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EGGS: FARMED, BOUGHT & PROCESSED



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What came first the chicken or the egg?

Did God create the bird first or the egg to hatch? It's probably one of the most famous riddles from the days of old when those people who were not farmers where bewildered about how a soft skinned, beak driven bird could lay a hard shelled egg. The best question is: who came up with the best answer throughout time?

Maybe the answer lies within the borders of China, which is believed to be the first country known for domestication of hens for laying eggs. This dates back to 5,400 B.C. according to research. The use of hens laying their eggs was introduced to Europe by the 7th century B.C. and then onto the Americas. There is a dispute as to whether or not Columbus should be credited with bringing this farming resource into the country.

It, however, is evident that breads and cakes using eggs were made by Ancient Egyptian and Roman people. They were a binding and thickening ingredient found in trial and error methods. Custard too dates around Apicius 25 B.C.. Apicius is a cookbook as a collection of Roman recipes. And, it is believed the egg was introduced to Africa after the Greek era of Pericles.

During the early days there is no specific mention of breakfast as it is found that up until 1620, having breakfast was considered "gluttony".

After this time-frame, eggs as a morning meal took on the suggestion a "healthy". England is believed to have aided in it's permanence as a morning food supported within the pages of a published 1669 English cookbook. Whereas in America, cornmeal staples such as Johnnycakes were constant. The diversification of the breakfast menu began during the latter 19th century including eggs and egg styles such as poached, Benedict and the use of Hollandaise sauce. Canadian bacon and the English muffin were invented in New York. It's first sight was believed at Delmonico's Restaurant in the 1860's and some say the Waldorf Hotel in the 1890's.

Notably is the fact that there after a host of eggs which were then eaten throughout the world. This would include chicken, quail, phoenix, turkeys, and even ducks as they were considered a good protein source and readily used in various recipes. Specific kinds such as Ostrich and turtle were highly valued. And, they could be prepared in diverse forms from fried, boiled, stuffed, scrambled, quiche, custards and meringue.

Yet, other cultures shared decidedly that eggs were a filthy food to consume!



EGG FARMING

Eggs are a hard shelled reproductive product produced by hens and other birds which, since the early days of man, become a food for human consumption. Early man discovered that removing the female game birds nest eggs, the jungle fowl was induced to lay more eggs and continue inside a long laying season. The Jungle Fowl were domesticated in India by 3200 B.C.E. They laid eggs for humans around 1400 B.C. back to the Neolithic age.

The quality of eggs during Roman days was well below that of ours today. During these times, the poultry produced smaller eggs and only 60 eggs lain was a expectant amount. Today seasonal, breeding, feed and cooping conditions play key roles in farming and food production. Farmers utilize the use of hen houses which have control mechanism with glitches that impact hen health as they co-exist in close proximity.

The breeds which lay large eggs, medium size and small are readily selectable as research and domestication has provided the ability to do so. This supported the desire to sale eggs based upon weight. Then, jumbo and extra large varieties were added which alter the need for two versus one egg per meal and can change the number used as a baking ingredient.

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POULTRY FARMING



Egg lovers, get ready to embark on a culinary journey!

Poultry-farming brought about the opportunity to make eggs a staple, a common part of our diets. This is possible through extensions into market as a consumer good and business to business food item. It is readily utilized by the food and beverage industry, bakeries for snacks, as a protein meat resource, and various other products.

Its market has grown relative to the increase in demand for confectionery and bakery item production(s), more disposable income, and as a result of health and fitness measures. It is expected to grow upwards of $386.75 billion in 2028 having an annual growth rate of 7.5%.

Egg Candling

The grade of an egg refers to the quality of it as determined using the candling methodology. The US Department of Agriculture has implemented use of letter grades which coincide with the quality of the eggs contained. This is based upon their appearance, weight, and interior quality. How do we determine interior content?

Using the candling system, farmers have the ability to monitor the development of an egg. In observance of the vasculature development, continued growth and shape of are signs of health. Beyond a full week, a healthy fetus kicks and wiggles. As time progresses, the air space within the egg is larger and the egg darker as the bird becomes bigger. The illumination process is a widely utilized means of protecting knowledge of egg quality before it hatches.

