# Summit Ridge Farms 

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## Canine Preference Results

Pedigree Chopped Ground Chicken \& Rice
VS
Pedigree Chopped Ground Chicken \& Rice with Dried Cream Extract @ 0.40\%

Study \# BUTPALC00220

Submitted to:
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Dates of Performance:
08/02/20
to
08/03/20

## Amanda Fallon

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Amanda L. Fallon

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## Consumption Summary

The total amount of food consumed by the 20 dogs during the 2 days of this test was 30,449 Grams as follows:
Diet A as Pedigree Ckn\&Rice: 2,601 Grams or 8.5 \%
Diet B as Pedigree Ckn\&R w/extract: 27,848 Grams or 91.5 \%
There is a 10.71 to 1 consumption ratio of Pedigree Ckn\&R w/extract to Pedigree Ckn\&Rice.

Using a Wilcoxon Signed Rank test there is significant reason to suspect a consumption difference between the two Diets ( $\mathrm{P}=0.0001$ ). A 2-way analysis of variance ( 2 -Way ANOVA) indicates that there is significant reason to suspect a difference in consumption of the 2 diets when the variance in consumption of the dogs is accounted for. ( $\mathrm{F}=154.056, \mathrm{P}=0.0000$ )

## Intake Ratio Chart

The individual Intake Ratios for each of the 20 dogs are sorted in ascending order for Pedigree Ckn\&Rice:


The average of the 20 individual Intake Ratios for each Diet are as follows:
Diet A as Pedigree Ckn\&Rice: Average IR $=0.084$.
Diet B as Pedigree Ckn\&R w/extract: Average $\mathrm{IR}=0.916$.

## Preference By First Choice

Over both days Pedigree Ckn\&Rice was chosen first on 2 occasions and Pedigree Ckn\&R w/extract was chosen first on 38 occasions. A significant First Choice is detected and tends to favor Pedigree Ckn\&R w/extract. The $\mathrm{Chi}^{2}$ probability is $\mathrm{p}=0.0000$

Over both days 0 dogs chose Pedigree Ckn\&Rice first every day and 18 dogs chose Pedigree Ckn\&R w/extract first every day, the other 2 were undecided. There is significant reason to suspect that this result is not random as a definite preference is detected. The $\mathrm{Chi}^{2}$ probability is $\mathrm{p}=0.0000$

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## Daily Consumption Summary

The average daily consumption of each diet is listed below for both days. The consumption of each diet is compared using a separate paired t -Test within each day ( 20 dogs by 2 diets) to assess significance in consumption difference for that day.

| Average Daily Consumption Data |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Day | Diet A | Diet B | Total | P of t | Significant |
| 1 | 79.7 | 695.6 | 775.3 | $\mathbf{0 . 0 0 0 0}$ | YES! |
| 2 | 50.4 | 696.9 | 747.2 | $\mathbf{0 . 0 0 0 0}$ | YES! |

 difference.

| Daily First Choice Counts |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Day | Diet A | Diet B | P of Chi $^{2}$ | Significant |
| 1 | 1 | 19 | $\mathbf{0 . 0 0 0 1}$ | YES! |
| 2 | 1 | 19 | $\mathbf{0 . 0 0 0 1}$ | YES! |


#### Abstract

\section*{Daily Preference By First Choice}

The diet of First Choice preference is scored daily for each dog and the counts are listed below. A Chi ${ }^{2}$ test compares the daily counts for Pedigree Ckn\&Rice and Pedigree Ckn\&R w/extract to the counts that might have been expected if there was no First Choice difference in the two diets. In this case that would be a 10:10 ratio or both diets chosen equally. Now, a Significant result (YES!) here indicates that these products were not chosen equally. Whereas, a non Significant result (NO) means that there is no evidence to suspect a First Choice




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## Preference Scoring by Intake Ratio

It is a popular contention that an animal shows a clear preference by consuming twice as much of one diet as the other. This is measured as a 2:1 consumption ratio or a 0.6667 Intake Ratio.

Scoring is achieved by reviewing the average intake ratios for each dog in the test and scoring one point for the Diet with an Intake Ratio greater than or equal to 0.6667 .

Using the $2: 1$ consumption criteria in the Intake Preference chart to the right, no dogs prefer Pedigree Ckn\&Rice, 18 dogs prefer Pedigree Ckn\&R w/extract and the other 2 dogs show no Preference.


