

THE EFFECTS OF A  
**NATURAL VS. COMMERCIAL PET FOOD DIET**  
ON WELLNESS OF COMMON COMPANION ANIMALS

---

**Brought to you by**  
William Pollak, DVM  
Fairfield Animal Hospital  
1115 E. Madison Ave  
Fairfield, IA 52556

*"Holistic & traditional approaches to support the best of animal health."*

Available online at  
<http://www.healthyvet.com>

Last updated on 12/7/2003

# **TABLE OF CONTENTS**

## **1.a INTRODUCTION**

1.b Theoretical Models and Approaches

1.c Some concerns about Commercial Pet Food

## **2.a WHAT IS A HEALTHY DIET?**

2.b A Check List of Undesirables

## **3.a FOOD LABELS**

3.b Common Nutritional Terms

3.c Key Issues - Regarding Commercial Diets

## **4.a FEEDING PATTERNS AND LIFE CYCLE**

4.b Transitioning to a new diet

4.c Key Issues - Regarding

## **5.a NATURAL RAW MEAT DIET**

5.b Canine

5.c Feline

## **6.a SELECTED RECIPES**

## **7.a BIBLIOGRAPHY AND READING LIST**

THE EFFECTS OF A  
**NATURAL VS. COMMERCIAL PET FOOD DIET**  
ON WELLNESS OF COMMON COMPANION ANIMALS

---

*Section 1.a*

## **Introduction**

As humans, we strive for more than just freedom from physical limitations, pain, or dis-ease; we seek Wellness; within ourselves and all of that around us. True Wellness is a state of life in which the totality of genetic expression is a living reality. This natural state is the birthright of all life on earth. Nurtured from within and supported from outside the confines of the physical body, life is viewed as a full and rich tapestry on many levels. The absence of disease is a by-product of this natural state.

The unfolding of genetic expression in youth and adolescence reflects a deeper, more subtle process that continues throughout the life span of an organism. This unabated process results in living in a state of peace, mixed with joy and an unmistakable sense of oneness; knowing that all earthly physical bodies are true extensions of, and in rhythm with, the dance of our solar system. This rhythm is the birthright of all life on earth.

Our companion animals provide us with an important reminder of our link to this totality. The closeness we feel toward our animal friends reinforces our view of them as full family members and life companions. We see ourselves in them and are reminded of our greater nature. Our companion animals live in a natural state of oneness no matter what "illness" they may have. In their reflection of a natural earthly rhythm, we are reminded intellectually and emotionally that all is well in life's ever diversifying flow. Our gain from their unconditional acceptance of us is transformed into our wanting Wellness for them and ourselves..

So where does dis-ease come from? Dis-ease is a perceived notion of something lacking or deficient, and as we give it attention, we chose to see dis-ease in the world we live in. Nourishment, both from within and from outside the body, is essential in sustaining healthy living systems. It is this combination or holistic form of sustenance that is the source of nourishment of all living systems. We, humans and companion animals, ingest food, from one perspective, in the form of proteins and carbohydrates. But, we are also ingesting nourishment in terms of freshness, wholesomeness and a kind of specific living intelligence consumed by each particular species. Dis-ease is the manifestation of some deficiency or lack of this fundamental flow of nourishment.

Western medical science views our bodies as "bio-mechanical parts" that can either be repaired or replaced. Non-holistic medical and veterinary practitioners address illness in the same way; a disease means a body part is malfunctioning or has been "invaded" by some outside agent.

One either repairs or removes that body part through surgery, or supports it with chemicals or substances from the outside. Identifying a malfunctioning part often requires expensive laboratory testing a major part of most physical examinations. Laboratory workups support medical diagnoses with "scientific fact"; which in turn confirms the malfunctioning body parts and outside agents. This is the non-holistic medical model of disease.

Growing numbers of people, though, are seeking alternatives to this medical model. They want more encompassing methods not just for themselves but also for their companion animals. Instead of viewing a living body as a flesh-covered skeleton composed of individual "bio-mechanical parts", holistic methods approach living organisms as constellations of "biological" systems; each self-contained and self-defined, yet all seamlessly woven into an organic tapestry that is constantly unfolding over time through the expression of "Universal Being". More inclusive forms of treatment address the whole organism; not just the sum of the organic parts. They assume that, not one, but many factors contribute to the expression of dis-ease. Suffering we observe in the dis-ease state is the expression of the body's struggle to regain biological balance and integrity, the biological system is resisting something that is wanted. Holistic treatments do not isolate, control, or eliminate individual symptoms; they assist *the whole body* in regaining "Wellness" and a higher state of balance.

Few people suggest that holistic approaches should totally replace medical and veterinary science especially in the case of accident or acute illness. However, many alternative methods achieve significant results without the need for surgical intervention or long-term drug therapy. Oftentimes these holistic methods are less expensive and less intrusive with regard to the quality of life. Most significant of all are the faster, more robust recovery rates often seen. Herein lies the attraction to these more encompassing forms of treatment.

As lovers of companion animals, we want to take an active role in the care of our pets. We must assume responsibility for their quality of life and their "Wellness." Statistics show that the average life expectancies of companion animals have rapidly dropped in the last 40 years despite improvements in the medical model, veterinary diagnosis and treatment modalities. Poor nutrition, inbred genetic defects and over-vaccination have led to an epidemic of allergic reactions that challenge our pets' bodily defenses. Their shortened lives are further complicated by symptoms ranging from skin rashes to epilepsy, kidney and liver ailments as well as other chronic disease processes. Our pets have grown hypersensitive to many common environmental allergens their ancestors casually threw off.

Why do we believe holistic approaches to animal care are so important? Since these methods address the whole organism and support the body's own abilities to heal itself, many holistic methods focus on prevention and cure of dis-ease, not just treatment. Proper nutrition is the

foundation upon which many holistic practices build our pets' (and our own) quality of life and Wellness. Poor nutrition is one of the major contributors to our pets lower life expectancy. By feeding our pets most commercially available pet foods, we are unintentionally depriving these animals of important nutrients needed for sustaining the states of greater Wellness that their genetic material encodes.

In addressing the whole animal, areas of exercise and social contact, whether it be human, animal or nature must be considered in addition to nutrition. Through integrating these essential qualities of life in a mutually supporting scenario, the overall richness of living in the relationship of human and companion animal can be raised to higher levels of unmistakable Wellness. This is perfect health, it is not just freedom from dis-ease. Perfect health brings a more ideal environment in which to support even greater freedom joy and growth. The irony is that in seeking the Wellness of our companion animals, and seeing their unconditional acceptance of us; we in turn will find that same Wellness in ourselves growing at a faster rate.

Why is the health and longevity of a pet so important? In our fast-paced world of technology and commerce, we can lose touch with our more nature-oriented aspects and the natural environment around us. Few links to this natural world remain. The very fortunate few of us with gardens that bear fruit still can experience a link to a less technological time. The only way greater numbers of us who live in concrete, urban environments can still share in a joy experienced by all cultures of humankind since the dawn of history is through the bonding with a companion animal. These pets allow us to go beyond the constraints of our own immediate human situation and into a larger, older, more harmonious world-view. The very act of nurturing and caring for these four-legged friends and, in return receiving their unconditional devotion, brings us closer to our natural roots in this world and allows us to experience our humanity from a place of greater emotional well being.

*Section 1.b*

## **Theoretical Models and Approaches**

Information, especially that which helps move us in directions that feel intuitively right and good, has powerful effects not only on oneself but also for all those with whom one interacts. The enhancement of nutritional well being is not complicated nor is it far removed. Scientific theories describe the behavior of parts and, at best, only substantiate specific theories under specific conditions. Science is a valuable tool in attempting to create an intellectual model from which to understand a particular observation. Nutritional Wellness though, is not based on scientific theories describing substances that are claimed to be panaceas for all ailments. Wellness takes into account all particulars simultaneously. It is from Wellness that all things can be known; it is from Wellness that all is known as being Well. Scientific theories attend to particulars to satisfy the intellect; they

construct models that go beyond our understanding and create new steps to further our sense of well being and comfort. But let us not mistake the model for the goal of living and being surrounded by Wellness; a condition hard to quantify in the traditional, scientific paradigm.

