



## Metabolic Support Low Fat is formulated to support dogs with diabetes mellitus, metabolic disease and obesity by addressing the following key nutritional factors:

- Made 100% with ingredients certified, inspected and approved by the USDA for human consumption
- Restricted complex carbohydrates and extremely low simple sugars
- Increased fiber to improve satiety and to help maintain a more steady blood glucose absorption with insulin therapy
- Restricted fat and carefully controlled protein
- Balanced for long-term feeding under veterinary supervision

*"My dog, Abigail, packed on the pounds over the last few years. I tried commercial low calorie diets, but she would not eat them, so she was continually hungry. JustFoodForDogs formulated a low calorie, high volume custom diet for her. She loves the food, and the weight came off quickly. It was Jenny Craig for dogs. I highly recommend JustFoodForDogs!"*

— Dr. Peter Vogel, VMD, DACVS

# TYPICAL ANALYSIS: Metabolic Support Low Fat

Nutrient	/kg As Fed	/kg Dry Matter	/1000 kcals
Protein	70 g	325 g	72 g
Total lipid (fat)	32 g	147 g	33 g
Carbohydrates (NFE)	101 g	469 g	105 g
Fiber, total dietary	31 g	143 g	32 g
Sugars	0.2 g	0.9 g	0.2 g
Calcium, Ca	1575 mg	7291 mg	1.63 g
Iron, Fe	14 mg	63 mg	14 mg
Magnesium, Mg	337 mg	1560 mg	0.35 g
Phosphorus, P	955 mg	4423 mg	1.0 g
Potassium, K	2700 mg	12500 mg	2.79 g
Sodium, Na	300 mg	1387 mg	0.31 g
Zinc, Zn	31 mg	144 mg	32 mg
Copper, Cu	1.60 mg	7.41 mg	1.65 mg
Manganese, Mn	4.48 mg	20.75 mg	4.63 mg
Selenium, Se	95 $\hat{A}\mu\text{g}$	441 $\hat{A}\mu\text{g}$	0.10 mg
Iodine, I	0.25 mg	1.18 mg	0.26 mg
Vitamin B1	2.00 mg	9.26 mg	2.06 mg
Vitamin B2	2.96 mg	13.72 mg	3.06 mg
Vitamin B3	19.68 mg	91.11 mg	20.32 mg
Vitamin B5	5.60 mg	25.92 mg	5.78 mg
Vitamin B6	2.04 mg	9.45 mg	2.11 mg
Folate	168 $\hat{A}\mu\text{g}$	779 $\hat{A}\mu\text{g}$	174 mg
Choline	558 mg	2582 mg	576 mg
Vitamin B12	20 $\hat{A}\mu\text{g}$	94 $\hat{A}\mu\text{g}$	21 $\hat{A}\mu\text{g}$
Vitamin A	3152 IU	14592 IU	3255 IU
Vitamin E	81 mg	375 mg	126 IU
Vitamin D	205 IU	950 IU	212 IU
EPA	0.13 g	0.59 g	0.13 g
DHA	0.94 g	4.37 g	0.98 g
Linoleic Acid	3.42 g	15.83 g	3.53 g
Arachidonic Acid	0.18 g	0.82 g	0.18 g
Linolenic Acid	0.29 g	1.32 g	0.29 g
Tryptophan	1.05 g	4.86 g	1.08 g
Threonine	2.40 g	11.10 g	2.48 g
Isoleucine	2.59 g	11.97 g	2.67 g
Leucine	4.55 g	21.04 g	4.69 g
Lysine	2.84 g	13.13 g	2.93 g
Methionine - Cystine	1.75 g	8.13 g	1.81 g
Phenylalanine - Tyrosine	4.29 g	19.85 g	4.43 g
Valine	2.79 g	12.90 g	2.88 g
Arginine	3.44 g	15.93 g	3.55 g
Histidine	1.54 g	7.04 g	1.57 g
Taurine	0.15 g	0.71 g	0.16 g

# Metabolic Support Low Fat Vet Directed Diet 14 oz, 72 oz Fresh Frozen



## DIET OVERVIEW

Metabolic Support Low Fat is made using 100% fresh, whole food ingredients approved for human consumption and fortified with fiber from whole psyllium husk. It is formulated to meet the key nutritional factors for the nutritional management of **Diabetes Mellitus**, **Metabolic Disease**, and **Obesity** in dogs:<sup>1, 2</sup>

- Restricted Carbohydrates; Low Simple Sugars
- Decreased Fat
- Balanced For Long-Term Feeding Under Veterinary Supervision
- Increased Fiber
- Carefully Controlled Protein

<sup>1</sup>Hand MS, Thatcher CD, Remillard RL, Roudebush PR, Novotny BJ (2010) Small Animal Clinical Nutrition (5th ed.). Topeka, KS  
<sup>2</sup>Kushner RF, Blatner DJ, Jewell DE, et al., The PPET Study: People and pets exercising together, Obesity 2006; 14 : 1762- 1770.

