

# [Eggs industry in malaysia](https://assignbuster.com/eggs-industry-in-malaysia/)

Today, egg industry in our country has been rapidly grown and turn into one of the modern industries. This is due to the large productions units, a various range of tailor made eggs, and egg products produced in our market to meet customer needs. About more than 40 million eggs are produced in our industry per day and the most preferred egg is brown eggs. In addition, the competition among the egg manufacturers lead to the rise of the various specialty eggs or also known as tailor made eggs such as Vit-E Enriched eggs, Low cholesterol eggs, Se-Enriched eggs, Meadow gold eggs, Happy eggs, Vegetables eggs, and Golden corn eggs. A Se-enriched egg was launched by Lay Hong Berhad, a publicly listed company, by the brand of Nutriplus.

Basically the eggs are enriched with the organic selenium by feeding the hens with special modified diets. This type of eggs is also being enriched with vitamin E and omega 3, besides are low in cholesterol. It is about 30 % of the total daily egg productions of the company are being exported to Singapore and Hong Kong. Other than that is low cholesterol eggs, it has been introduced by the company name Teck Ping Chan by the brand name of TPC. This type of egg is very popular among consumers who suffered from high cholesterol problems. According to the Malaysia Veterinary Department, the consumption of eggs are increasing from the year of 2000 to the year of 2010, they are 5, 727, 6, 020, 6, 074, 6, 295, 6, 474, 6, 793, 7, 107, 7, 363, 7, 761, 8, 080, and 8, 515 million eggs respectively, while according to Agri-Food Veterinary Authority of Singapore (AVA), the usage of eggs per capita in Singapore are also rising from year 1997 to the year 2009 with the value for each year are 277. 8 pieces and 300. 2 pieces respectively. On the other hand, our country has enough supply of eggs and egg products since early eighties, thus lead to the exporting of our eggs and egg products to the other countries, especially Singapore.

## Why We Export to Singapore

The main reason why Singapore imports their food supply is because of relatively limited production of all agricultural products. In fact, Singapore fully depends on the imports of food supplies. This situation gives a good opportunity to agricultural oriented countries especially the neighbouring ones. Malaysia has a strategic geographical advantage to provide agricultural supplies to Singapore because of the close proximity between Singapore and Peninsular Malaysia. Besides that, better developed infrastructure in the Malaysia than other agricultural oriented neighbouring countries, mainly Indonesia, Thailand, Myanmar, Laos, and Vietnam enhances the importation. As for the financial aspects, exporting to Singapore can help to save the transportation cost. Well enhanced mobility and delivery process is considered a positive characteristic when supplying the export products to Singapore. Food supplies can be exported with no delays and arrives in fresh and good condition.

Besides that, Malaysia can benefit from the currency exchange rate when exporting food supply to Singapore. However, the dependence on type of food import is determined by consumer demand. This would include the current conditions of Singaporean food consumption and expenditures. Data per capita consumption of food commodities in Singapore from year 1997 to 2007 conducted by Agri-Food and Veterinary Authority of Singapore (AVA) in 2008 shows that there is an increment in eggs consumption from 277. 8 pieces to 301. 6 pieces. Household budget share for expenditure on food at home conducted by Singapore Department of Statistics in 2008 shows that Singaporean households allocated most of their budget to rice and other cereals, seafood, meat, vegetables, dairy and eggs and fruits, accounting for more than 85 percent of total expenditure on food at home. This shows the importance of eggs that constitutes part of the major food intake in their diet.

## Accreditation of Overseas Poultry and Eggs Farms

The accreditation of the overseas poultry and table hen eggs farm is very important because this will help to make sure that the imported poultry and eggs are up to the standards. The accreditation is done by the Agri-food and Veterinary Authority of Singapore. This is accreditation is also very useful because this will make sure that the poultry and eggs that are imported into Singapore is free from the contamination and harmful microorganisms. The accreditation is covers three major part which are the evaluation of the country, evaluation of foreign eggs and unique entity number (EUN).

## 2. 1 Evaluation of the country

The country that is entitled for exporting the table hen eggs and poultry broilers to Singapore should follow some of the rules and regulation. Furthermore the country needed to meet the requirement that is set by the Agri-food and Veterinary Authority of Singapore (AVA). This is important because the Singapore authority is able to detect the source if there is something went wrong in the procedure of the exportation to Singapore. In this evaluation part the AVA mainly focus on Malaysian organization structure of the veterinary, the disease control situation, and the microbial residue.