What is most salient here is the importance of freshness, wholesomeness and the appropriateness of what is consumed. Awareness of natural raw meat diets and our understanding of the power of Wellness for our cats and dogs will easily avert the consequences of malnutrition and its associated suffering. We strongly question the quality of many ingredients and the long list of clearly harmful substances that are contained in so many commercially available pet foods our companion animals consume everyday. Conspiracy

The information we provide is for those people seeking powerful yet simple suggestions for enhancing Wellness in their companion animals, as well as their own lives. Not all seekers are looking for this enhanced Wellness. Most people in fact are satisfied with their dog or cat "looking" normal on the current commercial food; they assume the animal is just fine. It is not our wish to tell them otherwise. A developing sense of and desire for greater Wellness is growing in the world and is giving rise to this information. It is our hope that this small change, switching your pet to a natural raw meat diet, will enhance the quality of life of not just your pet but your entire household. We have seen this time and time again.

*Section 1.c*

## **Some concerns about Commercial Pet Food**

Pet labels mislead and distort nutritional facts. Some animal byproducts make regularly consumed pet food poisonous and toxic. Food additives, like coloring, are for the human purchaser, not the animal consumer. Product deficiencies lead to overeating, the buying of more product and the creation of greater malnutrition. Our companion animals' life expectancies are growing shorter every generation. Chronic allergic reactions are primarily food based; cause suffering; and require additional treatments that often exacerbates underlying dis-ease. Nutritional issues receive little publicity because the subject matter is technical and usually leads to the "naming of names". Pet food advertising revenue is huge and consequently, the advertisers are very powerful. Common editorial policy must balance "news-worthiness" with business; this usually results in avoiding negative references to advertisers' products.

This situation is neither political nor, by contemporary standards, even sensational. It is however, something we deal with everyday. It is lack of information. Food manufacturers are silent; they sell pet food in a highly competitive market at prices that haven't changed in many years. Have you ever asked yourself, why not? The raw materials these food manufacturers mix together to produce typical pet foods you find along the supermarket aisles come from highly questionable, and

in some cases, unbelievable sources unfit for either person or beast. Compounding this situation is the fact that pet food labels give only vague ideas of a pet food's content. The listed items are essentially "catch-all terms" for more specific, and often less desirable, substances. Protein, fat, carbohydrate and crude fiber are general food categories; they have no functional meaning in terms of nutritional source, quality or digestibility.

Package labeling is a necessary obligation the food manufacturers are required to provide by law. These laws however, perpetuate a classification system that has little to do with nutritional value. Manufacturers can and do use obscure and easily misunderstood terms. Why are these labels so obscure? The first and most important question to ask, for a better indication of the nutritional value of food we buy, is what percent of the food is digestible. A substance is a nutrient only when it is digestible, that is, absorbed and assimilated by an animal consuming the food product. Unassimilated food ingredients are at best, non-digestible roughage, and, at worst, deadly toxins or poisons. Nowhere on the pet food label does it state how much of the food can be digested. It is a fact that animals on "supermarket" or convenience diets are usually chronically malnourished due to excessive use of fillers, stale food, and chemicals coming out of a food can or pouch. This empty nutrition, non-vital state of health is the fertile ground for sub-standard biological activity and receptivity.

Our biggest concern as consumers of commercially available pet foods is that this food:

- contains ingredients, chemicals, toxins and poisons that should not be consumed
- lacks ingredients that should be part of our pet's daily food diet

Pet and baby foods are unlike any other products sold in a supermarket. Both items claim to be a complete, "Whole" nutritional package for the consumer; all other foods in the supermarket are part of an overall, individually tailored diet. Deficiencies in one food product are balanced by another food product if variety and wholesomeness is valued. The possibility of choosing what one wants to eat is available to humans. Our pets however, are denied this choice when given only commercial pet food as the sole source of nutrition. A pet owner must be satisfied in the belief the pet food is all the animal really needs to insure minimum nutritional needs. Rarely can one find a pet diet that provides more than minimum daily nutritional requirements; that seeks to provide, in fact, greater Wellness. It would be wise to seek out commercial pet foods that are, at best, acceptable supplements to a more natural, raw meat diet.

Among supermarket shelves, commercial pet food is sold in a highly competitive environment and must appeal to a certain kind of mentality, otherwise it will not succeed as a marketable product in that environment. The average pet owner feels satisfied upon leaving the store with a large bag of pet food purchased at a very affordable price (food at 15 cents a pound). At home,

the pet "attacks" the food in it's food bowl further confirming its owner's conviction that a "smart" purchase in both value and quality has been made. The pet loves the food! It eats it immediately with great vigor. This "gusto" though is usually a sign of a pet's lack of proper nutrition. It is the voracious overeating observed everyday at feeding time that indicates a lack in balanced nutrition along with a hyperactivity usually unnoticed until the animal is put on a more nutritious and wholesome diet. As the owner has nothing to compare the animal's behavior to, this behavior is assumed to be "normal". Overeating quickly empties a food bag; non-nutrient fillers and appetite stimulants (addictive agents such as sucrose, corn syrup, salt, and artificial flavoring) exacerbate a pet's already undernourished state. Since our pets grow more deficient over time, they consume more of the convenience diet every feeding session to compensate for their growing state of starvation.

When a pet overeats a food of low nutritional value, they must "digest" additional calories, protein, carbohydrates and waste products to derive a minimal benefit from the diet. Already low "vital energy" stores are further depleted. This borderline state of starvation, despite regular feedings, produces a responsive, though non-alert, living, though non-vital, animal. The end result a pet owner or pet professional observes is an overweight, doughy, dull-coated, undernourished pet that is marginally poisoned. This is the main reason life expectancies of our pets are growing shorter every year. Our companion animals just survive on convenience pet foods. From a holistic perspective, mere survival is not enough; organisms need to do more than just survive. By achieving a state of Wellness, a transcendent growth is secured.

*Section 2.a*

## **What is a Healthy Diet**

Healthy diets provide a fresh, rich nutrient pool of substances necessary for a full, vigorous life. Nutrients in their "natural state" are easily absorbed into the body based on each animals' specific nutritional needs. Many substances essential for life are not consumed at all; they are synthesized within the body from substrates found in a balanced diet. A healthy diet contains essential vitamins, minerals and amino acids necessary for optimum functioning. The completeness of a natural diet is greater than the sum of its individual parts. Using the same ingredients, methods of preparation make the difference between a healthy, balanced meal and ptomaine poisoning. The overall balance and blending, and even the mood of the preparer, is as important as the list of ingredients.

Ideal diet consumed in pleasant surroundings fosters the incorporation of environmental intelligence and Wellness into the living system. It is this sustenance that allows for greater DNA expression and the sense of overall Wellness. Optimal nutrition is more than the sum of the ingredients. A vital dog or cat is more than the sum of its physical parts; it is a manifestation of an



underlying essence which we define as "catness" or "dogness". The joy of sharing life with a vibrant dog or cat is an unmistakable reminder of our own human-ness. This quality of alive-ness bridges the differences in species and provides a common arena for experiencing complementary Wellnesses.

When parts, and not Wholeness, predominate our thinking about nutrition, our focus grows myopic. Out of the common Megadose mentality, the search for the "One" super ingredient begins. Cortisone, Selenium, Vitamin C, pycnogenol... there will always be a single, popular ingredient of the moment possessing what is claimed to be great healing power. But as the search focuses on the part and not the whole; so the result affects the part and not the whole. Nutritional supplementation will at best have only limited success.

