

# A Survey on Dog Feeding Practices in Dhaka, Bangladesh



**By:**

**Md. Atikur Rahman**

**Roll No: 16/58**

**Reg. No: 01678**

**Intern ID: 66**

**Session: 2015-2016**

A production report submitted in partial satisfaction of the requirements for the  
Degree of Doctor of Veterinary Medicine (DVM)

**Faculty of Veterinary Medicine  
Chattogram Veterinary and Animal Sciences University  
Khulshi, Chattogram-4225, Bangladesh**

# A Survey on Dog Feeding Practices in Dhaka Bangladesh



Approved by:

---

**Dr. Mizanur Rahman**

**Assistant Professor**

**Teaching & Training Pet Hospital and Research Center, Dhaka**

**Faculty of Veterinary Medicine**

**Chattogram Veterinary and Animal Sciences University**

**Khulshi, Chattogram-4225, Bangladesh**

## **Statements of Author**

In this report, I, Md. Atikur Rahman, hereby firmly assure that I have completed all tasks. The data was gathered through publications, websites, and other resources on a national and international scale. There has been proper citation of all sources. Because of this, I am solely responsible for gathering, organizing, keeping, and disseminating all of the data that was gathered for this report.

The Author

July, 2022

<b>Table of Contents</b>	<b>Page No.</b>
Statement of Author .....	I
List of Tables .....	III
List of Figures.....	III
Abstract.....	1
1. Introduction.....	2-3
2. Material and Methods.....	4-5
2.1 Study area and population	
2.2 Data collection process and tools	
2.3 Data analysis	
3. Result.....	6-8
3.1 General information of owner and dogs	
3.2 Feeding practices of dogs	
4. Discussion .....	9-10
4.1 General information of dogs	
4.2 Feeding practices of dogs	
5. Limitation.....	11
6. Conclusion.....	12
7. Reference.....	13
Acknowledgement .....	14
Biography of Author .....	15

**List of Tables:**

Table-1: Frequency and percentage of different parameter related to basic information of owners and dogs.....6-7

Table-2: Frequency and percentage of different parameter related to feeding practices of dogs.....8

**List of Figure:**

Fig 1: Geographical Location of data collection site.....4

## **Abstract**

The current study was performed through the period of February 17 and March 16, 2022, at the Teaching and Training Pet Hospital and Research Centre in Dhaka. The objective of the study was to understand the overall picture of dogs and their feeding practices. In this study, 40 dogs were induced. A conducted questionnaire was used to gather the information from the owners. The information showed that businessman made up the majority of the owners (32.50%). Dogs of the local (37.50%) and German shepherd (22.50%) breeds were mostly preferred by owners. The majority of dog owners preferred homemade feed (87.50%) followed by commercial feed. Among commercial feed, drools (5%) and classic pets (2.50%) were dominant because they are more popular. Boiled chicken (32.50%) was dominant protein sources and rice (65%) was dominant carbohydrate sources in case of homemade feeding. Vegetable (70%) were also offered. We can draw the conclusion that owning pets is growing in popularity. Therefore, the marketing strategy for pet feed must be user-friendly for pet owners.

**Key words:** General information, feeding practices, dog

## 1. Introduction

Animal health and welfare are primarily impacted by feed, a significant element of food chain. Any substances (single or numerous), whether processed, semi-processed, or raw, that is meant to be fed directly to animals is referred to as a "feed" (World Organization for Animal Health, 2018).

Over the past four decades, Bangladesh's urban population has grown remarkably (Helal and Hossain, 2013). People have a wide range of options to work in a variety of fields thanks to these rapid urbanizations, which enables them to supplement their income. The families in urban area are mostly nuclear. The majority of members of this predominant nuclear family in urban are engaged in their own interests and sometimes they feel loneliness and depression at leisure time. This promotes the ownership of pets and people are gradually becoming more interested in caring for pets (Irvine, 2013; Bradshaw, 2017). Most of them are cats followed by dogs to get away from such type of loneliness and depression. According to reports, pet owners have higher levels of life satisfaction and happiness than non-owners (Bao and Schreer, 2016).

The majority of dogs and cats in industrialized nations have been fed these diets since the development of conventional dry (kibble) and wet (canned, pouches, and rolls) pet foods, which are widely regarded as the standard way to feed dogs and cats. For dogs, homemade food is the standard in Bangladesh. The menu includes fish, milk, boiled chicken, rice, and vegetables. Only small volumes of dry and wet food are utilized because Bangladesh's dog food industry is still developing (Dodd, 2020).

