

## Medicoethnozoological Studies of Quranic Mammals from Religious and Scientific Perspectives

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**Abstract:** This work presents an inventory of Quranic Mammals and their importance in the light of religion and science. In view of the importance of this study comprehensive and detailed data was systematically collected from Holy Quran, other Islamic and available scientific literature. Present findings confined to 13 animals belonging to class mammalia of animal kingdom. The mammals enlisted in the holy Quran are: camel (*Camelus dromedarius* L. 1758), cow (*Bos Taurus* L. 1758), dog (*Canis familiaris* L. 1758), donkey (*Equus africanus* L. 1758), elephant (*Elephas maximus* L. 1758), goat (*Capra hircus* L. 1758), horse (*Equus caballus* L. 1758), lion (*Panthera leo* L. 1758), monkey (*Macaca sylvanus* L. 1758), mule (*Equus mule*), pig (*Sus scrofa* L. 1758), sheep (*Ovis aries* L. 1758) and wolf (*Canis lupus* L. 1758). Results were systematically arranged by alphabetic order of zoological names followed by Quranic name, English name, Arabic name, family, medicinal uses, references cited from Holy Quran and Islamic ruling. It is recommended that animal-based industries should be developed in the light of Islamic teaching and research. The adulterations of unlawful animals particularly pig sources in food products are prohibited in Islam. Muslim researchers should have an urge to explore the detection techniques in food adulteration in order to protect muslim consumers in choosing food products for their consumption.

**Key words:** Mammals • Holy Quran • Islamic Ruling • Zootherapy

### INTRODUCTION

Islam is the most perfect religion and Qur'an the most perfect and last revealed book. The Holy Qur'an is the only complete divine guidance that exists in the world for mankind [1]. From the very beginning it has a claim that it covers every aspect of life and is full of wisdom. The God says in the Holy Quran "We have neglected nothing in the Book" [2]. The mammals are the highest group of the vertebrates. They are *warm-blooded* and breathe by means of lungs. The body is covered with *hair* and the youngs are suckled by the mother from the *mammary glands*. Mammals have two sets of teeth, milk and permanent sets. Each tooth is set in separate socket in the jaw. In addition the teeth are as a rule of different shapes (heterodont), being divisible into cutting *incisors*, gripping *canines* (dog teeth) and chewing cheek teeth of

*pre-molars* and *molars*. The basic number of teeth is 44 although modifications occur in many mammals. Coelom is divided by a muscular diaphragm into an anterior thoracic cavity containing the heart and lungs and the posterior space containing the viscera [3]. Since long, humans have always been in intimacy with animal life in their habitats for food, transportation and medicine through observation and experimentation. However, it can be assumed that concern about animal health only originated after the domestication of formerly wild animals species for use in transportation, agriculture, medicine, or as direct food source [4]. In Islamic religion diseases are cured in two ways, first the cure of soul through prayers and second the cure of ailments through medicines [5]. The medicinal use of animals and their products for the benefit of humans is termed Zootherapy. The Zootherapy (therapy facilitated by animals) is a therapeutic device that

is based on the interaction between animals and the human being [4]. Since ancient to present time animals have been providing food, medicine and clothing to humans together with a number of other goods and services [6] and many domestic animals are being used for zootherapeutic practices throughout the world, so their proper conservation and management has turned imperative [4]. In modern societies, zootherapy constitutes an important alternative to the many other known therapies practised worldwide. Wild and domestic animals and their by-products (e.g. hooves, skins, bones, feathers and tusks) form important ingredients in the preparation of curative, protective and preventive medicine. Many cultures still employ traditional medicine incorporating animal-derived remedies. Probably the most famous of these are the Chinese, who use animals to treat a variety of ailments [7]. Traditional medicine has been described by the World Health Organization (WHO) as one of the surest means to achieve total health care coverage for the world's population [7,8]. The World Health Organization (WHO) estimates that as many as 80% of the world's population rely primarily on plant and animal-based medicines. Among the 252 essential chemicals that have been selected by the World Health Organization, 11.1% come from plants and 8.7% from animals [9]. In Traditional Chinese Medicine more than 1500 animal species have been recorded to be some medicinal use [10].

## MATERIALS AND METHODS

The research work was conducted by reviewing the Holy Quran, Islamic and available scientific literature. Comprehensive and detailed information about mammals mentioned in the Holy Quran were collected from these sources. Animal species were arranged in systematic order of Zoological names in alphabetic order followed by Quranic name, Arabic name, English name, vernacular names, medicinal and other uses and references cited from Holy Quran, Ahadith and Islamic ruling.

## RESULTS

Present findings were confined to 13 mammalian animal species, enlisted in Holy Quran, belonging to 8 families of 5 orders. The mammals mentioned in the holy Quran are: *Bos taurus* (cow), *Camelus dromedarius* (camel), *Canis familiaris* (dog), *Canis lupus* (wolf), *Capra hircus* (goat), *Elephus maximus* (elephant), *Equus africanus* (donkey), *Equus caballus* (horse), *Equus mule* (mule), *Macaca sylvanus* (monkey), *Ovis aries* (sheep), *Panthera leo* (lion), *Sus scrofa* (pig). Results were systematically arranged by alphabetic order of zoological names followed by Quranic name, English name, Arabic name, family, medicinal uses, references cited from Holy Quran and Islamic ruling.

Table 1: Lawfulness (Hillat) / Unlawfulness (Hurmat) of mammals mentioned in the Holy Quran.

S.#.	Scientific name	Eng. Name	Quranic name	Lawful/Unlawful	Reference
1.	<i>Bos taurus</i>	Cow	Baqara	Lawful (halal)	17,18
2.	<i>Camelus dromedarius</i>	Camel	Ibl	Lawful (halal)	9,17,18
3.	<i>Canis familiaris</i>	Dog	Kalb	Unlawful (haraam)	9,18,23,24
4.	<i>Canis lupus</i>	Wolf	Dhi'b, Zi'b	Unlawful (haraam)	9,18
5.	<i>Capra hircus</i> L.	Goat	Ma'z	Lawful (halal)	9,17,18
6.	<i>Elephus maximus</i>	Elephant	Fil	Unlawful (haraam)	18,47
7.	<i>Equus africanus</i>	Donkey	Himar	Unlawful (haraam)	18,47,51
8.	<i>*Equus caballus</i>	Horse	Khail	Lawful (halal)	53
9.	<i>Equus mule</i>	Mule	Bighaal	Unlawful (haraam)	18,47,51,56
10.	<i>Macaca sylvanus</i>	Monkey	Qiradah	Unlawful (haraam)	17,18
11.	<i>Ovis aries</i>	Sheep	Dh'n	Lawful (halal)	9,17,18
12.	<i>Panthera leo</i>	Lion	Qaswara	Unlawful (haraam)	18,47
13.	<i>Sus scrofa</i>	Pig, swine	Khizeer	Unlawful (haraam)	18,47,62

\*Islamic Ruling: Imam Abu Hanifa (Allah have mercy on him) considers it somewhat disliked (makruh tanzihan) due to its honour and due to the fact that a horse is needed in Jihad. Imam Abu Yusuf and Imam Muhammad (Allah have mercy on them both) consider it Halal and it is said that Imam Abu Hanifa also retreated to this opinion. Thus, it would be permitted to consume horse-meat, although better to avoid [53].

Table 2: General information about location of mammals in the Holy Quran.

