

Recommended Feeding Plan

For Hilo

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This feeding plan evaluates Hilo's current nutritional management and provides evidence-based recommendations to support long-term health and welfare. The analysis includes assessment of energy intake, nutrient adequacy, feeding practices, and enrichment strategies, along with consideration of potential alternative diet options. Organized using the STRAW framework (Situation, Targets, Required Actions, and Who/When), the plan integrates clinical evaluation with practical guidance for ongoing nutritional decision-making.

Situation

Hilo Kona Coffee Bean is a 2.5-year-old neutered mixed-breed dog adopted at seven months following early trauma, neglect, and malnutrition of uncertain severity. A brief rehabilitation period occurred prior to adoption. Current weight is 55 pounds with a body condition score (BCS) of 4/9, placing him in a lean and healthy range. Activity level is moderate and includes daily walks, regular off-leash exploration in wooded areas, and structured indoor rest.

Health is generally stable aside from occasional mild constipation and intermittent swallowing difficulty, likely related to prior throat trauma. The primary diet consists of Taste of the Wild Sierra Mountain Grain Free dry kibble fed at 1.5 cups twice daily. Training rewards include 5–10 Blue Buffalo Blue Bits per day, one to two sprat treats weekly, and occasional peanuts or peanut butter in enrichment toys. Meals are measured and offered on a consistent schedule with no free feeding, though treat quantities are not precisely portioned.

As the only animal in the household, meals occur without competition, supporting consistent intake and portion control. Family goals focus on long-term disease prevention, particularly reducing diabetes risk, while remaining mindful of potential long-term effects

associated with early malnutrition and neutering. Identifying safe enrichment chews is also a priority, as chewing dense materials such as antlers or horns results in thick, adhesive saliva.

Nutritional Assessment

Using standard equations for resting energy requirement (RER) and an activity factor of 1.6 for a neutered, moderately active adult dog, Hilo’s estimated daily energy requirement (DER) is approximately 1,250 kcal/day (WSAVA Global Nutrition Committee, 2021).

Hilo’s energy intake from his primary food items (main diet and Blue Bits treats) closely aligns with this requirement. Excluding infrequently offered sprat treats and peanut products, total daily energy intake from primary food items ranges from approximately 1,250 to 1,270 kcal/day. Treats contribute approximately 1.6–3.2% of total daily caloric intake, remaining well below the recommended maximum of 10% of total calories (Cline et al., 2021).

The nutrient composition of Hilo’s primary diet and routine treats was evaluated against Association of American Feed Control Officials (AAFCO) adult maintenance standards (AAFCO, 2023).

Table 1

Current Nutrient, Energy, and Ingredient Summary for Hilo

Nutrient / Energy	Taste of the Wild (DM)	Blue Bits (DM)	AAFCO Min	AAFCO Max	Major Ingredient Sources
Feed Type	Main Diet	Treat	—	—	—
Metabolizable Energy (kcal/kg)	4,037 kcal/kg	~3,000 kcal/kg†	3,500 kcal/kg†	—	—
Crude Protein (%)	27.8%	13.7%	18.0%	—	Lamb, lamb meal, egg; chicken liver, potatoes
Crude Fat (%)	16.7%	9.6%	5.0%	—	Canola/sunflower oil; chicken fat, fish oil
Crude Fiber (%)	5.6% (max)	5.5% (max)	—	—	Dried chicory root, lentils; vegetable glycerin, pea fiber

Nutrient / Energy	Taste of the Wild (DM)	Blue Bits (DM)	AAFCO Min	AAFCO Max	Major Ingredient Sources
Moisture (%) (as fed)	10.0%	27.0%	—	—	—
Linoleic Acid (%)	2.0%	<i>Not listed</i>	1.0%	—	Sunflower oil, canola oil
Calcium (%)	1.54%	<i>Not listed</i>	0.6%	2.5%	Lamb meal, calcium carbonate
Phosphorus (%)	1.11%	<i>Not listed</i>	0.5%	1.6%	Lamb meal, pea protein
Ca:P Ratio	1.39:1	<i>Not listed</i>	1:1	2:1	—
Zinc (mg/kg)	150 mg/kg	<i>Not listed</i>	120 mg/kg	1,000 mg/kg	Zinc sulfate, zinc proteinate
Selenium (mg/kg)	0.35 mg/kg	<i>Not listed</i>	0.11 mg/kg	2.0 mg/kg	Sodium selenite
Vitamin E (IU/kg)	150 IU/kg	<i>Not listed</i>	50 IU/kg	1,000 IU/kg	Vitamin E supplement
Vitamin A (IU/kg)	10,000 IU/kg	<i>Not listed</i>	5,000 IU/kg	250,000 IU/kg	Vitamin A supplement
Omega-6 Fatty Acids (%)	2.67%	1.4%	Not required	—	Sunflower oil, canola oil
Omega-3 Fatty Acids (%)	0.33%	1.1%	Not required	—	Salmon oil, fish meal

