



# JAPAN – A VIRTUAL COUNTRY WITH TRADITIONS

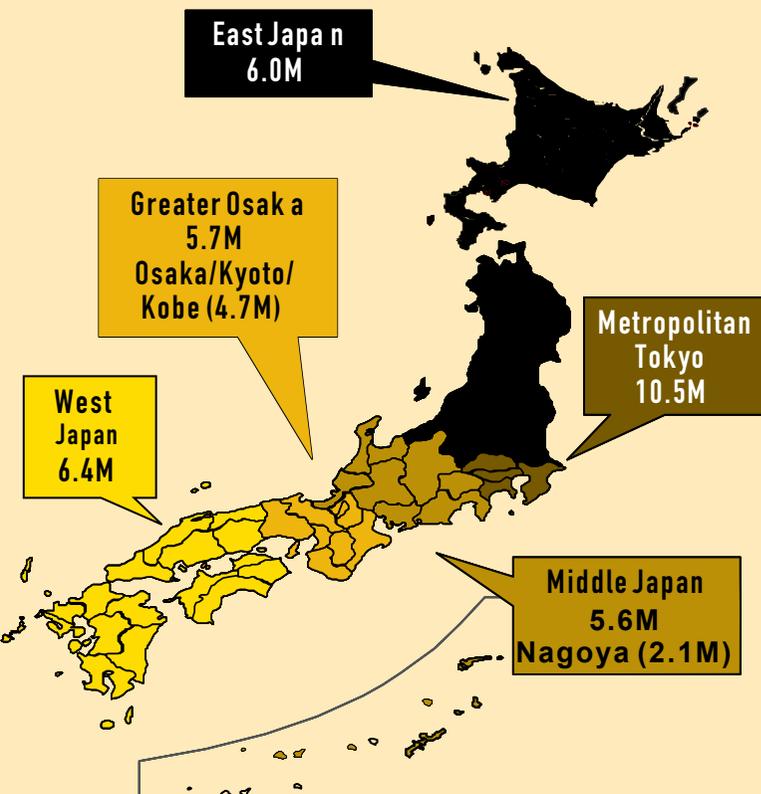
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I visited Japan from 11 to 24 August, 2009, to explore what the breweries are doing in order to ‘keep the smile on the consumer’s face’ – especially with a focus on food and beer pairings, new innovations or new lean trends. The trip was sponsored by a grant received from the Danish Brewmasters’ Guild.

The trip was already great when I entered the SAS flight 283 to Tokyo; I was upgraded to first class! After a 10-hour flight, Narita Airport approached very fast – some of the passengers were already equipped with mouth/nose protection. Immediately after arriving, I began my exploration of the Japanese beer market by meeting my colleagues at Molson Coors Japan, situated in the Shibuya-ku area in Tokyo.

I was briefed by the charismatic President, Kazuo Tekezaki, on Japanese culture, competition, beer and beer related products. The Japanese culture is a wealthy, homogenous group-based society with an exquisite focus on service, where domestic brewers control the market and beer imports make up less than one per cent.

First, some basic facts about Japan:



**Population:**

Approximately 127 million people. The country has one of the lowest population growth rates, not just in Asia, but in the world as a whole. The country has one of the most rapidly ageing populations amongst the world’s developed nations. At present, 19 per cent of the total population is over 65 years of age.<sup>1</sup>

**Economy:**

Second largest in the world.

**Political situation:**

Stable with two houses; the DPJ (Democratic Party of Japan) and the LDP (Liberal Democratic Party). The LDP party has governed Japan almost continuously since 1955, but on the election day on 31 August, 2009, DPJ won a historic victory.

**Key regions:**

Japan is divided into 47 prefectures. Five prefectures have a population of over seven million – Tokyo, Osaka, Kanagawa, Aichi and Saitama. Between them, they account for over one third of Japan’s total population.<sup>1</sup>



1. Bentobox for the train 2. Tetra paks with sake 3. Wine-on-the-go 4. Vitamin energizers

**RETAILERS, DISTRIBUTION AND PACKAGING**

I visited several supermarkets, hypermarkets and small convenience stores in and around Tokyo and also in Kyoto (Seven & I holding, Don.ki, Ozeki, AEON (Jusco), Lawson, FamilyMart, etc.).