Scientific Name	Eng. Name	Quranic name	Part No.	Name of Sura	Surah No.	Verse No.
<i>Bos taurus</i>	Cow (male &female)	Baqaratun (S)	1	Al-Baqarah	2	67-69,71
	Cows (male &female)	Baqara(Pl.)	1	Al-Baqarah	2	70
	Cows (male &female)	Baqara(Pl.)	8	Al-An'am	6	144,146
	Cows (male &female)	Baqarât(Pl.)	12	Yûsuf	12	43, 46
	Calf	Ijl	1	Al-Baqarah	2	51,54,92,93
	Calf	Ijl	6	An-Nisaa	4	153
	Calf	Ijlan	9	Al-A'raaf	7	148
	Calf	Ijl	9	Al-A'raaf	7	152
	Calf	Ijl	12	Hûd	11	69
	Calf	Ijlan	16	Ta Ha	20	88
	Calf	Ijl	26	Az-Zariyat	51	26
<i>Camelus dromedarius</i>	Camel (male &female)	Ibl	8	Al-An'am	6	144
	Camel (male &female)	Ibl	30	Al-Ghashiya	88	17
	Camel (male &female)	Jamal	8	Al-A'raf	7	40
	Camels (male &female)	Jimalatun(Pl.)	29	Al-Mursalat	77	33
	Camel (male &female)	Ba'ir	13	Yusuf	12	65,72
	Camel (Female)	Naqatun	8	Al-A'raf	7	73, 77
	Camel (Female)	Naqatun	12	Hud	11	64
	Camel (Female)	Naqatun	15	Bani Israeel	17	59
	Camel (Female)	Naqatun	19	Al-Shoa'ra	26	155
	Camel (Female)	Naqatun	27	Al-Qamar	54	27
	Camel (Female)	Naqatun	30	Al-Shamas	91	13
	Camel (Female)	Ham	7	Al-Maidah	5	103
<i>Canis familiaris</i>	Dog (male &female)	Kalb	9	Al-A'raf	7	176
	Dog (male &female)	Kalb	15	Al-Kahf	18	18,22
<i>Canis lupus</i>	Wolf	Dhir'b (Zi'b)	12	Yusuf	12	13,14,17
<i>Capra hircus</i> L.	Goat (male & female)	Ma'z	7	Al-An'am	6	143
	Goat	Ghanam	8	Al-An'am	6	146
	Goat	Ghanam	16	Tâ-Hâ	2	18
	Goat	Ghanam	17	Al-Anbiyâ'	21	78
<i>Elephas maximus</i>	Elephant	Fil	30	Al-Fil	105	2
<i>Equus africanus</i>	Donkey	Himar	3	Al-Baqarah	2	259
	Donkey	Himar	28	Al-Jum'ah	62	5
	Donkey	Hamir	14	Al-Nahal	16	8
	Donkey	Hamir	21	Luqmân	31	19
	Donkeys	Humurun	29	Al-Muddasar	74	50
<i>Equus caballus</i>	Horse	Khayl	3	Al-Imran	3	14
	Horse	Khayl	10	Al-Anfal	8	60
	Horse	Khayl	14	Al-Nahal	16	8
	Horse	Khayl	15	Bani Israeel	17	64
	Horse	Khayl	28	Al-Hashr	59	6
<i>Equus mule</i>	Mule	Bighâl	14	Al-Nahal	16	8
<i>Macaca sylvanus</i>	Monkeys(Apes)	Qiradatun	1	Al-Baqarah	2	65
	Monkeys(Apes)	Qiradatun	6	Al-Maidah	5	60
	Monkeys(Apes)	Qiradatun	9	Al-A'raaf	7	166
<i>Ovis aries</i>	Ewes (Sheep)	Ni'aj (Pl.)	23	Sâd	38	24
	Ewe (Sheep)	Na'jah	23	Sâd	38	23,24
	Sheep	Dha'n	8	Al-An'am	6	143
<i>Panthera leo</i>	Lion	Qaswara	29	Al-Muddasar	74	51
<i>Sus scrofa</i>	Pig	Khinzir	2	Al-Baqarah	2	173
		Khinzir	6	Al-Maidah	5	3
		Khinzir	8	Al-An'am	6	145
		Khinzir	14	Al-Nahl	16	115
		Khanazir (Pl.)	6	Al-Maidah	5	60

Table 3: Taxonomic information of mammals mentioned in the Holy Quran.

Scientific name	Eng. Name	Vernacular name	Order	Family
<i>Bos taurus</i>	Cow	Baqara(A), Gai(U), Gao(P)	Artiodactyla	Bovidae
<i>Camelus dromedarius</i>	Camel	Ibl(A), Unt(U), Shutar(P)	Artiodactyla	Camelidae
<i>Canis familiaris</i>	Dog	Kalb(A), Kutta(U), Sug(P)	Carnivora	Canidae
<i>Canis lupus</i>	Wolf	Zi'b(A), Bheria(U),	Carnivora	Canidae
<i>Capra hircus</i> L.	Goat	Ma'z(A), Bakri(U), Buz(P)	Artiodactyla	Bovidae
<i>Elephas maximus</i>	Elephant	Fil(A), Hati(U)	Proboscidea	Elephantidae
<i>Equus africanus</i>	Donkey	Himar(A), Gadha(U),	Perissodactyla	Equidae
<i>Equus caballus</i>	Horse	Khail(A), Ghora(U), Farus(P)	Perissodactyla	Equidae
<i>Equus mule</i>	Mule	Bighaal(A), Khacher(U),	Perissodactyla	Equidae
<i>Macaca sylvanus</i>	Monkey	Bandar (U),	Primates	Cercopithecidae
<i>Ovis aries</i>	Sheep	Bher (U)	Artiodactyla	Bovidae
<i>Panthera leo</i>	Lion	Asad, Kaswara (A), Sher (U)	Carnivora	Felidae
<i>Sus scrofa</i>	Pig	Khizeer(A), Suar(U)	Artiodactyla	Suidae

Key: A = Arabic, U = Urdu, P = Persian

### Enumeration of Mammalian Animal Species:

Scientific name	: <i>Bos taurus</i> (L. 1758)
Quranic name	: Al-Baqarah
English name	: Cow
Vernacular name	: Baqarah (A), Gai (U), Gao (P)

**Medicinal Uses:** The mixture of fresh milk (of cow) and turmeric powder is taken at morning and evening for weakness and recovery of body power after any disease [10]. Curd is orally used for the relief from the swallowed glass pieces [4]. Ghee (butter-oil) is used to neutralize the snake poison [10] and the poisonous effect of Dhatura. Pure and fresh ghee is also applied by nasal at morning and evening for seven days to treat hemicranias (migraine). Solution of turmeric and milk is orally taken at night before sleeping for over bleeding in accident and weakness [4]. Bone marrow is reported for ribcage pain, male impotence, anemia and cough; cheese for potency, purgative, eye inflammation, sore throat, burns and cough. Fat and bone marrow are also reported for rheumatism and wound healing [10]. Powder of head bone of bull is given to buffalo in food for treatment of leg infection of buffalo [4]. In Brazil the cow body parts (liver, urine, butter, marrow and hoof proteins) are used to treat illnesses such as sore throats, anemia and severe coughing (whooping cough) [7]. The dried dung is burnt and ash is applied externally to treat urticaria [11]. 250 gm Ghee + 100 gm black pepper mixture given orally to neutralize snake poison [12]. Cooked flesh of ox is given to TB patients for speedy recovery [13].

