the export market.

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<tr>
<td>Taiwan</td>
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<td></td>
<td></td>
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<td>84.3 tone</td>
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<td>Singapore</td>
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<tr>
<td>H Kong</td>
<td>10 million Yen</td>
<td>84.3 tone</td>
<td>$12.5 M</td>
<td>31.6% up</td>
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Export Prices:
- $213/kg
- ¥17,446/kg

- 2012年: $123/kg, ¥17,446/kg
- 2013年: $153/kg, ¥20,160/kg
- 2014年: $183/kg, ¥22,874/kg
- 2015年: $213/kg, ¥25,588/kg
- 2016年: $243/kg, ¥28,302/kg
- 2017年: $273/kg, ¥31,016/kg
Monthly Price fluctuation and Increasing Price

- Price fluctuation of domestic Uni is very large.
- Price increases to 3 times more in the Last 3~4 months in the off-season of domestic Uni.
  - Aquaculture has advantages in that harvest can be controlled and supply more in the last 4 months of the year.
- Price increases every year due to reduced catch of Uni in Japan.
  - High opportunity for land based Uni farming
- Price of imported Uni is quite stable. Different country has different supply season.

Price increases, worsened quality, Unstable supply, production reduction

Likely significant high opportunity of Uni farming
What will come next? Recent trend of aquaculture in Japan

**Marine Culture** - for red sea urchin.
I think this is the only commercial marine culture but is limited scale.
This method is urchin raft and grow Uni from spat.
Why not successful?
- Water exchange is not so good.
- Temperature control is difficult
- Salinity changes
- Availability of natural feed.

**Land culture**
Obtain old, low GI Uni and they are brought into the tank in the closed system or water run through system and grow 2~3 months. Artificial feeds is mainly used.
Feeds developed by Nofima, Norwegian organization with mix of other ingredients are supplied to aquaculture farmers. Japanese feeds manufacturer improved growth and taste.
It was reported 0.8% GI. was Improved to around 15% in 10 weeks.

**Land culture**
This is similar to the above method except the feeds used. It has been reported that Uni fed with cabbage and lettuce which was not used for human consumption was resulted in good GI (16% or so) and good color & taste.
Hence several companies, fishery cooperatives have started Uni farming with this method.
Australia exports 6.0% of fresh & child Fin Fish, 45.9% processed abalone and 5.7% live abalone to Japan in 2017.

Why not Uni?
Thanks

Need high quality feeds and aquaculture system