For an outsider, the number of convenience stores appears enormous, but since very fresh seafood is an extremely important dish/ingredient in the Japanese kitchen, *freshness (cold) and convenience* seems to be of equal importance when trading beverages. Most of the beverages seen in retail shops were displayed and stored cold and sold in single packs or 6-packs. This makes it convenient, fast and easy to consume, just like the bento box full of e.g. handmade nigiri. Lots of beverages were sold in PET bottles (especially soft drinks and fruit drinks with or without milk), sake traded in tetra paks, bottles of wine including a glass (on the go), pouches for freezing cold coffee or soft drinks, vitamin drinks and e.g. bags with handles for two cans of beer on the go.

Aluminium cans sold at the off-trade market make up approximately 75 per cent of the sales!

Beer is distributed via independent wholesalers and directly from the breweries by outsourcing companies. Another way to sell

beer is through vending machines (but this is not very common anymore as legal drinking age and responsible drinking is prevalent and part of a CR agenda).

**MARKET CONDITIONS**

The breweries Kirin and Asahi each hold approximately 38 per cent of the market, whereas the breweries Sapporo and Suntory hold approximately 12 per cent each.

Asahi has acquired the smaller brewery group Orion and has recently opened the microbrewery ‘Sumida’ in their Tokyo HQ.

Kirin has a smaller microbrewery, ‘Spring Valley’, which can be experienced in Namamugi (Tokyo).

On 14 July, 2009, Kirin announced that they are in negotiations with Suntory to merge under a holding company, aiming for a deal later this year. The merged entity would be the largest in both the Japanese beer and soft drink markets and one of the world’s biggest beverage firms, Japanese business daily *Nikkei* reported. The companies held a combined 49.6 per cent share of the domestic beer market in 2008. In the wine segment, their combined stake of the domestic market was 38.7 per cent in 2007, according to *Nikkei*’s estimate. The leading strategy centres on integrating their holding companies into one, then placing core operations under this entity, with businesses to be reorganised later by categories such as liquor and soft drinks, *Nikkei* stated. For the year ended 31 December, 2008, the companies’ combined sales reached about 3.82 trillion yen (\$41 billion), which puts the merged entity above Belgian-based Anheuser-Busch InBev and U.S. company Coca-Cola Co. – and on par with U.S. food and beverage giants PepsiCo Inc. and Kraft →

**PACKAGING FORMATS (BEER):**

**Cans:** 135 ml, 250 ml, 350 ml, 500 ml and extraordinary 750 ml, 1000 ml, 2000 ml and 3000 ml.

**RB:** 334 ml, 500 ml, 633 ml and extraordinary sizes includes a 1,957 ml.

**NRB:** Mostly import in 330 ml.

**Kegs:** 7, 10, 15, 20 and 25 litres.



Foods Inc. Their combined sales would roughly be 2.6 times those of rival Asahi Breweries Ltd. And their total market share for beer products would reach 49.6 per cent, surpassing Asahi's 37.8 per cent, while their soft drink share would come to 31.4 per cent, topping the Coca-Cola Group's estimated 29.4 per cent share, *Nikkei* said. Privately held Suntory's founding family holds about a 90 per cent stake in the firm.<sup>2</sup>

In Japan, home brewing is illegal if you produce beverages with more than 1% ABV, but in spite of this, an increasing number of home brewers are making their own beers anyway. They buy their ingredients in e.g. USA.

The total beer consumption is 48.3 litres per capita and is stable with only a slight decline.

When coming to Japan, you arrive to the battle between four large brewery groups; beer is not their main activity, but one of many. All breweries are regularly introducing new beverages on the market as the consumer seems not very loyal, except for the major established brands (Asahi Super Dry, Kirin Ichiban, Sapporo Black Label or Yesibu, and The Premium Malts by Suntory). The names of the new products being launched are occasionally also very close to each other: The Premium Malts (Suntory), The Master/All Malt (Asahi) and Premium (Asahi – Happoshu). The tax on the beer category does not seem to improve the development of the beer category, but the beverage category instead. The following 'beer' products have evolved since 1995:

BEER BEVERAGE CATEGORY	
Malt content	Category
>67%	Beer
Normally ≤25% (67%≥ malt content >0%)	Happoshu – 'Sparkling spirits' – introduced in 1995
0%	Third category/ new category – introduced in 2004 (use of soy, unmalted barley, maize, peas, etc.)
<50% malt and added spirits (Shochu)	Third category/ new category

*The table shows the beer beverage categories currently produced by the major breweries. Please note that a beer must contain more than 67% malt to be called a beer.*

Apart from these categories, you will meet alcoholic 'Sho-chu', 'Cho-hai' and 'Cocktail', which are closest to the beer beverage category and like FAB's.

