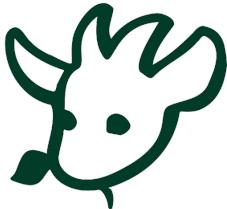


restorative diet guide

CANCER & METABOLISM

by Chelsea Kent
Roxanne Stone
and Dr. Barbara Royal



diet overview

Whole Foods Required

- Pork Recipe OR Beef Recipe
- Fish Jiggles OR Pork Jiggles
- Better Butter Tea



Functional Nutrition

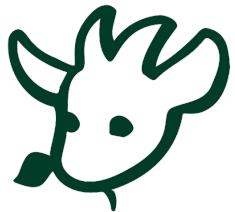
- Ketogenic diets have been found to "starve" many cancers of their primary food source, sugar. Research shows that a properly formulated ketogenic diet can improve responses to many holistic and conventional treatments, including chemotherapy and hyperbaric oxygen therapy.
- Solutions Diets contain bioavailable proteins and cultured/fermented ingredients. These can optimize nutrient utilization and support the microbiome
- The aromatic substances in Butter Tea can dissolve fat and help digestion. Better Butter Tea is formulated to improve nutrient utilization, benefiting the kidneys, liver, and heart, endocrine system, and mental health.
- Gelatin Jiggles are a superior source of amino acids and other nutrients that would otherwise be lacking in high-ratio ketogenic diets.

Chronically elevated blood glucose levels have been scientifically shown to cause metabolic diseases, including cancer. Most cancers consume sugars provided in the diet. Reducing or eliminating sugar intake has been shown to effectively starve cancer cells. When sugar is removed from the diet, the body transitions to utilizing fat for energy (ketosis). Ketosis can be accomplished through fasting or a properly formulated diet.

Glycolysis and gluconeogenesis are both metabolic states that optimize for glucose, either through a readily available source of glucose (carbohydrates) or by converting protein into glucose. Both of these have been shown to exacerbate inflammatory conditions like cancer.

A ketogenic diet causes the body to rely exclusively on fat as its energy source. This process is far more appropriate for metabolically damaged animals and has been shown in multiple studies to reduce cancer cells.

It is not possible to be in a ketogenic state and in a state of glucose reliance. Since glucose energy release is much faster, the body uses it first and stores fat for later. In order to enter and maintain ketosis, it is important to limit sugar intake and increase fat consumption.

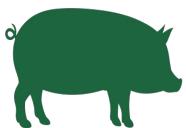


diet overview

The word “cancer” represents a variety of similar diseases. Cancer occurs when cellular metabolism is dysfunctional. As a result, abnormal cells can grow uncontrollably and form tumors in the body. These dysfunctional cells can disrupt the normal functioning of organs and tissues. Cancers can metastasize to other parts of the body and promote growth of more types of cancer. Depending on the location and stage of the cancer, symptoms can include weight loss, fatigue, pain, appetite changes, and changes in the skin. Without treatment, cancer can be life-threatening. With early detection and appropriate treatment, many types of cancer can be effectively managed or cured.



100% grass fed and finished. Raised on diverse organic pastures. No hormones or antibiotics. Sigourney, IA



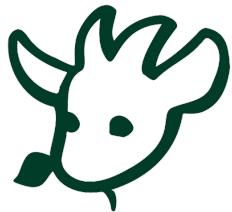
GAP 1-3 and Animal Welfare certified. No chemicals, no hormones, no antibiotics. Organic Certified. Forage in organic pastures. Warsaw, NC



MSC Certified and wild caught in clean Atlantic waters. Tested for heavy metal toxicity. New Bedford, MA



Grass fed, no antibiotics or hormones. Raised on organic pastures in thriving polyculture environments. Lykens, PA.



high quality fat

KetoPet Sanctuary research determined that fresh, raw fats do not contribute to pancreatitis. Heat processing, UV light, exposure to oxygen, very high or very low humidity, exposure to heavy metals or ionizing radiation, and time (passing expiration dates) contribute to fat oxidation and rancidity. Oxidation and rancidity can damage cellular DNA and proteins, potentially leading to pancreatitis and disease. Pancreatitis can also be caused by necrosis or inflammation in the pancreas (often attributed to carbohydrate consumption), certain medications/vaccinations, or certain toxic environmental exposures. Solutions Pet Products suggests rotating between butter, virgin coconut oil/MCT oil, pork lard or beef tallow. These products should be sourced exclusively from pastured, grass-fed, clean animals.



