

PuppyBoost

*Energy booster
For newborn puppies and kittens*



Energy line

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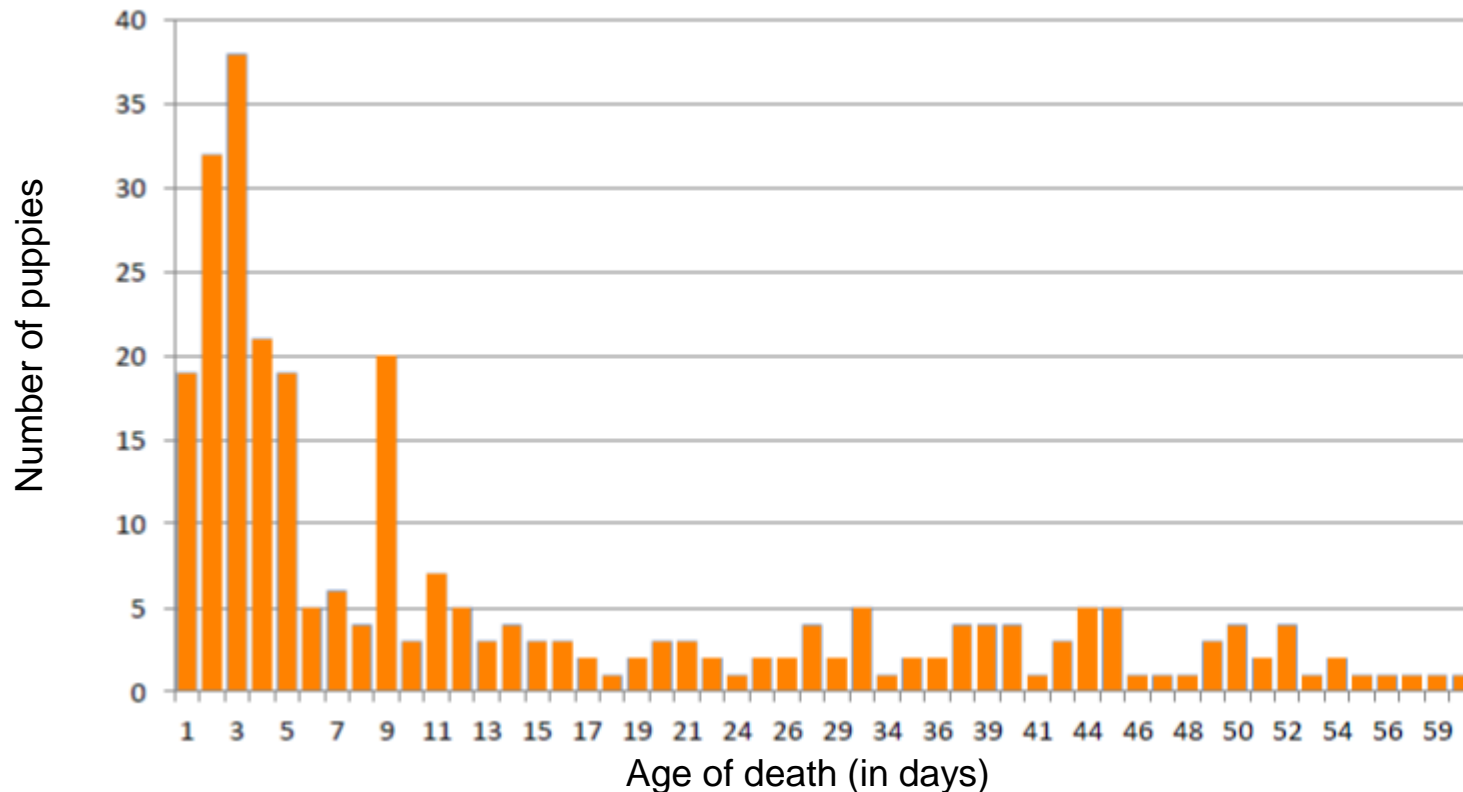