The following taxes are applied to the categories just mentioned:

TAXES				
	100% malt Premium beer	100% malt Standard beer	Happoshu	New category
Consumer price, JPY	249	207	152	135
Liquor tax, JPY	77	77	47	28
Consumer tax, 5%, JPY	12	10	7	6
Beer price before tax, JPY	160	120	98	101

*Please notice the taxes on the new category and why this is driving consumer behaviour!*

The premium beer category, mostly lagers, seems to be increasing slightly in volume and is also much more interesting from a brewer's point of view with use of aroma hops – a fine example is 'The Premium Malt' from Suntory.

The Japanese use the mobile telephone extensively; not for talking, but to pay for e.g. train rides, to pay at retail shops, playing games, to watch digital TV, launch of new commercials, surfing on the web, etc., etc. This could be an advanced way for the brewing industry to launch new initiatives, via mobile phone, to increase beer consumption.

### THE JAPANESE KITCHEN

How could I get closer to the Japanese kitchen and get to know more about what drives the Japanese beverage industry?

I met with Japanese/American food writer Yukari Sakamoto, and we hurried to the Tsukiji fish market to understand how raw fish enters the restaurants and to get acquainted with the different Japanese fish varieties. There are about 1,600 shops in the inner fish market and 400 in the outer market. In the inner market, you can expect to see the tuna fish auction (if you are awake at 5 a.m.). It is a fish market without fishy flavours, meaning that the fish is really fresh and ready to be eaten raw.

Which kinds of seafood were observed?

Some of the seawater animals to study were the tuna, eggs from herrings on kombu-leaves (Komochi-kombu), bloody eel, pickled octopus, salmon eggs, sea urchin (tairagai), king crab, turtle (suppon), tuna collar, managatsuo, abalone (awabi), kampachi, smoked and cured bonito (Katsuo Bushi).



Tsukiji fish market



Tuna fish auction

In the Japanese kitchen, they focus on:

- texture
- visual presentation and service
- taste, including umami

Texture is a big part of the Japanese kitchen, as well as how to present the food as a piece of art (masterpiece) – perfection may be a better word. The Japanese eat with their eyes, and in order to increase the appetite, food is garnished with flowers and leaves reflecting the current season.

Showing respect for the family and your colleagues is a very important issue for the Japanese people, and therefore bottom-up processes are very normal and accepted around here. They do not want to promote themselves, but let others do it, if necessary. The chef is not superior to the waiter or the person doing the dishes.

A trip to the retail store Isetan in Tokyo was a fantastic experience. Firstly, to see the perfection and tidiness of all foodstuffs, secondly to see the service provided by the Japanese shop assistants – instant rapport with the customer! I went through a lot of separate department stores finding no less than perfection, and sometimes some astounding prices – try two melons for 31,500 JPY (1,764 DKK!!!) – and vinegar with added fruit juice and e.g. collagen to improve your health.

Trends which might come to Europe, some may be here already:<sup>3</sup>

- Okonomiyaki (Japanese pizza) – with toppings like bean sprouts, cabbage, carrots, red ginger, kombu seaweed or dried bonito flakes.
- Tempura (re-introduction) of shrimps, whitebait, sweetfish, leek (yummi), green peppers or e.g. perilla leaf.
- Bread roll stuffed with e.g. noodles, red ginger and mayonnaise.
- Many more kinds of nigiri and maki toppings and stuffings.

Green tea alone can be found in forms as varied as steam buns, chewing gums, ice cream, as sprinkle along with a fleck or two of gold leaf on the surface of choice, pure chocolate, green tea powder mixed with hot milk ('Matcha latte') or as the flavouring in Kit-Kat bars. I even saw PET bottles containing dry green tea powder, which was not released in the bottle before being opened.