Kerrygold Grass Fed Butter is widely available at most supermarkets. While this is a pasteurized butter, it is very easily accessible and has shown quality results when used as part of a ketogenic diet.



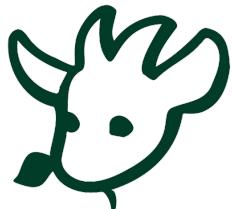
CocoTherapy Organic Virgin Coconut Oil and MCT Oil are available online or through independent pet food retailers. It is a raw, vet recommended, therapeutic grade coconut oil and is very high in lauric acid and other fats.



Fatworks or Epic Beef Tallow is pure fat from 100% grass fed cows. While this is a heat treated product (tallow is rendered beef fat), it is non-oxidized and stable. It is available at speciality grocery stores and online.



Fatworks or Epic Pork Lard is pure fat from pastured pigs. While this is a heat treated product (lard is rendered pork fat), it is non-oxidized and stable. It is available at speciality grocery stores and online.



choosing the right diet

Cancer is a highly variable disease condition - to assume that one diet is effective regarding all types of cancer would be irresponsible. Research done by KetoPet Sanctuary has shown that different cancers are responsive to different diets depending on the location and manifestation of disease.

Use the chart below to determine which diet recommendation is right for your pet. If you are unsure, please consult with your holistic or integrative veterinarian.

diet option 1 - 4:1 Keto Ratio

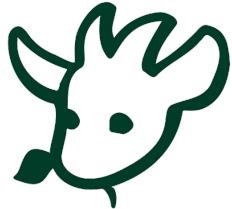
for cancers with solid tumors that are **not** in the abdominal cavity. See “supplements” page for additional required support. Also use for intractable seizures.

diet option 2 - 2.5:1 Keto Ratio

for cancers with solid tumors that **are** in the abdominal cavity. See “supplements” page for additional required support. Also use for mild to moderate seizures, brain injury, or metabolic diseases.

diet option 3 - 1.5:1 Keto Ratio

for cancers that do not have solid tumors (e.g., Leukemia, Osteosarcoma, and bone cancers). Also use for obesity and mild metabolic issues.



diet option 1 - 4:1 keto ratio

Dogs
<50lbs

BEEF RECIPE or PORK RECIPE	8.46g (0.30oz) per 10lbs of bodyweight per day
HIGH QUALITY FAT SOURCE	16.49g (0.58oz) per 10lbs of bodyweight per day
FISH JIGGLES or PORK JIGGLES	57.14g (2oz) per 10lbs of bodyweight per day
BETTER BUTTER TEA	17.14g (0.60oz) per 10lbs of bodyweight per day
Nutrabio EAA	1.20g per 10lbs of bodyweight per day
Fermented Cod Liver Oil	0.35g per 10lbs of bodyweight per day
Solutions Heavy Metal Blend	1.40g (0.05oz) per 10lbs of bodyweight per day

Dogs
51-74
lbs

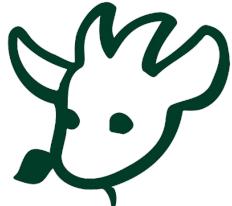
BEEF RECIPE or PORK RECIPE	7.40g (0.26oz) per 10lbs of bodyweight per day
HIGH QUALITY FAT SOURCE	14.43g (0.51oz) per 10lbs of bodyweight per day
FISH JIGGLES or PORK JIGGLES	50g (1.75oz) per 10lbs of bodyweight per day
BETTER BUTTER TEA	15g (0.53oz) per 10lbs of bodyweight per day
Nutrabio EAA	1.05g per 10lbs of bodyweight per day
Fermented Cod Liver Oil	0.30g per 10lbs of bodyweight per day
Solutions Heavy Metal Blend	1.23g (0.04oz) per 10lbs of bodyweight per day