†AAFCO assumes an energy density of 3.5 kcal/g dry matter. Adjustments are recommended for foods ≥ 4.0 kcal/g. Blue Bits estimate is based on published kcal/treat and average weight per treat.

Note. Nutrient values are based on manufacturer-reported guaranteed analysis and converted to dry matter using reported moisture (10% for Taste of the Wild, 27% for Blue Bits). Only listed nutrients are shown; values not reported by the manufacturer have been excluded. Data sources: Taste of the Wild (n.d.); Blue Buffalo (n.d.).

The primary diet exceeds minimum AAFCO requirements for crude protein (27.8% DMB), crude fat (16.7% DMB), linoleic acid, calcium, phosphorus, zinc, selenium, and vitamins A and E. The calcium-to-phosphorus ratio (1.39:1) falls within the recommended range for adult maintenance. Because treats contribute a small proportion of total caloric intake, they do not

meaningfully alter overall nutrient balance. Based on this analysis, the current diet meets established nutrient requirements for a healthy young adult dog.

Targets

1. Energy and Body Condition

Maintain a body condition score of 4–5/9 with a target weight of approximately 55 pounds. Daily caloric intake should remain aligned with the estimated requirement of ~1,250 kcal, with treats contributing less than 10% of total intake.

2. Long-Term Nutritional Adequacy

Continue providing a diet that meets AAFCO adult maintenance standards while supporting long-term metabolic health and minimizing modifiable risk factors for obesity and diabetes.

3. Feeding Experience and Safety

Support comfortable swallowing, appropriate chew selection, and structured feeding practices that promote both physical and behavioral welfare.

Required Actions

1. Energy and Body Condition Management

Hilo's current intake of approximately 1,250–1,270 kcal per day aligns with his estimated energy requirement, and no adjustment is needed at this time. Ongoing weight and body condition trends should guide future caloric modifications, with a target weight range of 53–58 pounds and a BCS of 4–5/9 (Cline et al., 2021; WSAVA Global Nutrition Committee, 2021).

Treats should remain below 10% of total daily caloric intake; current usage (approximately 1.6–3.2%) falls well within this range. If treat frequency increases, minor kibble adjustments may be required to maintain energy balance.

Maintaining structured walks and off-leash activity will continue to support metabolic health and lean muscle mass, helping reduce modifiable risk factors for obesity and diabetes.

2. Long-Term Nutritional Adequacy and Disease Prevention

Hilo’s current diet meets adult maintenance standards and is supporting an appropriate body condition. Long-term planning should remain responsive to emerging research, life stage transitions, and the family’s goal of disease prevention.

The primary diet is grain-free. Current research has identified a potential association between certain grain-free diets and dilated cardiomyopathy (DCM), although a direct causal relationship has not been established (Cline et al., 2021). Hilo shows no clinical signs of cardiac compromise, and continuation of the current diet is reasonable at this time. Periodic reassessment is appropriate if clinical signs, breed-specific risk factors, or new evidence emerge.

If a grain-inclusive formula is considered in the future, Purina Pro Plan Chicken & Rice represents a nutritionally comparable alternative. A comparison of key nutrient and energy characteristics is provided below.

Table 2

Nutrient, Energy, and Ingredient Comparison of Purina Pro Plan vs. Taste of the Wild

Nutrient / Energy	Purina Pro Plan (DM)	Taste of the Wild (DM)	Blue Bits (DM)	AAFCO Min	AAFCO Max	Major Ingredient Sources
Feed Type	Alternative Main Diet	Main Diet	Treat	—	—	—
Metabolizable Energy (kcal/kg)	3,790 kcal/kg	4,037 kcal/kg	~3,000 kcal/kg†	3,500 kcal/kg†	—	Chicken, rice, corn gluten meal; lamb, potatoes; chicken liver
Crude Protein (%)	29.5%	27.8%	13.7%	18.0%	—	Chicken, soybean meal, dried egg; lamb, lamb meal
Crude Fat (%)	18.2%	16.7%	9.6%	5.0%	—	Beef fat, soybean oil; chicken fat, fish oil