## Methods and Procedures

The kennel facility is registered with the USDA No. 23-R-0126 under the Animal Welfare Act. The kennel had a 12-hour-light/12-hour-dark cycle. Every attempt was made to keep temperature ranges within targeted conditions (from $50^{\circ}$ to $85^{\circ} \mathrm{F}$ ) in accordance with the Animal Welfare Act. Cages and feed bowls were cleaned daily and sanitized in accordance with the Animal Welfare Act.

The purpose of the study was to assess the palatability of Pedigree Ckn\&Rice and Pedigree Ckn\&R w/extract. The Sponsor owns the study, including raw data, results, and final reports. Summit Ridge Farms agrees to keep all aspects of this study and report confidential. All data created for this study will be stored in Summit Ridge Farms' archives for a five year period.

On 07/20/20, 160 cans pedigree + dried cream of test article Pedigree Ckn\&Rice and of test article Pedigree Ckn\&R w/extract were received.

Twenty male and female Beagles identified by ear tattoo and cage number were presented the test diets on an individual basis. Two stainless steel bowls, each containing approximately 2 cans of diet, were offered once daily for 2 days. To create diet B, $0.40 \%$ of dried cream was added to 2 cans of Pedigree Chopped Ground Chicken \& Rice. Bowl placement was reversed daily and both bowls were presented for 30 minutes. If one diet was completely consumed prior to the end of the 30 minutes, both bowls were removed. Food consumption and first choice preference were recorded for each dog.

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Table 1: Day 1 Food Consumption and First Choice Data

|  |  | Grams of Diet Pedigree Ckn\&Rice |  |  |  | Grams of Diet Pedigree Ckn\&R w/extract |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dog | A <br> Weigh In | A <br> Weigh Out | A <br> Total | First <br> Choice | B <br> Weigh In | B <br> Weigh Out | $\begin{gathered} \text { B } \\ \text { Total } \end{gathered}$ | First <br> Choice | IR |
| 1 | 13311 | 963 | 954 | 9 |  | 987 | $\underline{251}$ | 736 | * | 0.01 |
| 2 | 1506103 | 925 | 915 | 10 |  | 922 | $\underline{186}$ | 736 | * | 0.01 |
| 3 | 2825245 | 910 | 905 | 5 |  | 905 | $\underline{171}$ | 734 | * | 0.01 |
| 4 | 13176 | 913 | 763 | 150 |  | 909 | 174 | 735 | * | 0.17 |
| 5 | 2771897 | 909 | 179 | 730 | * | 913 | 875 | 38 |  | 0.95 |
| 6 | 2954819 | 906 | 882 | 24 |  | 918 | 177 | 741 | * | 0.03 |
| 7 | 12853 | 908 | 905 | 3 |  | 905 | $\underline{170}$ | 735 | * | 0.00 |
| 8 | 13292 | 914 | 861 | 53 |  | 918 | $\underline{178}$ | 740 | * | 0.07 |
| 9 | 1487801 | 906 | 765 | 141 |  | 920 | $\underline{176}$ | 744 | * | 0.16 |
| 10 | 13528 | 915 | 832 | 83 |  | 922 | 176 | 746 | * | 0.10 |
| 11 | 2967155 | 920 | 904 | 16 |  | 914 | $\underline{174}$ | 740 | * | 0.02 |
| 12 | 2783526 | 912 | 893 | 19 |  | 912 | $\underline{172}$ | 740 | * | 0.03 |
| 13 | 1564905 | 911 | 894 | 17 |  | 972 | $\underline{232}$ | 740 | * | 0.02 |
| 14 | 3530338 | 921 | 914 | 7 |  | 914 | 173 | 741 | * | 0.01 |
| 15 | 2772711 | 913 | 898 | 15 |  | 952 | $\underline{210}$ | 742 | * | 0.02 |
| 16 | 13439 | 948 | 901 | 47 |  | 922 | 177 | 745 | * | 0.06 |
| 17 | 13629 | 969 | 965 | 4 |  | 978 | $\underline{230}$ | 748 | * | 0.01 |
| 18 | 13761 | 907 | 903 | 4 |  | 917 | 359 | 558 | * | 0.01 |
| 19 | 13120 | 972 | 904 | 68 |  | 909 | $\underline{173}$ | 736 | * | 0.08 |
| 20 | 12630 | 912 | 723 | 189 |  | 911 | 175 | 736 | * | 0.20 |
|  | Total: | 18454 | 16860 | 1594 | 1 | 18520 | 4609 | 13911 | 19 | 1.97 |
|  | Average: | 922.7 | 843.0 | 79.7 |  | 926.0 | 230.5 | 695.6 |  | 0.10 |