**Other Uses:** Cow meat and products of milk [dahi (yoghurt), lassi (sour milk), kurth (cheese), butter and ghee] are used as food. In Europe cows were prized for

their milk. Cow's milk became more popular than sheep's milk by the 14th century. Leather, glue and soap are all made from parts of the cow. The dung of the cow provides fertilizer and fuel. Cows are also used for ploughing and carrying heavy loads. They are also used as currency in the world [14].

**Note:** According to Hindu people cow is a sacred, therefore they do not eat meat of the cow [15,16]. Thus the cows increase in number in India. That is why, once the people of India living near territory of districts Lahore and Qasur (Pakistan) forced the cows to enter in the territory of Pakistan [16].

**Islamic Ruling:** The Holy Quran says. *The cattle have been made lawful for you* (Surah Al-Ma'idah verse #.1)

The word, *Al-An'am*, in the verse is the plural form of *na'am* (grazing livestock). So, the meaning of the verse comes to be that 'eight kinds of domestic animals or cattle such as the camel, the cow, the buffalo and the goat (male and female of each) have been made lawful for you [17]. Hence according to the Islamic ruling the consumption of meat of cow is good and permissible (Halal). The sacrifice of cow on the occasion of Eid-ul-Azha is considered to be preferable. The Holy Prophet (Sallallahu Alaiyhi Wassallam) has also slaughtered cow on that day [18].

**References from Holy Quran:** The following terms have been mentioned in the Holy Quran used as in the meaning of cow. The number of citations is given against each term. *Baqaratun*(S): 4 times (Surah Al-Baqarah, verse #. 67-69, 71); *Baqara* (Pl): 3 times (Surah Al-Baqara, verse #.70; Surah Al-An'am, verse #.144, 146); *Baqaraat* (Pl): 2 times (Surah Yusuf, verse #. 43, 46); *Ijal, Ijlan*(calf):10 times ( Surah Al-Baqarah, verse #. 51, 54, 92, 93; Surah

An-Nisaa, verse #. 153; Surah Al-A'raaf, verse #. 148, 152; Surah Hûd, verse #. 69; Surah Ta Ha, verse #. 88; Surah Az-Zariyat, verse #. 26). The terms *Na'am* (S) and *An'am* (Pl) mean cattle also including cow, bull and calf. *Na'am* (S): once (Surah Al-Maidah, ); *An'am* (Pl) have been cited 31 times in the Holy Quran in different Suras: (Surah Al-Imran, verse #.14; Surah An-Nisaa, verse #.119; Surah Al-Maidah, verse #.1; Surah Al-An'am, verse #. 136,138,139,142; Surah Al-A'raf, verse #. 179; Surah Yûnus, verse #.24; Surah An-Nahl verse #. 5,66,80; Surah Ta Ha, verse #. 54; Surah Al-Hajj, verse #.28,34; Surah Al-Momanoon, verse #.21; Surah Al-Furqan, verse #. 44,49; Surah Ash-Sho'raa, verse #.133; Surah As-Sajda, verse #.27; Surah Al-Fatr, verse #. 38; Surah Yasin, verse #.71; Surah Az-Zumar, verse #. 6; Surah Al-Momin, verse #.79; Surah Shura, verse #. 11; Surah Az-Zuruf, verse #.12; Surah Muhammad, verse #.12; Surah An-Nazi'at, verse #.33; Surah Abasa, verse #. 32).

Scientific Name : *Camelus dromedarius* (L. 1758)  
 English Name : Camel (male and female)  
 Quranic Names : Ibl, Ba'ir, Jamal  
 Vernacular Names : Ibl, Ba'ir, Jamal(A), Unt (U), Shuthar (P)  
 Medicinal uses : Camel milk is used as massage cream in muscular pain [10,12].

Milk and oil, used for snake and scorpion bite, liver disease and ulcer in Lavent [10], milk is drunk for the treatment of Jaundice, milk mixed with flour of jowar (*Sorghum bicolor*) and orally taken for liver infection or tumor in liver (not proper functioning of liver), drunk orally at night is useful to treat malaria fever [4]. The use of meat of camel improves the sexual power of man. It is also useful for the inflammation of liver and helpful in easy urination [18]. The dried dung is burnt and ash is applied externally on stomach for treating constipation [11].

**Other Uses:** Camel is said to be ship of the desert and is used for riding, carrying goods and ploughing fields. Camels hair are used for making ropes, bags, mats, carpets and blankets. Camel hides are used for making shoes and saddles. Products of camel milk include dahi (yoghurt), lassi (sour milk), kurth (cheese), khoya, butter and ghee are used as food [19].

**Islamic Ruling:** According to the Quran, “the cattle have been made lawful for you” (Surah Al-Ma'idah, verse #.1). The word cattle also include camel [17].

Therefore, the meat of camel (male and female) is pure and lawful (halal) and permissible for consumption indisputably. Both, he and she camels are slaughtered on the day of Eid-ul-Azha [9,18].

References from Holy Quran: Camel has a variety of Arabic names, *Ba'ir*, *Ibl*, *Jamal*, *Jamaalaatun* (Pl.) and *Naqatun*, which have been cited 13 times in the Holy Quran [20].

*Ba'ir* : Mentioned twice (Surat Yûsuf, verse #. 65,72).  
*Ibl* : 2 times (Surat Al-An'am, verse #. 144; Al-Ghashiya, verse #.17).  
*Jamal* (S) : Once (Surat Al-A'raf, 40).  
*Jimalaat* (Pl.) : Once (Surat Al-Mursalat, verse #. 33);  
*Naqah* : 6 times (Surah Al-A'raaf, verse #. 77; Surah Hûd, verse #. 64; Surah Bani Israeel, verse #. ; Surah Al-Sho'ara, verse #. 155; Sura Al-Qamar, verse #. 27; Surah Al-Shamas, verse #. 13).

- The following terms have also been applied to camel in the Holy Quran once each.
- *Budn* (Surah Al-Hajj, verse #. 36).
- *Bahirah* (Surah Al-Ma'idah, verse #.103): a she-camel whose milk was dedicated in the name of idols and no body was allowed to use it personally.
- *Haam* (Surah Al-Ma'idah, verse #.103): a stallion-camel freed from work for the sake of their idols, after it had finished a number of copulations assigned for it.
- *Sa'ibah* (Surah Al-Ma'idah, verse #.103): a she-camel let loose for free pasture for their false gods, e.g. idols and nothing was allowed to be carried on it.
- *Wasilah* (Surah Al-Ma'idah, verse #.103): a she-camel giving birth to female offspring continuously, uninterrupted by the birth of a male, was also released in the name of idols [17].
- *Al-Him*: Thirsty camels (Surah Al-Waaqiah, verse #. 55).
- *Rikab*: Camels (Surah Al-Hashr, verse #. 6).
- *I'shar*: She-camels (Surat Takwir, verse #. 4) [10].

Scientific Name : *Canis familiaris* (L. 1758)  
 Quranic Name : Kalb  
 English Name : Dog (male & female)  
 Vernacular Names : Kalb (A), Kutta (U), Sug (P)

**Medicinal Uses:** Fresh and warm blood is drunk for the treatment of asthma and fever. Skull is burnt and made into powdered. The powder is applied on affected area of burn (fire) trice a day [21].

**Ethnozoological Uses:** Dogs play important roles in various fields for human society, such as hunting, herding, pulling loads, protection, assisting police and military, companionship and more recently aiding handicapped individuals. Therefore they have been given the nickname "Man's Best Friend" in the Western world. In some such as Korea, China and Vietnam dog meat is consumed. Dog is also used as a detection dog or sniffer dog. Such dog is trained to and works at using its senses (almost always the sense of smell) to detect substances such as explosives, illegal drugs, or blood. Bed bug detection dogs are specially trained by handlers to identify the scent of bed bugs. Such detection is complicated by the fact that the insects can hide almost anywhere. So this problem is solved by dogs [22].