Even though ingredients comprise the "soup", it is the method of preparation and the mixture that adds to and helps make the soup good and nourishing. It is the totality permeating through and extending beyond the parts that is responsible for the essence of the taste and the enhancement of all living systems. Appropriate "natural" nutrition, or external intelligence, gives vitality to the consumer, or internal intelligence, resulting in an ongoing flow and expansion of creative intelligence.

A balance of species-specific nutritional building blocks is necessary to insure proper digestion and guarantee perfect health. Vibrant animals need food in a fresh and natural form to satisfy their nutritional demands for vitamins, amino acids, minerals and trace elements. Many breeders insist on serving their animals a natural raw meat diet. These people, and many holistic practitioners, claim this nutritional "soup" is too complex to manufacture and that the biological value of proteins, carbohydrates, vitamins, minerals, trace elements and heretofore, unknown sources of energy, is damaged or lost when food is cooked. Routine supplementation of pet food with megadoses of vitamins, as previously mentioned, is no substitute for a balanced, natural diet.

There are many examples of just how complex and delicate the balance of nutrients can be. Two examples will be given to show how complicated it can quickly get from an intellectual viewpoint, in trying to assess the value of scientific statements and then attempting to apply the statement to a more generalized situation.

1. Eggs supply the highest biological value protein. However, raw egg white is not well digested (perhaps in people with poor digestion). Avidin, found in egg whites, has been known to block the absorption of biotin, an important B vitamin, in the gut by combining with it. This suggests that Avidin (eating raw eggs) can decrease biotin levels and cause hypo-vitamin B. However, feeding of raw eggs on a continuous basis with other foods to dogs and cats has not shown any detrimental effects. Fresh raw eggs are considered a delicacy among dogs and cats within farm circles.

2. Raw eggs, chicken and turkey can carry Salmonella bacteria which can cause diarrhea, sickness and death (in people). Feeding of these substances raw to animals, along with other nutritious foods has not shown any detrimental effects for decades.

Deteriorated, dis-eased, or decomposed food sources not only increase toxin levels in the body but actually increase nutritional needs. These toxins come from dead, dying, diseased or disabled animals that are categorized as animal by-products along with entrails, hair and hooves. In order for our pets to eliminate these undesirable compounds, greater metabolic energy is expended and larger amounts of nutrients are needed; there is thus less nutritional sources for normal biological processes. Companion animal populations have lost much of their natural ability to cope with the environment, dietary variations, viruses, bacteria, insects, and stress from family life. Over the last 40 years, poorly formulated commercial pet foods have washed over the market place and have helped shorten our pets' life expectancy, leaving less robust (sometimes seriously defective) breed lines, chronic illness and hypersensitivity in their wake. This allergic hypersensitivity can manifest itself in biting, scratching, eczema, and hot spots. Animals also suffer from chronic digestive disorders and hyperactivity. We have observed over the years that just feeding a highly nutritious, balanced diet produces many dramatic improvements in long-term digestive, behavioral and skin problems. Why?

Ideal nutrition can be conceived as freshness and "orderliness" in the natural diet, not a concoction of nonspecific byproducts, chemicals, and nutrient supplementation. A formula for life's vitality is simple;

- wholesome, balanced food that is species specific
- supported, in a natural context, by vitamins, minerals and trace elements
- delivered and consumed fresh
- consumed in a quiet, appropriate setting

Ideal nutrition conceived around points other than these usually becomes wasteful, a marketing tool, or just over intellectualization. Food quality descriptions grow very specialized to the point that particulars are made disproportionately important; the forest becomes lost to the tree.

Food processing during manufacture must be carefully monitored since many procedures destroy the vital force of nutrients. Freshness is the ideal state. Commercially available foods must be carefully formulated to counterbalance destructive food processing techniques. Meat-based recipes that contain, for example, chelated minerals (as they are found in biological systems) and exaggerated (though not Megadose) amounts of natural vitamin will offset nutritional losses during food processing. Smaller volumes of a more natural diet bring gentleness to the digestive system, allowing it to work less hard for more energy and orderliness. Gentler, more readily digestible diets

enable the body to receive the needed intelligence of balanced nutrition for ideal function, harmonized activity, and perfect health.

*Section 2.b*

## **A Check List of Undesirables**

Some of the undesirable ingredients included in with more wholesome nutrients are:

- slaughterhouse waste products
- dead, dying, diseased or disabled domestic animals
- toxins and pollutants from rancid animal products and byproducts
- non-nutritional fillers
- heavy-metal contaminants
- herbicides
- drug residues
- sugar, artificial flavoring
- preservatives
- food rejected by the USDA for human consumption
- road-killed wild animals

*Section 3.a*

## **Food Labels**

Commercial pet food labeling is, at best, a weak attempt to try to reflect on the package what is in the package. Labels can also reinforce a false sense of security. Commercial pet food is available in canned, dry and semi-moist styles. Proper nutritional comparisons must be made on a dry-matter or caloric basis to factor out differences like moisture content. Pet foods are legally required to furnish information including product name, guaranteed analysis, ingredient guarantee, net weight, and name and address of manufacturer or distributor. Ingredients are listed in descending order with the first three to four ingredients on a label comprising most of the bulk weight of the food. These main ingredients differentiate the nutritional quality of one food from another. In general, lamb, poultry, rice and grains such as millet are superior, though more expensive ingredients. Unfortunately, their weights are rarely adjusted for the moisture they contain; actual percentage weight of the dry-matter diet may be significantly less than what is listed. Some ingredients such as corn are listed as individual components, flaked corn, ground corn, corn kibbles, etc., so that each individual component's percentage by weight is less than if it were calculated as one ingredient. The different corn "components" appear lower in the list of ingredients and mask their true percentage contribution to the food as a grain.

Pet food labels also list ingredients using vague, misleading generic terms. Food descriptions like meat by-products and dried animal digest even when associated with words like poultry, liver or fish do not necessarily describe digestible nutrients. All pet foods must be registered with state fed control officials and must contain approved ingredients *Generally Regarded As Safe* (GRAS) unless the formulation is designed for specialized needs. Foods that claim to cure "ailments" must be approved by the Food and Drug Administration. Since most commercial diets are formulated from "balanced" recipes, pet owners are told to avoid nutritional supplementation unless specifically directed by a veterinary care provider.

In an attempt to standardize pet foods for the sake of setting minimum standards a scientific framework has been created. A general discussion of some basic guidelines are presented to give an introduction to the nature of the language.

Biological value (nitrogen balance index) of a protein is based on the unique combination of life's basic building block, the amino acid. Humans and other living organisms use amino acids to build tissue. Eggs are used as a benchmark for biological value; they are ranked at 100. In relative terms, fish meal is ranked 92; beef and milk, 78; rice, 75; and wheat gluten, 40. *Digestibility* of that protein measures how much of that biological value is actually absorbed into the body. Food processing sometimes causes important nutrients to combine with others forming indigestible compounds. Food labels often list levels of *crude protein* rather than amounts our pets actually consume during a meal. Furthermore, *crude protein* can include substances like those item listed above as well as feather meal, connective tissue, leather and hair. All these substances are protein; none are digestible.

Proteins are not created equal. They do not always form a positive nutritional mix. Actual amounts of digestible protein in, say meat meal, may be far less than the crude protein level printed on the label. The percentage of crude protein is, in addition, misleading because it must be evaluated in relation to moisture content. In fact, when comparing wet to dry foods, these percentages should be recalculated as percentage of total dry weight. Most dog foods when adjusted this way contain at least 22% crude protein; cat food, 32%. Food processing methods such as sterilization further rob the foodstuff of nutritional value and its vital force. Other ingredients in combination also lower nutritional levels. For example, carbohydrates in soft-moist foods usually come from sucrose (sugar), propylene glycol and corn syrup; empty calories. Fats added to pet foods are usually unfit for human consumption because of rancidity. In this state, the toxicity of the fat "steals" essential vitamins from available nutritional stores in the body. Fiber can also be misrepresented; it can come from whole grains or from filler like peanut hulls and hair. Without careful investigation, crude protein levels as determined by chemical analyses say little about biologically usable protein levels.

