Canine Gut Health: Commercial or Raw Meat Diet

Neive Munrei A Ara-is

Outline

- History of Dog Food
- Comparing the two diets
- Effect of Commercial Food Diet on the gut
- Effect of Raw Meat Diet on the gut
- Digestability andNutrient Absorption

History

The History of Dog food from the earliest record to present day.
This will be very brief.

Wikipedia Contributors. (2019, September 3). *Dog food*. Wikipedia; Wikimedia Foundation. https://en.wikipedia.org/wiki/Dog_food

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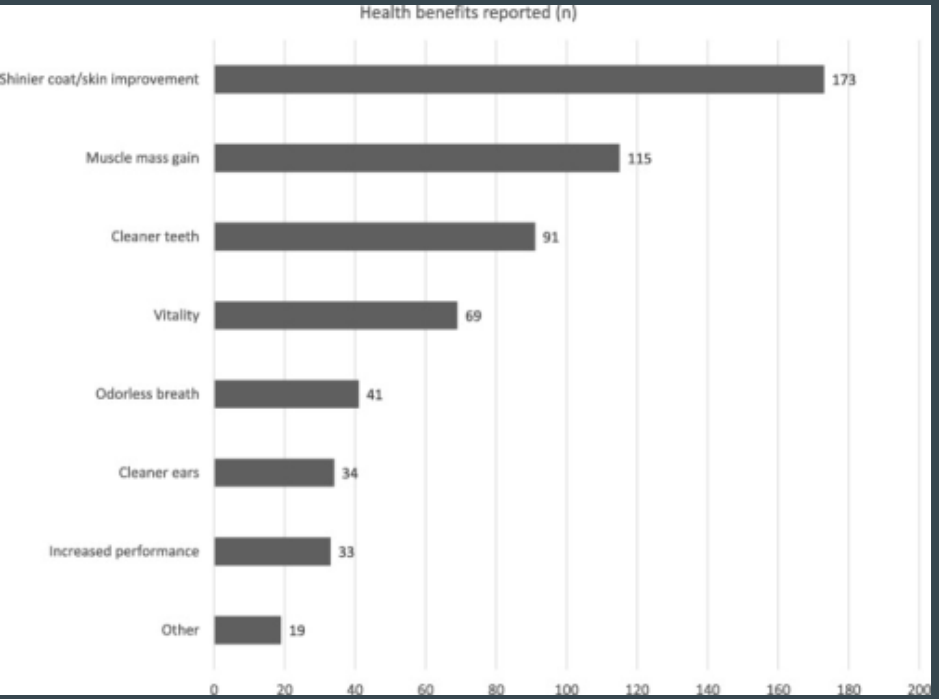
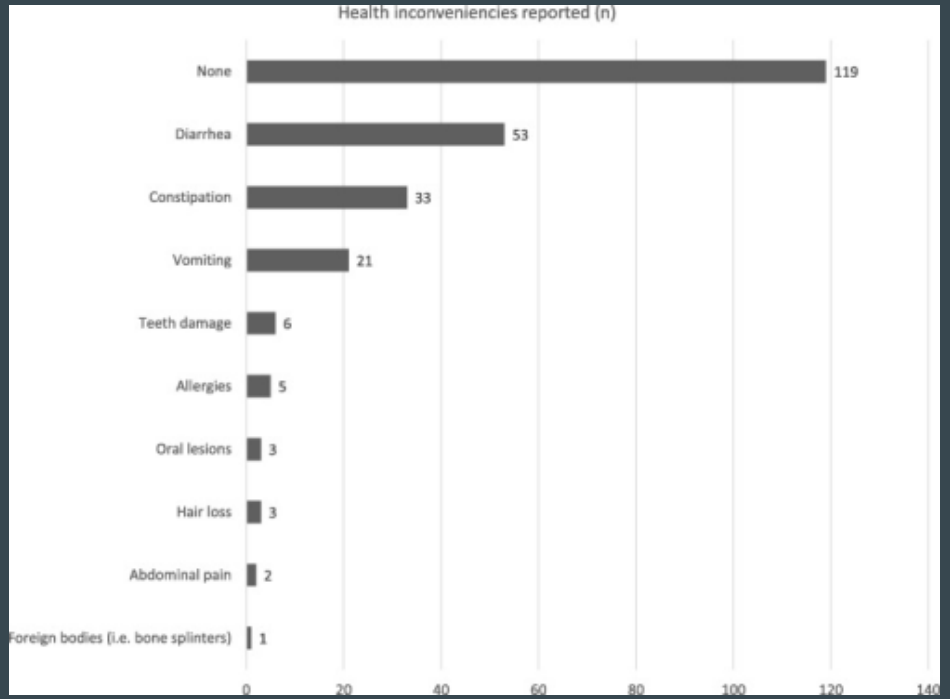
Overview

Qualifying what the raw meat diet is and what the commercial food diet is.