There are risks associated with feeding nutritionally deficient meals, including infectious pathogen exposure and dietary deficiencies or imbalances. Eating unbalanced homemade meals has been associated to seizures, myelopathy, dysregulation of bone metabolism, and pancreatitis. Antibiotic resistance and the use of raw feed have also been connected. There have been allegations of ingredient adulteration and nutrient imbalances in commercially produced kibble and wet food, therefore they are not a guaranteed method of preventing nutritionally associated sickness.

The advice of veterinarians seems to be that dogs should be fed complete, balanced commercial diets. In order to keep practitioners up to date, it is essential to regularly

document and identify trends in companion animal nutrition due to the variety of feeding methods and the shifting perspectives of pet owners (Dodd, 2020). Therefore, the study was conducted with the following objectives:

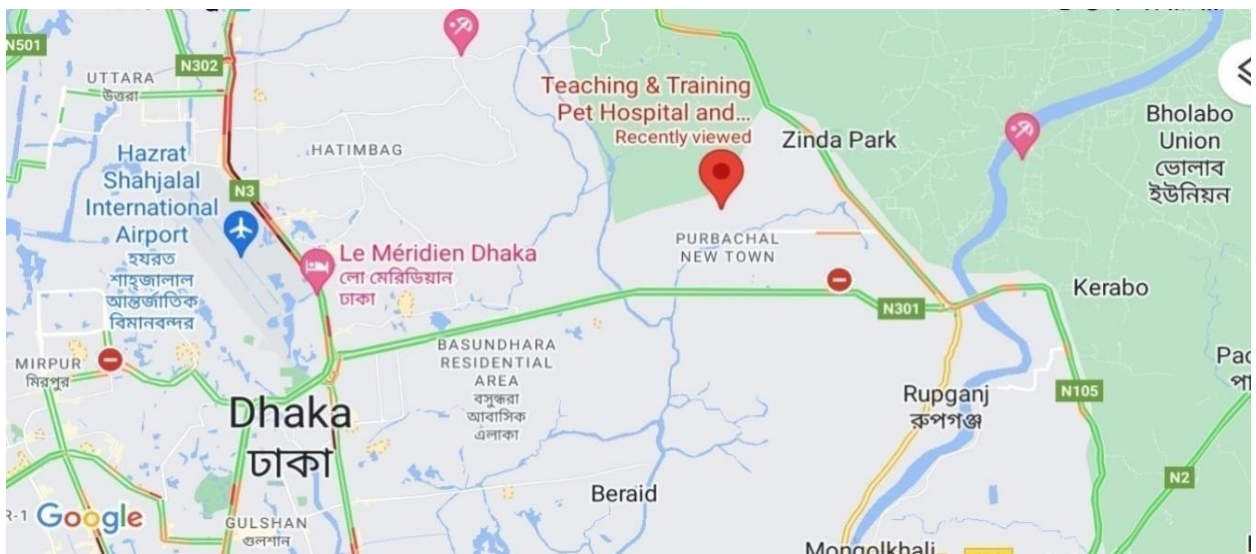
- To know the common dog feeding practices in Dhaka, Bangladesh.
- To know the dog feeding management system in this area.



## 2. Materials and methods

### Study area and population:

The study was conducted from February 17 to March 16, 2022, during one-month internship placement at Teaching and Training Pet Hospital and Research Center (TTPHRC), Purbachal, Dhaka. The information was gathered from dogs that visited to the hospital for routine checkup, deworming, vaccination shots, and treatment purposes etc. A pre-structured questionnaire was used to conduct the survey, which was based on individual level data collection through face to face interview of the owners and close observation of dogs. A total of 40 dogs were enrolled during our study period.



**Fig: Geographical Location of TTPHRC.**

**Data collection process and tools:**

The owner was interviewed and was closely observed the dogs to acquire data regarding study's objectives using a pre-planned interview schedule. Information based on various qualitative and quantitative criteria, such as general information about the owner and dogs (occupation, dog population size, age, breed, body weight, sex, information about neutering, BCS, etc.), feeding practices of dogs (feed type, mixing percent, brand name, commercial feed type, protein source, carbohydrate source, vegetables, frequency of feeding, amount of feed/meal, vitamin/mineral supplement, feeding advice, etc.), and health status of dogs etc. were collected.

