

# RAISING HEALTHY CUBS

## The Stages of Life:



The development of a newborn out of a single cell is a miracle of nature. Family histories dating back uncounted generations are passed along by the mother and father to give each offspring a unique makeup unlike no other creature born before or ever to be born again! As miraculous as this is, a newborn is unprepared to face a whole new world of sights, sounds, and actions. The development that takes place after birth is just as wonderful and just as necessary. This is true whether the newborn is a human baby or a lion cub. It takes a lot of care to help a newborn survive and thrive.

## Surviving and Thriving:

Deprived of air, you might live five minutes. Deprived of water, you might live four days. Starvation takes a little longer, but not much. You could die at any time without shelter--an environment free from immediate dangers. If you just have air, water, food, and shelter, you can survive, but you would feel like a prisoner if that's all you had! So equally important to making life possible is making life bearable, not just surviving but thriving. A living thing that thrives that can perform behaviors basic to a comfortable existence. Thriving requires a healthy environment.



## The Environment:



What comes to mind when you hear the word "Environment?" Do you think of the out-of-doors? A place where wild animals live? Every place on Earth that can support life? Actually, your environment is everything affecting you and everything you affect. The clothes in your closet, the checker

who rings up your groceries, and the half-finished soda next to your computer are all part of your environment. Most living things reside in their Natural Environment, which are the conditions under which their species developed long ago. Most humans, their livestock, and their companion animals, live in a Captive Environment, which are a series of conditions created by human culture. While some animals like beavers make major changes to their environment, humans are more powerful and more destructive than any other living thing.

Most living things can do quite well in an environment different from the world their ancestors knew. For them to adjust to a new environment, certain conditions must be met. When everything works out, the resulting partnership a living thing has with its environment is called a Lifestyle.

## Living a Lifestyle:



Lifestyles are important. Most higher animals will not do certain things when something in their environment is not right. It may be something present, or something absent. Most pandas have trouble mating in a zoo, but most humans have trouble undressing in a crowded restaurant. Pandas might like everything else about a zoo, just as you might like everything else about a restaurant. If you want animals in your care to live full lives, be sensitive to the differences making all species unique and special. Know their lifestyle.

## Helping Cats Survive and Thrive:

A cub's lifestyle has many of the same things yours does. Cubs need rest, security, play, social interaction, and exploration. The forms they take often resemble the ones human children exhibit. With a little work, you can meet the needs of a growing cub to help them fulfill the wonderful potential they have. The key is having some knowledge, some patience, and a lot of love.



## Physical Contact and Movement:



Cats show affection through rubbing, nuzzling, grooming and snuggling. The brain of cubs not only reacts well to touch and movement, but needs it to mature properly. Pathways of pleasure not used at a young age eventually degenerate, interfering in the adult cat's ability to socialize well, mate, and care for their own offspring. Cubs with minimal contact grow into emotionally disturbed adults with unusual and often violent behavioral traits. Replacing the quantity and quality of time spent with the mother and littermates in natural settings is very difficult but it can be done. You can wear a pouch in where very young cubs can be carried with body-to-body contact and movement, while allowing you to work on your daily duties. This should be continued until the cubs are able to move about freely on their own. Carry this over into the night by allowing them to sleep with you. Remember you are not giving up any more convenience than a mother cat, and what you invest in those crucial first months will be repaid many times over in the joys of the following years.

## Peer Association:

Cubs enjoy being with littermates and learn how to "read" and get along with other cats. They burn up excess energy, exercising muscles and building strong bodies. They learn how to defend themselves, and how far they can push the changing limits of their growing bodies. It's a mistake to think felines are born speaking "cat" instinctively. Cubs are inquisitive and observe everything, and what they learn is an important part of the growing process.



## An Enriched Environment:



The environment is everything affecting the cubs, and everything the cubs affect, remember? Whether those effects are good or bad depends on how much thought you put into designing it. Cubs need a safe world, but they also need a challenging world that can fill their need to play, explore, and learn about themselves and the world around them. They need to meet other people and be exposed to unusual smells, sights, sounds, and activities. But Don't give them anarchy--you can put order into their life by having a regular routine of mealtimes, bedtimes, and other selected activities. Finding the right balance of stability and novelty is one of the challenges of being a good foster parent.

## Building Blocks of Life:

There are many chemicals needed to assemble the raw materials in food into a finished, healthy living thing. Think of these chemical helpers as if they were plumbers, carpenters, electricians, and masons. With a genetic code (DNA) as their blueprints, they build the marvelous, complex systems that make our planet a living oasis. Many of these chemical helpers are manufactured in the body, but others must be found in the diet. These are called "vitamins," a Latin word meaning "needed to live." When certain vitamins are missing, sickness or death can occur. Other chemicals actually become part of the body structure--these are minerals. Minerals build body structure but are not used as a source of energy. They are easiest to find in the bones (i.e. calcium), but also have a lot of other important roles.



Look at the label on your vitamin supplement. There are vitamins A, B, C, D, and E. Why then is the next letter K? What of F, G, H, I and J? Humans don't need them in their diet, but some other species do. Every species adapts to its own food source over generations, making chemicals not occurring in their diet, and simply eating the rest. Even between large and small cats there are differences: big cats eat not only

muscle tissue (meat) from their prey but also organ meats, marrow, and bone fragments. They rely on chemicals harvested from these parts of their diet, and if supplements are not added to an all-meat diet, big cats develop cataracts or badly formed bones. "Cat food" designed for small domestic cats lacks taurine and calcium, and a lion or tiger raised on cat food may go blind from cataracts and be unable to stand or move about.

## Defensive Diet:



While some chemicals needed to help build up bodies, others are needed to prevent them from being torn down. Part of the aging process is the gradual damage done by "free radicals," harmful chemicals that break down the body. These chemical vandals can be trapped and made harmless by a new type of chemical helper: the phytochemicals and antioxidants. Where vitamins are like construction workers, phytochemicals and antioxidants are like security guards. They are more attractive to free radicals than regular chemicals, luring away the vandals! There are not just free radicals attacking the body. Some harmful chemicals are made by the body itself! To respond to stress, the body provides a number of "quick fixes" to escape danger through fight or flight, and to endure discomfort. They may help in the short term, but when stress is prolonged, these chemicals begin to harm the body. There are also attacks from microbes, other living things that sometimes exploit the body for their own benefit and causing illness or death. To help the body protect itself against chronic stress and defend itself against attack from microbes, it needs micronutrients. Micronutrients are things needed in very tiny amounts, which is where they got their name, but even those small amounts disappear from prepared foods. To ensure that the body's vital defenses stay effective, these micronutrients have to be added back.