Dogs
75-110
lbs

BEEF RECIPE or PORK RECIPE	6.34g (0.22oz) per 10lbs of bodyweight per day
HIGH QUALITY FAT SOURCE	12.37g (0.43oz) per 10lbs of bodyweight per day
FISH JIGGLES or PORK JIGGLES	42.85g (1.50oz) per 10lbs of bodyweight per day
BETTER BUTTER TEA	12.85g (0.45oz) per 10lbs of bodyweight per day
Nutrabio EAA	0.90g per 10lbs of bodyweight per day
Fermented Cod Liver Oil	0.30g per 10lbs of bodyweight per day
Solutions Heavy Metal Blend	1.05g (0.04oz) per 10lbs of bodyweight per day

Dogs
>111lbs

BEEF RECIPE or PORK RECIPE	5.28g (0.18oz) per 10lbs of bodyweight per day
HIGH QUALITY FAT SOURCE	10.71g (0.37oz) per 10lbs of bodyweight per day
FISH JIGGLES or PORK JIGGLES	35.69g (1.25oz) per 10lbs of bodyweight per day
BETTER BUTTER TEA	10.71g (0.37oz) per 10lbs of bodyweight per day
Nutrabio EAA	0.75g per 10lbs of bodyweight per day
Fermented Cod Liver Oil	0.25g per 10lbs of bodyweight per day
Solutions Heavy Metal Blend	0.87g (0.03oz) per 10lbs of bodyweight per day



diet option 2 - 2.5:1 keto ratio

Dogs
<50lbs

BEEF RECIPE or PORK RECIPE	21.14g (0.74oz) per 10lbs of bodyweight per day
HIGH QUALITY FAT SOURCE	12.51g (0.44oz) per 10lbs of bodyweight per day
FISH JIGGLES or PORK JIGGLES	42.86g (1.50oz) per 10lbs of bodyweight per day
BETTER BUTTER TEA	17.14g (0.60oz) per 10lbs of bodyweight per day
Nutrabio EAA	0.40g per 10lbs of bodyweight per day
Fermented Cod Liver Oil	0.40g per 10lbs of bodyweight per day
Solutions Heavy Metal Blend	0.80g per 10lbs of bodyweight per day

Dogs
51-74
lbs

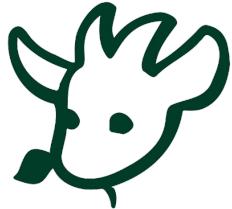
BEEF RECIPE or PORK RECIPE	18.50g (0.65oz) per 10lbs of bodyweight per day
HIGH QUALITY FAT SOURCE	10.95g (0.38oz) per 10lbs of bodyweight per day
FISH JIGGLES or PORK JIGGLES	37.50g (1.31oz) per 10lbs of bodyweight per day
BETTER BUTTER TEA	15g (0.53oz) per 10lbs of bodyweight per day
Nutrabio EAA	0.35g per 10lbs of bodyweight per day
Fermented Cod Liver Oil	0.35g per 10lbs of bodyweight per day
Solutions Heavy Metal Blend	0.70g per 10lbs of bodyweight per day

Dogs
75-110
lbs

BEEF RECIPE or PORK RECIPE	15.85g (0.55oz) per 10lbs of bodyweight per day
HIGH QUALITY FAT SOURCE	9.38g (0.33oz) per 10lbs of bodyweight per day
FISH JIGGLES or PORK JIGGLES	32.14g (1.12oz) per 10lbs of bodyweight per day
BETTER BUTTER TEA	12.85g (0.45oz) per 10lbs of bodyweight per day
Nutrabio EAA	0.30g per 10lbs of bodyweight per day
Fermented Cod Liver Oil	0.30g per 10lbs of bodyweight per day
Solutions Heavy Metal Blend	0.60g per 10lbs of bodyweight per day