Forewords



- Most of puppy mortality occurred in the first days of life

Distribution of death of puppies born alive
N=295



PuppyBoost target

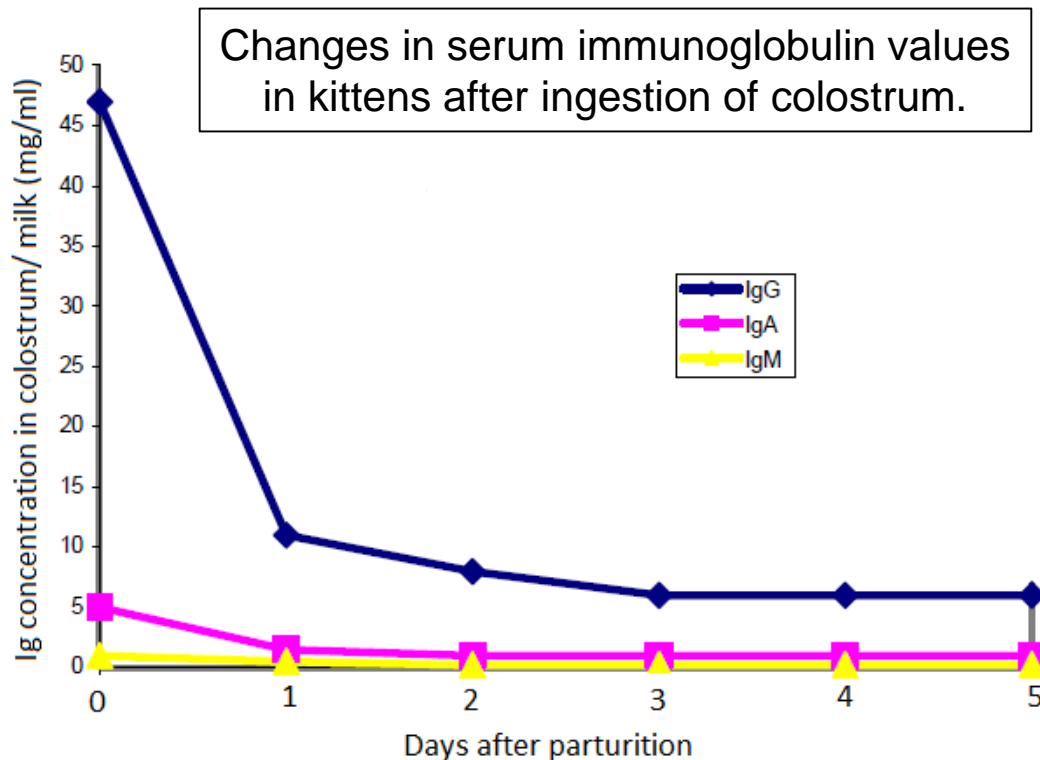


- Energy booster for weak puppies and kittens
 - ✘ Newborns stimulant
 - ✘ Brings ready to use energy
- Energy booster for hypoglycemic young and adult dogs
- It brings:
 - ✘ Ready to use energy supply
 - ✘ Vitamins
 - ✘ Tea and siberian ginseng (*Eleutherococcus senticosus*)
 - ✘ Symbiotics:
 - Probiotics (bacteria *E. faecium*) and prebiotics (yeast walls)

PuppyBoost target



- A quick access to colostrum is the key to get the best of the colostrum.