Umami is the fifth taste apart from sweet, sour, bitter and salty. As you can read in the book *'Umami and Dashi'*, the taste umami was isolated in 1908 by Japanese scientist Kikunae Ikeda.<sup>4</sup> Umami is a savoury taste imparted by glutamate and five ribonucleotides, including inosinate and guanylate, which you can find in e.g. tomatoes, mushroom and in miso soup. (See also [www.umamiinfo.com](http://www.umamiinfo.com), buy the book, or look at [www.bento.com](http://www.bento.com) or [www.eat-japan.com](http://www.eat-japan.com).)

## PRINCIPLES OF PAIRING FOOD AND BEER

Principles of pairing beer and food are still developing, but the principles below are still valid:<sup>5</sup>

### 1. Start to seek a balance in taste intensity.

Light beers with light dishes (e.g. simple fish and shellfish, blond and cooked courses with meat).

Stronger beers (more alcohol and body) with heavier courses (e.g. roasted meat and courses with venison).

### 2. Take bitterness into consideration.

Bitterness in beer (from hops and/or roasted malt) will be increased by bitter, spicy and sweet food. Very bitter beers are not ideal with food, as the taste of bitterness will increase. The bitterness in beer will tend to be more harmonious if the food is salty, fat, has some acidity or is all of these combined. →



### 3. Believe that beer is not sweet.

Do not serve beer with a dish that has an extreme sweetness if the beer itself is not very sweet.

#### Where the five tastes are normally found in foodstuffs:

*Sweet* taste is mostly found in sweet sauces, chutney, roasted root vegetables, fruits and berries and also in marinades with e.g. honey.

*Salty* taste can be found in all salted and cured products of fish and meat (pork butcher's shop), oysters and some shellfish.

*Sourness (acidity)* can be found in citrus fruits, wine, wine vinegar and vinegar, as well as in sour dairy products and vegetables (e.g. sauerkraut).

*Bitterness* can be found in all sorts of lettuce, raw vegetables and fresh herbs and in food that is charred or very grilled.

*Umami* is a salt, which can be found in raw materials with a high content of protein and is able to develop a metallic bitter tone in the beverage (normal in wine, less noticeable in beer). Umami can be found in large amounts in raw or lightly cooked vegetables, nuts, soya bean, tomatoes, some cheeses (e.g. parmesan), red fish and shellfish. The two first groups are usually troublemakers for wine, but seldom for beer.

#### What to be aware of when pairing beer and food:

Bitterness in beer originates from hops and e.g. roasted malt (can not be measured, but can be tasted). The bitterness in beer can be increased by certain other bitter tastes or by sweetness in food. The reason why sweetness in food increases the bitter taste in beer is due to the fact that sweetness in food reduces

the perception of malt/sweetness/body in beer, and therefore the beer will feel thinner and the bitterness will appear and be intensified. Spicy food will also increase the taste of bitterness. The figure at the bottom will help you to match beer and food.