A nutritionally *incomplete* product must state by law that it is "intended for intermittent or supplemental feeding only." Remember that beef-flavored products do not have to necessarily contain any beef muscle meat. Furthermore, laboratory calculations and analyses cannot measure true metabolic utilization especially by different breeds under the real world conditions. Manufacturer-supplied statements regarding feeding trials are particularly important. Refer to the Manual of the *Association of American Feed Control Officials* (AAFCO) which is published annually for information regarding feeding trials. A Statement of Nutritional Adequacy indicates that when fed as the only source of dietary nutrition, the food product meets or exceeds the *National Research Council* (NRC) nutritional requirements based on chemical analysis.

The AAFCO is considering changing labeling standards for dogs to include Policy Statement 21 which "is intended to assure the consumer that the finished product has been tested by feeding trials which have demonstrated the nutrients are present not only in sufficient quantities to support desired physiological demands but in forms that are bio-available to the dog". This revision in labeling would mean that chemical profiles meeting or exceeding minimum NRC nutritional requirements would no longer suffice since they do not reflect issues of utilization and bio-availability.

Section 3.b

## Common Nutritional Terms

Other terms indicating nutrient content and biological availability

- *As fed basis* - nutrients and moisture content expressed as percentage of food out of the bag, can, box, or pouch. Remember that adding water theoretically dilutes the nutrients.
- *Dry-matter basis* - nutrients measured as a percentage of the food when moisture has been removed.
- *As a percentage of calories* - a more complicated measure of the amount of nutrient needed in relation to the caloric energy provided by the diet.
- *Per pound (kilogram) of body weight* - the amount of nutrient as a function of animal body weight.
- *Digestibility* - the relationship between what is consumed and what is actually absorbed into the body.
- *Utilization* - the relationship between what is consumed and what the body nutritionally retains.
- *Metabolizable Energy (ME)* - the energy component derived from a nutrient that is retained in the body

Whether vitamins and minerals are present or absent in a biologically utilizable form poses additional questions. While amounts are seldom stated, the actual levels that are consumed by pet animals are questionable. Aside from food processing methods, the presence of oxygen during processing, and chemical interactions with substances listed above weaken or destroy the nutritional value of vitamins such as A, B<sub>1</sub>, and B<sub>6</sub>. Animals on these commercial diets are regularly fed but nevertheless can be vitamin deficient. Cats, for example, fed commercially available low-fat, dry food, have problems absorbing vitamin A. Minerals, likewise may be chemically complete but nutritionally valueless; they need to be consumed the way they are found in nature. Minerals by themselves are difficult to absorb and assimilate. Protein is easier to incorporate. In order to aid in their absorption, chelated minerals are wrapped in a protein envelope made up of amino acids that speed absorption by the digestive system. Most of the time, these complex, protein envelopes called chelates or cages surround minerals in biological systems. Our pets easily digest these chelated minerals; minerals without these protein cages are no better than little rocks.

Chemical additives necessary to manufacture these convenience products can interfere with our companion animal health. Many members of our society want the companionship of a pet animal without the inconvenience of pet food maintenance. In effect, the convenience pet foods, particularly the semi-moist "burgers", are no more than animal "junk" food containing highly questionable ingredients like sugar, corn syrup and chemicals to maintain flexibility, dampness, and retard spoilage. An even more disturbing practice is the use of artificial coloring agents derived from coal tar dyes. Many of these chemical dyes have already been banned from use in both human and pet products. Neither dogs nor cats see colors! In reality, the deep blood-red coloration of food visible through plastic is for the benefit of the human purchaser. The consequence of long-term consumption of these coal tar derivatives by our companion animals has yet to be determined.

Finally, there are many hidden contaminants in the form of antibiotics, hormones, pesticides, and manufacturing aids for coloring, softening, and preservation. In fact, feeding a pet slaughterhouse waste products significantly increases their own chances of developing cancer and other degenerative diseases. The sick and dying livestock that have not only been loaded with synthetic hormones to stimulate rapid growth but also contain antibiotics add other sources of toxins and poison. Finally, meat meal also contains glandular wastes and fetal tissue from pregnant livestock; both high in active hormones. These hormone levels are extremely toxic to cats in even very low levels. Meat products tend to accumulate more pesticide residue, heavy metals, chemical residues, and toxic pollutants than vegetable matter. Bonemeal is especially high in concentrations of heavy metals like lead. Since many of these substances are toxic to the body, the body attempts to expel them through processes of detoxification and elimination in the liver and kidneys. Our animals immune system also comes into play since these substances cause harmful reactions in the tissue.

The more contaminants are consumed over time, the greater the body's effort to expel them, the more nutritional stores and vitamins are used up. Not only is the body stores depleted, normal detoxification processes are overwhelmed by the components in the regular diet. In this depleted state, a life of just getting by ensues; vitality is unreachable.

*Section 3.c*

## **Key Issues - Regarding Commercial Diets**

- Ingredients are listed in descending order by weight with the first three to four ingredients on a label usually comprising most of the bulk weight of the food.
- Canned pet food contains approximately 80% water; it's called moisture content. Since the cost of canned pet food as compared to dry food by weight is largely the cost of water, dry food not only represents more concentrated nutrition, it costs less.
- Beef and poultry by-products include ground up hooves and feet, hide, horn, feathers, hair, bones, beaks, organs, and entrails. Sometimes these by-products also include animal tissue determined unfit for human consumption.
- Vegetable fiber includes ground up corncobs, cornhusks, peanut hulls, and other non-nutritional substances. Sometimes grain and soy meals also contain vegetable matter unfit for human consumption due to rancidity, mold, and other forms of spoilage. Most of these materials, though composed of protein, are difficult or impossible for animals to digest, and thus, have little nutritional value. Some of these spoilage products can be toxic as well.
- Preservatives, coloring additives, and flavoring agents in food accumulate in body tissue over time. Common ingredients like ethoxyquin, butylated hydroxyanisole (BHA), tertiary butyl hydroquinone (TBHQ), and propyl gallate are linked to long-term physiological disorders.
- Meat by-products, judged as unfit for human consumption, are used in commercial pet foods. They often contain animal parts with high concentrations of hormones like Bovine Growth Hormone (BGH) which are frequently given to domestic livestock to increase physical size and other hormones fed to chickens to increase their breast size.
- Fish has a very appealing flavor but is not a natural food for most carnivores. Frequent feeding can introduce high levels of heavy metals, cause allergic reactions and deplete Vitamin E. Another flavor additive, sugar, comprises as much as 25% of some semi-moist dog-food packets and a high proportion in dog biscuits. Propylene glycol, yet another sweetener for cats, can also be found in many cat foods. These ingredients can be addictive to our pets.

## Feeding patterns and life cycles

Dogs and cats meet their nutritional needs by ingesting proteins, carbohydrates, fats, vitamins, minerals and trace elements just like humans. Protein with high biological value such as eggs, muscle meat, fishmeal and soybean are critical for proper nutrition. The higher the protein's value along with the proper balance of other nutrients, the less volume need be served. Nutritional requirements increase during stages of growth, pregnancy, lactation, and fever. Because of their close association with humankind, the eating patterns of both domestic dogs and cats have undergone significant modification from those members of the species who roam free. One example of these behavioral changes is excessive food intake resulting from easy access to food and general overemphasis on quantity rather than quality of food by the owner.

Research on the life cycle nutritional needs of cats is not extensive. Feline requirements clearly indicate though, a true carnivore heritage. Diets for all companion animals must provide nutritional balance and properly regulated energy intake to correct over- or underweight conditions. Disease arising from nutritional imbalances or non-nutritional causes will affect daily food intake and must be carefully addressed. Respect the differences in the dietary needs of each species. Do not feed cats dog food because the latter is lower in protein, insufficient in fat which is necessary for proper digestion in the cat. Dog foods do not contain taurine and are not formulated to produce urinary pH of < 6.5, important in the prevention of magnesium-ammonium phosphate crystallization in the feline urinary tract.