Dogs
>111lbs

BEEF RECIPE or PORK RECIPE	13.21g (0.46oz) per 10lbs of bodyweight per day
HIGH QUALITY FAT SOURCE	7.82g (0.27oz) per 10lbs of bodyweight per day
FISH JIGGLES or PORK JIGGLES	26.77g (0.94) per 10lbs of bodyweight per day
BETTER BUTTER TEA	10.71g (0.37oz) per 10lbs of bodyweight per day
Nutrabio EAA	0.25g per 10lbs of bodyweight per day
Fermented Cod Liver Oil	0.25g per 10lbs of bodyweight per day
Solutions Heavy Metal Blend	0.50g per 10lbs of bodyweight per day



diet option 3 - 1.5:1 keto ratio

Dogs
<50lbs

BEEF RECIPE or PORK RECIPE	40.86g (1.43oz) per 10lbs of bodyweight per day
HIGH QUALITY FAT SOURCE	6.46g (0.23oz) per 10lbs of bodyweight per day
FISH JIGGLES or PORK JIGGLES	28.57g (1.00oz) per 10lbs of bodyweight per day
BETTER BUTTER TEA	14.29g (0.50oz) per 10lbs of bodyweight per day
Fermented Cod Liver Oil	0.40g per 10lbs of bodyweight per day
Solutions Heavy Metal Blend	0.40g per 10lbs of bodyweight per day

Dogs
51-74
lbs

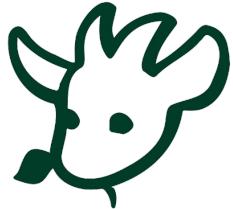
BEEF RECIPE or PORK RECIPE	35.75g (1.25oz) per 10lbs of bodyweight per day
HIGH QUALITY FAT SOURCE	5.65g (0.20oz) per 10lbs of bodyweight per day
FISH JIGGLES or PORK JIGGLES	25.0g (0.88oz) per 10lbs of bodyweight per day
BETTER BUTTER TEA	12.5g (0.44oz) per 10lbs of bodyweight per day
Fermented Cod Liver Oil	0.35g per 10lbs of bodyweight per day
Solutions Heavy Metal Blend	0.35g per 10lbs of bodyweight per day

Dogs
75-110
lbs

BEEF RECIPE or PORK RECIPE	32.6g (1.15oz) per 10lbs of bodyweight per day
HIGH QUALITY FAT SOURCE	4.84g (0.17oz) per 10lbs of bodyweight per day
FISH JIGGLES or PORK JIGGLES	21.42g (0.75oz) per 10lbs of bodyweight per day
BETTER BUTTER TEA	10.71g (0.37oz) per 10lbs of bodyweight per day
Fermented Cod Liver Oil	0.30g per 10lbs of bodyweight per day
Solutions Heavy Metal Blend	0.30g per 10lbs of bodyweight per day

Dogs
>111lbs

BEEF RECIPE or PORK RECIPE	25.52g (0.89oz) per 10lbs of bodyweight per day
HIGH QUALITY FAT SOURCE	4.03g (0.14oz) per 10lbs of bodyweight per day
FISH JIGGLES or PORK JIGGLES	17.85g (0.62) per 10lbs of bodyweight per day
BETTER BUTTER TEA	8.92g (0.31oz) per 10lbs of bodyweight per day
Fermented Cod Liver Oil	0.25g per 10lbs of bodyweight per day
Solutions Heavy Metal Blend	0.25g per 10lbs of bodyweight per day



optional supplements

These supplements have been carefully chosen to work in tandem with our products and diet protocols - if you choose to use supplements other than what are specifically listed here, we cannot speak to what results you will achieve.



Nutrabio EAA Natural is our recommended supplement to balance our 4:1 Keto Diet for medium to long term feeding. There are no added ingredients, sugars, or sugar substitutes. Nutrabio amino acid supplements are available online and in retail stores.



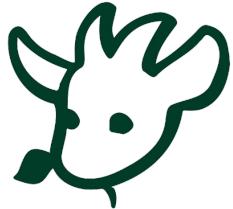
Fermented Cod Liver Oil helps increase the Vitamin A and Vitamin D in our keto diets. Unlike other fish oils, fermented cod liver oil is not rancid or loaded with heavy metals or plastics. FCLO can be added to any diet for increased health. It is available anywhere Solutions Pet Products are sold.



In nature, minerals are bound to each other. They are rarely found alone. You can use this binding capacity to your benefit. Heavy Metal aids in detoxification by binding heavy metals and eliminating them. There is also an abundance of minerals in the blend. You don't want to add synthetic minerals when fighting cancer (or anytime really), therefore you can get your minerals naturally from the Heavy Metal blend. This blend also includes Chaga, which is a medicinal mushroom that is another component that helps the body fight cancer.