## DIET INDICATIONS

- Diabetes Mellitus
- Weight Management
- Pancreatitis
- Fiber Responsive Gastroenteritis
- Hyperlipidemia
- Obesity
- Protein Losing Enteropathy
- Exocrine Pancreatic Insufficiency

## CONTRAINDICATIONS

- Sensitivity to any of the ingredients
- Growing puppies

## INGREDIENTS

- **Acorn Squash** is the staple of this diet as it is high in fiber and protein, containing approximately 9 g of dietary fiber and approximately 2 g of protein per cup serving. It is also rich in other nutrients found in natural foods, including vitamins E and B6, potassium, magnesium and a significant amount of vitamin C.
- **USDA Certified Turkey Breast** is a high quality source of lean protein and contains selenium, niacin, iron, zinc, phosphorus, potassium and B vitamins.
- **USDA Certified Ground Beef** is considered a high quality source of protein and is also rich in iron and zinc, as well as vitamins B12 and B6.
- **USDA Graded Eggs** must meet strict U.S. quality standards and are monitored continuously for quality assurance. Eggs are a great source of protein and numerous vitamins and minerals, including vitamin A, potassium, B vitamins, folic acid, choline and biotin.
- **USDA Certified Beef Liver** contains the most concentrated volume of protein and vitamin A, ounce per ounce. It's a rich source of iron, copper, folate, riboflavin, niacin, phosphorus and zinc.
- **Whole Oats** have many benefits documented in nutrition journals. Specific to metabolic disease, oats are shown to improve insulin sensitivity in a randomized, double-blind, controlled clinical trial in humans.<sup>3</sup> Oats have also been shown to produce favorable changes in cholesterol (hyperlipidemia)<sup>4</sup> and have high satiety scores,<sup>5</sup> making it an excellent ingredient choice for a metabolic diet.
- **Whole Psyllium Husk** is a fiber source with medicinal effects. Additional fiber in the diet has a filling effect and also promotes steady glucose absorption. Diets with increased fiber have been clinically proven to improve blood glucose curves in conjunction with insulin therapy.

## INGREDIENTS (Cont.)

- **Coconut Oil** contains medium chain triglycerides (MCTs), which have been shown to help increase the liver's efficiency at metabolizing energy. A recent study in women showed that those who consumed coconut oil daily for 12 weeks maintained weight and had lowered amounts of abdominal fat.<sup>6</sup>
- **Icelandic Premium Fish Oil** provides Omega 3 fatty acids in highly biologically available forms of EPA and DHA.
- **JustFoodForDogs Nutrient Blend** is formulated specifically to meet NRC standards. The blend is compounded from 100% human grade nutraceuticals regulated by the FDA.

## ADDITIONAL REFERENCES

<sup>3</sup>European Journal of Clinical Nutrition, June 2007; 61(6):786-95

<sup>4</sup>American Journal of Clinical Nutrition, August 2002; 76(2):351-8

<sup>5</sup>European Journal of Clinical Nutrition, September 1995; 49(9): 675-90

<sup>6</sup>Lipids. 2009 Jul;44(7):593-601. doi: 10.1007/s11745-009-3306-6. Epub 2009 May 13.

## NUTRITIONAL SUITABILITY STATEMENT

This diet has been formulated for the long-term nutritional management of metabolic disease. For use under direction of a veterinarian.

Caloric Information Compare to: Royal Canin® Glycobalance and Hills® w/d				Guaranteed Analysis As Fed		Dry Matter
Kcal/kg: 969		Kcal/oz: 27		g/1000Kcal: 1032		
Metabolizable Energy % from:	JFFD Metabolic	2017 RC Glycobalance	2018 Hills w/d	Protein	6%	30%
Protein	34%	42%	18%	Fat	2%	10%
Fat	34%	43%	31%	Carb	7.5%	37.5%
Carbohydrates	32%	15%	51%	Fiber	2.5%	12.5%
				Ash	2%	10%
				Moisture	80%	---
				Simple Sugar	0.02%	0.10%
Calcium-Phosphorus ratio:				1.6:1		
Omega 6: Omega 3 ratio:				6:1		
Nutritional information averages primarily from independent lab analysis, supplemented with information originating from the USDA SR28 database.						

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## RECOMMENDED DAILY FEEDING GUIDE (feeding amount per day)

For best results it is recommended that pet owners weigh the food in ounces using a digital scale. If they do not have a scale, they may estimate volume in cups per the chart below. The chart is only a guide; always adjust feeding recommendations based on careful monitoring of the weight of the patient.

Wt (lbs)	Oz (wt)	Cups (est)	Wt (lbs)	Oz (wt)	Cups (est)
<b>5 - 10</b>	5 - 9	1.0 – 1.5	<b>75 - 80</b>	40 - 42	6.75 – 7.0
<b>15 - 20</b>	12 - 15	2.0 – 2.5	<b>85 - 90</b>	44 - 46	7.25 – 7.75
<b>25 - 30</b>	18 - 20	3.0 – 3.25	<b>95 - 100</b>	48 - 50	8.0 – 8.25
<b>35 - 40</b>	23 - 25	3.75 – 4.25	<b>110 - 115</b>	54 - 55	9.0 – 9.25
<b>45 - 50</b>	27 - 30	4.5 – 5.0	<b>120 - 125</b>	57 - 59	9.5 – 9.75
<b>55 - 60</b>	32 - 34	5.25 – 5.75	<b>130 - 135</b>	61 - 63	10.25 – 10.5
<b>65 - 70</b>	36 - 38	6.0 – 6.25	<b>140 - 145</b>	64 - 66	10.75 – 11.0