**Data analysis:**

After being organized, the data were imported into Microsoft Excel 2016. Using an excel sheet, descriptive statistics were mostly used to show the results in accordance with the study's objectives.

### 3. Result

#### General information of owners and dogs:

Frequency and percentage of occupation of owner, age, breed, body weight, neutering information, BCS (Body Condition Score) and number of dogs were measured among general information on owners and dogs (Table-1). The occupation of dog owner was varied into 10 categories where businessmen having a larger percentage (32.50%) and Army, Navy, Scientists having a lower percentage (2.50%). Maximum owner had over 10 dogs (47.50%) followed by 3-10 (40%) and below 3 (12.5%) among the number of dogs. Among age category, adult and old dogs were higher percentage (30%) than puppy and young (20%). Local breed (37.50%) was the most prevalent breed, followed by German Shepherd (22.50%). Majority of dogs were weighed below 10 kg (40%) followed by greater than 20 kg (32.50%). Male dog was higher (55%) than female (45%). Most of the dogs were neutered (72.50%).

Table 1: Frequency and percentage of parameter related to general information of owners and dogs (N=40)

Explanatory variable	Co-variable	Frequency (n)	Percentage (%)
Occupation	Army	1	2.50
	BGB	2	5.00
	Businessman	13	32.50
	Doctor	2	5.00
	Housewife	7	17.50
	Navy	1	2.50
	Rescuer	2	5.00
	Scientist	1	2.50
	Service holder	6	15.50
	Student	5	12.50
Population size	<3	5	12.50
	3 to 10	16	40.00
	>10	19	47.50
Source of dog	Adopt	10	25.00
	Gift	9	22.50
	Pet shop	10	25.00
	Stray	11	27.50
Age category	Adult (>1 to 5 Y)	12	30.00
	Old (>5 Y)	12	30.00
	Puppy (<6 M)	8	20.00
	Young (6 to 12 M)	8	20.00
Sex	Female	18	45.00
	Male	22	55.00
BCS	Good	33	82.50
	Poor	7	17.50
Breed	Cross	1	2.50

	Doberman	1	2.50
	German Shepherd	9	22.50
	Labrador	2	5.00
	Lassa	4	10.00
	Local	15	37.50
	Pomeranian	1	2.50
	Pug	1	2.50
	Rottweiler	2	5.00
	Samoyed	1	2.50
	Husky	2	5.00
	Spaniel	1	2.50
Body size	Large (>20 kg)	13	32.50
	Medium (10-20 kg)	11	27.50
	Small (<10 kg)	16	40.00
Neutered	Yes	11	27.50
	No	29	72.50

### Feeding practices of dogs:

The frequency and percentage of following feeding practices for dogs were mentioned like feed type, mixing percentage, brand name, commercial feed type, protein source, carbohydrate source, vegetables, frequency of feeding, volume of feed/meal (gram), vitamin-mineral supplement, and feeding recommendations received (Table-2). Most of the owner preferred home-cooked meals (87.50%), followed by combination of home-cooked and commercial food (12.50%). Classic pets, drools, pedigree and purina were infrequently chosen as commercial dog food by owners. Among commercial feed, owner favored dry type mostly. Only boiled chicken was the dominant protein source (32.50%) followed by combination of meat and boiled chicken (20%) for the dogs in this study.

Most of the owner used rice (65%) as carbohydrate. Majority of them (45%) liked feeding their dogs twice in a day. Maximum owner provided  $\leq 300$  grams (62.50%) feed per meal. Very few owners offered vitamin and mineral supplements for their dog.