Nutrient / Energy	Purina Pro Plan (DM)	Taste of the Wild (DM)	Blue Bits (DM)	AAFCO Min	AAFCO Max	Major Ingredient Sources
Crude Fiber (%)	3.4% (max)	5.6% (max)	5.5% (max)	—	—	Beet pulp, wheat bran; dried chicory root, lentils
Moisture (% as fed)	12.0%	10.0%	27.0%	—	—	—
Linoleic Acid (%)	1.6%	2.0%	Not listed	1.0%	—	Soybean oil, beef fat; canola/sunflower oil
Calcium (%)	1.14%	1.54%	Not listed	0.6%	2.5%	Calcium carbonate, poultry by-product meal; lamb meal
Phosphorus (%)	0.91%	1.11%	Not listed	0.5%	1.6%	Poultry by-product meal; pea protein
Ca:P Ratio	1.25:1	1.39:1	Not listed	1:1	2:1	—
Zinc (mg/kg)	Not listed	150 mg/kg	Not listed	120 mg/kg	1,000 mg/kg	Zinc proteinate, ferrous sulfate; zinc sulfate
Selenium (mg/kg)	0.35 mg/kg	0.35 mg/kg	Not listed	0.11 mg/kg	2.0 mg/kg	Sodium selenite
Vitamin E (IU/kg)	460 IU/kg	150 IU/kg	Not listed	50 IU/kg	1,000 IU/kg	Vitamin E supplement
Vitamin A (IU/kg)	15,000 IU/kg	10,000 IU/kg	Not listed	5,000 IU/kg	250,000 IU/kg	Vitamin A supplement
Omega-6 Fatty Acids (%)	1.7%	2.67%	1.4%	Not required	—	Soybean oil, chicken; sunflower oil, canola oil
Omega-3 Fatty Acids (%)	Not listed	0.33%	1.1%	Not required	—	Fish meal; salmon oil

†AAFCO assumes an energy density of 3.5 kcal/g dry matter. Adjustments are recommended for foods ≥ 4.0 kcal/g. Blue Bits estimate is based on published kcal/treat and average weight per treat.

Note. Nutrient values are based on manufacturer-reported guaranteed analysis and converted to dry matter using reported moisture (10% for Taste of the Wild, 27% for Blue Bits, 12% for Purina Pro Plan). Only listed nutrients are shown; values not reported by the manufacturer have been excluded. Data sources: Taste of the Wild (n.d.); Blue Buffalo (n.d.); Chewy (n.d.).

Both diets meet AAFCO adult maintenance standards. Differences in energy density and fiber content may influence feeding volume and gastrointestinal response. The current diet provides 410 kcal per cup compared to 379 kcal per cup in the alternative, meaning a slightly larger volume would be required if transitioning. Fiber content is modestly higher in the current formula, which may support stool consistency given Hilo's occasional constipation.

Given Hilo's history and the family's interest in diabetes prevention, maintaining stable body condition and avoiding excess caloric intake remain the most meaningful modifiable factors. At this time, no dietary change is required.

As Hilo approaches middle age (approximately 6–7 years), reassessment of caloric density and protein-to-calorie balance will be appropriate to support lean mass maintenance (Laflamme, 2005). Renal function should be monitored prior to any significant protein modification.

If a transition is pursued, a gradual change over 7–10 days with incremental increases every few days is recommended to minimize gastrointestinal upset (Hand et al., 2010). Body weight and tolerance should be monitored during and after the transition to confirm continued alignment with target condition.

3. Feeding Experience and Safety Considerations

Although Hilo's nutritional intake is appropriate, feeding strategy also supports overall welfare. Given his history of early malnutrition and throat trauma, continued attention to comfort and enrichment is important.

Swallowing difficulty is currently mild and intermittent, and no dietary change is needed. Caregivers should monitor for increased coughing, prolonged eating time, or visible discomfort.

If symptoms progress, texture modification (e.g., lightly hydrating kibble or incorporating wet food) may be appropriate, and persistent concerns should prompt veterinary evaluation.

The family has considered Merrick Natural Cuts Rawhide Free Chews with Real Venison; however, this product appears to be discontinued. When selecting enrichment chews, salivary response and chewing tolerance should guide choice. Because dense materials such as antlers or horns produce thick, adhesive saliva, new chews should be introduced cautiously and monitored for excessive salivation, gagging, or prolonged chewing effort. Options with moderate firmness may be better tolerated.