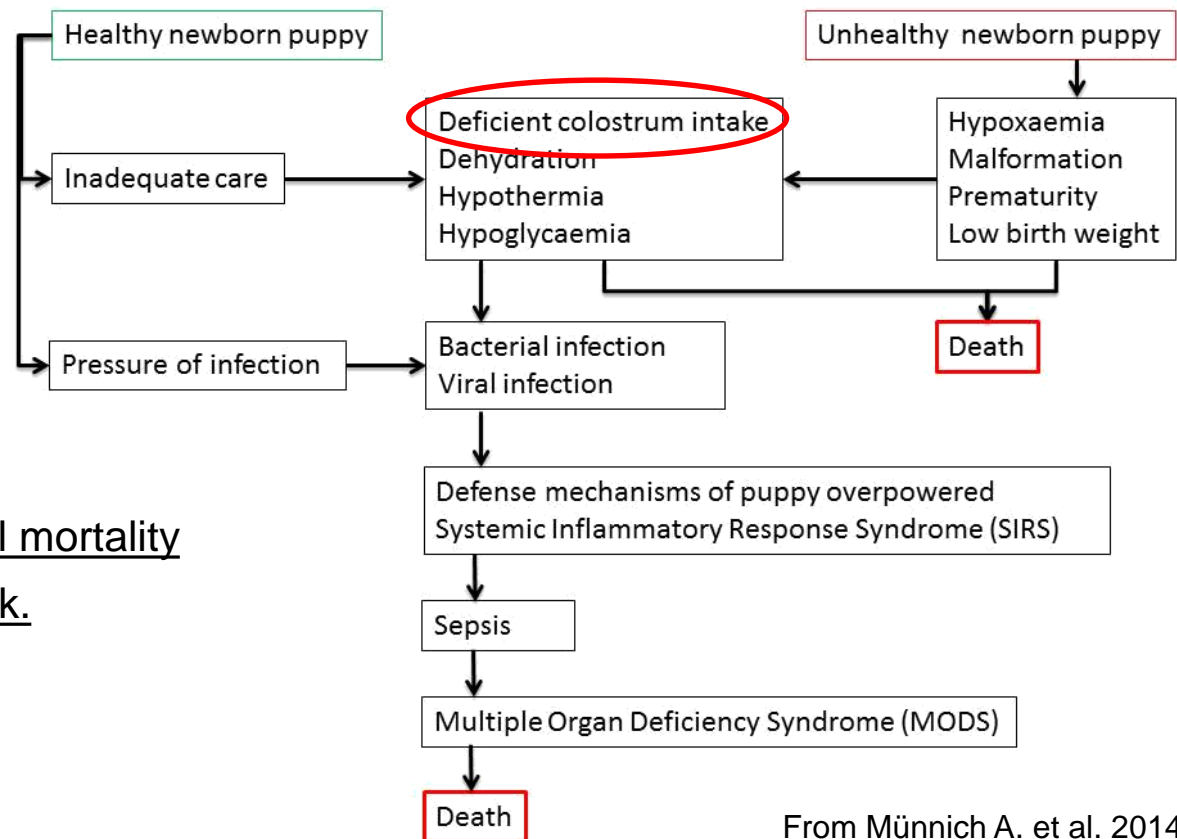


Yamada *et al.*, 1991

PuppyBoost target

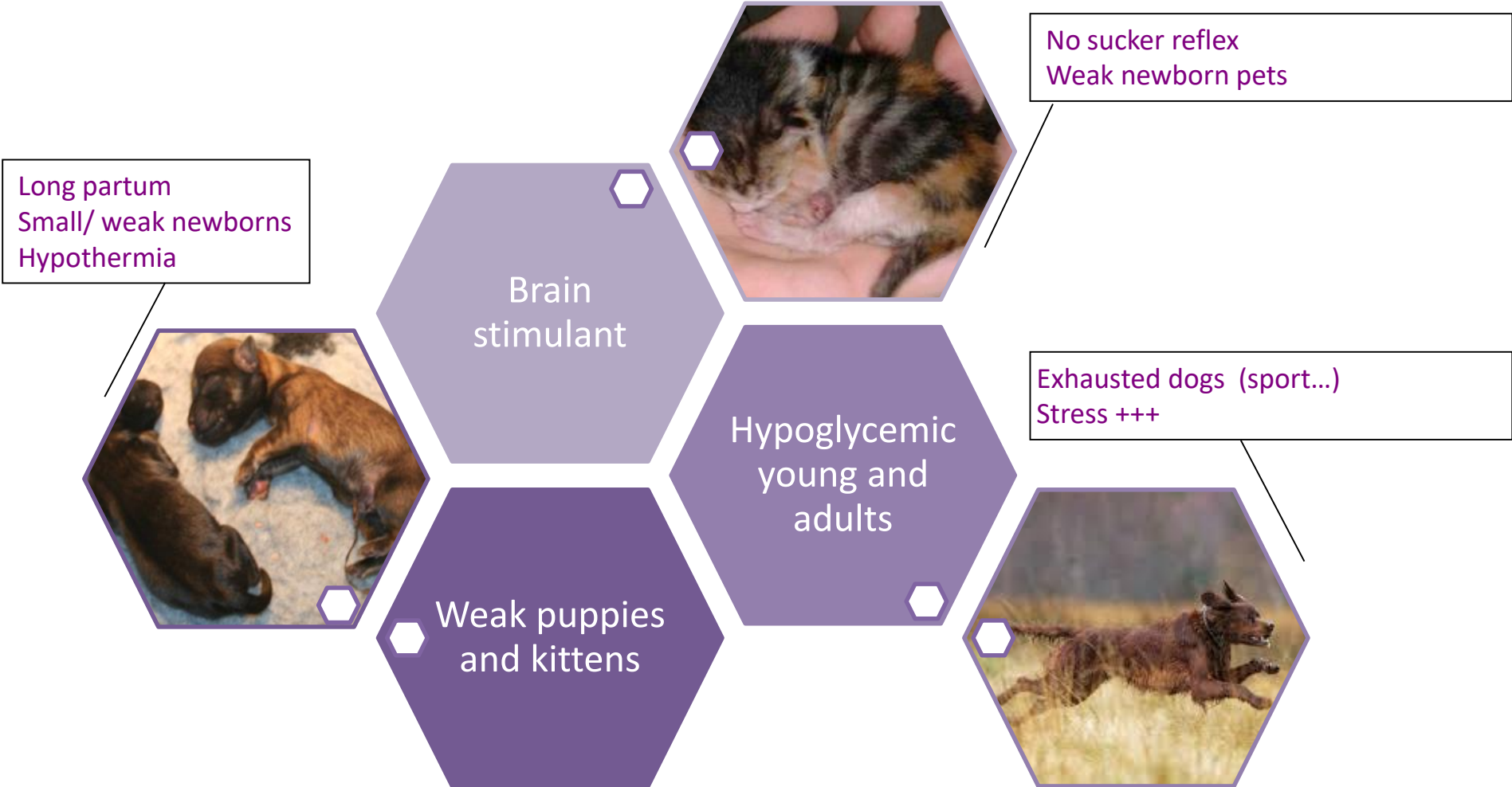


- A deficit of colostrum intake make puppy/ kitten susceptible to
 - ✗ Hypothermia
 - ✗ Infection



Possible pathways to neonatal mortality
in puppies during the first week.

PuppyBoost uses



How does **PuppyBoost** work? Stimulant



- Brings tonicity and vitality:

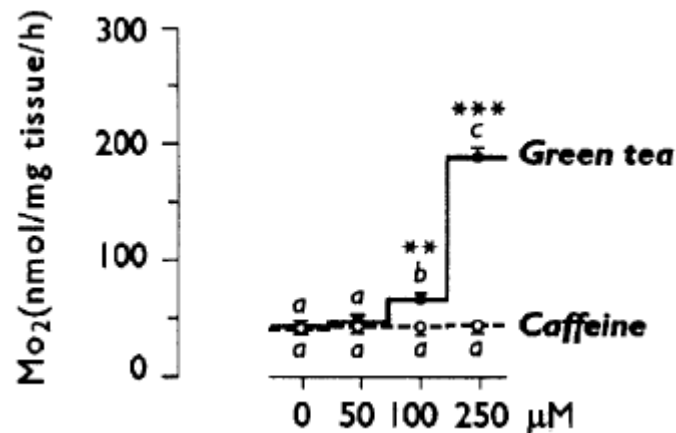
- ✘ High alkaloids contents

- Caffeine and theophylline
 - In tea extract

- Higher thermogenesis



Respiration rates (MO₂) of interscapular brown adipose tissue (IBAT) from rats