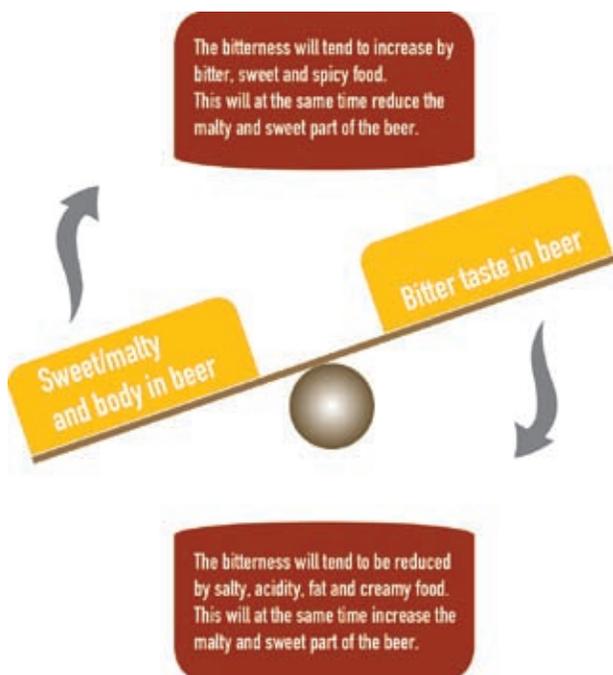
#### SUSHI AND IZAKAYA

Some of the Izakayas (Japanese tapas restaurants) in the Ginza/Tokyo area are like sitting in the film 'Black Rain', starring Michael Douglas, and experiencing the real Japan with sho-chu, beer, yakitori and watching the Japanese society passing by. My first meeting with Asahi Super Dry and Japanese Sushi (Nigiri) was not the best experience; the kampachi's sweet and fatty texture was disappearing in the beer, which I found removed all the flavours of the fish, leaving a very dry feeling in my mouth. I was dreaming of a Blonde beer as a good alternative. The next nigiri was with octopus that felt salty and was very good with the lager beer. Then it was time to study the tuna heaven. I tried the three different types of tuna – otoro (fatty part), the Chu-toro (medium fatty part) and akami (the red and meaty part) – all quite good with a lager beer with a bit of body and bitterness such as The Premium Malts from Suntory, especially to the otoro part of the tuna, as the bitterness was helping to separate the greasy part from the meaty.

#### BEER AND FOOD PAIRING AND KUMAZAWA BREWERY

What do you normally do on a Saturday abroad – shopping, watch local people, relax by the pool or? I went to Kagawa Station approximately one hour south of Tokyo city. Dressed with caps and umbrellas my colleague brewer, Toshi Ishii, his wife, Yukiko Ishii, and I were well protected against the sunshine and a temperature of 34 °C, and we walked 15 minutes to the Kumazawa Brewing Company.

Kumazawa Brewing Company won a gold medal at the World Beer Cup in 2008 in the category 'German Schwarzbier' with their black beer 'Shonan Liebe'. 'Shonan' means 'Sunset on the beach'. I was very well received by the owner of the brewery, Mokichi Kumazawa, and his master brewer, Takashi Tsutsui. The owner reminded me of Per Kølster from Fuglebjerggaard microbrewery due to his passion for wholesomeness, local development of own food supply, and the philosophy of reducing waste to a minimum (he reused spent grain and spent rice in his kitchen, e.g. to make miso soup!). Apart from the brewery, his ancestors have lived on the same spot for 450 years and he was also a sixth-generation sake brewer, had his own bakery and an Italian inspired and Japanese inspired restaurant! Mokichi's family has been sake brewers for 137 years.





1. Izakaya in Ginza 2. Kumazawa Brewery, Mokichi is no. 2 from the left 3. Maturation of sake

The brewery is located in a relatively small town, and 50 per cent of the output is sold locally in his restaurants on draught. The rest is sold in bottles or on draught in Tokyo. The Kaspar Schultz brewhouse had a brew length of 20 hectolitres and the 2000-hectolitre output per year is all sold. The brewery was equipped with cooling facilities for malts and hops, 12 fermenters (Japan made), five maturation tanks and 1000-litre Duotanks for the restaurants.

Sake production must be explained in depth another time as this is a very interesting process, but has not got anything to do with the topic of this article. The maturation of Japanese sake is very important for the development of the final taste and flavour of this liquid as well as if you want to drink it warm or cold, as the experience is completely different. The sake to be drunk warm was matured in a cellar from World War II. Mokichi's brand name for his sake is 'Tensei sake' and he produces two super premium varieties.

Fortunately for me, we had lunch in the Japanese restaurant, which was very impressive in dark mahogany and individual sections for families. Our lunch consisted of a six-course menu and paired beers.

**The six-course menu:**

1. Cold corn soup mixed with cream and vanilla seeds, a scallop

topped with a gel of sliced red pepper, cucumber, shrimps and onions, surrounded by a thin slice of cucumber, a piece of squash added small river shrimps, three slices of akami tuna with sliced radish and a shiso leaf (perilla leaf – mint and lemon flavour), and a sliced squid mixed with spent rice from the sake production.

- With this dish, we got the Shonan Pilsner (all malt beer with Saaz hops) which had a spicy, hoppy character making the pilsner dry and ready for the flavour of sea fish and sour and salty tastes. The only thing it did not match was the corn soup, where the local sake would have been a better choice.
- 2. Sliced radish in soya sauce topped with sour plum marinade. This was eaten with steamed vegetables.
  - With this dish, we were given the black beer. This was a good pairing as the soya sauce and plum marinade worked well with the chocolate and roasted flavours of the beer.
- 3. A piece of white fish on a green piece of squash surrounded with a mix of sliced salmon, onion and tomatoes.
  - This was served with an alt beer with fruity apple and caramel aroma and a very refreshing and lively character. Maybe the beer was a bit overpowering for this refreshing dish.
- 4. Grilled local pork served with pickled egg plant with a puree of egg plant, beans, yellow sweet potato and a slice of squash.
  - We continued with the alt beer where the grilled character from the pork paired well with caramel flavours from the beer. →