It is impossible to buy commercially prepared foods that are preservative-free since there are few raw materials that, for example, contain fat of any kind without added preservative agents. Even fat-soluble vitamins have preservatives added during the manufacturing process. The best alternative to preparing a totally fresh diet is to seek out manufacturers who *DO NOT ADD* chemical preservatives to their food mixture.

The interrelationship of nutrients, and the emphasis on a balanced diet, is particularly noteworthy between minerals like calcium, phosphorus and vitamin D. The ratio of calcium to phosphorus, 1.2 to 1, must be made available to our companion animals in the presence of sufficient levels of vitamin D for proper assimilation and utilization of these essential nutrients to occur. An "all-meat" diet delivers these nutrients in ratios as high as 1 to 15. Furthermore, meats such as beef, beef liver, and horsemeat alone do not supply adequate levels of vitamins D, A, and E when measured, for example, in terms of the amounts necessary to satisfy caloric requirements of an average size dog.



There are three feeding stages in the life of the dog; namely, puppy, adult and senior. We discuss these stages in more detail later in this paper. Puppies can be fed four times a day up to the age of three months; three times daily from three to six months, and twice daily from 6-12 months. When feeding by hand, allow about twenty minutes for a feeding session. Dogs under 8 months of age require about twice as much protein and about 50% more calories of body weight daily than adult dogs in meeting daily nutritional requirements. Puppy foods must provide at least 25% of their energy from highly digestible protein. If pups or kittens are overfed, experiments show that their life span is decreased. If the aged animal is overfed, organ degeneration and death are hastened. It is essential for the older animal to be physically active in order to maintain muscle tone, enhance circulation, and to improve waste elimination.

Dogs have an average life span of about 12 years and have been reported to live as long as 29. Cats average 14 years and have lived as long as 36 years. Large breeds mature more slowly and generally have a shorter life span. Older animals require fewer calories because of reduced activity and metabolism. They require easily digested food, reduced protein, phosphorous and sodium because of digestive, kidney and cardiovascular changes. Many older pets tend to become overweight due to a decrease in energy needs associated with aging. Obesity can be controlled by feeding a lower calorie-high fiber diet or limiting food intake or both. Overfeeding in larger breeds of dogs during growth will result in a faster rate of growth which predisposes the animals to skeletal problems. Broadening of the metaphyseal regions of the long bones is a normal physiological event during growth to allow longitudinal bone growth. It may be quite pronounced in larger breeds. Vitamin and mineral supplements do alter this process. These physiological and pathological changes can be put into better balance by limiting food intake and feeding a more natural diet.

Unlike dogs and humans, who both metabolize carbohydrates and fats to supply energy, the domestic cat consumes protein for energy; it consequently has a higher protein requirement than most species. Cats must consume on a daily basis between 15% and 29% protein depending on factors of digestibility and age. They must ingest specific nutrients like taurine (see below) found only in proteins of animal origin. Unlike dogs, humans, and other less carnivorous species, the cat cannot synthesize enough of this nutrient in its own body.

Healthy adult cats need about 5 g of protein of high biological value per kg body weight/day. Optimal diets should contain at least 28-29% ME as protein for kittens; 21% for adults. Animals in growing stages are more sensitive to the quality of dietary protein and amino acid balance than adults. Protein must contain 500 mg of taurine /kg diet dry matter to prevent taurine depletion, retinal degeneration or dilated cardiomyopathy. As much as 60% of a cat's calories may come from diets with 8-40% fat on a dry matter basis though higher fat levels in palatable diets lead to overeating and obesity. Recommended fat intake is twice that of a dog. Insufficient antioxidant protection from

vitamin E and too much polyunsaturated fats may lead to painful nutritional steatitis or "yellow fat" disease.

Carbohydrates are not essential in the diet when ample protein and fats supply nutrients like amino acids and glycerol. Uncooked starches are poorly digested and cause flatulence and diarrhea. Except for occasional lactose or sucrose intolerance, most cooked carbohydrates however, are well tolerated. A cat must consume Vitamin A; it cannot synthesize it from carotene like other species. The thiamine requirement is about 5 times that of a dog. Magnesium levels in excess of 0.3% (dry-matter basis) may be detrimental if the diet is too alkaline. Likewise, excessive amounts of calcium and phosphorus should also be avoided.

Cats and dogs have a high calcium requirement; dogs more than cats. Feed companion animals strong, raw bones other than chicken, turkey, fish or pork since the latter splinter easily. An animal unaccustomed to bones will typically suffer from constipation or diarrheadiarrhea. Over time however, an animal's system will develop strong stomach acid to digest the material. Animals will typically pass hard and white stool after eating a large quantity of bone. Both cats and dogs benefit from an occasional (monthly) one-two day bone fast in which their digestive systems can break from their normal functions and perform healing maintenance. The ancestors of these animals rarely ate on a regular basis and only when seriously hungry. This is very unlike the human/companion animal feeding scenario today.

An important topic especially among cat owners is ash content. Ash is defined as the total mineral content of food. The percentage of ash content is determined by burning food at very high temperatures to produce an "ash" residue. This residue is composed of all the minerals that did not burn off. Low ash content means little mineral residue remained in the burnt sample. Hills prescription diet, one of the major manufactured diets used to treat feline urological syndrome (FUS) in cats following the initial acute stage, contains 0.08% magnesium and 5% ash. It is more important to have a low magnesium level than a low ash level. Ash level by itself does not contribute to FUS. Canned cat food contains 75-80% water; ash content is low. Dry food is only 10% water; ash content based on the entire mixture is proportionally higher. Bone is high in magnesium. The optimal magnesium level in cat food is .05% to 0.1%. Magnesium is an essential mineral involved in protein synthesis, bone development, muscle activity, and nervous system activity. Cats have a pronounced ability to conserve bodily water through the production of concentrated, hypertonic urine. This is an adaptive trait inherited from their ancestors who populated the semi-arid geographical areas of their origin. This predisposition to produce concentrated urine, especially in the non-vital animal, may lead to chronic urinary disorders. When the mineral level is too high and/or the diet is improperly balanced or, in general, is non-vital, male cats predominantly develop urinary calculi (crystallized minerals or stones) that can block the urinary tract and cause a life threatening situation.

This report has dealt with aspects of pet nutrition that are rarely discussed such as using the four D's; namely, *Disabled, Diseased, Dying or Dead* domestic livestock, as a pet food source. We attribute the epidemic of hypersensitivityhypersensitivity, numerous allergic reactions, and shortened life expectancies of our companion animals in part to the continual use of these "food sources" by commercial food manufacturers. We do not challenge the right of food manufacturers to use these raw materials in order produce competitively priced food products. We do however, raise the issue of disclosure and ask what long-term effects these diets, containing contaminated food and sometimes toxic chemical levels, have on the quality and longevity of our companion animals. Is there a correlation between the use of these commercially-available diets and widespread *allergic reactions* and *shortened life expectancies* of our companion animals? Given the advances in medical and veterinary sciences in the last 40 years, why are dogs and cats not benefiting from an opposite trend of healthier and longer lives?

Diet is a major factor in restoring health and greater Wellness to our companion animals. The more discerning pet owners will choose a more natural source of food when a greater understanding of the important aspects of nutrition is known . The present situation will improve, one pet at a time. But how do you determine a more natural diet for your companion animal?