The level of statistical significance of differences is indicated as asterisks: **P<0.01; ***P<0.001

Dulloo A.G. *et al.* 2000

How does **PuppyBoost** work? Stimulant



- Brings tonicity and vitality:

- ✘ Adaptogen

- Siberian ginseng helps the newborn pet to adapt to its new environment



- ✘ Vitamins B1 and B5

- Stimulates suckle reflex
 - Quicker colostrum intake



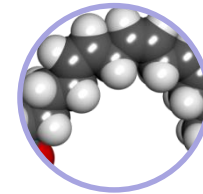
How does **PuppyBoost** work? Energy



- Brings easy to use energy



🐾 MCFA: medium chain fatty acids

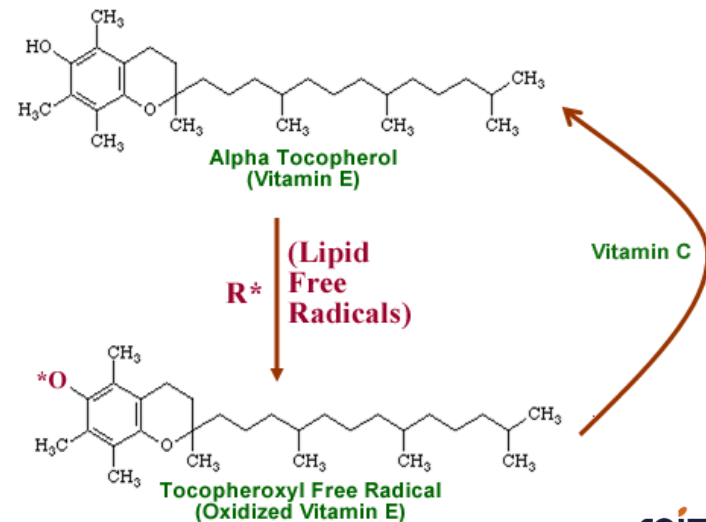


- Immediate uptake of energy (no lipid enzyme required)
- Ready to use energy
- 2 metabolic pathways (carbohydrates and lipids)