The Gut Microbiome

Raw Meat Diet (RMD)





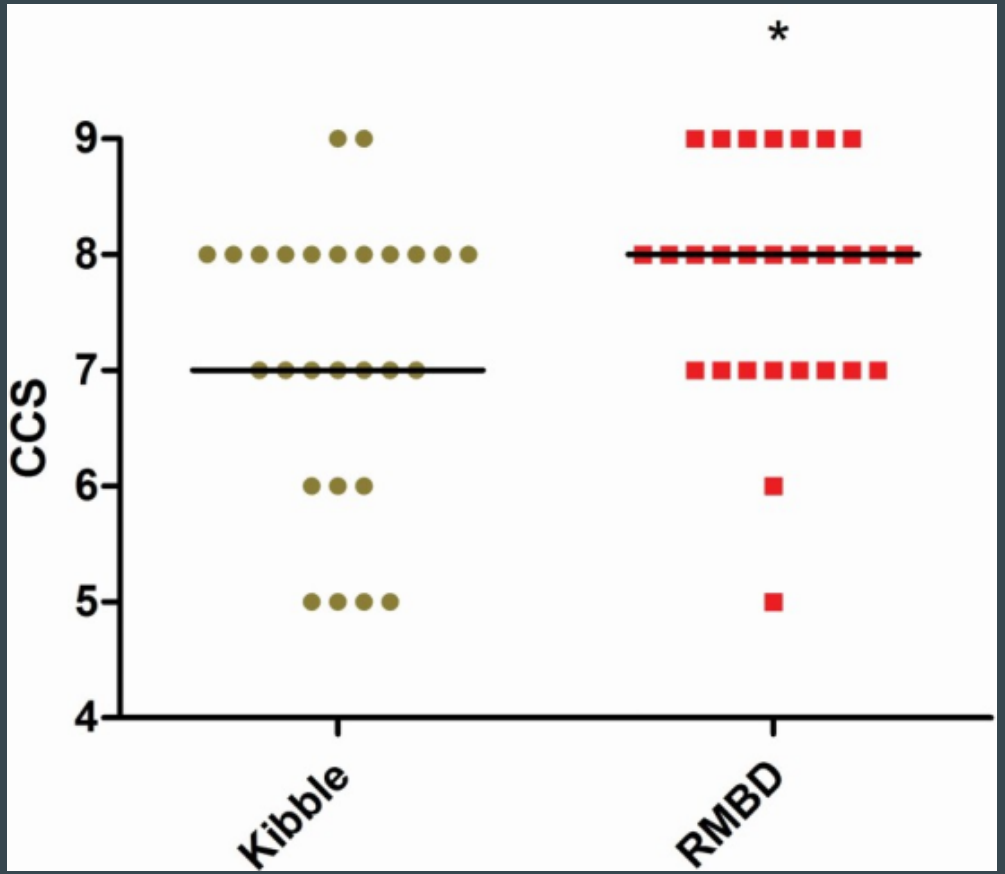
Commercial Food Diet

Table 1.

Characteristics of dogs enrolled in the study[1]