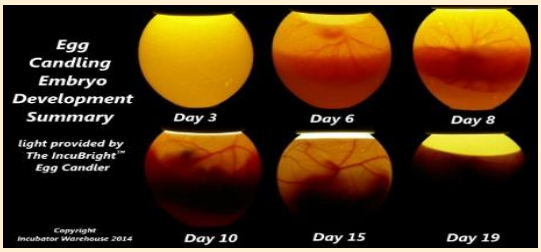
Just as we've seen in Willy Wonka movies, there are bad egg measurement scales through which we are able to assess the fertility and development of eggs, particularly during the incubation period. It involves shining a light source, typically a bright and focused beam of light, through an eggshell to observe the internal contents of the egg.

Eating Eggs

Eggs are a culinary staple that has been preserved in continued use as a scrambled, poached, over-easy, hard fried, boiled, and additive to soups and burgers. They are often eaten in a broth or with meat as olden eggs philosophy suggested that if prepared with good spices, pepper and ginger, they were digested best and were nourishing. Boiled eggs are especially stretched into breakfast item eaten alone, it can be cooled and stuffed using its yolk, it is a additive to cold salads, an ingredient in pastry, cakes, sauces, as a binder and is a additive to soup(s) recipes for varied cultures as it is a protein resource for our bodies.

The duration of the 1920's and 1930's saw egg farms which hens laying eggs for the families and excess went to local farmer's markets. The profits enabled farmers to maintain flocks of hens whom suffered the weather and predators living outside. Larger birds ate more than smaller ones which generated expense for feeding fuel. They began to control the birds diet to maintain their health and ensure quality eggs were produced. Later research into living inside began as protection and longevity in use. These changes reduced early death rates.

In the winter(s), the hen houses were enclosed with fans as the hens were a good 'heat' resource. To collect the eggs, conveyor belts were added and as technology evolved, so did the progression of farming flocks on large commercial operation properties in the 1960's. This increased time and lowered costs to consumers, food service industry, and product line items.



Powdered Eggs

.....are dehydrated egg produced using 'spray drying'. In the late 1800's, advertisements appeared denoting the availability of 'dehydrated eggs. There was and underlined knowledge base that suggested powdered eggs held two advantages (1) reduced weight per volume of whole egg and (2) longer 5 to 10 years shelf life verses that of fresh eggs. There is also the use of less storage space and no need for refrigeration which during such times was a necessity as homes were smaller and held little space for storage. Researchers also noted that their 'spray drying' process reduced natural cholesterol in eggs which held a positive impact against heart attack potential. The powdered version could be rehydrated for use in baking and to scramble or other dishes.

By 1912, the powdered form of eggs was a standard for campers so as not to miss out on the goodness of a home cooked meal. As it's popularity grew it was referred to as dried eggs or Ersatz in the U.K.. It moved onto manufacturing in the 1930's within a London company, Mile End Road resultant of dissatisfaction with China's liquid egg that contained mostly water. This experimental plant was built and utilized. Later, China began to manufacture the Chinese egg in Singapore and they, Mile End Road Company, moved to Argentina to work escaping an ensuing war at home. For this, the British Government would lift it's 'patent' rights which enabled other suppliers into the market.

Omelets (brunch, dinner)

Omelletes are believed to originated in ancient Persia. It is a French term as it was discussed in cookbooks especially notable Frenchman A. Dumas. His choice was made of fresh herbs, mushrooms, or green peas, asparagus, spinach, sorrel or truffles. The Kirsh omelet was made of rum and was sweet with sugar and rum liquor. It is also known that the French used butter as it later became the standard. Other cultures, such as Prussia, used eggs with apples and brown sugar glaze among others. The ostrich egg was prepared with spicy tomato-pepper sauce.

It is most comparative today to a 'fritata' as the eggs are blended with choice ingredients, cooked until brown with the infusion of all items. Traditional omelets were also stuffed with items like mushrooms, seafood, potato or steak after its been fully cooked and on top of the egg until right before it's flipped.

Liquid Eggs

What are pasteurized liquid eggs and how are they utilized?

First came the hard shelled egg with it's yellow yolk and clear bodied liquid substance. Well after it gained acceptance as a regular food item, it prevailed onto the breakfast menu (scrambled, mixed) food but with it's full use was the sense of storage, safety, care, and life expectancy concerns. In the early days, little kitchen space was preserved for storage and the ice box was a tinge smaller than what we are accustomed to today. Liquidating the egg, as seen when agitating the yoke and white portion, became of interest to first the Asian culture and transcended into the U.S..