How does **PuppyBoost** work? Stimulant



- Protection against oxidative stress
 - 🐾 Cell membranes protection against free radicals
 - Vitamin C : vitamin E « recycling »
 - Nerve cell protection



How does **PuppyBoost** work?

Gut protection



- Gut protection

- ✘ Probiotics

- *Enterococcus faecium*
 - Barrier effect

- ✘ Prebiotics:

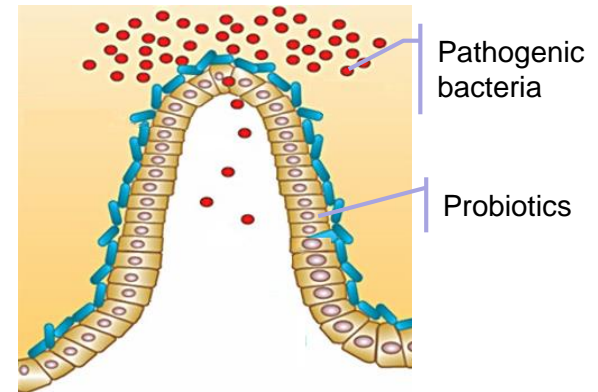
- Yeast walls
 - Prebiotics like: MCFA

- Colostrum and milk are better used

- Less digestive disorders



Enterococcus faecium



Probiotics barrier effect

How does **PuppyBoost** work?

Growth booster



- Enhances a good start

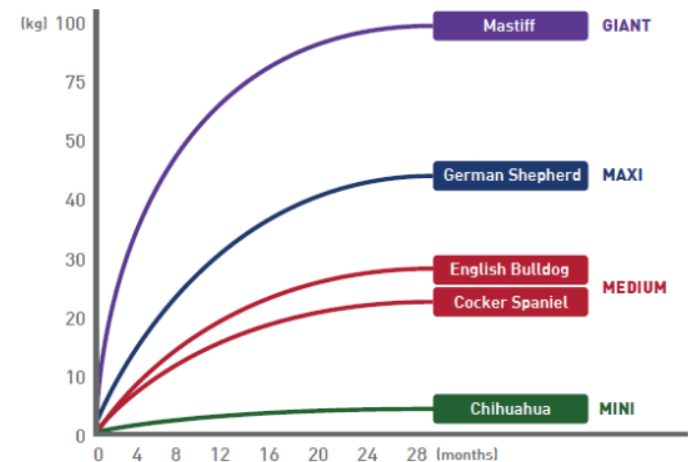
- ✘ Brings easy to use aminoacids

- Protein synthesis

- ✘ Metabolism stimulation (catabolism and anabolism)

- Vitamins A, B1, B2, B3, B5, B6, C, biotin and D3

Puppy growth curve depends on adult size



How does **PuppyBoost** work? Trial



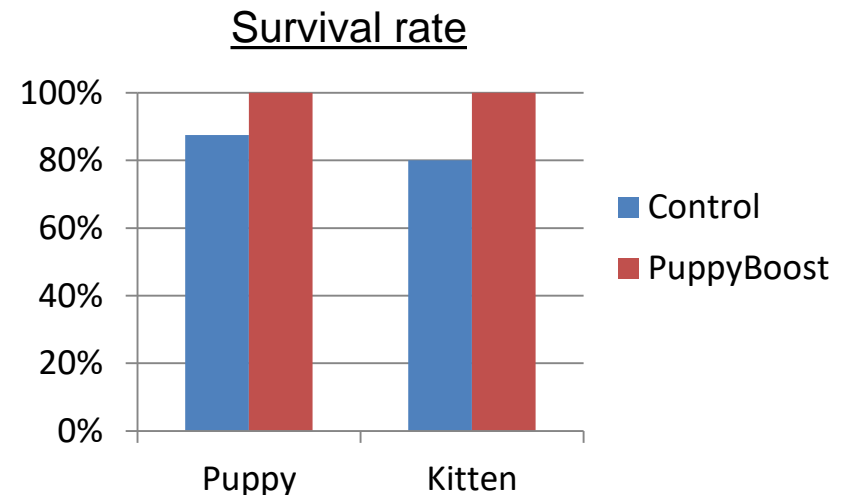
- 16 newborn puppies and 10 newborn kittens
- Check of the general condition at the third day of life

✘ Control group:

- One dead in each group (1 kitten, 1 puppy)
- For the others: exhaustion, immobility, passivity, lack of appetite
- Liquid stool.