Day 1, 2 dogs were observed with loose stool.
The underlined numbers indicate all of the diet offered was consumed.
8.73 to 1 consumption ratio for Pedigree Ckn\&R w/extract to Pedigree Ckn\&Rice
19.00 to 1 First Choice ratio for Pedigree Ckn\&R w/extract to Pedigree Ckn\&Rice


Animal \#

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Table 2: Day 2 Food Consumption and First Choice Data

|  |  | Grams of Diet Pedigree Ckn\&Rice |  |  |  | Grams of Diet Pedigree Ckn\&R w/extract |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dog | A <br> Weigh In | A <br> Weigh Out | $\begin{gathered} \text { A } \\ \text { Total } \end{gathered}$ | First Choice | B <br> Weigh In | B <br> Weigh Out | $\begin{gathered} \text { B } \\ \text { Total } \end{gathered}$ | First Choice | IR |
| 1 | 13311 | 961 | 955 | 6 |  | 982 | $\underline{252}$ | 730 | * | 0.01 |
| 2 | 1506103 | 925 | 920 | 5 |  | 916 | $\underline{187}$ | 729 | * | 0.01 |
| 3 | 2825245 | 910 | 905 | 5 |  | 901 | 171 | 730 | * | 0.01 |
| 4 | 13176 | 912 | 788 | 124 |  | 908 | 174 | 734 | * | 0.14 |
| 5 | 2771897 | 916 | 911 | 5 |  | 916 | 244 | 672 | * | 0.01 |
| 6 | 2954819 | 916 | 912 | 4 |  | 916 | 178 | 738 | * | 0.01 |
| 7 | 12853 | 914 | 896 | 18 |  | 918 | $\underline{170}$ | 748 | * | 0.02 |
| 8 | 13292 | 911 | 907 | 4 |  | 914 | $\underline{179}$ | 735 | * | 0.01 |
| 9 | 1487801 | 912 | 897 | 15 |  | 911 | 176 | 735 | * | 0.02 |
| 10 | 13528 | 919 | 174 | 745 | * | 909 | 900 | 9 |  | 0.99 |
| 11 | 2967155 | 925 | 921 | 4 |  | 913 | 174 | 739 | * | 0.01 |
| 12 | 2783526 | 910 | 874 | 36 |  | 908 | $\underline{172}$ | 736 | * | 0.05 |
| 13 | 1564905 | 909 | 905 | 4 |  | 969 | $\underline{232}$ | 737 | * | 0.01 |
| 14 | 3530338 | 919 | 912 | 7 |  | 914 | $\underline{174}$ | 740 | * | 0.01 |
| 15 | 2772711 | 912 | 908 | 4 |  | 944 | 211 | 733 | * | 0.01 |
| 16 | 13439 | 949 | 946 | 3 |  | 910 | 177 | 733 | * | 0.00 |
| 17 | 13629 | 962 | 958 | 4 |  | 966 | $\underline{231}$ | 735 | * | 0.01 |
| 18 | 13761 | 897 | 894 | 3 |  | 918 | $\underline{175}$ | 743 | * | 0.00 |
| 19 | 13120 | 977 | 973 | 4 |  | 913 | $\underline{173}$ | 740 | * | 0.01 |
| 20 | 12630 | 908 | 901 | 7 |  | 916 | $\underline{175}$ | 741 | * | 0.01 |
|  | Total: | 18464 | 17457 | 1007 | 1 | 18462 | 4525 | 13937 | 19 | 1.32 |
|  | Average: | 923.2 | 872.9 | 50.4 |  | 923.1 | 226.3 | 696.9 |  | 0.07 |

Day 2, 1 dog was observed with loose stool.
The underlined numbers indicate all of the diet offered was consumed.
13.84 to 1 consumption ratio for Pedigree Ckn\&R w/extract to Pedigree Ckn\&Rice
19.00 to 1 First Choice ratio for Pedigree Ckn\&R w/extract to Pedigree Ckn\&Rice


Animal \#

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Study \#BUTPALC00220
Dates: 08/02/20 through 08/03/20

## Summary Table: Total Food Consumption and First Choice Data

Grams of Diet Pedigree Ckn\&Rice
Grams of Diet Pedigree Ckn\&R w/extract

10.71 to 1 consumption ratio for Pedigree Ckn\&R w/extract to Pedigree Ckn\&Rice
19.00 to 1 First Choice ratio for Pedigree Ckn\&R w/extract to Pedigree Ckn\&Rice


Animal \#