As a faction of chicken eggs having both the yolks and whites pasteurized, liquid egg is used for food production of items such as cakes, donuts, pasta, mayonnaise, ice cream and other products. It is slowly thermally processed to rid of harmful bacteria(s) that affect the digestive tracts and are dangerous to our health. Specialized equipment breaks the shell and takes the liquid egg, filters it for contamination and is heated to a low required temperature to kill pathogens along with egg pasteurizer. To reserve its natural protein, the liquid is then cooled down as the product free and safe for human consumption.

This same machine can separate the yolk and egg white using a sieve. This enables the variation of product as liquid whole eggs, egg whites, and yolk. This creates and enables the use of the egg as an ingredient, food resource and healthy choice food item. Each is packaged within a carton or bag-in-box form that maintains cold and prevents leakage as they are available chilled or frozen.

The egg is a primary resource of protein as a food item, however, it has not gone without transforming into this more adaptable form for use in food preparation. Chefs, cooks, and food preparers globally infused the use of 'liquid' eggs as an extension of its traditional form. They provide full use, full servings, safe refrigerated keeping and elongated shelf life with greater volume and use of the egg itself.

Nutritionist, food chemist, and other professionals suggest that liquid eggs, because of the processing technique, are void of all the natural elements chicken eggs offer, are still found as viable, nutrient valued food forms. This is important to consumers as restaurants food having a consistency in use, ease of preparation, controlled portions and quality in storage. It is said that processed eggs were believed to propel the egg market into the future

Future of Eggspectations.....

a. Egg bites: fully cooked bites baked with sausage or bacon and cheese.
b. Farmers have begun use of 'robots' to package eggs for increased productivity
c. Antibiotic-free animal agriculture
d. Enhancing an animals immune system using immune modulator drugs to control disease and risk of transmission of disease to humans
d. Use of egg yolk antibodies help decrease risk of chicken disease

Egg Market Potential

The egg market consists of revenues earned from raw eggs breed and hatched and includes processed eggs and bird meat sales. Further onto the product development from use of farmed eggs categorically. Goods and services traded or sold between interest to end consumers in market and geographic defined.

This industry fluctuates annually recognizes an increase in purchases based upon supply imbalances due to retailer promotions using attractive price incentives. This is dually impacted by occurrences such as the "avian influenza" and other disease or natural disaster which have befallen farmers. Thus a shortage of hens negatively reflects in output. And, there is event focused market increase during the Easter holiday as there exist a greater demand.

In 2024 the expectant growth rate of 8.47% will reflect as U.S. $130.70 billion. Having the highest revenue from eggs in China at $22,500 million. In 2023, the U.S. exports totaled $760.31 million within a growth rate of 1.8%. Annual incomes per country present as follows for 2014-2023:

(USD)

Mexico	$218.73 mil	Brazil	$42.12 mil
Canada	$200.33 mil	Trinidad & Tobago	$26.65 mil
Japan	$54.76 mil	United Kingdom	$22.8 mil
Jamaica	$43.8 mil	Guyana	$14.31 mil
European Union	$42.9 mil		
Bahamas	$11.93 mil		

Asia-Pacific was the largest region in the egg market in 2023. U.S. was the second largest.

As recognized in this text, the liquid egg industry is currently stable having light to moderate supplies accessible.

Eggs and the Medical Community

Egg white has become a none substance to bare the brunt of fighting off unwanted bacteria in our bodies. It too has sufficient antibiotic therapeutic qualities. This is for infections and as extensive as tumor malignancies. Primarily, eggs were used to grow viruses which are functional vaccines. Using the egg white, a genetic modification technique encodes proteins in DNA and they contain the essential amino acids which our bodies readily utilize. This helps with weight loss, muscle mass, lowering blood pressure and bone health among other physical aide properties.

Using an egg based Flu vaccination, production of IV Benadryl or Propofol medications grant farmers more privy to funding to assure high-quality eggs and diseased free birds (hens) are used for these purposes.

In the UK, a British scientist has created a breed of genetically modified hens that produce a cancer-fighting medicine in their eggs. This research along with all the others, can reduce the future cost of producing drugs significantly saving millions of dollars.