**Islamic Ruling:** There is a quranic verse, “*and makes impure things prohibited to them*” (Surah Al-A’raaf, Verse #. 157). This verse has described one of the attributes of Holy Prophet Muhammad (Sallallahu Alayhi Wassallam) that He shall prohibit his people to eat impure things. The example of impure things includes blood, dead animals, liquor and all the prohibited animals [23]. This verse proves the authenticity of Ahadith and the prohibition of eating the flesh of dogs and donkeys is also revealed from this [24]. So each and every type of dog is unlawful [9,18].

The fuqahaa (Islamic Jurists) are agreed that it is not permitted to keep a dog unless it is for a purpose, like hunting or guarding property or other uses that are not contrary to the *Sha’riah*, the Islamic law [25].

**References from Holy Quran:** Dog (male &female) is known as *Kalb* in Arabic and has been cited five times in the Holy Quran in the following Suras: (Sura Al-A’raf, verse #. 176; Sura Al-Kahf, verse # 18, 22).

Scientific Name : *Canis lupus* (L. 1758)  
Quranic Name : Zaibun  
English Name : Wolf  
Vernaculr Name : Dhi’bun, Zi’bun (A), Bheria (U), Gurg (P)

**Medicinal Uses:** Skin (whenever available) is burnt and taken in pinches as a preventive measure coughs and fevers, epidemics. Meat is used to cure asthma, paralysis and arthritis by Koya, Guthikoya, Lambada, Mala of Andhra Pradesh in India [26]. Flesh is eaten in case of body aches [13].

The wolf's claws are considered to be useful medicine against male impotence. It was recommended to carry claws to increase potency. Another belief advised soaking the claws in oil for a long time and then using this oil as an ointment [27].

**Islamic Ruling:** The wolf is carnivorous animal with fangs therefore, eating of meat of wolf is unlawful [9,18].

**References from Holy Quran:** The Arabic name of wolf is Dhi’bun (zaibun). It has been mentioned three times in the Holy Quran (Sura Yûsuf:12, verse #. 17, 131, 141).

Scientific Name : *Capra hircus* (L. 1758)  
Quranic Name : Ma’z, *Ghanum*\*  
English Name : Goat  
Arabic Name : Ma’z  
Vernaculr Name : Ma’z (A), Bakri (U), Buz (P)

**Medicinal Uses:** The frontal bone is burnt and taken in pinches mixed with boiled water 2-3 times a day to minimize fever and early pregnancy pain. Gall bladder is cooked with rice and taken for stomach ache [26]. Milk for general weakness [10]. Flesh is cooked and eaten. Milk is drunk to avoid weakness [28]. Meat is reported to stimulate digestion among tribes like Koya, Guthikoya, Lambada, Mala of Andhra Pradesh. Soup of leg bone is used to cure weakness [26]. Placing ring around the nipple or teats and than milk stream taken directly in mouth for to treat mouth ulcer [10]. The Solution of Milk and black salt is boiled and then filtered. The remaining of filtrate is applied on eye for eye infection. Mixture of milk+ honey+ mishri (big crystal of sugar) rubbed on anus for anal infection [4]. Tribes of Attappady hills of Western Ghats use goat milk externally in eye troubles. Thoracic vertebrae and bone marrow of goat are used for preparation of drugs for tonsillitis, laryngitis and lymphatic ailments [29]. The leaves of *Calotropis procera* are fed to the goat with fodder and its milk is given to the infants to cure asthma [30]. Paste is prepared by crushing the droppings of goat in water and applied locally in scorpion bite. Goat is sacrificed and liver is eaten by the

tribal to cure night blindness. 20 ml urine of goat is taken orally by the tribals as antidote in poisonous insect-bite [30]. A mixture of 100 gm of Acalyfa leaves and 250 gm of liver roasted for 15-20 minutes without oil is prescribed for patients to take 2 hours before meal. The patients should avoid taking salty substance in advance. This phytozootherapy is considered useful for snake bite and night blindness [21].

**Other Uses:** Dried intestine is used to make small wire and dried skin is use as base, for their musical instruments (maandal and kamayacha) [10].

Ethiopian goats in the lowlands are highly valued and reared mainly for milk and meat production. In the highlands, goats are mainly kept for meat [31]. The meat is lean and may appeal to health-conscious consumers, but the primary purchasers of goat meat are members of ethnic groups, especially Hispanics, Muslims and various Caribbean and Asian peoples [32]. Goats are also sources of manure, valuable skins and cash income [31].

**Islamic Ruling:** The meat of goat is pure and lawful (halal) and permissible for consumption indisputably [9,18]. The Holy Quran says.

*The cattle have been made lawful for you* (Surah Al-Ma'idah verse #.1)

The word, *Al-An'am*, in the verse is the plural form of *na'am* (grazing livestock). So, the meaning of the verse comes to be that 'eight kinds of domestic animals or cattles such as the camel, the cow, the buffalo, the goat (male and female of each) have been made lawful for you [17]. Hence according to the islamic ruling the eating of meat of goat (male and female) is good and lawful (Halal) [18].

References from Holy Quran: In Arabic the goat is known as *Ma'z* which has been cited once in the Holy Quran. Another term, *\*Ghanum* has also been used three times for *Ma'z* in the Holy Quran. Ghanam: (Surah Al-An'am, verse #.146; Surah Ta-Ha, verse #. 18; Surah Al-Anbiya, verse #. 78) [20].

**\* Note:** Most of the authorities have translated the term, *Ghanum*, as goat [17,20,33-41].

Scientific Name : *Elephus maximus* (L. 1758)  
 Quranic Name : Al-Fil  
 English Name : Elephant  
 Vernaculr Name : Al-Fil (A), Hathi (U)

**Medicinal Uses:** Teeth and tusks are powdered and applied on skin to treat leucoderma, eczema and ringworm infections [10,28]. Elephant tusk paste made with cocoanut oil and is used for 15 days to treat skin diseases and eczema [42]. Tooth is used to improve women's fertility. Tooth is also used in leucoderma, ringworm, itching and eczema [10]. Dung is mixed with herbs and smeared on affected part to treat the bone fractures, oedema, elephantiasis. Dung Used as enema or smeared on body of sick child Childhood diseases associated with close births [43]. Scratched tooth and tusks are mixed with mother's milk and applied topically on the affected part before going to bed [44]. Teeth and tusks are powdered and applied on skin to treat leucoderma, eczema and ringworm infections [28,45]. Teeth powder is good remedy for toothache. Fumigation of elephant dung is useful to eliminate mosquitoes [46]. Powder of tooth mixed with cream of cow milk and used as cream for pimples on face and beauty [10].

**Other Uses:** Shields made from skin were used for head hunting by Nagas [28]. Teeth are used to make ornaments like bangles [46].

**Islamic Ruling:** According to Hanfi school of thought the meat of elephant is unlawful (haram) for consumption [18,47]. However, the selling of elephant is lawful indisputably because it is used for riding and other purposes [18].

**References from Holy Qurn:** In Arabic the elephant is called *Al-Fil* which has been cited once in the Holy Quran: "*Have you not seen how your Lord dealt with the People of the Elephant?*" (Surah Al-Fil, verse #.1).