Table 2: Frequency and percentages of parameter related to feeding practices of dogs (N=40)

Explanatory variable	Co-variable	Frequency	Percentage
Type of feed	Home cooked	35	87.50
	Home cooked and commercial	5	12.50
Brand	No brand	35	87.50
	Classic pets	1	2.50
	Drools	2	5.00
	Pedigree	1	2.50
	Purina	1	2.50
Protein sources	Boiled chicken	13	32.50
	Boiled chicken, meat	8	20.00
	Boiled and cooked chicken	3	7.50
	Boiled and cooked chicken, fish	1	2.50
	Boiled and cooked chicken, milk	1	2.50
	Boiled chicken, egg	5	12.50
	Boiled chicken, egg, meat, cooked chicken	1	2.50
	Boiled chicken, milk	2	5.00
	Boiled chicken, milk, egg	3	7.50
	Cooked chicken	2	5.00
	Grilled chicken	1	2.50
Carbohydrate sources	Bread	1	2.50
	Rice	26	65.00
	Rice and bread	12	30.00
	Rice, bread and rice gruel	1	2.50
Other additives	No	10	25.00
	Biscuits	1	2.50
	Vegetables	28	70.00
	Vegetables and cake	1	2.50
Frequency of feeding	Single	4	10.00
	Double	18	45.00
	Triple	16	40.00
	Quarter	2	5.00
Amount of feeding (per meal)	Up to 300gm	25	62.50
	301-500 gm	6	15.00
	>500 gm	9	22.50
Vitamin supplement	No	36	90.00
	Glucosamine	1	2.50
	Calcium	1	2.50
	Zinc and calcium	2	5.00

## 4. Discussion

### **General information of owner and dogs:**

Businessmen made up the majority of dog owners in this study. People in business must perform under stress. They need a break from this boring situation. As a result, they began keeping dogs as a source of stress and anxiety relief. Pets offer friendship in addition to refreshment, which helps people regain their vitality. Studies have revealed that owning a dog has a number of health advantages, according to the CDC. Blood pressure, cholesterol, and triglyceride levels are all lowered as a result of regular walks with pet dog. Due to the fact that exercise raises serotonin levels in the brain, running or speed walking with dog has additional advantages. Brainpower and mental clarity are increased thanks to serotonin, which also helps with productivity and production (CDC, 2018)

According to the current study, German Shepherds are the most popular breed because they are readily available for purchase and because of their gentle attitude, beautiful look, loyalty, and courage (American kennel club, 2009).

### **Feeding practices of dogs:**

Homemade dog food was the most preferred option for owners (87.50%) in this study. The availability of raw materials, as well as the unpopularity and lack of a pet feed marketing structure, were the primary factors in the decision to choose for homemade pet food. The owner has complete control over the feed's ingredients, which is its biggest advantage. Fillers and unnecessary ingredients are commonly found in commercial dog food. These inferior ingredients contribute to weight gain and health issues (Villaverde and Chandler, 2022). Providing homemade feed will help avoid these issues. A fundamental limitation of homemade feed is the absence of testing. Owners must rely on database data to determine nutritional sufficiency because this could jeopardize safety. Nutritional deficiency may result from this. Only 12.5 percent of owners favored merging homemade and commercial feed, according to our study. Drools, pedigree, classic pets, purina were favored by the majority of owners in commercial feed. When compared to other manufacturers, Drools and pedigree are Bangladesh's most reputable brands, though the pricing is little bit high (Pet Zone BD, 2022). When it came to commercial feed, the dry type diet was more common.

In case of protein source most of the owners preferred boiled chicken (32.50%) for their dog. Boiling chicken is okay to give to dogs every day. Only boiled chicken, however, does not provide a balanced diet. Boiled chicken helps provide dogs' needs for protein and amino

acids, which should make up a large amount of their diets. However, chicken cannot be the only source of the necessary vitamins and minerals. Because of this, veterinarian's advice to giving dogs cooked chicken along with fruits and vegetables to create a balanced diet. A healthy diet for sick dogs is boiled chicken. It gives the dogs energy and is simple to digest, which is very beneficial for dogs that have digestive problems (Yumwoof, 2021). Owner shouldn't put away the other necessary item like vegetables, if boiled chicken provides every day. Our study revealed that 70% pet owners preferred vegetables as additives which are healthy and necessary for their dog.

Although rice is high in carbohydrates, it also has protein and fiber. Bruce Fogel, DVM, MRCVS, writes in *Natural Dog Care* that "Energy comes from the protein, fat, and carbs consumed by dog (Myollie, 2019). Sugar is produced when carbohydrates are consumed, giving immediate energy. For dog, rice is a fantastic source of iron, fiber, and vitamin D. Iron helps create hemoglobin, the oxygen-carrying molecule in red blood cells, while vitamin D helps control calcium and phosphorus levels. Rice should just be one component of a diverse diet that provides all the nutrients dog needs; it should not be the only meal dog has every day. As long as the rice is cooked simply, without any spice or flavors, and as long as it's a part of dog's balanced diet, dogs can consume rice in moderation (Purina, 2019).