✘ Trial group:

- Increased body weight
- Increased activity and mobility
- Normal stool: solid yellowish feces.



How does **PuppyBoost** work?

Easy to use



- Easy to administer

- ✘ Adjustable syringe

- ✘ Gel => no leakage

- ✘ Good palatability : lacto-vanilla and coconut flavor



PuppyBoost packaging



- Adjustable 15 ml syringe
 - ✂ Precise dosage with rotatable ring on piston

 = 15 doses



Direction for use



- **PuppyBoost** administration :

-  **Newborn puppy/ kitten**

- 1ml as soon as possible at birth
- 1ml half a day later
- 1ml the second day if necessary

-  **Hypoglycemia in young and adults**

- toys and small dogs (adult bodyweight < 10kg): 2ml
- medium dogs (adult BW between 11 and 25 kg): 5ml
- tall dogs (adult BW between 26-44 kg): 8ml
- giant dogs (adult BW > 45kg): 12 ml



1 ml

Birth



1 ml

5 hours



1 ml

Day 2



From 2 to 12 ml
according to BW

Hypoglycemia in adult

Take home message

PuppyBoost



- Energy booster for weak pets
- A ready to use syringe for a good start
 - ✘ Tonicity and vitality to start suckling
 - ✘ Easy to use energy for heat and strength
 - ✘ Symbiotic to enhance microflora
 - Prebiotics + probiotics
 - ✘ Growth preparation



PuppyBoost



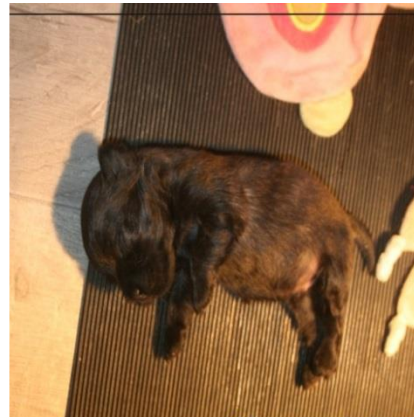
Very weak puppy at birth



PuppyBoost

*So efficient that you can see
a visual effect on animals only
few hours after use!!*