Egg Symbolism & Traditions

a. Eggs too developed socio-religious connotation symbolic (Fertility) and of tradition(Easter). Because they were believed to embody the essence of life, ancient people onto this modern world seek traditional mystical relativity and beliefs endowing 'eggs' with power in creating life and prophesy of the future. Shells are often representative of 'female eggs' symbolic of life in varied stages beyond birth, long life, and immortality. Early mythical beings granted the Sun, in our sky, and the Egg, with it's yellow yolk, as the sources of life.

b. They were eaten to provoke fertility partaking of it's magical qualities. Slavonic and German lands smeared their hoes with eggs to mythically fertilize the soil in hope of prosperous crop season.

c. Medieval France, ate to maintain a healthy body, 'soft-boiled' eggs for their digestibility.

d. In Iran brides and grooms exchange eggs and in France the bride breaks an egg at the door of new home for to ensure fertility.

e. Australian Aborigines believed they were descendants of the Emu so they avoid eating, as a strict taboo, the eggs of their ancestral bird.

f. The Chinese belief eggs symbolize life used them to divine the future boiling and painting them and reading the patterns in their cracks. Oomancy from the base Greek word 'oon' for egg.

g. Jewish traditions during Passover suggest the egg as a symbol of sacrifice and rebirth.

h. The egg had become, at some point, the biological history of the world. The Hindu culture adapted a description of an egg in total as a reflection upon our very existence. Their belief suggested that after incubation period, the egg splits open into a silver and a gold portion. Silver is the earth and the gold the sky having its outer membrane as the mountains. The inner part are the clouds and mist as the veins are rivers. The fluid inside is the ocean and from this came the sun.

i. Even eggs having been sold for decades by the dozen has symbolic meaning. As 12 reflects biblically upon Jesus' disciples it has become a standard measurement which evolved more so during the Elizabethan times. It too became known as the "bakers dozen" in a carton. But, then dispute began as some suggested eggs must be sold by weight and not by count. The actual size of eggs varied and therefore it was impractical to not be sold by size. Hence, egg grades were established and packaging began to range from 6 to 18 per container at market. There may have been a difference only when directly purchased from a local farmer.

j. Egg packaging was design, of course, to prevent breakage as we all know there is nothing worse then owning damaged goods upon reaching home. That meant that the eggs must not touch and early shopper employed the use of dry, clean 'straw' to separate them. A barrel could also be packed with straw and eggs strategically for transport to market. At market they were sold or bartered for other goods. The U.S. uses Wholesale Grades for Shell Eggs which designates weight classes for eggs. The four grades are: AA, A, B and C. The best are the AA and A whereas grade B's are for scrambling, baking and recipes. And, grade C's are rarely a 'for sale' retail good.

k. Brown eggs are found to have the same quality in taste and use as their white counterparts, however, they are bigger as they laid by larger hens which eat more and therefore cost more.

The Word EGG

The word has been traced back to prehistoric Indo-European as a related word for 'bird' which transposed from the English term 'oeg' from ey 'eyren' and by the 14th century the word 'egg' was taken from Old Norse emerging more so by the sixteenth century.

a. Eggplant

Eggplant is big among the vegan community, yet, it has its list of partakers as a vegetable side. It is a large purple spongy fruit used in many cuisines as a veggie. Solanum melongena has gained popularity and continues to be a good food source.
The use of the word "eggplant" has been extended fro the food world out into the real world as it is a popular "ambergine emoji" which represents a penis within sexting conversations. And, a long time ago, for some reason, it is a term that represents "a black person" amongst Italian Americans. As blacks are referred to as melanzane and mouliyans also.

b. Eggos

"Let go my eggo" was a notable command of the eighties as it echoed that the Kellogg's Waffle was property of whomever put it inside of the toaster to eat. The commercial(s) reverberated the sentiment for years of brand advertisement.

c. Eggspectation

This Montreal restaurant chain, existing throughout the United States and abroad, specializes in egg based meals and all day breakfast menu items. It shares in it's fascination with the "egg" along side other restaurants whom used with intention "egg" to bring in customers with egg savvy names.

Eggstravaganza	Fireside Eggs	Sunnyside Up	Cracked Eggery
Benedict Farms	Sunny Side Cafe	Chucky Chicks	

d. Egg Foo Yung

.....as it is spelled in it's traditional Guangdong, Cantonese language, is known also as hibiscus egg. It is a Chinese omelet flavored with use of special seasonings and vegetable content with sauce, rice and choice meat or seafood customary companion. The dish also spelled, Egg Foo Young, is traditional in the U.S. as a Chinese restaurant menu item.

e. To challenge the ice cream float for those desiring to consume no egg and no cream, the creation of the **"Egg Cream"** cold beverage was created. It consisted of milk, carbonate water, and flavored syrup.







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