5. Then followed a course consisting of white rice with a sprinkle of sesame, pickled carrots and cucumber, and miso soup.
  - This was served with a 7.5% imperial stout with a strong aroma of cascade hops. It worked well with the sour miso soup, mostly because of similar aromas and the reducing effect on the bitterness of the beer.
6. We finished the course with Olong tea, American IPA, a black sesame ice cream, cooked soya milk, pieces of fruit, and a piece of cake made with spent rice.
  - The IPA was very orangy and piny and was a little overpowering for the dish. I would recommend the local Tensei sake!

Did they think about food and beer pairing? They said this was a good idea.

I think the kitchen is professional enough so that this could be a new initiative creating a higher experience for the customer. Maybe something we can teach the Japanese?

What could I do to understand what the Japanese breweries were doing with regard to beer and food? I asked Masaharu Yamada, at the Belgian Izakaya, Bois Cereste, situated near Asaksa station in Tokyo. His answer was immediate, 'the consumers are not ready yet to understand beer and food – I tried, but there was not much interest'. The sommeliers want to tell about wine and food, and beer is more for beer gardens and as a refreshing drink.

*Then I started thinking about the rapid society we are working in and the need for very fast transfer of knowledge and information (especially here in Japan). Could it be that beer is the convenient beverage for a fast 'alcoholic kick' and meeting with your colleagues and friends in the Izakayas or beer gardens? It seems to me that wine has also conquered the more advanced and sophisticated moments in Japan. Are we, in the beer industry, shooting ourselves in the foot by making beer more and more convenient and not really a super premium category? We are always striving to make improvements (Kaizen) and ways to reduce costs, but are we forgetting the consumer? (For us to reflect upon!)*

I asked Mr. Yumada what I should order to have a great beer and food moment. He recommended beer stewed veal with lentils and a 6.3% ABV Double 'Florefe' from Brasserie Lefebvre Quenast. I did not regret this – it was a perfect match. The caramel and slightly oxidised flavours matched the flavours of the veal and slightly removed the fat from my mouth. I ended the evening with a

refreshing Belgian Wit beer 'Troublette' from 'La Brame Caracole Falmignoul'. Great aroma of lemon (not orange) making the beer even more refreshing compared to an ordinary Wit beer.

Next stop must be a microbrewery to experience what they do to raise the profile of beer...

Through the food writer, Yukari Sakamoto, I met with an Australian consulting engineer, Steve, living with his Japanese wife and children in Tokyo. Steve wanted me to experience Baird's newly opened (8 August) brewpub 'The Harajuku Taproom' in the area of Harajuku. They only serve Baird's craft beers 'jibiru', which means microbrewed beer (for further info, please visit <http://www.bairdbeer.com/home.html>). Bryan Baird has opened his second beer place in Tokyo and it seems to be going quite well. Bryan is American and is apparently growing without a lot of competition. His beers are inspired of America and the normal styles could be found – like American IPA, American Brown Ale, American Porter, etc. The beer is normally served with 'yakitori' – all kinds of grilled chicken, from fresh liver and heart to normal grilled chicken wings. The beer was good to the roast of yakitori and I hope he will serve paired beer and food in the near future.

The major Japanese breweries are not doing much to invite the consumers to experience and learn about how to do real beer and food pairings. Maybe this is a job for the future?

## BEER AND WOMEN

I was also thinking about why women drink beer in Japan (seems to be less important than in other countries?). Beer developed specifically for women's taste does not yet seem to be a hot topic in Japan. Is it because they just do what their husband or boss chooses in the bar or restaurant? I came across an article in Japan's national newspaper, *The Asahi Shimbun* (English edition, 16 August 2009, page 16, edition A, by Leo Lewis), with the following headline: 'Japan's election could be starting signal for women's revolution'. I quote: 'The new CEO of one of Japan's larger companies sat up late into the night recently puzzling over the accounts. He simply could not work out why there seemed to be so many more people working in the office than appeared on the books. An assistant explained it to him the next day: We don't count the women...!'