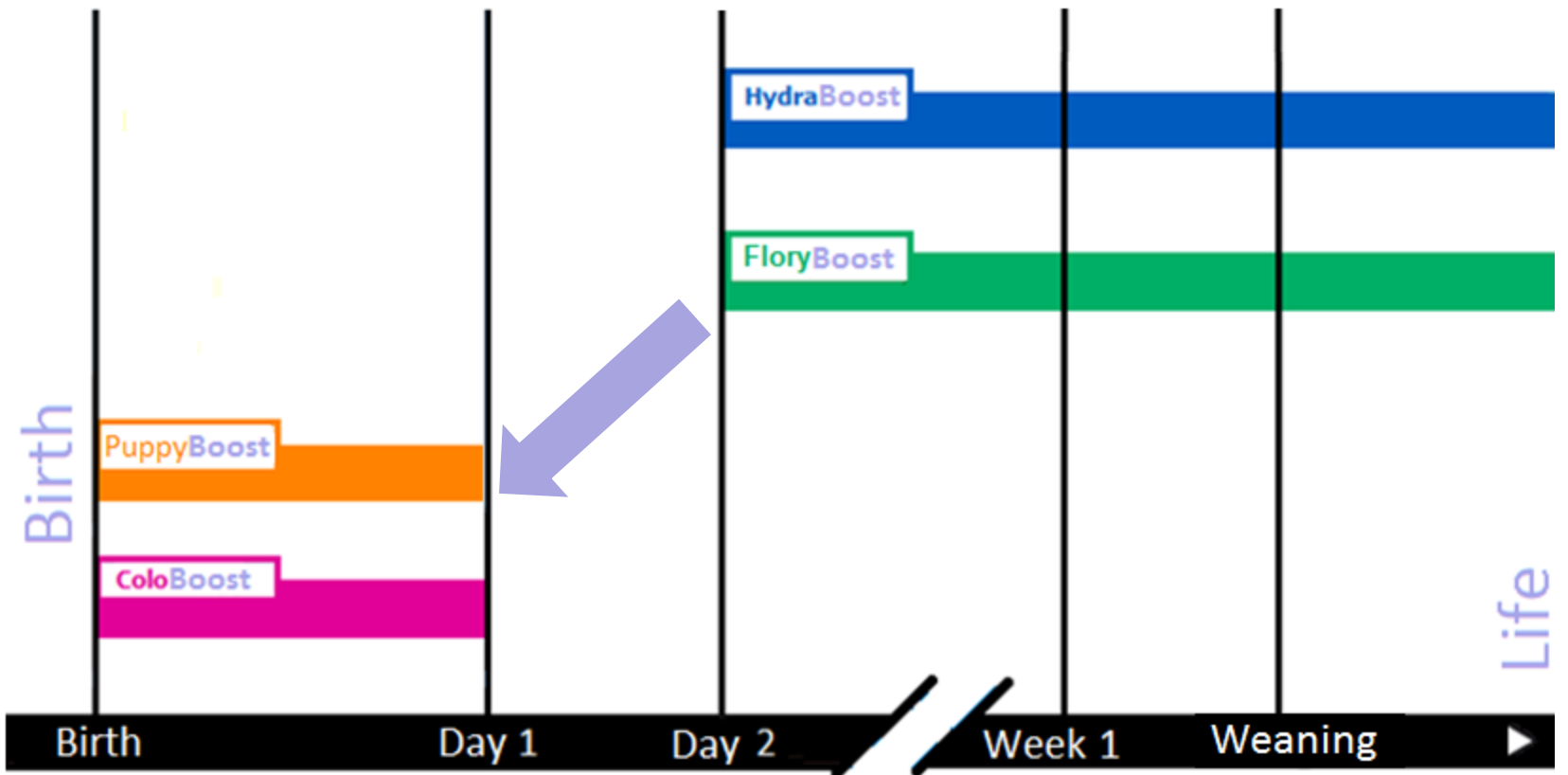
Fast recovery



Good survival



Puppy program



Puppy program

Puppy/ kitten stimulation at birth



- ColoBoost pet

- ✘ Immunity booster

- ✘ When ?

- Bad quality of colostrum
 - Not enough colostrum
 - Early lactation (colostrum is turning to milk before birth : colostrum is poorer)



- PuppyBoost

- ✘ Energy booster

- ✘ When ?

- Good quality of colostrum
 - Weak puppies and kittens
 - Cold or wet environment
 - Poor maternal instinct



PuppyBoost

Thanks for your attention !