## The set up and organizational structure of the veterinary services

The veterinary services are very important in monitoring the condition of the livestock in a country. This veterinary service will have the standard and monitoring to make sure the livestock are performing well, which is that the livestock are not infected any types of diseases. Therefore the country that wants to export table hen eggs and poultry broilers must has proper veterinary services with a functional organization. In Malaysia the veterinary services is the Malaysia Veterinary Department under the Ministry of Agriculture Malaysia .

## The poultry disease situation and the national program for control and prevention of diseases

The table hen eggs that are produced by the hens should be free from any diseases this is because if the hens are infected with the diseases, the diseases could be transmitted to the eggs. Thus is will be affect the consumers that consume the eggs. The government that is exporting the table hen eggs should have the control and prevention method to stop the spreading of diseases among the livestock. Among the well known diseases that affect the chickens are the avian influenza. The government of Malaysia of the diseases control methods by giving the vaccination for the hens and if the farm is already infected with the diseases, the poultry will be destroyed to prevent any further spreading of the diseases.

## Copy of the legislation

The copy of the legislation of the exporting country is needed when the country want to export the table hen eggs. The legislation will give prove for the AVA that the exporting country has their own standard of the exporting and importing table hen eggs. The legislation for the table hen eggs is written in the Malaysian Food Act and Regulation. In Malaysian Food Act and regulation, the eggs is mentioned as the no putrefaction and no development of the embryo has begun, and the egg is not incubated. The shell is also free from extraneous matter and the shell is not broken. The term of fresh egg also shown the eggs do not undergo any preservation and cooking.

## Copy of legislation authority poultry farms and storage, handling and distribution of egg

The legislation on poultry farms and storage, handling, and distribution of eggs will show whether the authority of the exporting country is following the proper procedure. This is because not proper handling of the storage handling and distribution of the eggs will influence the quality of the eggs and can have the contamination risk. In Malaysia the legislation authority that is responsible for the control is the Malaysian Veterinary Department.

## Licensing authority and licensing system of approved farms

The licensing authority is the authority that is in charge for make sure the producer of the eggs are following the rules and the regulation that is set up by the authority. The licensing system shows the proper ways to attain the license for breeding chicken and producing the eggs. The Malaysia Veterinary Department is in charge of the licensing and approving the chicken farms in Malaysia. The eggs can only be exported from the farms that are accredited by AVA.

## National microbiological and residue control programmes on eggs and poultry meat

In Malaysia the microbiological content in the eggs are 5 x 104 per ml for the total plate count and for the coliform count is 5 x 10 per ml (Food Act, 2009). The microbial content is very important because it will prevent any food borne disease that is caused by the microorganism. The egg producers should do some important microbial test to make sure that microorganisms content is below the level. The National Food Safety Policy is one of the policies that can be used as the reference for exportation of the eggs to the Singapore.

## National Salmonella Enteritidis Control Programme

Salmonella is a type of bacteria that is responsible for the causing the illness in the digestive tract. The Salmonella usually shares the common antigen but they will have their own name. The Salmonella Enteritidis is one the Salmonella species that is closely related in causing the human salmonellosis. The Salmonella can be contaminated the eggs by two methods, which are vertical transmission and horizontal transmission. Malaysian Veterinary Department and Food Safety Department will monitor the salmonella content in the eggs.

## 2. 2 Evaluation of Foreign Poultry Layer (Eggs) and Broiler (Live) Farms

The evaluation of the foreign poultry layer and broiler farms is needed to make sure that the particular farm is eligible for the exporting the eggs to Singapore. The evaluation is done by the authorities from the AVA. The farm breeder can submit the application via the competent veterinary authority of the exporting country. Some of the important information is required for the application and the assessment from AVA.

## Name, address and location of the farm

The name and the address is very important because this will make sure that the authority from AVA able to detect the source of the eggs.

## Population of poultry, breed and estimated production per month

The population of the poultry is very important, this is to make sure whether the farm is over populated or not. This is because the over populated farm can increase the risk of getting and spreading of the diseases. The production per month will indicate that the farm are able provides the demand from the both countries, which are Malaysia and Singapore.