There could be many reasons – I did ask – but I am not sure the men are prepared yet for what might come, but it will definitely take some time due to the strict traditions and so much politeness.

From the Aussie, Steve, I received the following answer: 'I am not so sure that women are entirely drinking what the men



are drinking. But there is certainly not complete segregation into men's and women's markets. Women do drink beer, and men do drink wine. However, a typical meal for office workers would start with most people ordering a beer, probably an Asahi or Kirin (depending on which company has got the restaurant's account). Then some men will stick with beer and some will switch quickly to some kind of sho-chu drink. Most women will either start with or switch to a mixed sho-chu based drink after the one beer. The sho-chu drinks for men are usually mixed with ice +/- water in summer or with warm water and a sour plum (umeboshi) in winter. Better quality sho-chu is usually just served with rock ice. Women will have a mixed sho-chu drink called a chu-hai, i.e. mixed with some kind of fruit juice or cold tea. This is of course a fairly gross generalisation and there are deviations from this. At the Tokyo station, in the Sho-Chu authority, I experienced sho-chu and nihonshu (Japanese sake). I could see why the sho-chu, in special bottle designs, added sweet fruit juices like peach, apple and plum were the biggest selling items to women. The alcohol strength varied, but all were lower than the usual strength of the original products, ranging from 7% ABV down to 3.5% ABV. These beverages were sold with nice glasses and should be consumed on the rocks or with added water to reduce the alcohol content even further.

### THE BIGGER BREWERIES

Unfortunately, I was not allowed to have a closer look at the operations in any of the Japanese breweries that I visited. I was not closer than what the normal consumer could see, which was a bit disappointing, but may have to do with the fierce competition between the breweries. I visited Sapporo in Chiba (Tokyo), Asahi in Kanagawa (Tokyo), Suntory in Kyoto, and Kirin in Namamugi (Tokyo).

### WHAT I SAW AND HEARD

Main brands and beverages have an alcohol percentage of 5% ABV with a strong link to German type lagers. Main product types are lagers with varying amount of bitter hops and, lately, aroma hops. Black beer and stouts are playing a smaller role, but seem to increase in popularity. Smaller breweries are entering the market launching Extra Special Bitters or American inspired hoppy beers. All malt beers seem to be of increasing importance even though the tax is so high. Natural ingredients also play an important role in this highly competitive market.

Brewhouse technology based on lauter tuns (very large in diameters up to 13 metres) and variety of mashing regimes seem possible, as rice has been a former large ingredient. Some use decoction on their main brands (Suntory) others only first worts (Kirin Ichiban).

Two-tank fermentation/maturation approaches seem prevalent. Fermentation is taking place in vertical cylindrical fermenters and vertical or horizontal maturation vessels.

The beer filters are altered dependent on the brewery and age (as normal). Pall membrane filters to Filtrox candle filters was in place. The bottling, canning and kegging halls were impressive with real lean/six sigma (SPC) approach. 5S was prevalent with VPM boards and TPM as the dominating mantra.

Unpasteurised beer resulted in aseptic filling and very high cleaning standards. Operators wore protection masks, hats and one-piece suits. When I asked about the number of FTE per line, the normal answer was two, but that could be without women and outsourced operators.

The Japanese breweries all had visitor's routes, restaurants and shops for the consumer to experience.

The breweries all had a stake in the small Japanese hop business and it seemed very important for the breweries to control the quality of raw materials entering the brewery. This means that the breweries have technical experts working together with main suppliers to improve the quality of materials used, like malted barley, hops, rice, etc.

Labelling requirements: I found one thing of importance that could be of use in Europe. In Japan, they declare: Calories, proteins, fat, sugar, fibres and sodium on the packaged product – could we do the same in Denmark, maybe as part of a Corporate Responsible agenda?

I hope this article can inspire you to visit Japan or introduce new interesting beer beverages... 🍷

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- <sup>3</sup> *Via* by Stephen Mansfield, p. 35, July-September 2009.
- <sup>4</sup> *Dashi and Umami: The Heart of Japanese Cuisine*, by Heston Blumenthal, Nobu Matsuhisa, Pascal Barbot, and Kiyomi Mikuni.
- <sup>5</sup> *Great Beer with Great Food*, by Michel Jamais & Jens Eiken, *Scandinavian Brewers' Review*, vol. 63, no. 1, 2006, pp. 22-4.