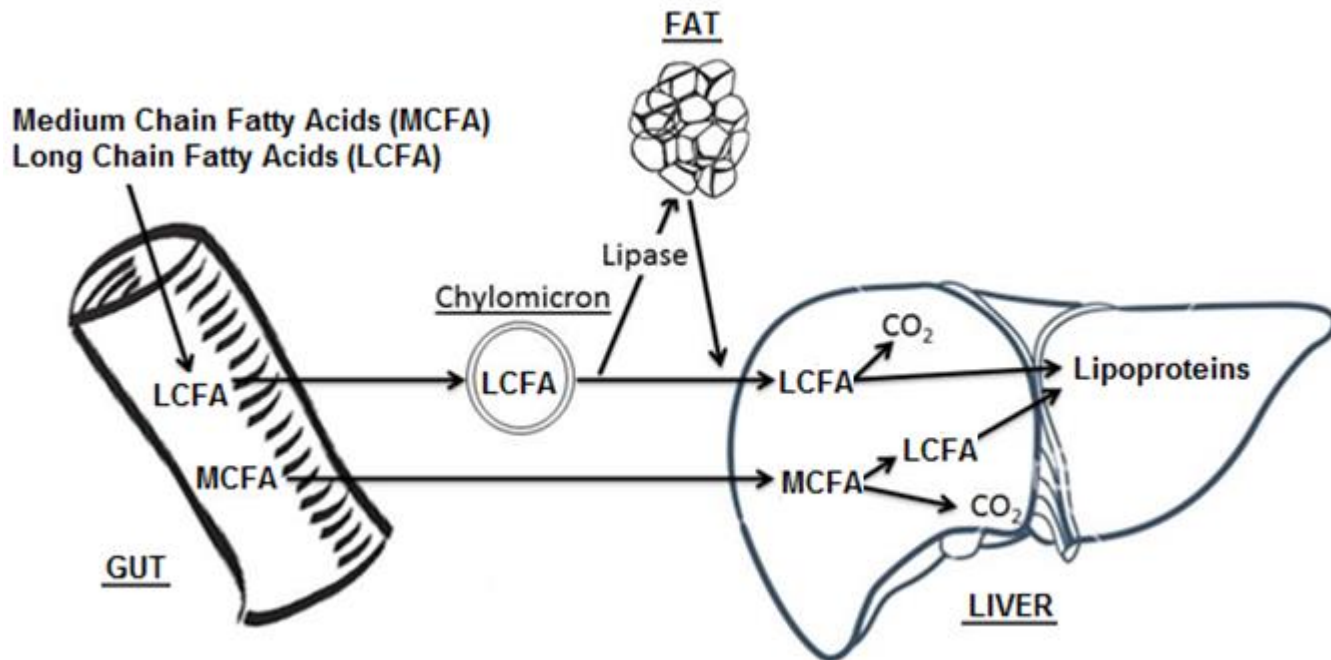
Energy line

To learn more ...

Absorption of fatty acids



- No need of lipid enzymes to use MCFA

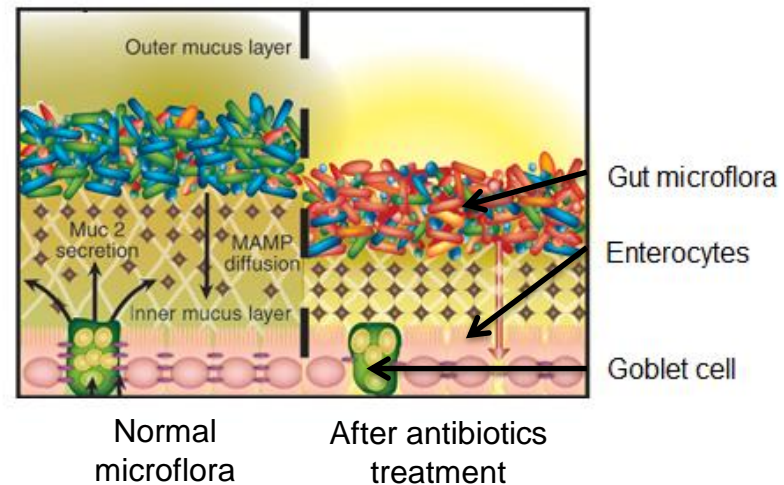


To learn more ...

Gut microflora



- ✗ Also called microbiota
- ✗ Includes billions of bacteria (100 000 billions)
= 10 to 100 times more than the number of cells of the whole body
- ✗ Includes hundreds of bacteria species
- ✗ Specific and stable composition unless in case of
 - Infection
 - Stress
 - Drug therapy (antibiotics)
 - Feed transition



To learn more ...

Probiotics



- ✘ Live bacteria
- ✘ That have a positive effect on gut microflora, enhancing growth of positive species
 - Help to maintain microflora equilibrium
 - Reduce gut microflora sensitivity to biotic and abiotic stresses
- ✘ How does it work ?
 - Modulate immune system (act like a vaccine: non pathogenic bacteria that mimic pathogenic bacteria)
 - Reinforce intestinal mucus layer by stimulating mucus production
 - Produce antibiotic products (bacteriocins against bacteria and propionine against virus)
 - Anticancer activity by mutagenic substances destruction
 - Digestion of fibers that can't be digested by the animal

To learn more ...

PFC and KFC



- **Puppy /Kitten Fading Complex**

- ✘ In fading puppy syndrome (FPS), a newborn pup born apparently healthy fails to thrive despite all possible nursing care and therapy. (Ranjan A, 2010)

- ✘ Etiology is diverse:

- Environment:

- Low temperature that leads to hypothermia

- Maternal factors:

- » Overweight of the bitch that leads to accidental crush of puppies

- » Maternal neglect, especially for young bitches

- Care:

- » No removal of placenta (pneumonia due to inspiration of placental fluid)

- » No cleaning and disinfection of navel cord (risk of infection)

- Genetic factors:

- Physical defects (breed, inbreed...)

- Birth weight

- Infectious agents:

- Bacteria

- Virus

- Parasites

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