Life Extension Branched Chain Amino Acids can be used to balance our 4:1 Keto Diet for medium to long term feeding. There are no added ingredients, sugars, or sugar substitutes. Titrate human dosage to 1/15th the suggested dosage per 10lbs of bodyweight per day. For example, if your pet is 20lbs and the suggested dosage is 3 pills, you would give 1/2 pill per day. It is available online.



optional supplements



I Heart You

Elemental Solutions I Heart You supports the symbiotic relationship between the kidneys and heart. The kidneys and heart work in tandem to regulate pH and mineral activity. If the kidneys are stressed, the heart is stressed. If both are stressed, the whole body is stressed and falls out of homeostasis. I Heart You assists the body in maintaining homeostatic water balance and movement.

Up to 20lbs: 1/4th TSP per day
21 - 40lbs - 1/2 TSP per day
41 - 80lbs - 1 TSP per day
Over 81lbs - 2 TSP per day



BIOME

This gut-boosting blend is a microbial feast! It contains beneficial homeostatic soil organisms and postbiotics from RISOBiotics™ microbiome support, whole quail eggs with their nutrient-rich shell and eggshell membrane, dandelion root and greens, chicory root, protein-rich spirulina, ashwagandha, cat's claw bark, and diatomaceous earth. This gut elixir supports the gut microbiome with a symphony of microbiome wellness.

Loading dose – 1tsp per 10lbs of body weight per day, up to 60 days.

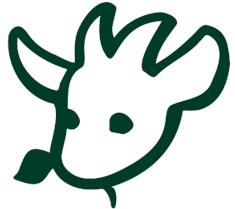
Maintenance dose – ½ tsp per 10lbs of body weight per day, given in one meal, separated in multiple meals, or with Solutions milk or Jiggles.



Turmeric & Ginger

This blend is generally used to fight inflammation but does so much more. Ginger improves the benefits of the curcuminoids in Turmeric by as much as 2,000%. This blend supports liver health by; Increasing fat metabolism (thus helping with weight management, gallbladder buildup, and fatty lipomas), thinning blood, and potentially moderating insulin and glucose levels (making it beneficial for diabetic conditions).

Up to 20lbs: 1/2th TSP per day
21 - 40lbs - 1 TSP per day
41 - 80lbs - 2 TSP per day
Over 81lbs - 4 TSP per day



optional supplements



Restore

There are two main phases of liver function. Phase I is the liver's first defense against toxins. Fat-soluble toxins are made to become more water soluble and convert to mess harmful ones. Phase II provides the elimination of these toxins. Although less harmful, there can be a build-up of these toxins. In Phase II these toxins are moved to the kidneys and gallbladder before exiting the body. Restore assists with Phase II of liver function.

The liver is continuously exposed to environmental chemicals, toxins, sometimes drugs, food contaminants, and more. The metabolism of some of these exposures may cause injury to the liver which can damage mitochondria and cells - potentially resulting in cancer or other diseases. Mitochondrial dysfunction is one of the major mechanisms of drug-induced liver necrosis, hepatitis, and liver failure. This blend contains Ashwagandha, Frankincense, Milk thistle, and other herbs that fight inflammation and increase the activity of cellular antioxidant enzymes.

Up to 20lbs: 1/2th TSP per day

21 - 40lbs - 1 TSP per day

41 - 80lbs - 1.5 TSP per day

Over 81lbs - 2 TSP per day



Immune

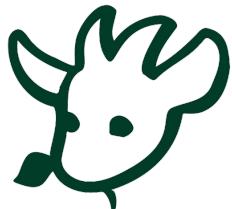
This blend is designed to assist with improving immune markers and decreasing systemic inflammation. Inflammation causes a multitude of problems in the body. Immune contains a special blend of medicinal mushrooms known for activating or modulating the immune system, thereby inhibiting cancer cell metastasis and growth. Mistletoe is also added for its nutritional anti-cancer and antitumor compounds.

