

# Quail egg consumption: patterns, preferences and perceptions among consumers in Galle district, Sri Lanka

H.M.W.N. Abeyrathna

*Galle Advanced Technological Institute, Labuduwa, Akmeemana.*

## Introduction

Owing to the changing life style and food availability, Quail egg is being used as an alternate potential and acceptable egg source in many parts of the world. Regular consumption of quail eggs helps fight against some diseases such as digestive tract disorders, tuberculosis, asthma, diabetes and stomach ulcers, strengthen the immune system, promote memory health, increase brain activity and stabilize the nervous system. Nutritional value of quail eggs is higher than those offered by other eggs and contain high amount of antioxidants, minerals, and vitamins and less amount of cholesterol (Tanasorn *et al.*, 2013). Compared to chicken eggs, there is a limited body of scholarly literature in related to consumer behavior of quail eggs. Most literature to do with quails and their eggs has focused on production and processing issues, not consumer market studies. Therefore, present study was aimed to determine the quail egg consumption patterns, preferences and perception among consumers in Galle district, Sri Lanka.

## Methodology

Ten Divisional secretariats (Akmeemana, Ambalangoda, Baddegama, Balapitiya, Bopepoddala, Elpitiya, Galle four gravates, Habaraduwa, Thawalama and Yakkalamulla) in Galle districts were purposively selected as the research area. 200 consumers, who toured to local markets and supermarkets in those areas were purposively selected and interviewed. Information related to consumers' age, sex, education, occupation, income, consumption pattern and attitude towards quail eggs were collected using a pre-tested questionnaire with having both open and closed form questions. Primary data were processed and analyzed using the Microsoft Office Excel (2003) and SPSS 20 package. The association between demographic data and egg consumption pattern was tested using chi square, with a p-value of less than 0.05 considered statistically significant.

## Result and Discussion

As to present study produced data it is revealed that majority of the respondents (57%) did not consumed quail eggs, while 43% consumed. Table 01, shows the relationship between

demographic data with the quail egg consumption. These demographic indices did not significantly ( $p > 0.05$ ) influence the quail egg consumption, except gender, with female respondents consuming less eggs. Findings of the study is revealed that purchasing frequency is not satisfied, because most of the respondents who consume quail eggs (81%) rarely purchased eggs every month. Most of them had purchased quail eggs once or twice during the past year. Findings revealed, quail eggs were not a regular food item in their diet.

Boiled eggs were most preferred (61%) as egg serving method than any other preparations (Figure 01). This can be expected because of the small size of quail eggs, it is inconvenient to prepared comparing with other poultry eggs especially chicken eggs. Consumers had purchased quail eggs from Food Cities (34%), from Farm shops (30%), from grocery stores (20%) and directly from farms (11%). 5% of consumers had supplied quail eggs by home production.

When the quail egg consumers were asked about the major factors that limit their consumption of quail eggs, it was found out that the most common limiting factor was the low of availability of quail eggs (54%) in the accessible markets, the high price of the quail eggs became the second factor (23.3%) and less preference of other family members was the third factor (16.3%).

Variable	Frequency	Percentage (%)	$\chi^2$	p-value
Gender (n=200)				
Male	119	59.5	9.929	0.002*
Female	81	40.5		
Age (Years)(n=200)				
Less than 30	47	23.5	0.166	0.920
30-50	121	60.5		
>50	32	16		
Religion (n=200)				
Buddhist	179	89.5	0.998	0.607
Catholic	5	2.5		
Islam	16	8		
Educational level (n=200)				
Below secondary	68	34	5.475	0.065
Secondary	81	40.5		
Tertiary	51	25.5		
Income (per month) (Rs.)				
<20,000	62	31	4.231	0.124
20,000-50,000	102	51		
>50,000	36	18		

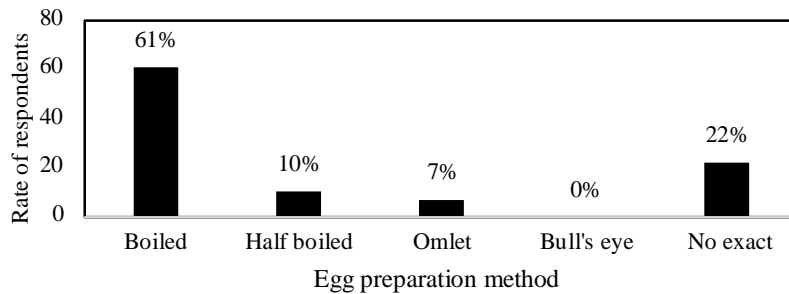
Egg consumption (n=200)				
Yes	86	43		
No	114	57		

Table 01:Demography and egg consumption among respondents

\*Relationship with the egg consumption is significant at 0.05 level.

Table 02 revealed that, awareness on the nutritional and health benefits of quail eggs among the people had significant influenced on egg consumption. Majority of egg consumers had knowledge that quail eggs are better for asthma and have a low level of cholesterol.

Respondents who did not consume quail eggs mentioned their reasons as follows: a) they are



not used to eat quail eggs as a food (50%), b) do not like the appearance of the egg (17.5%), c) not available where they usually shop (14.9%) and d) do not like taste and odour of eggs.

Figure 01: Way of preparation of quail eggs for consumption

Table 02: Awareness of nutritional and health benefits of quail eggs among respondents

Consumption of quail eggs	Awareness about the qualities of quail eggs		$\chi^2$	p- value
	Yes	No		
Yes	74	12	45.626	<0.0001
No	44	70		

It is recommended to keep cholesterol level below 200 mg per day for whom with cardiovascular diseases, diabetic patients, those with hypercholesterolemia and serious risk factors and those with a history of familial early atherosclerosis (Cengizhan, 2012). Hence, there is a potential to increase the quail egg consumption within the society due to its low level of low density lipoprotein cholesterol ((Polatet *et al.*, 2013; Tanasomet *et al.*, 2013).

## **Conclusions**

Quail egg consumption is low in the society. But there is a potential to enhance it as an alternative egg source among the people. Effective promotion and advertising campaign about the nutritional and health benefits for a healthy society should be organized to create well-informed consumers. As well as quail egg production should be promote to increase the availability of them.

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## **References**

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