Scientific Name : *Equus africanus* (L. 1758)  
 Quranic Name : Himar  
 English Name : Donkey  
 Vernacular Names : Himar (A), Gadha (U), Khar (P)

**Medicinal Uses:** Donkey milk, with its balanced nutritional properties, is a wonderful source of strength and energy for people of all ages. Donkey milk detoxifies the liver yielding immediate renewal of skin cells. Balances the micro flora of the intestines through the action of lysozyme and lactose and prevents cardiovascular diseases. Balances the metabolic activity of cells, corrects blotchy skin and rejuvenates the facial expression lines.

Assists in the treatment of skin disorders like eczema and psoriasis. Helps in the fight against osteoporosis [48].

**Ethnozoological Uses:** From before the dawn of recorded history, donkeys have been used in Europe and western Asia to carry loads, pull carts and carry riders. Though not as fast as a horse, they are long-lived, cheaper to maintain than horses, have great endurance and are agile (quick-moving) on poor tracks. They remain of crucial economic importance in many developing countries [49].

They are an important means of transporting rural Botswana. They are used mainly for carrying loads, such as firewood, water drums and also commonly used for riding, mainly by children and women. Most traditional households use their donkeys for transport, fetching water and for gathering firewood. Despite the increase in mechanization throughout the world, donkeys are still well deserving of the beasts of burden. They have an important role to play in transport of people and goods in arid and semi-arid areas where roads are poor or non-existent. This is shown by the wide spread use of donkeys in urban and rural areas in Africa, as well as parts of the Central America and Asia [50].

**Islamic Ruling:** As for the meat from donkey is concerned, the majority of Fuqaha (Muslim jurists) particularly of Hanfi school of thought agree upon its meat being unlawful (haram), for consumption [47] Shamim, 2008b) and in a Hadith on the subject, its unlawfulness has been clearly stated [51].

**References from Holy Quran:** The terms used for donkey in the Holy Quran are:

- *Himar* (S) cited two times (Surah Al-Baqarah, v.#.259; Surah Al-Jumu'ah, verse #. 5).
- *Hamar* (Pl.) mentioned once (Surah Al-Muddassir, verse #.50); Hameer used two times (Sura Al-Nahl, verse # 8; Surah Luqman, verse #. 19).

Scientific Name : *Equus ferus caballus* (L.1758)  
Quranic Name : Al-Khail  
English Name : Horse  
Vernacular Names : Al-Khail (A), Ghora (U)

**Medicinal Uses:** Flesh of this animal is used for promote strength and eyesight [10]. Mixture of Black Pepper (*Piper nigrum*) and Saliva, rubbed on eyes before sleeping for Sleeplessness problem. Tied the hair of mare around the moles tightly. After some days the moles are automatically broken [4].

Meat is believed to be a promoter of corpulence, strength [52].

**Other Uses:** Hair of tail are used as small wire for their musical instruments [10].

**Islamic Ruling:** As far as the consumption of horse-meat is concerned, Imam Abu Hanifa (Allah have mercy on him) considers it somewhat disliked (makruh tanzihan) due to its honour and due to the fact that a horse is needed in Jihad. Imam Abu Yusuf and Imam Muhammad (Allah have mercy on them both) consider it Halal and it is said that Imam Abu Hanifa also retreated to this opinion. Thus, it would be permitted to consume horse-meat, although better to avoid [53].

**References from Holy Quran:** Horse is known as Al-Khail in Arabic and five times has been cited in the Holy Quran in the following Suras: (Surah Al 'Imran, 14; Surah Al-Anfal; 60; Surah An-Nahl, 8; Surah Bani Israeel, 64; Al-Hashr, 6).

The following terms have also been used for horses in the Holy Quran.

- *Jiyad*: The swift horses (Surah Sâd, 31)
- *Safinat*: The horses of high breeding (Surah Sâd, 31)
- *Adiyat*: those (horses) that run snorting, (Surah al-'Adiyat, 1)
- *Muriyat*: those that create sparks by striking (their hoofs) on the stones (Surah al-'Adiyat, 2)
- *Mughirat*: those that invade at morning (Surah al-'Adiyat, 3) [54].

Scientific Name : *Equus mule* (L. 1758)  
Quranic Name : Bighaal  
English Name : Mule  
Vernacular Names : Bighaal(A), Khacher (U)

**Ethnozoological Uses:** The mules are used mainly in and around the hilly areas, for riding, for pack transport and for pulling carts. The donkeys are maintained to breed mules and some are used for pack transport and riding in and around the mountains. There are only a few donkey carts in use. The populations of mules and donkeys have been relatively constant over the past forty years, with a slow increase in the number of donkeys [55].

**Islamic Rulings:** As for the meat from mule is concerned, the majority of Fuqaha (Muslim jurists) particularly of Hanfi school of thought agree upon its meat being unlawful (haram), for consumption [18,48,51,56] and in a



Hadith on the subject, its unlawfulness has been clearly stated [51].

**References from Holy Qurn:** Bighaal (*Equus mule*) has mentioned once in the Holy Quran (Sura Al-Nahl, verse # 8).

Scientific Name : *Macaca sylvanus* (L. 1758)  
Quranic Name : Qirada  
English Name : Monkeys (Apes)  
Vernacular Names : Qirada (A), Bander (U)

**Medicinal Use:** Skull of Pata monkey is used for cure of whooping-cough. The powder of bone of the Chimpanzee is sprinkled on food and used for abdominal pains. Meat of the Black & White Colobus Monkey is used in food for Purification & strengthening of widow/widower. Hair of Olive Colobus monkey are used as talisman for the treatment of Diseases in children associated with close births. Skin of Red Colobus Monkey is - Used to wrap up medicines used as talisman Bruises and rashes on newborn babies [43]. Body parts of Assamese Monkey like flesh and viscera Assamese Monkey are given to the patients suffering from tuberculosis for nourishment. Food: Flesh is eaten as food [13]. Meat of all monkey species is eaten by Naga tribes. It is general belief that monkey meat cures tuberculosis. Meat of all monkey species is eaten by Naga tribes. It is general belief that monkey meat cures stomach disorder. Meat of all monkey species is eaten by Naga tribes. It is general belief that monkey meat cures general weakness [28]. The meat is believed to cure, adiposity, anemia and parasitic infestation [52]. In Bolivia, spider monkey parts are used to cure snake bites, spider bites, fever, coughs, colds, shoulder pain and sleeping problems; in India, the survey found that many people believe that macaque (Monkey) blood is a cure for asthma. Other monkeys or lorises have their bones or skulls ground up into powder administered with tea, or have their gall bladders ingested or blood or fat used as ointments. Monkeys are also valued in Sierra Leone, where a small piece of chimpanzee bone is tied to a child's waist or wrist, as parents believe it will make the child stronger as he grows older [57].

**Other Uses:** Before humans went into space, several animals were launched into space, including numerous monkeys, so that scientists could investigate the biological effects of space travel. The United States launched flights containing primate cargo primarily between 1948-1961 with one flight in 1969 and one in 1985. France launched two monkey-carrying flights in 1967.

The Soviet Union and Russia launched monkeys between 1983 and 1996. Most monkeys were anesthetized before lift-off. Overall thirty-two monkeys flew in the space program; none flew more than once. Numerous back-up monkeys also went through the programs but never flew. Monkeys from several species were used, including rhesus monkeys, cynomolgus monkeys and big tailed macaque. Some chimpanzees were also used [58]. Iran sent a monkey in a Pishgam rocket to a height of 72 miles (116 km) in 2013 and retrieved "shipment" [59,60].