## Type of housing, water, and feed sources

The type of housing of the chickens are very important, this is to make sure what kind of environment the chickens are exposed to. There are two type of housing such as the open sided bird-proofing and closed house system. The water for the feeding of the chicken also very important, the aspect that is being reviewed is the source and type of the water. The feed will help the growth of the chickens and the chickens will produce good quality eggs. The feed source is very important because to know what type of feed is fed to the chickens.

## Sanitation and biosecurity of the farm

The sanitation of the farm is one the aspect that will be look through by the authority from AVA. The sanitation is the procedure on how to handle the waste material of from the farm. There should be a proper and good sanitation procedure, in order to prevent any unwanted disease contamination between the chickens. If the sanitation is not proper the chickens will contract the illness and will fall sick. This also will affect the eggs production and the quality of the eggs. The biosecurity aspect is the fencing systems and the separation of the working places. The fencing is to make sure chicken is separated according to the type of chicken and this will also prevent unwanted crowding of the chicken.

## Hygiene

The farm is should be kept in a very hygiene condition in order to comply with the AVA’s standard and procedure. A very hygienic farm will reduce and minimize the risk of the disease contraction. The aspects that will be looking through by the authority are disinfection procedures, disinfectant used and the frequency of disinfection.

## Management practice

The management practice is very important because proper management will help to maintain the good condition of the farm. The proper management will help to retain the quality of the eggs. The important aspects are movement of old chicks, manure and feed, the handling of eggs, pest control and the recording systems.

## Disease surveillance programmes

The surveillance will help to minimize the risk disease contamination and any factors that contribute to the disease. The surveillance programme includes the surveillance for the Salmonella Enteritidis. The Salmonella Enteritidis will cause the salmonellosis among the humans. The farm must have a programme that is approved by the competent authority in eradicating the Salmonella Enteritidis.

## Drug usage and vaccination programme

The farm that applied for the evaluation for exportation of the eggs to the Singapore must have a proper drug usage and vaccination programme. The drugs and vaccination must be comply with the standard with of the AVA.

## Photographs and layout plan of the farm

The photographs and layout will provide a proper and general view of the farms and this will make sure the evaluation authority will more understanding of the farm. This is also will show the management of the farm.

## 2. 3 Unique Entity Number (UEN)

The UEN is a type of number that is used for the standard identification of an entity. The UEN number is the equal to the identification number of the citizen. The UEN uniquely indentifies the entity. All the entities that are entering and registered in Singapore must need the UEN. The benefit of the EUN is it will make sure a convenient interaction with the Singapore government. Therefore the exporter who exports eggs to Singapore must require the EUN from the authority.

## Veterinary Condition of Importation Eggs (For Malaysia)

## 3. 1 The Purpose of Eggs

According to the regulation, the purpose of the eggs from Malaysia must be only for consumption.

## 3. 2 Import License

Importers from Malaysia need to have a valid license in order to import eggs, which is being issued by the Agri-Food and Veterinary Authority (AVA) of Singapore. In addition, each of the consignment of eggs needs to be accompanied by a valid TradeNet Cargo Clearance Permit (CCP) issued. The CCP must be in the format that approved by Singapore Customs containing the full particulars of the import goods and the condition as may be imposed by the Singapore Customs for the clearance of cargo declared under Section 37 or 59 of the Customs Act (Cap 70), and or Section 3 of the Regulation of Imports & Exports Act (Cap 272A).

## 3. 3 Veterinary Certification

The regulations also strictly focus on this particular point. For eggs from Malaysia, each of the consignment must be accompanied by the veterinary certificate dated within the seven days period of export and being signed or verified by the duly authorized by the Government Veterinary Authority of Malaysia. The particular need to be fulfilled include giving details about the consignment, which is the consignor, consignee, the quantity of the eggs, farm code which is being issued by the Singapore Government, and also the name and address of the farm in Malaysia.

In the veterinary certification by Malaysia, it must include the status and the effect of:

## Pathogenic Avian Influenza (HPAI)

In order to have a precaution on the produced eggs, the regulation also need the importer from the disease-free zones in the state of Johore, Malacca, Negeri Sembilan, Selangor, Perak, and Pahang have been free from highly pathogenic avian influenza (HPAI) for the past six month prior to export. This is due to the past record in detection of such HPAI in those states in Malaysia.