Since dogs and cats are carnivores, they require meat. Our companion animals require more protein and mineralsminerals like calciumcalcium on a pound-for-pound basis than humans. They obviously can not thrive on table scraps. Unlike their free-roaming ancestors, our companion animals cannot hunt for their own food. We must supply them with as natural and as fresh a diet as possible. Meat no matter how "contaminated" is still the most natural food for carnivores. Lean meats are the food of choice since they are higher in protein and lower in fat than fatty protein sources. Ground meats are the best way to prepare food for cats because they will not be able to separate individual ingredients from the total food mix. Examples of lean and fatty meats are as follows:

- *Lean* - Turkey and giblets, lamb, beef, free-range chicken or turkey liver, most chicken, beef, chicken or turkey heart, lean hamburger, lean chuck, duck without skin
- *Fatty* - Roaster chicken with skin, fatty beef heart, brains, regular hamburger, fatty chuck, sirloin steak, lamb or pork (properly cooked)

Since the intestinal tracts of dogs and cats are much shorter than those of cereal-eaters like omnivores (humans) or herbivores (cows and horses), grain should not be the primary source of nutrition. Plant-derived food sources like grains, for example, oatmeal, cornmeal, millet, and bulgur (rich in iron), need to be cooked to "pre-digest" the nutrients for our pets. Larger grains like rice and whole wheat berries or barley are best for dogs. Remember, dogs like vegetables, too. However, avoid feeding a pet vegetables high in oxalic acid such as spinach, Swiss chard or rhubarb because these compounds interfere with the absorption of mineralsminerals like calcium. When preparing

fresh produce, always wash the vegetable thoroughly to remove pesticides and other chemicals, dyes, or wax.

Section 4.b

## **Transitioning to a new diet**

Upon switching to a more nutritious diet, physical and behavioral improvements can be dramatic or gradual depending on the state of the animal's health. *Severe nutritional deficiencies and toxic states have been known to mimic almost every known disease in veterinary medicine.* In chronic conditions, some developing over several generations, improvement in health can take months or years. A Vitamin A pet's ability to respond to high protein diets may require the individual animal "transitioning" through periods of purification or detoxification. Malnutrition and the toxic condition of the animal fed commercial diets can result in the inability to digest and assimilate basic food components of the fresher, more wholesome type we are describing here. The body will sometimes expel these accumulated poisons during periods of diarrhea, diarrhea hair loss, scaling of skin. These periods are known as Healing Episodes Healing Crisis. Though these situations are not necessary, they are not uncommon. The body will cleanse itself of these toxic agents before it can assimilate more healthful nutrients to regain a higher state of balanced health.

During these Healing Episodes Healing Crisis, the animal's immune system immune system continues to react to remaining toxins toxins and poisons until a more gentle, balanced diet can complete the transition to a more resilient internal state. These periods, during which time the animal can have diarrheadiarrhea, loss of some of its coat, and appear transiently sick, are really signs of a more vital life force finally shedding disease more completely. The situation is an important sign indicating a transitioning to a state of greater Wellness. The frequency, intensity and duration of a Healing Episode is totally dependent on an individual animal's health, nutritional state, age and breed. Each animal will react differently during the transitioning to a more nutritious healthier diet. Not always will there be signs of purification. We can rest assured that as long as the animal is clear eyed, bright and full of the energy of life, these periods (should there be any) will quickly pass and the need for medical intervention is almost never. As concerned pet owners seek out these more wholesome natural food sources, we can anticipate occasional brief detoxification episodes. Finding professional or lay support that understand the process of Healing Episodes will help make the transition for the owner easier and less filled with fear and doubt.

The ideal form of nourishment is fresh, raw or home-cooked food. These diets, however, can demand long term commitment. The raw materials for these diets require preparation time. With long term feeding of solely home prepared foods, guidelines and specific recipes for dogs or cats will be helpful in insuring balanced nutrition; as our pets are not allowed to roam the supermarkets.

Following basic recipes along with vitamin/mineral supplementation along with exposing our pets to many fresh wholesome food items will insure an ideal diet.

Providing a natural raw meat diet for our pets is a commitment not all are willing to give. Cooking grains and mixing the food ingredients can be performed weekly with freezing the mixture in containers that will provide a daily ration. Since many people do not cook for themselves it is unlikely they will cook for their animal(s). The next best approach is feeding raw meat and other favorite food items as a supplement to a high quality, chemical free, meat-based commercially available pet food. In seeking out these products, look for boutique or regional food manufacturers that subscribe to a holistic approach to pet care. Inquire about their company mission as pet food manufacturers, their commitment to their food processing methods and ingredients list.

*Section 4.c*

## **Key Issues - Regarding Natural Raw Meat Diets**

- Companion animals thrive on meat-based diets. Cats are true carnivores; they need meat. Dogs, though carnivore, digest a wider range of food sources. Grains should not be the main protein source for either species.
- Raw food is preferable to processed food. If a raw diet is impractical, seek diets that are manufactured in ways that compensate for loss of biological value in "cooked" nutrients. In general, lamb, poultry, rice and grain such as millet are superior ingredients.
- Fresh ingredients are the foundation for good nutrition.
- Meal has greater nutritional value than meat because it is meat with water and fat removed; it contains approximately 65% protein, compared to 10% protein in meat.
- High quality fats, stabilized with Vitamin E and C, are necessary in the diet.
- Carbohydrates in the form of rice, wheat, barley, soy, and corn are important as burnable "fuel" and useful to active dogs and cats.
- Dogs and cats, unlike humans, thrive on diets with minimal carbohydrate levels and a predominance of high-quality protein and fat.
- Concerns that "high protein" diets cause disorders such as epilepsy, renal damage, and hyperactivity are challenged by many; documentation is inconclusive at best.
- Natural preservatives like Vitamins C and E (mixed tocopherols) are preferable over chemical ingredients and additives.
- Pet food diets that do not add chemical preservatives during any aspect of the manufacturing of the food product are recommended.
- Dry food not only represents more concentrated nutrition, it costs less and is easier to store and serve especially in a free-feeding situation.

- Vitamins and minerals must be biologically active to enhance metabolic processes. Mineral chelation facilitates absorption and helps in digestion.
- Labeling descriptions like "complete" or "balanced" are preferable, but meat-based diets are best in supplying essential and useful nutrients.
- Determine whether the manufacturer has different formulations for specific life cycle stages.
- Food brands that have testimonials from professional care providers like breeders, vets and groomers who specialize in your pet's breed are preferable.
- In calculating costs, remember that dry food is sold by weight while food consumption is measured by volume. Actual feeding costs are calculated by the serving.

Living with and caring for companion animals is a luxury that is available to almost anyone who wants it. It can be filled with hours of quality first hand contact with the earthly energy flow that surrounds us in the form of our two and four legged friends. We feel this experience does not have to be laced with the degree of chronic disease, medical attention and worrisome thought that is widespread today. It is our hope that in sharing this information, both scientifically and holistically; an understanding of the powerful roots and utter simplicity of providing healthy living nutrition for our companion animals is possible and comfortable. It is our hope that people who are seeking common-sense, intuitively-based answers will find them with greater ease.

*Section 5.a*

## **THE NATURAL RAW MEAT DIET - General Information**

This diet is designed to mimic the natural diet of dogs or cats. In nature the meat, roots and vegetables (greens) are consumed raw. Upon killing the prey the stomach contents is usually consumed first, this consists of enzymes and partially digested (partially "cooked") grains, greens, roots, and whatever else the animal has eaten. Like wise this diet consists of three basic food groups: raw meat, raw vegetables and cooked grains. Gradually increasing the meat content and maintaining it at 40% to 60% (depending on the species) of the total diet will also reflect the natural feeding preferences. FRESH (newly killed), WHOLESOME (running around happy a minute ago, and VARIED (different feeding behaviors and preferences at different times of the year), are the three important qualities of the diet overall to ensure vitality over the long run. If no commercial pet food is added suggested supplementation is recommended after a two to three week period. Both recipes and important information regarding feeding patterns and guidelines are given.

## Adult Canine

Freshness and variety are the most fundamental themes regarding what to feed. Large feed batches can be made and frozen for several weeks if daily preparation is not feasible. Place feed mixtures in containers appropriate for daily ration size. Begin changeover of diet slowly; gradually reducing current diet while increasing the Raw meat natural diet.