**Islamic Rulings:** The selling of monkey is lawful while eating of its meat is unlawful [18,47].

**References from Holy Qurn :** The term, *Qirada* has been applied to monkey three times in the holy Quraan in the following suras (Al Baqarah, verse #. 65; Surah Al-Maidah, verse #. 60; Surah Al-A'raaf, verse #. 166)

Scientific Name : *Ovis aries* (L. 1758)  
Quranic Name : Dha'n, Na'jah  
English Name : Ewe (Sheep)  
Vernacular Names : Dhs'n (A), Bher (U)

**Medicinal Use:** Mixture of milk salt solution is boiled and remaining is used orally in cough. Milk rubbed on affected part for the treatment of bone fracture and muscular pain [4]. Boiled or fried meat is eaten. One time taking is also very effective for skin disease (white patches cover whole body). Fat of the sheep is used as massage oil on the affected area in case of rheumatism and arthritis [21].

**Other Uses:** Although sheep were domesticated as dual purpose animals to produce wool and meat, early people would have valued sheep milk as well [31]. Sheep were originally used for meat, milk and hide. Harvesting sheep's wool or fleece probably did not begin until 8000 years ago. During the Bronze Age the sheep's wool was plucked by hand and woven in to cloth. Later, probably during the Iron age, herders used shear to remove the wool. Because wool was a renewable resource of relatively high value, shepherds raised large flocks which were also used as barter [61].

Milk of sheep is used for massage by the tribals in dislocation and deformities of bones [30].

**Islamic Rulings:** The meat of sheep is pure and lawful (halal) and permissible for consumption unanimously [9,17,18].

**References from Holy Qurn:** The following terms have been used in Holy Quran for the sheep:

- Dha'n: (Surah Al-An'am, verse #.143).
- Ni'aaj (Pl.): (Surah Sâd, verse #. 24).
- Na'jah: (Surah Sâd, verse#. 23, 24).

Scientific Name : *Panthera leo* (L. 1758)  
Quranic Name : Qaswara  
English Name : Lion  
Vernacular Names : Asad (A), Baber sher (U)

**Medicinal Use:** It is believed that if one eats the heart of a lion that he will be brave and recover from such conditions such as depression, bad mood and nervousness. Even today, Azerbaijanis have an expression to describe such a courageous person. They say, "Did you eat a lion's heart?" (Shir urayi yemisan?). It's impossible to find any lions' hearts in Azerbaijan today because they all became extinct in the 16th century[27]. Skin worn as talisman around waist for the treatment of convulsion. Skin is put in water for bathing to treat weak child. Skin is worn as a talisman for vanishing powers [43].

**Islamic Rulings:** The eating of meat of each and every kind of lion is unlawful [18,47].

**References from Holy Qurn:** The Quranic name of lion is Qaswara. It has been used once in the holy Quran in Surah Al-Muddassir, verse #. 51

Scientific Name : *Sus scrofa* (L. 1758)  
Quranic Name : Khinzeer  
English Name : Pig  
Vernacular Names : Khinzeer (A), Suar (U)  
Mode of preparation : Pure flesh is rubbed on body as cream.

**Medicinal Use:** Fat is used for haematoma [44], fat is used to treat muscular pain [62]. meat is used as promoter of strength and corpulence [52], fat is applied in paralysis, joints pain and burns [10]. Applied locally as embrocation/Massager and in snakebite Used as antidote [45] The fat content of the adipose tissue of the pig is melted in an earthen pot and applied topically until hemorrhoids disappear [44]. Fat of pig is used in athlete's foot, Berne, wound healing [4].

**Islamic Rulings:** The Holy Quran says, "Prohibited for you are: the carrion, the blood, the flesh of swine..... (Surah Al-Maidah, verse #. 3). In fact, all parts of the swine, the bones, the skin, the hair, the ligaments, are forbidden by the consensus of the Muslim community [17,18,47,62]. The causes of prohibition of pig have been described in detail under the discussion of this article.

**References from Holy Qurn:** The terms used for pig in the holy Quran are as follows.

- *Khinzeer* (S): (Surah Al-Baqarah, verse #. 173; Surah Al-Maidah, verse #. 3; Surah Al- An'am, verse #. 145 ; Sura Al-Nahl; verse #.115 )
- *Khanazeer*(Pl.): ( Surah Al-Maidah, verse #. 60)

## DISCUSSTION

The Holy Quran says, "As for the cattle, He created them, having warmth for you and other benefits; and of them you eat. And for you there is beauty in them when you drive them (home) in the evening and take them out to graze. And they carry your loads to a city where you were not able to reach without putting yourself into hardship. Surely, your Lord is Very Kind, Very Merciful. And (He created) horses, mules and donkeys so that you may ride on them and they may look good. And He creates what you do not know (yet)." (Surah An-Nahl, verse #. 5,6,7,8) [51].

Faunal resources have played a wide range of roles in human life from the earliest days of recorded history. Human-animal interactions have constituted a fundamental connection in all societies throughout history. In fact, mammals comprise the preferred source of food because of their size and the possibility of yielding a greater return for the energy invested in hunting [63]. Different mammal products (e.g. horn, leather and teeth) are also used as trappings and decoration [64].

Wild and domestic animals and their by-products (e.g. hooves, skins, bones, feathers and tusks) form important ingredients in the preparation of curative, protective and preventive medicine [65].

Humans and wildlife share a wide range of diseases. Infectious diseases transmitted between animals and humans are called zoonoses. Over 70% of emerging diseases have animal origins, making zoonotic diseases some of the most important potential threats to public health and wildlife health [66].

Cow (*Bos taurus*) is strong and powerful and useful animal which has been mentioned in various verses of the Holy Quran. Allah has made her obedient to the human being. As she depends upon human being for her protection, therefore, she lives under his control like other domestic animals [18].

Cows are often called cattle. The adult female is called a cow. The adult male is called a bull. A baby is called a calf. Cattle were domesticated thousands of years ago. They are farmed for their milk, meat, hides (leather) and many other products, like cheese, cream, gelatin, glue, soap and many other products. In some parts of the world, cattle are still used to pull plows and carts. There are still some wild cattle (like the gaur and banteng) living in Asia [67].

The cow remains a protected animal in Hinduism today and Hindus do not eat her meat. Most rural Indian families have at least one dairy cow, a gentle spirit who is often treated as a member of the family. The five products (pancagavya) of the cow — milk, curds, ghee butter, urine and dung — are all used in puja (worship) as well as in rites of extreme penance [68].

Camel (*Camelus dromedarius*) Camel has a variety of arabic names such as *Ibil*, *Ba'eer*, *Jamal*, *Jamaalaatun* (Pl.) and *Naqatun* which have been cited 13 times in the Holy Quran [20]. Camel is a large ruminant used in Asia and Africa for carrying burdens and for riding. There are two types of camels: the one-humped camel (the Arabian Camel or Dromedary Camel) and the two-humped camel (the Bactrian Camel). The two-humped Bactrian camels are much more mild-mannered than the hot-tempered dromedary camels. The Bactrian camel loses its coat in the spring and grows a thick coat of hair each winter whereas the Dromedary Camel has a uniform length of hair year round. Both are well adapted to desert conditions. They can derive water, when none is available elsewhere, from the fat stored in their humps [69].

It is probable that they are first domesticated in Arabia some time after 1500 BC. By about 1000 BC caravans of camels are bringing precious goods up the west coast of Arabia, linking India with the Mediterranean and Mesopotamia [70].