Up to 20lbs: 1/4th TSP per day

21 - 40lbs - 1/2 TSP per day

41 - 80lbs - 1 TSP per day

Over 81lbs - 2 TSP per day



frequently asked questions

- Are Solutions Cancer Diets calorically sufficient even though the feeding amounts are so small?

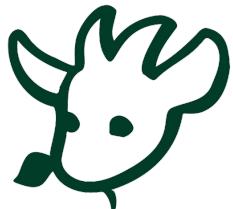
Yes, the caloric intake is sufficient despite the small amount of meat. All ketogenic diets are nutritionally deficient once you exceed ~2:1 ratio. To ensure nutritional adequacy, you must supplement. However, supplementing with synthetic isolates taxes the body and risks contaminants and poor absorption and supplementing with whole foods changes the macronutrient ratio and eliminates the ketogenic value. So it's very difficult to formulate a nutritionally complete ketogenic diet that is >2:1 ratio.

Our diets are very meticulously formulated to be nutritionally sufficient while also maintaining the correct ratios. If you increase the meat, you increase protein which will reduce the number of calories from fat and risk preventing your dog from achieving ketosis. So yes, the amounts that you listed appear accurate. If you're unsure, use the Feeding Calculator. And it is very important that you provide the supplements as noted if you use the diet longer than 10 days.

- Is raw milk safe for pets with cancer?

Pasteurization oxidizes the fats in the milk, making them inflammatory and potentially damaging to metabolism. Pasteurization also eliminates essential enzymes such as alkaline phosphatase and lactase - without these enzymes the milk becomes difficult to digest and certain invaluable minerals (such as calcium) become inaccessible to the gut. The mineral imbalances caused by pasteurized milk can, over time or in the case of metabolic disease, contribute to bone remodeling and hormone imbalances. Additionally, poor sourcing of milk from animals that are provided "feed" rather than a natural diet, and/or those kept in confined lots, are known to be contaminated with higher levels of pathogenic bacteria, antibiotics, unnatural hormones, less conjugated linoleic acid, and in some cases high levels of heavy metals, nitrates, and pesticides. Of course, we would agree that this should be avoided.

This doesn't apply to Solutions raw milk. Raw milk is the food that nature provides to mammals during the most nutritionally demanding period of life (infancy) when the digestive system is too immature to tolerate complex food matrices. One could argue that in the case of cancer, the body struggles equally to tolerate complex foods and a raw milk diet can often reset the body in a way that foods and supplements cannot. So in this regard the question shouldn't be, "is milk bad for my pet with cancer?" but rather, "is the milk from poor quality sources and processed in a way that eliminates its value?" If the milk is well sourced and not pasteurized, it is beneficial. If it is cultured/fermented, it is safer for pets with compromised immunity.



frequently asked questions

- Are fermented foods safe for pets with cancer?

Dogs with compromised immune systems are actually safer when consuming fermented products, at least relative to immunity. Solutions milk products are cultured/fermented.

The concern about cancer and fermentation largely revolves around lactic acid. Cancer produces lactic acid - the same kind of lactic acid that makes your muscles sore after a workout. Fermented food, such as Solutions dairy products, contain lactic acid bacteria (aka *lactobacillus* beneficial bacteria). These have a similar name but are not related to each other. If lactic acid in dairy, such as yogurt, were similar to lactic acid produced in tissue then yogurt would give people sore muscles. Lactic acid in muscles is a waste product from the body breaking down sugar for quick energy without enough oxygen while lactic acid from *lactobacillus* bacteria is made by friendly bacteria that keeps food safe from pathogens.

- What about histamines?

It is possible for improperly fermented products to be a problem for cancer. Foods that have fermented to the point of rotting or otherwise for a long time (e.g., aged cheese, summer sausage, roadkill) have very high histamine levels. Because calcium tends to be negatively impacted by cancer, and calcium plays an enormous role in histamine metabolism, you certainly do not want a high-histamine product in the diet of an individual with cancer. Solutions does not ferment to the point of elevating histamine levels. Additionally, by adding raw milk (cultures/ferments) you are contributing an excellent source of accessible calcium. Further, fermentation provides more probiotics and postbiotics than non-fermented foods. These beneficial bacteria help support whole-body health and help protect against poor immunity when the immune system is compromised.