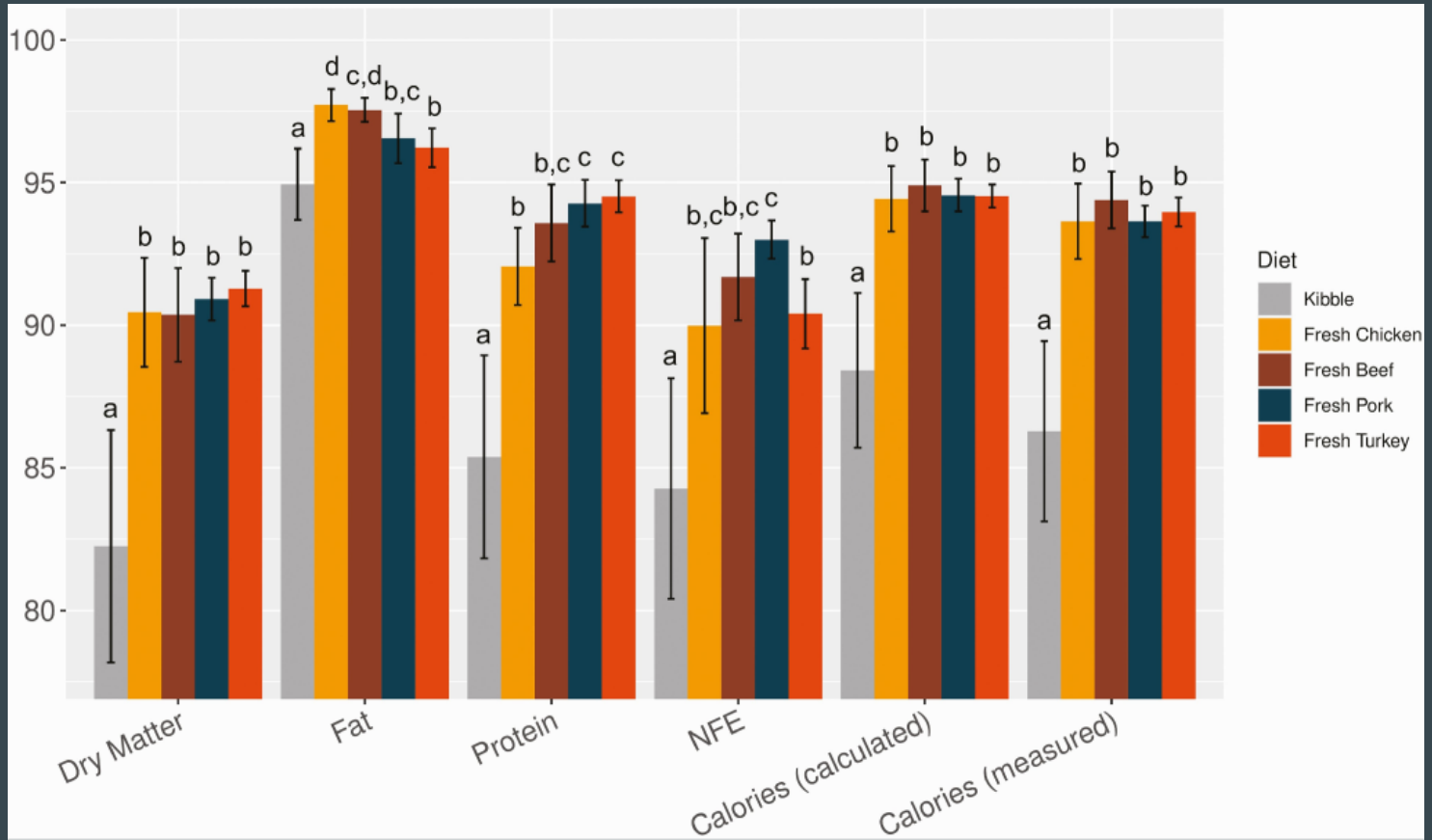
	Kibble	**Raw**	***P*-value**
Number enrolled	*n* = 27	*n* = 28	
Gender	M = 5; MC = 11; F = 0; FS = 11	M = 4; MC =7 ; F = 6; FS = 11	0.06
Age (mean ± SD)	4.5 ± 2.1 yr	6.9 ± 2.6 yr	<0.001
Weight (mean ± SD)	27.81 ± 13.6 kg	24.14 ± 11.1 kg	0.28
BCS (mean ± SD)	5.1 ± 1.4	3.8 ± 1.2	0.001
Breed (multiples)	BC = 3; Lab = 3; GD = 3; Aussie = 2; Mixed = 9	BC = 11; Rott = 4; ESS = 3; Lab = 2; Mixed = 5	0.08
Breed (singles)	Corgi, Golden, Husky, Heeler, Greyhound, Staffy, and Beagle	GSD, GSP, Mal, and BM	

Differences in the Gut



Digestibility & Nutrition

Digestibility of Each



Nutritional Advantages of Each

Table 1.
Nutrient composition of the study diets

Measure	Kibble-chicken			Fresh-chicken			Fresh-beef			Fresh-pork			Fresh-Turkey		
	FW	DM	g/Mcal ME[a]	FW	DM	g/Mcal ME[a]	FW	DM	g/Mcal ME[a]	FW	DM	g/Mcal ME[a]	FW	DM	g/Mcal ME[a]
Nutrient (%)															
Moisture	5.40	–	13.78	72.90	–	530.35	71.60	–	509.36	73.60	–	684.77	71.00	–	502.10
Protein	35.44	37.46	90.44	9.94	36.68	72.31	10.56	37.18	75.12	10.50	39.77	97.69	11.56	39.86	81.75
Fat	18.25	19.29	46.57	8.22	30.33	59.80	7.38	25.99	52.50	3.96	15.00	36.84	7.77	26.79	54.95
NFE	29.76	31.46	75.94	6.62	24.43	48.16	7.93	27.92	56.41	9.24	35.00	85.97	7.13	24.59	50.42
Total dietary Fiber	12.5	13.2	31.9	5.5	20.3	40.0	–	–	–	–	–	–	–	–	–
Crude fiber	3.3	3.5	8.4	0.5	1.8	3.6	0.3	1.1	2.1	0.4	1.5	3.7	0.3	1.0	2.1
Soluble fiber	9.2	9.7	23.48	5.0	18.5	36.4	–	–	–	–	–	–	–	–	–
Ash	7.85	8.30	20.03	1.82	6.72	13.24	2.23	7.85	15.86	2.30	8.71	21.40	2.24	7.72	15.84
Phosphorus	1.04	1.10	2.65	0.26	0.96	1.89	0.33	1.16	2.35	0.40	1.52	3.72	0.30	1.03	2.12
Calcium	1.37	1.45	3.50	0.35	1.29	2.55	0.43	1.51	3.06	0.43	1.63	4.00	0.40	1.38	2.83
Ca:P ratio	1.32	1.32	–	1.36	1.36	–	1.30	1.30	–	1.10	1.10	–	1.34	1.34	–
Calculated ME density (kcal/kg)[b]															
Atwater	4,251	4,493	–	1,402	5,174	–	1,404	4,943	–	1,146	4,341	–	1,447	4,989	–
Modified Atwater	3,833	4,051	–	1,278	4,716	–	1,274	4,488	–	1,028	3892	–	1,314	4,533	–

Overall Health

Benefits and Deficiencies of Each

Conclusion

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