Dog (*Canis familiaris*) is known as *Kalb* in Arabic and has been cited five times in the Holy Quran: (Sura Al-A'raf, verse #.176; Sura Al-Kahf, verse # 18, 22) [20].

There is no consensus as to exactly when and how many times dogs were domesticated. What is clear is that domesticated dogs are the earliest domesticated mammals.

It is often assumed that humans intentionally domesticated dogs, but Morey (1994) argued that it may have been accidental [66].

Dog's earned the nickname "man's best friend" because they work for humans in so many ways. They are used in herding live stocks, in hunting, in rodent control, in guarding, in helping fishermen with their nets, in pulling loads or as a companion [71]. They also serve as guide dogs, utility dogs, assistance dogs and hearing dogs and psychological therapy dogs provide assistance to individuals with physical or mental disabilities [22].

The fuqahaa (Islamic jurists) are agreed that it is not permitted to keep a dog unless it is for a purpose, like hunting or guarding property or other uses that are not contrary to the Sharee'ah. The Prophet (*Sallallahu Alayi Wassallam*) said: "Whoever keeps a dog, except a dog for herding, hunting or farming, his reward will decrease by one qiraat every day." (Reported by Muslim, 294) [25]. According to the most of the religions the dog is impure [20]. The saliva of the dog is extremely impure, because the Prophet (*Sallallahu Alayi Wassallam*) said: "If a dog licks the vessel of any one of you, let him throw away whatever was in it and wash it seven times"( Reported by Muslim, no. 41) [25].

The eating of dog meat is very dangerous because it causes various diseases. Cases of rabies, encephalitis, trichinellosis, cryptosporidiosis, toxocara and Monkeypox have been reported from various countries, such as Russia, Poland, Turkey, China, Central and West Africa, United of America. In Philippines where dog meat is now banned, there are health warnings about the deadly diseases including rabies that it can cause [72]. The Centers of Control Diseases reported 80 cases of monkey pox from six states. It was investigated that the monkey pox virus first transferred from infected Gambian rats to prairie dogs during interstate shipments and then on to humans who handled the prairie dogs [66].

In much of Asia, Africa and Latin America, dogs are the principal reservoirs for the rabies virus. Horse, mule and donkey The Quran first mentioned al-an'am, that is, the camel, cow and goat. Then, out of their benefits, one such benefit was declared to be the eating of their meat. Then, as separate from it, it was said: (and horses, mules and donkeys). When pointing out to their benefits, definite mention was made of their use for riding and that they may look good by having them. But, the eating of their meat has not been mentioned here. This provides the proof that the meat from horse, mule and donkey is not

Halal. As for the meat from mule and donkey is concerned, the majority of Fuqaha (Muslim jurists) agree upon its meat being Haram - and in a Hadith on the subject, its unlawfulness has been clearly stated. But, in the case of horse meat, there are two conflicting narrations of Hadith. One of them puts it as Halal, while the other, as Haram. Therefore, sayings of the Fuqaha (Muslim jurists) became divided on this religious issue. Some declared it to be Halal while others called it Hariim. It was because of these conflicting arguments that Imam Abu Hanifah, did not call horse meat Haram like the meat of a donkey or mule, but he did call it Makruh (reprehensible) [51].

The majority of working animals are owned by individuals who use them as their sole means of income to sustain often large and extended families. In developing nations where 96 per cent of all donkeys and 60 per cent of horses are found, hundreds of millions of impoverished people depend on equines for their livelihoods, from transport of water to attractions for tourists. Up to 20 people can be dependent on each animal for their daily survival. In addition to their traditional role as pack and riding animals, equines, most notably donkeys as they are cheaper than oxen and more resistant to droughts, are increasingly used for light cultivation tasks. In the developing world, they are the most important source of agricultural energy and transport for resource-poor communities in both urban and rural areas [73].

Equines are the most important animals in the farming and transport systems of Ethiopia. They are important animals to the resource-poor communities in both rural and urban areas.

Horses involved in pulling carts often work continuously for 6 to 7 hours/day, carrying 3 to 4 persons (195–260 kg) in a single trip [74]. Donkeys are often involved in more multi-purpose activities than horses. They transport goods to and from markets, farms and shops, traveling long distances. They also pull carts carrying heavy loads 3 to 4 times their body [73].

Donkey (*Equus africanus*) are domestic animals falling under the equine family, which includes horses, zebras and the mules. This is an animal that has been neglected as an object of scientific inquiry. Donkeys therefore contribute to economic development as they are used in every-day life. They are even used more frequently than cattle and horses and have taken the work that was in the past done by cattle, horses and machinery such as tractors [50]. In most societies, they were mainly used as beasts of burden or for their pulling power. There

is strong evidence that early domestic asses were used for many of these tasks; for example, they were used for plowing and as draft animals in Mesopotamia [75].

Ever since the donkey was domesticated, many centuries ago, people have drunk donkey milk for its beneficial properties. And over this time, it has been drunk by a variety of people for a variety of purposes. For one, donkey milk was drunk to strengthen babies and the sick. Later, some of the most beautiful women of antiquity used donkey milk for cosmetic purposes. In medical fields, given that donkey milk is closer to human milk than cow or goat milk, it has become a popular alternative to human breast milk for babies. In fact, in Germany and Italy it is commonly given to premature babies. Donkey milk, with its balanced nutritional properties, is a wonderful source of strength and energy for people of all ages [48].

Wolf (*Canis lupus*): The Arabic name of wolf is *Zaibun*. It has been mentioned three times in the Holy Quran (Sura Yûsuf:12, verse #. 17, 131, 141) [20]. Wolf is described as a predatory, carnivorous pack mammal of the family Canidae. Highly intelligent animals with upright ears, sharp, pointed muzzles and sharp eyes. Wolves have ruffs of long hair framing the sides of their faces similar to sideburns [76]. It is estimated that wolves were first domesticated about 12,000 years ago. They are wild animals. They survive by hunting and consuming large ungulate (hooved) animals. They used to be common to most of the Northern Hemisphere. Currently, they are found in Canada in the greatest numbers and also occur in much smaller numbers in Russia, Northern Europe and some isolated regions in the United States. Most wolves in the United States are in Alaska and extreme northern Minnesota. Some wolves are also in the northern Rocky Mountains. There are also a very few in Arizona.

The most unique trait of wolves is their intelligence and social behavior. Wolves are highly social animals, living in family groups called packs. These packs are tightly knit social groups, with a ranking structure in place, most generally believed for keeping the pack organized for purposes of the hunt and care of the pack [77].

Elephant (*Elephas maximus*) is known as Fil in Arabic and has been cited once in the Holy Quran.. Allah says in His Holy Quran (Surat Al-Fil, verse #. 1) [20]: “*Have you not seen how your Lord dealt with the People of the Elephant?*” This Surah refers to the story of the People of the Elephants. There was a bad king named Abraha who once came to destroy the Holy Ka’ba with a big

elephant. He wanted the people to stop coming to the Ka'ba and instead come to pray at a big church that he had built. When he tried to destroy the Ka'ba, Allah sent a flock of tiny birds that carried small stones in their beaks and claws. When the stones were dropped on Abraha's army, many of the elephants and the soldiers were killed. Abraha ran away [54].