Structured feeding enrichment (e.g., slow feeders or puzzle bowls) can extend meal duration and support natural foraging behaviors without increasing caloric intake (Hunt et al., 2022), enhancing overall welfare.

Who and When: Monitoring and Reassessment

Hilo's caregivers will monitor body weight monthly and perform formal body condition scoring every 8–12 weeks. Caloric intake adjustments will be made if weight trends outside the established target range.

Diet selection and caloric density should be reviewed annually by the caregivers in consultation with a veterinarian, or sooner if activity level, gastrointestinal tolerance, or swallowing comfort changes. As Hilo approaches middle age (approximately 6–7 years), caregiver–veterinarian collaboration is recommended to reassess protein-to-calorie balance and support lean mass maintenance. Veterinary evaluation should also be pursued if swallowing concerns progress or before any significant dietary modification.

References

- Association of American Feed Control Officials. (2023). *Dog food nutrient profiles*. In *Official publication*. AAFCO. <https://www.aafco.org/>
- Association for Pet Obesity Prevention. (2022). *Pet obesity prevalence survey*.
<https://petobesityprevention.org/2022>
- Case, L. P., Daristotle, L., Hayek, M. G., & Raasch, M. F. (2011). *Canine and feline nutrition: A resource for companion animal professionals* (3rd ed.). Mosby Elsevier.
- Blue Buffalo. (n.d.). *Blue Bits Tender Chicken Recipe Training Dog Treats*.
<https://www.bluebuffalo.com/dog-treats/blue/chicken-treats/>
- Chewy. (n.d.). *Purina Pro Plan Complete Essentials adult shredded blend chicken & rice high protein formula with probiotics dry dog food (35-lb bag) product page*. Chewy.
<https://www.chewy.com/purina-pro-plan-high-protein-shredded/dp/52445>
- Cline, M. G., Burns, K. M., Coe, J. B., Downing, R., Durzi, T., Murphy, M., & Parker, V. (2021). 2021 AAHA nutrition and weight management guidelines for dogs and cats. *Journal of the American Animal Hospital Association*, 57(3), 153–174. <https://doi.org/10.5326/JAAHA-MS-7232>
- Gross, K. L., Yamka, R. M., Khoo, C., Friesen, K. G., Jewell, D. E., Schoenherr, W. D., Debraekeleer, J., & Zicker, S. C. (2010). *Macronutrients* (Chapter 5). In M. S. Hand, C. D. Thatcher, R. L. Remillard, & P. Roudebush (Eds.), *Small animal clinical nutrition* (5th ed., pp. 49–122). Mark Morris Institute.
https://www.markmorrisinstitute.org/sacn5_download.html

- Hand, M. S., Thatcher, C. D., Remillard, R. L., & Roudebush, P. (2010). Fiber. In M. S. Hand, C. D. Thatcher, R. L. Remillard, & P. Roudebush (Eds.), *Small animal clinical nutrition* (5th ed.). Mark Morris Institute.
- Hunt, R. L., Whiteside, H., & Prankel, S. (2022). Effects of environmental enrichment on dog behaviour: Pilot study. *Animals*, 12 (2), 141. <https://doi.org/10.3390/ani12020141>
- Laflamme, D. P. (2005). Nutrition for aging cats and dogs and the importance of body condition. *Veterinary Clinics of North America: Small Animal Practice*, 35(3), 713–742. <https://doi.org/10.1016/j.cvsm.2004.12.011>
- Taste of the Wild. (n.d.). *Sierra Mountain Canine Recipe with roasted lamb*. <https://www.tasteofthewildpetfood.com/dog-grain-free/sierra-mountain-with-roasted-lamb/>
- Villasenor, Y. (2025). *Vitamin E for dogs*. Chewy. <https://www.chewy.com/education/dog/food-and-nutrition/vitamin-e-for-dogs>
- Wedekind, K. J., Yu, S., Kats, L., Paetau-Robinson, I., & Cowell, C. S. (2010). Micronutrients: Minerals and vitamins. In M. S. Hand, C. D. Thatcher, R. L. Remillard, P. Roudebush, & B. J. Novotny (Eds.), *Small animal clinical nutrition* (5th ed., pp. 108–116). Mark Morris Institute. https://www.markmorrisinstitute.org/sacn5_download.html
- WSAVA Global Nutrition Committee. (2021). *Body Condition Score Charts*. <https://wsava.org/global-guidelines/global-nutrition-guidelines/>