## Source of Eggs

The source of eggs must be derived from the layer flocks kept in a farm and unfertilized, which is being accredited for the import of eggs by Agri-Food Veterinary Authority of Singapore.

## Inspection of Disease

The regulation also strictly need the farm in Malaysia where the eggs are originated must be tested, and also must found to be free from Salmonella Enteritidis. This bacteria can be inside of normal appearing eggs, which is when it being consumed raw or uncooked, it can cause foodborne illness. Currently, there are 22 farms in Malaysia which has been authorized by Singapore, are subject to this inspection. As most of Salmonella species live in the intestinal tracts of animal, thus Singapore setup a strict standard in the management of layer farm.

In addition, the farm also must be free from velogenic Newcastle disease (ND). The disease is caused by Newcastle disease virus which has been classified into the order of Mononegavirales, family of Paramyxoviridae. This disease has been contributed to major loses in eggs industry in Malaysia, thus regulation on this particular disease being implement by Singapore Government.

Other than that, the farm also need to be free from any of infectious bronchitis, infectious laryngotracheitis, Avian encephalomyelitis, infectious bursal disease, EDS ’76 or chronic respiratory disease due to Mycoplasma gallisepticum or M. synoviae, Salmonellosis which including Salm. Pullorum, duck virus enteritis, or duck viral hepatitis. All above inspection must be diagnosed on the farm for last three month prior to export to Singapore.

## 3. 4 Notification of Arrival

Regulation also stated that, if necessary, the eggs importer form Malaysia or their agents need to contact the Quarantine Officer as being stated in the Import License for the time period at least five working days before the arrival of eggs in Singapore.

## 3. 5 Veterinary Inspection

Other than that, on the arrival of the eggs at the disembarkation in Singapore, the eggs and all related document which is Cargo Clearance Permit (CCP) and Veterinary Health Certificate, shall be presented to and examined by and authorized Singapore officer. If the consignment of eggs is found to be clean and fresh, and there is no objection in the documentation particular, the eggs shall be release to the importer.

The eggs also subjected to microbiological examination before release at the discretion of the Director-General of Agri-Food and Veterinary Services. Sample of eggs may be taken for laboratory monitoring or surveillance. The eggs also need to meet requirement of at least 60 Haugh Units (HU). This unit is use in order to describe the freshness of eggs, based on the thickness of the albumin.

## 3. 6 Penalty

All the above requirement and regulation need to be fulfill in order to export the eggs into Singapore. However, if the eggs does not meet the requirement, penalty could be implies to the exporter. If the eggs are not clean or fresh or if any document is not in order, the eggs shall be returned or destroy at the discretion of the Director-General of Agri-Food and Veterinary Services. The exporting farm may be suspended and the importers have its license revoked. Other than that, the importer also is subject to prosecution.

## 3. 7 The Fees

All eggs exporter from Malaysia are subject to particular fee which need to be paid for each consignment of the Cargo Clearance Permit through inter-bank GIRO. There are two fees need to be fulfilled, which is:

Import License (CCP), and

Veterinary inspection and processing of document.

## 3. 8 Other requirements

Additional requirement subjected to the exporter from Malaysia, which are as follow:

Eggs must be derived from farms accredited by Singapore Agri-Food and Veterinary Authority (AVA). Each consignment must be derived from a single farm only. The application for farm accreditation may be made by supplying detail technical information of the farm. Example of the details are name, address and location of farm and hatchery, size, population of poultry, breed, estimated production per month, sanitation and hygiene, management practice, vaccination regime through the competent Veterinary Authority of the country of origin like the Director-General of Veterinary Services of Malaysia.

New farms and suspended farms seeking accreditation and re-instatement by Singapore Agri-Food and Veterinary Authority (AVA) may be required to obtain replacement birds such as day-old chicks only from Singapore Agri-Food and Veterinary Authority (AVA) accredited breeder farms. The requirements needed for accreditation of breeder farms is as mentioned in paragraph (a).

In the case of eggs being transported in reefer containers, the temperature must be maintained throughout the transportation so that the eggs would arrive in a sanitary and fresh condition.