**Meat:** Raw, One third or slightly more of the total daily diet, chopped, chunked or whole depending on the vitality of the animal.( A vital animal will be better able to properly chew and assimilate larger pieces of meat ). It is best to start with chopping the meat into small pieces if unsure of the vitality. Raw meat has had no deleterious effects on animals when fed with other wholesome, diversified foods. If cooking is still desired this is fine. Beef, Chicken, Turkey and Lamb is fine. Don't feed raw pork or rabbit. Organ meats on a regular basis will help in enhancing variety.

**Vegetables:** the balance of the diet consists of raw vegetables, fruits and cooked grains with some supplementation. Raw grated vegetables are appropriate including carrots, broccoli, leafy greens (any and all kinds), beets etc... Organic, home grown are the best. Go easy on the fruits, less vital animals can take awhile adjusting to them, cutting them up into small pieces will also be helpful.

**Grains:** Cooked, including but not limited to brown rice, oatmeal, buckwheat, wheat, quinoa, cous cous, any whole grain cereal or bread will be fine. Include variety on a weekly basis. Ground up nuts and seeds (sprouted or raw) are a life giving addition.

**Fats:** Olive oil, sesame oil, butter, ghee (clarified butter), canola etc. ... are fine.

**Milk and Milk Products:** Pasteurized cow's milk can cause diarrhea, flatulence and uneasiness in the less vital animal. Any processed (i.e. cottage cheese) or cultured dairy product is usually fine. like cheese, yogurt, kefir, panir, etc.. Raw goat's milk, sheep's milk and in many cases raw cow's milk will be well tolerated if introduced slowly into the diet, after the animal has been acclimated on the Raw meat, natural diet for awhile.

**Eggs:** Excellent overall food source. One to several eggs (depending on the size of the dog) twice weekly. Raw is fine with the shells broken into small pieces. Lightly scrambled with butter and shells is also fine, or French toast a la shells.

**Water:** Purified (filtered or R.O.) or distilled (if placed in glass in direct sun, the vitality of distilled water will be returned).

*Supplements (Vitamin and Mineral): Including but not limited to the following:*

**Colloidal minerals** containing over 70 natural occurring minerals, preferably in liquid form. There are many such products available on the market. Dosage according to weight on the container.

**Dog multi-vitamin mineral supplement**, dose according to instructions.

**Calcium** either via Bonemeal (human consumption quality) or calcium tablets or powder in the form of calcium carbonate, gluconate, or lactate along with magnesium if possible. Give one to two times the recommended dose to compensate for the lack of efficient absorption form the gut in many animals.

**Bones**, beef, are an excellent source of minerals, raw marrow (long) bones only are to be given, marrow and all. Ask the meat department to cut the bone into smaller "rings" , freeze and give as tasty treats. Watch to see how much of the bone is actually chewed away.

**Vitamin C and Vitamin E** (water soluble) child to adult dosage depending on size.

**Kelp, Nutritional Yeast, Antioxidants, lecithin, wheat grass juice, sprouted beans or seeds** have all been used successfully for their nutritional support and can be added freely or according to label. Start off in small amounts until the animal gets accustomed to the new tastes.

**Dry Dog Food:** if you're not a purist or if you do not have the time to prepare a total home diet, use dry dog food as a supplement. Look for foods that have no artificial preservatives, additives, or addictive appetite stimulants. The food should be high in meat meal, with a company policy of delivering freshness and quality ingredients. A super concentrated dry food ( predominantly meat) will most likely mimic the Raw meat natural food diet. This kind of dog food will not be in the supermarkets as already explained.

**How much to feed?** Generally speaking, after some time the animal will eat approximately half (or less) the amount of natural diet as it was consuming of supermarket commercial dog food. Do not be concerned. The most important thing to consider is how the dog looks; the ribs should be able to be felt, the stomach area should be tucked up compared to the chest, the top of the back bones should be easily felt and should be higher than the muscles/fat to either side of the backbone. A "doughy" appearance leaves and a more compact, solid conformation takes its place. If there is more dog than described here, reduce food intake. If more weight is needed, increase the food ration. There is less voracious feeding behavior. The animal's eyes become bright and clear with overall greater energy and vibrancy. The animal is more calm and responsive. There is almost always less drinking with less urination and stool. This is natural and to be expected. These characteristics become more prominent as higher quality nutrition makes its way to the cells of the pet. This can take weeks to months.



**How often to feed?** Adult dogs need only feed once a day. Fasting once a week with fresh water available at all times will enhance your pet's wellness. The animals truly appreciate the rest day and will periodically take it even though food is made available.

*Puppies, lactating and pregnant dogs*

This life stage requires more frequent feeding and slightly higher protein, mineral content and dairy in the diet. High quality growth formulas can be used as supplements.

*Section 5.c*

## **Adult Feline**

Freshness and variety is the most important underlying commonality of what to feed. Batches can be made and frozen for several weeks if daily preparation is not feasible. Place in containers appropriate for daily ration size, between one half and one cup per day. Begin changeover slowly, gradually reducing current diet while increasing the Raw meat natural diet. Cats can be finicky to changes in just about anything, especially food. Commercial cat foods are loaded with addictive agents that reassure the owner that the correct choice of supermarket food has been made. Older cats on this kind of food can be quite slow to changeover to a more natural diet.

It would be wise when adding any new food into the cat diet that it be done VERY slowly. Minute amounts to allow for familiarity of taste before increasing the new substance will markedly facilitate acceptance.

**Meat:** Raw meat, one half or slightly more of the total daily diet, chopped, chunked or whole depending on the vitality of the animal. ( A vital animal will be better able to properly chew and assimilate larger pieces of meat ). It is best to start with chopping the meat into small pieces if unsure of the vitality. Raw meat has had no deleterious effects on animals when fed with other wholesome, diversified foods. If cooking is still desired this is fine. Chicken, turkey, beef, fish and Lamb is fine. Don't feed raw pork or rabbit. Organ meats on a regular basis will help in enhancing variety.

**Vegetables:** the balance of the diet should be composed of raw vegetables, fruits and cooked grains with some supplementation. Raw grated vegetables are appropriate including carrots, broccoli, leafy greens (any and all kinds), beets etc.. Organic, home grown are the best. Go easy on the fruits, less vital animals can take awhile adjusting to them, cutting them up into small pieces will also be helpful.

**Grains:** Cooked, including but not limited to brown rice, oatmeal, buckwheat, wheat, quinoa, cous cous, any whole grain cereal or bread will be fine. Include variety on a weekly basis. Ground up nuts and seeds are a life giving addition.

**Fats:** Olive oil, sesame oil, butter, ghee (clarified butter), canola etc. are fine.

**Milk and Milk Products:** Pasteurized cow's milk can cause diarrhea, flatulence and uneasiness in the less vital animal. Any processed (i.e. cottage cheese) or cultured dairy product is usually fine, like cheese, yogurt, kefir, panir, etc.. Raw goat's milk, sheep's milk and in many cases raw cow's milk can be well tolerated if slowly added to the diet after the animal has been acclimated to the Raw meat natural diet, but continue to monitor stool for looseness or note excessive drinking.

**Eggs:** Excellent overall food source. One or two eggs twice weekly. Raw is fine with the shells broken into small pieces and softened. Lightly scrambled with butter and shells is also fine, or French toast a la shells.

**Water:** Purified (filtered or R.O.) or distilled (if placed in glass in direct sun, the vitality of distilled water will be returned).

*Supplements (Vitamin and Mineral): Including but not limited to the following:*

**Colloidal minerals** containing over 70 natural occurring minerals, preferably in liquid form. There are many such products available on the market. Dosage according to weight on the container. Start off with very small amounts to allow adjustment to the taste. Cat multi-vitamin mineral supplement: dose according to instructions. Vitamin C and Vitamin E (water soluble) child to adult dosage depending on size Kelp, nutritional yeast, antioxidants, lecithin, wheat grass juice, sprouted beans or seeds have all been used successfully for their nutritional support and can be added freely or according to label. Start off in small amounts until the animal gets accustomed to the new tastes.