India is the region where elephants are first domesticated, during the Indus civilization. The two species of elephant are at this time widespread - the Indian elephant throughout temperate Asia as far west as Syria and the African elephant in regions north and south of the Sahara. (The mammoth has become extinct by the end of the last glacial period, about 10,000 years ago - partly through climatic changes and partly at the hands of human hunters) [70]. The Asiatic Elephant (*Elephas maximus*) is a famous animal of India. It is the only living species of the genus *Elephas* and distributed in South Asia from India in the west to Borneo in the east. Asian elephants are the largest living land animals in Asia [78]. For centuries people have viewed elephant ivory as a valuable commodity, used for carvings, jewellery and other artifacts [64]. Thus, the killing of elephants to satisfy the demand for ivory has presumably been the major factor in reducing elephant populations throughout most of history. Skins and furs from many mammal species are traded internationally to make clothing, boots and shoes, bags and other items [63].

Monkeys (*Macaca sylvanus*) are classified into two groups; the 'New World monkeys', i.e. the species found in South and Central America and the 'Old World monkeys', i.e. the species from Asia and Africa. Other than their range, there exist quite a few differences between the two. While the New World monkeys have tails which they use efficiently, Old World monkeys don't usually have one and even if they do they don't use it like their New World counterparts. The Old World monkeys have versatile thumbs and these thumbs compensate for the absence of tail. The list of New World monkeys includes species like marmosets, tamarins, capuchins, squirrel monkeys, owl monkeys, howler monkeys, spider monkeys, woolly monkeys, etc. On the other hand, the list of Old World monkeys includes species like macaques, baboons, colobus, langurs, mandrills, mangabeys, etc [79].

Goat (*Capra hircus*) is known as *Ma'z* in Arabic which has been cited once in the Holy Quran. They are believed to be the second animal domesticated following the dog [31].

Sheep (*Ovis aries*) has been mentioned four times in Holy Quran in the terms of *Ni'aj* (Pl.), *Na'jah* and *Dha'n* [20]. Sheep are believed to have been among the first animals to be domesticated, preceded by the dog and goat.

The domestication of both sheep and goats probably dates back to the pre-settled agricultural period. It is also believed that most domestication took place in W. Asia where the majority of the present day small ruminant breeds likely originated [31].

Sheep and goats are among the major economically important livestock, playing an important role in the livelihood of resource-poor farmers. They provide their owners with a vast range of products and services such as meat, milk, skin, hair, horns, bones, manure and urine for cash, security, gifts, religious rituals, medicine, etc [61].

Compared to cow milk, goat and sheep milk have higher protein, energy and fat contents with beneficial amino acids. The higher proportions of short- and medium-chain fatty acids make goat and sheep milk easy for human digestion. Because of this and the way it forms a fine curd in the stomach, humans can more easily digest goat milk than cow milk. Goat milk is an excellent source of calcium, phosphorus and chlorine.

It is also believed that goat milk will not cause cow-milk-allergy (CMA) in many patients because of its species-specific proteins.

Goat and sheep products include liquid milk, powdered milk, cheese, yogurt, ghee and ice cream. As much as 50% of goat milk production is made into cheese world-wide. Their milk and dairy products can meet a significant portion of the daily nutrient requirements of humans in the world. In addition, goat and sheep products greatly diversify the diets of people and are considered as delicate treats in many developed countries. More importantly, they provide food security, needed nutrition and can be an income source [80].

Pigs (*Sus scrofa*) are very adaptable animals that eat many different foods and live in a variety of environments. Pigs were domesticated thousands of years ago. They are farmed for their meat and hides (leather). There are still many wild pigs, like the wild boar, the warthog and the bushpig. Pigs are found in every continent on Earth except Antarctica.

Pigs will scavenge and eat any type of food, including dead insects, worms, tree bark, rotting carcasses, garbage and even other pigs. Pigs have very few sweat glands so therefore they are unable to

completely rid their bodies of toxins. New evidence indicates that farming practices are leading directly to the spread of human bacterial infections [81]. Pigs are animals that are prohibited in Islam. This prohibition includes all part of pig such as flesh, skin and also its derivatives (lard, enzyme and others). This is clearly mentioned in the Quran, Sunnah and the consensus of the Muslim jurist (Ijma') [62,82]. The prohibition of this animal is based on several aspects of harm from either chemical, microbial or psychology [82]. Feral pigs represent a potential source of disease. Eating of pork can cause no less than 70 different types of diseases [83]. They carry pseudorabies, (Aujeszky's disease, *porcine herpesvirus 1*), a viral swine disease of considerable economic importance to the hog industry. Cattle are susceptible as secondary hosts and infection results in the cattle disease known as mad itch. Rats, dogs and horses are also known secondary hosts, as are populations of wild animals such as panthers [84]. Feral pigs are also a source of trichinosis and of swine brucellosis which is potentially fatal in humans [85]. Leptospirosis, foot-and-mouth disease, Japanese encephalitis and the parasite *Toxoplasma gondii* are other disease agents harbored by feral pigs [83,84,86].

Newly emerging evidence has also implicated feral pigs in a recent (2006) outbreak of *E. coli* spinach contamination in California that killed at least three people and caused illness in at least 200. The proposed infection pathway suggests that feral pigs transmitted the pathogenic *E. coli* strain to spinach fields from adjacent cattle pastures. Samples from cow manure in the pastures tested positive for the same bacterial strain responsible for the disease outbreak [84]. Other Diseases: Flesh of the pork is hard to digest and may lead to chronic digestive disturbances. Pimples, boils, cysts are common in pork eaters. These are some of the parasites and diseases found in pork and/ or the skin of pigs and certainly there are many more. There is still no means of killing these parasites, in the tissues, neither has anyone found a method of expelling them, even produced any specific treatment for the diseases [83]. It has been shown by a number of studies that substantial numbers of pigs are carrying *Salmonella* when arriving in the abattoirs. Several studies have demonstrated that the intestinal tract and its associated lymph nodes are frequently infected and provide a source from which *Salmonella* may be spread in the abattoir, contaminating carcasses and other food products [87]. In 1999, pig farmers on the Malaysian

peninsula began exhibiting unusual neurological symptoms, later diagnosed as severe febrile encephalitis. Later the year the disease was appeared in other parts of Malaysia. Nipah virus was later determined to be the causative agent of the epidemic. The Nipah virus is paramyxovirus whose natural reservoirs are Pteropodid fruit bats. The emergence of Nipah in 1999 is attributed to the expansion of pig farms into area where large colonies of bats were present. The outbreaks of Nipah virus in Humans have also been occurred in Singapore, Bangladesh, India and Cambodia [66]. The Recent outbreak of swine flu in Mexico and North America led some countries to slaughter pigs en masse however there is ample scientific evidence to suggest that pigs harbour parasites that are harmful to humans and the pig has long been considered the ideal breeding ground for influenza [81]. The pig is the most shameless animal on the face of the earth. It is the only animal that invites its friends to have sex with its mate. The pig is one of the filthiest animals on earth. It lives and thrives on muck, feces and dirt. It is the best scavenger that God has produced. In the villages they don't have modern toilets and the villagers defecate in the open air (Body releases) and Very often these releases are cleared by pigs [83,88].

Besides recommending the consumption of meat to satisfy bodily needs, Islam has forbidden the consumption of the meats of some animals. One of the scientific wonders of the Quran is forbidding unsanitary and dangerous foods that are harmful for the human body and mind. Eating of meat of pig, dog etc. has been forbidden in Islam. One of the reasons for this ban on meat of such animals is that it causes various diseases as mentioned earlier. This was stated when medical sciences were not advanced and there were no modern tools for diagnosing disease pathology. Allah Almighty prohibits something for His servants to save them from all what may bring them harm; He is indeed Ever-Kind and Most Glorious.

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