Any expenditure incurred in the process of importation shall be borne by the importer.

Regulations and fees are subject to change without notice notwithstanding the issuance of a license by Singapore Agri-Food and Veterinary Authority (AVA).

Domestic birds include domestic fowls, ducks, geese, turkeys, silkies, quails, chukar partridges and pigeons.

Table-eggs include eggs of domestic birds which are not fertilized or embryonated.

Eggs must be individually labelled with a code that is approved by Singapore Agri-Food and Veterinary Authority (AVA) to identify the producing farm. Labelling should be done with an approved food dye applied with an ink-jet equipment.

## Implication to Malaysian Exporters

## Increase number of eggs produce

The increasing demand for eggs from Malaysia to be exported to the other country has given a clear impact on the increasing number of eggs production by our country. In general, every year, the production towards the consumption of eggs has shown an increasing amount. Below is the table showing on the consumption of eggs in Peninsular Malaysia from 2002 until 2010.

Table 1 : Consumption of eggs in Peninsular Malaysia 2002-2010

Year

Consumption (million)

2002

6074

2003

6295

2004

6474

2005

6793

2006

7107

2007

7363

2008

7761

2009

8080

2010

8515

Source: Department of Veterinary Services (DVS), Kuala Lumpur

In an article in the ThePoultrySite. com, an article on Singapore importation of eggs from Malaysia mention that ; Singapore imports approximately 3, 700, 000 eggs, 125, 000 broiler chickens and 20, 000 broiler ducks from Malaysia daily.

The country’s production of table eggs is expected to reach 8, 295 billion eggs this year, up from 7, 629 billion in 2009, when a 1. 5% increase was recorded (Clements, 2010).

## Better Control and Management From Farm to Consumer

In order to fulfill the requirement of import country, Malaysia’s exporter will have a better control and management from farm, to maintain the quality of the egss produce. Due to a large number of production in commodities in Malaysia, including production of eggs and poultry farm, exportation is a way to a better control and management of these commodities from farm to consumer. Malaysia is self-sufficient in eggs, and exports to a number of neighboring countries (Clements, 2010). In one of the review article by Tey et al., 2009, Malaysia will produce too much commodities by the year 2010, which as stated below :

Malaysia is expected to have excess for these food commodities under the Ninth Malaysian Plan (2006-2010). Agriculture, as the third engine for economic growth is ambitioned to increase productivity of major food commodities in Malaysia. It is targeted that Malaysia will be more than self-sufficient in poultry, pork, seafood, vegetables, and fruits by 2010. Specifically, self-sufficiency levels in poultry, pork, seafood, vegetables, and fruits are expected to attain 122 percent, 132 percent, 104 percent, 108 percent, and 138 percent by 2010 respectively. By achieving that, there will be excess of supplies for domestic consumption. Hence, the excess of the food commodities mentioned above will only become valuable if they are meant for export (Tey et al., 2009).

Exporting commodities to a country also can help to improve in the food safety and quality control. Without the standard level of a safe food, a commodity cannot enter any foreign market. This is supported by the statement made in one of the article’s title in the ThePoultrySite. com. In this article, Agri-Food & Veterinary Authority (AVA) has made an assurance that the eggs exported by Malaysian exporter are safe for consumption and does not pose any risk to food safety. AVA will continue to work closely with DVS to monitor the situation for a safe and adequate supply of eggs and poultry in Singapore.

## Increase Revenue of Eggs Industry and Food Safety and Quality Control

It is really clear that increase in exportation of a commodity to a country will increase the revenue of the exporting country. Exporting eggs to Singapore will help in increasing Malaysia’s economic thus increase the revenue of the year. Malaysia is both importer and exporter of eggs. However, is the fact that 2009 saw the country’s egg exports increase by 40% compared to the year before. Most were exported to Singapore, while the rest were destined for Brunei and Indonesia. Exports totaled 1, 166. 35 billion eggs (Clements, 2010).

## High Control of Food Hygiene and Food Safety

Food hygiene and food safety is a very important issue in the food industry as it provides with safe food to be consumed by the consumer. The trading of egg between countries must be inspect thoroughly to make sure there is no food borne illness being transfer along the way. To control or to monitor this issue is the Agri-Food & Veterinary Authority (AVA). The strictness of AVA towards controlling the safety of the eggs being exported to Singapore shows a high control in the food hygiene and food safety of the traded eggs. Malaysian companies selling their eggs to Singapore will have to follow the requirements of AVA. Indirectly these sellers are exposed to the safety measures and practice it themselves.