According to this study, the majority of owners used to provide food two times every day. Additionally, we noted that 62.50% of proprietors served meals weighing up to 300 grams. According to surveys, the majority of owners opted against taking a vitamin-mineral supplement. Only 10% of dog owners chose to give their dog's vitamin and mineral supplements. Manufacturers and supporters of dog supplements claim that vitamin-mineral supplements should be viewed as an addition to a dog's diet since they can promote the longer, healthier lives of dogs (Great pet care, 2021).

## **5. Limitation**

This study has certain shortcomings. Time allotted for study was constrained, and only a specific area has been used. The conclusions might not apply to the entire nation as a whole as a result.



## **6. Conclusion**

With Bangladesh's rising urbanization, pet-raising is becoming more common. The completed study will aid students interested in the fields of veterinary science, companion animal nutrition, and pet animal nutrition by providing information regarding dog feeding practices to both new and experienced pet owners.

## 7. References

- American Kennel Club. (2009). Expert-advice/lifestyle/why-are-german-shepherds-so-popular. <https://www.akc.org>.
- Bao, K. J, and Schreer. (2016). Pets and happiness: Examining the association between pet ownership and wellbeing. *Anthrozoos*, 29: 283-296.
- Bradshaw, j. (2017). *The animals among us; the new science of anthrozoology*. Penguin UK.
- Center for Disease Control. (2018). Healthy pets/keeping-pets-and-people-healthy/how.html.<https://www.cdc.gov>.
- Dodd, S. C. (2020). An observational study of pet feeding practices and how these have changed between 2008 and 2018. *Veterinary Record*, 186(19), 643-643.
- Great Pet Care. (2021). Dog-nutrition/vitamins-and-minerals-for-dogs. <https://www.greatpetcare.com>.
- Helal, M., and Hossain, M. (2013). Four decades of economic development of Bangladesh: An assessment. *Journal of the Asiatic Society of Bangladesh (Hum.)*, 58: 335-362.
- Irvine, L. (2013). Animals as Lifechangers and Lifesavers: Pets in the Redemption Narratives of Homeless People. *Contemporary Ethnography*, 42; 3-30.
- Myollie. (2019). Can-dogs-eat-rice. <https://blog.myollie.com>.
- Purina.(2019).Articles/dogs/feeding/what-dogs-eat/can-dogs-eat-rice.<https://www.purina.co.nz>.
- World Organization for Animal Health. (2018). Retrieved from World Organization for Animal Health Web site: <https://www.woah.org/en/what-we-do/standards/codes-and-manuals/terrestrial-code-online-access>
- Yumwoof. (2021).Blogs/nutrition/how-much-chicken-rice-to-feed-dog.<https://yumwoof.com>.

## **Acknowledgement**

All the praises go to the Almighty Allah, the creator and supreme ruler of the universe, who enabled the author to complete the work successfully.

The author wishes to express his sincere gratitude to his esteemed teacher and supervisor, DR. Mizanur Rahman, Assistant Professor, Teaching and Training Pet Hospital and Research Center (TTHPRC), Purbachal, Dhaka, for his academic guidance, considerate supervision, priceless counsel, and sound judgment throughout all phases of the study. The author wishes to express his sincere gratitude and respect to Professor Dr. A. K. M. Saifuddin, Director of External Affairs, Chattogram Veterinary and Animal Sciences University, and Professor Dr. Md. Alamgir Hossain, Dean, Faculty of Veterinary Medicine, for allowing his to continue this internship program.

Finally, a special thanks to Dr. Abdul Mannan for his approval and assistance. He is the Deputy Chief Veterinary Officer and Director (In-Charge) of the TTHPRC in Purbachal, Dhaka.

## **Biography**

Md Atikur Rahman, a student pursuing his graduation in Doctor of Veterinary Medicine (DVM) at Chattogram Veterinary and Animal Sciences University under the Faculty of Veterinary Medicine, is the son of Babul mia and Kuhinur Begum. He earned his Secondary School Certificate (SSC) from Rasullabad U.A.Khan High School in Brahmanbaria in 2012 and his Higher Secondary Certificate (HSC) from Adhyapak Abdul Majid College in Cumilla in 2014. He is now completing his 12-month internship.