**Dry Cat Food:** if you're not a purist or if you do not have the time to prepare the total home diet, use dry cat food as a supplement. Look for foods that have no artificial preservatives, additives, or addictive appetite stimulants. The food should be high in meat meal, with a company policy of delivering freshness and quality ingredients. A super concentrated dry food (predominantly meat) will most likely mimic the Raw meat natural food diet. This kind of dry cat food will not be in the supermarkets as already explained.

**How much to feed?** Generally speaking, the cat will eat between one half and one cup of the Raw meat natural diet. More will probably be consumed in the beginning as nutritional deficiencies are compensated for. This is considerably less than the amount of supermarket food consumed, this is natural and good. Do not be concerned. The most important thing to consider is how the cat looks; bright eyed, active, usually more even-tempered and flexible. A "doughy" appearance is replaced by a more compact, solid conformation. If more weight is needed, increase the food ration adding both fat (or oil) and more meat. There is less voracious feeding behavior. The animal's eyes become bright and clear with overall greater

energy and vibrancy. The animal is more calm and responsive. There is almost always less drinking with less urination and stool. These characteristics become more prominent as higher quality nutrition makes its way to the cells of the pet. This can take weeks to months. **How often to feed?** Adult cats need be fed once a day. Fasting once a week with fresh water available at all times will enhance your pet's wellness. The animals truly appreciate the rest day and will periodically take it even though food is made available.

### *Kittens, lactating and pregnant cats*

This life stage requires more frequent feedings and slightly higher protein, fat, mineral and dairy content in the diet. Dairy in the form of raw (unpasteurized) cat or goat milk is best. Be sure to check to see that no diarrhea ensues. High quality growth formulas can be used as supplements.

Section 6.a

## **Selected Recipes**

These recipes are given to help you create your own recipes based on this framework. Your creativity and sensitivity to your pet's needs and desires will be the guiding direction for your particular situation. Try to stay within this general format, yet feel free to add food stuffs in moderate proportion that are fresh, wholesome and appealing to your pet.

### **BASIC CANINE THREE-PART COMBO**

Balanced generic recipe for a mid-sized canine. Feed once daily, substituting raw meats, grains and vegetables as described in the text.

#### **Ingredients:**

1/4 pound(1/2) cup) ground chicken turkey or beef(heart or muscle OK)

use liver not more than once weekly

4-6 slices whole natural bread (break up) or pasta

1 cup whole milk (raw, non-homogenized if possible)

2 large eggs (optional: ground up, softened shells)

1/4 cup string beans or other vegetable

1 tablespoon Vitamin/Mineral Powder

1 tablespoon ghee, olive, or vegetable oil

1-1/2 teaspoons bone meal, calcium or softened eggshells

200 i.u. vitamin E

(optional) 1/4 teaspoon Tamari, Bragg's liquid aminos or a dash iodized salt

(optional) 1 clove garlic, crushed or minced

(optional) 1/4 teaspoon ginger, licorice and/or cumin

**Directions:**

Combine all ingredients, water can be added. Serve raw or shape and bake at 325 degrees until lightly browned (20-30 minutes)

**CONTINENTAL CANINE**

Something quick and easy containing the three basic food groups of raw meat, raw grated vegetables and cooked grain.

**Ingredients:**

1 cup raw rolled oats

3 eggs (shells crushed and baked at 350 for 12 min.)

1 teaspoon bone meal, calcium/magnesium powder (or eggshells)

½ cup cottage cheese

1 cup raw grated vegetable (whatever is on hand)

½ cup raw chopped meat (chicken, turkey or beef)

**Directions:**

Bring 2 cups of water to a boil. Add the raw oats, cover, cook two minutes, turn off the heat, let stand about ten minutes. Stir in rest of ingredients. Mix in a some brewer's or nutritional yeast, lecithin and or olive oil.

**FELINE FOUNDATION FOOD**

Good basic balanced ingredients to introduce your cat to higher nutrition. Be sure to add all food sources as the cat in the beginning might want to eat only the meat; try to make it difficult. Small amounts of flavorings (new or familiar) will ease the transition.

**Ingredients:**

1 egg

2 lbs.( 4 c.) raw meat, fattier grades of beef or chicken, muscle or heart, liver not more than once weekly)

1 c. Millet (can substitute wheat, oats, bulgur, or quinoa)

3 Tbs. Vitamin/Mineral Mix

1-1/2 Tbs. bone meal

15,000 i.u. vitamin A

400 i.u. vitamin E

600 mg taurine (optional)

1 tsp. fresh vegetables with each meal, whatever is available.

**Directions:**

Bring 3 cups of water to a boil. Add millet (or other grain with the appropriate amount of water), cover and simmer 20-30 minutes or until the water is absorbed. When done, stir in the egg. Mix in the remaining ingredients. Freeze in daily ration plastic bags whatever cannot be eaten in 2-3 days.

**CHEWY CAT CUISINE**

Good basic balanced ingredients to introduce your cat to higher nutrition. Be sure to add all food sources as the cat in the beginning might want to eat only the meat; try to make it difficult. Small amounts of flavorings (new or familiar) will ease the transition

**Ingredients:**

1 c cornmeal or oatmeal

2 eggs

2 lbs ( 4 c) ground turkey or chicken (or lean chuck, lean heart, lean hamburger, liver giblets, fish or other lean meats)

4 tbs Vitamin/Mineral Powder

2 tbs bone meal or chopped, softened or ground eggshells)

2 tbl olive oil or butter (or 1 tbl each)

15,000 i.u. vitamin A

200 i.u. vitamin E

600 mg taurine(optional)

1 tsp fresh vegetable, ground, include fresh with each meal.

**Directions:**

Bring 4 cups (1 quart) of water to a boil. Add the cornmeal or oatmeal. When thoroughly blended, cover and simmer on low 10-15 minutes. Stir in the eggs and oil or butter. Mix in the remaining ingredients. Freeze in daily ration plastic bags, feed fresh for two days when a new batch is made.

## BIBLIOGRAPHY AND READING LIST

- Collins, D.R., The Collins Guide to Dog Nutrition, Howell Book House, Inc., New York, 1987.
- DeBairaclı Levy, Juliette, Cats Naturally, London, UK: Faber and Faber, 1991.
- DeBairaclı Levy, Juliette, The Complete Herbal Handbook for the Dog and Cat, London, UK: Faber and Faber, 1955-1991.
- Lewis, L.D., M.L. Morris, and M.S. Hand, Small Animal Clinical Nutrition III, Mark Morris Associates, Topeka Kansas, 1987.
- National Research Council, US Subcommittee on Dog Nutrition, Nutrient Requirements of Dogs, National Academy Press, Washington, DC, 1985.
- McGinnis, Terri, The Well Dog Book, Random House, New York, 1974, 1991.
- McGinnis, Terri, The Well Cat Book, Random House, New York, 1975, 1993.
- Merck & Company, The Merck Veterinary Manual - Seventh Edition, Merck & Company, Inc., Rahway, New Jersey, 1991.
- Pitcairn, Richard H. And Susan Hubble Pitcairn, Dr. Pitcairn's Complete Guide to Natural Health For Dogs and Cats, Rodale Press Inc., Emmaus, PA 1995.
- Stein, Diane, The Natural Remedy Book For Dogs and Cats, The Crossing Press, Freedom, CA 1994.
- Lazarus, Pat, Keep Your Pet Health The Natural Way, Keats Publishing, Inc., New Canaan, Ct.
- McKay, Pat, Reigning Cats and Dogs, Oscar Publications, South Pasadena, CA.
- Frazier, Anita, The New Natural Cat, Penguin Group.