The effectiveness of the AVA is shown during the outbreak of H5N1 bird flu in chickens in the year of 2007. This outbreak happens in a village at the state of Selangor. Due to this news, the AVA immediately suspended the imports of poultry and egg from the Malaysian state of Selangor. This gives no chance for the sellers in Selangor to export their eggs to Singapore. This is necessary to make sure that the eggs being exported to Singapore won’t harm the public or the animal health. To ensure the continuation of the market and sales, the egg companies in Malaysia will make sure that the eggs won’t be infected by any diseases by taking extra precautions. Once the sales of the egg is suspended, the company will loss huge sum of money.

Earlier than this outbreak, there is another outbreak of bird flu in Malaysia in the year of 2004 and it happened in the state of Johor and Malacca. This leads automatically to the suspension of eggs to Singapore. However due to the satisfaction of the safety precaution taken by Malaysia to keep the country free from bird flu diseases, the AVA uplifted the ban. AVA plays a very important role in this. In this time, it has worked closely with the Malaysia Bs Department of Veterinary Services (DVS) to make sure that the country are free from bird flu. Inspections were done regularly by AVA to see that Malaysia authorities have taken necessary precaution against the disease and the important control measures that needs to be taken according to the international standards.

## Increase Trade, Indirect Business

Ever since Malaysia has become an exporter of egg to Singapore, the market for the local suppliers of egg has been increasing their sales by exporting it to Singapore. A project has been established and led by a company in China to export more eggs to Singapore and there are companies in Malaysia that had joined this project. The total investment of the project is S$25 million and it start with 300 000 hens and an average production of 250 000 eggs a day. This has led a very huge increase of production of eggs among the Malaysian local exporter. Indirectly it has created a new market, and the increase sales of eggs has promote various ways of egg products to be introduced such as egg yolk solid, egg yolk powder, egg white powder, frozen whole egg and whole egg powder.

Since Malaysia is very close to Singapore the transportation or the delivery service done to export the egg becomes cheaper. It is an advantage to Malaysia than the other neighboring countries. This factor encourages more local egg exporter, big or small to expand their business. This is an important criterion in the management of supplying eggs and egg products to be delivered to Singapore. Easy delivery system decreases the work and procedures need to be done. Therefore the price of the eggs when reaches the country will not get high. Prices of the eggs including transportation really play an important role in the trade market of eggs between Malaysia and Singapore.

Small companies or small egg seller gets more market in selling their eggs as they can consider on selling their eggs to Singapore. It helps them a lot when the transportation of the egg doesn’t need to be sending so far. It is different with big companies as they can afford to sell their eggs outside the country without any problems especially with money. However with the advantage of the location which is very near, the delivery cuts out most of the transportation expenses makes the small companies to also be able to export their eggs, indirectly giving them more business and profit. This helps them to expand in their business.

## Effect to the Local

Due to the increase demand in exportation of eggs to Singapore, more farms are being open to make sure the supply of eggs in the country are always enough. More eggs are produced daily to make sure that the supplies of eggs are sufficient in the country. There are still no shortage of eggs been reported in Malaysia which shows that despite the huge amount of exportation of eggs to Singapore, yet the amount of eggs in the country are still enough. Instead of shortage of egg, more eggs are being produced in the country. Local marketers see that the industry is getting more and more profiting. Therefore more companies invest in the industry.

The increase in the exporting of eggs from Malaysia to Singapore has led to a major development to in the egg industry. Local suppliers have increased their production and due to this expansion, the industry of egg suppliers has developed to an industry of nutritive eggs to the consumer. The local suppliers starts to make a change in the industry by introducing eggs such as Se-Enriched eggs, Vit-E Enriched eggs, Low cholesterol eggs, Meadow gold eggs, Happy eggs, Vegetable eggs, Golden corn eggs and NutriPlus eggs. These suppliers provide enriched nutritive eggs that promote better health to the consumer. Indirectly it gives a better quality egg to be marketed and exported to Singapo