PuppyBoost



Energy booster

For newborn puppies and kittens





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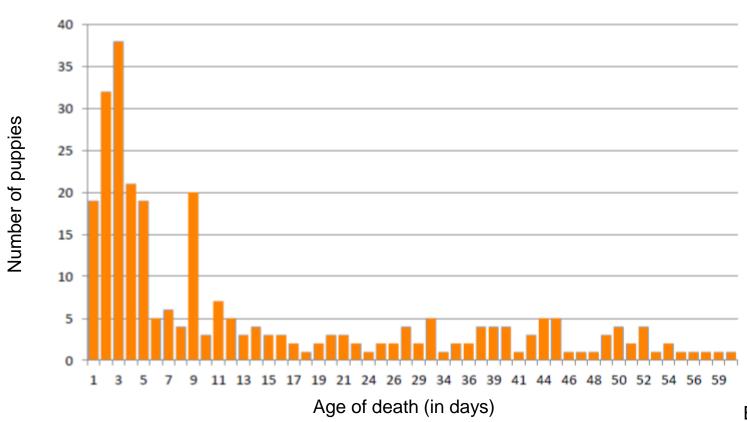


Forewords



Most of puppy mortality occurs in the first days of life

Distribution of death of puppies born alive N=295



Belin, M. 2013

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 senticoccus)
 - Symbiotics:
 - Probiotics (bacteria *E. faecium*) and prebiotics (yeast walls)

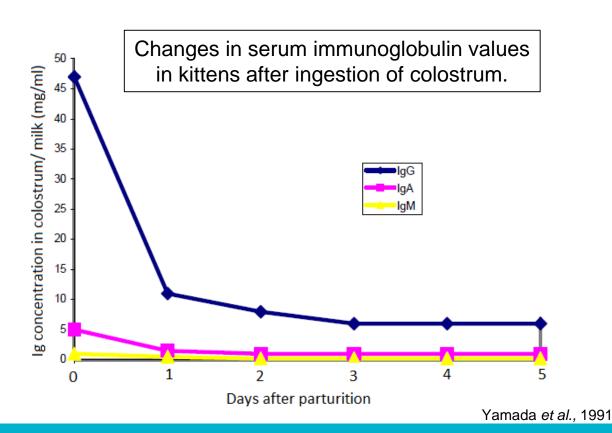




PuppyBoost target



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



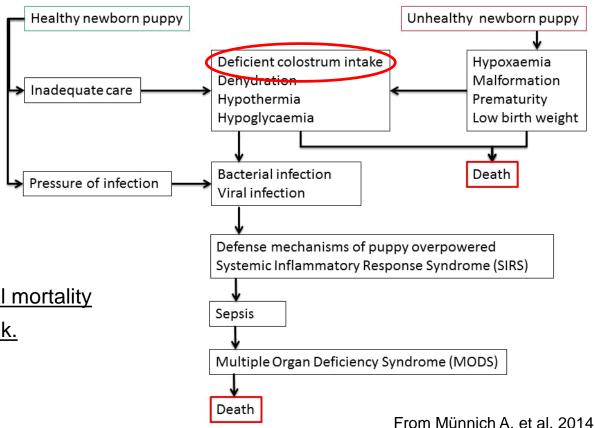




PuppyBoost target



- 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



No sucker reflex Weak newborn pets

Long partum Small/ weak newborns Hypothermia



Brain timulant

Hypoglycemic young and adults

Exhausted dogs (sport...)
Stress +++

Weak puppies and kittens







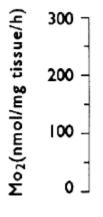


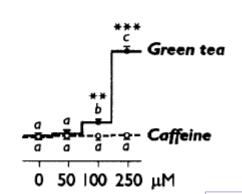
Stimulant: Brings tonicity and vitality

- 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







Stimulant

- Brings tonicity and vitality:
 - Adaptogen
 - Siberian ginseng helps the newborn pet to adapt to its new environment
 - Vitamins B1 and B5



Quicker colostrum intake







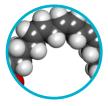


Energy

- Brings easy to use energy
 - Glucose



• MCFA: medium chain fatty acids



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







Stimulant

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

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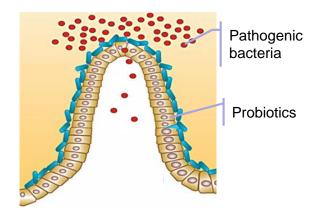




Gut protection

- Probiotics
 - Enterococcus faecium
 - Barrier effect
- Prebiotics:
 - Prebiotics like: MCFA
- Colostrum and milk are better used
- Less digestive disorders





Probiotics barrier effect

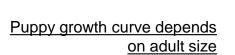


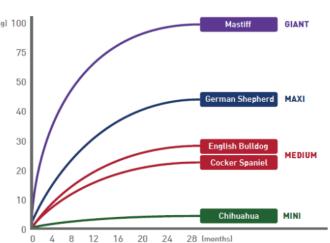




Growth booster

- 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

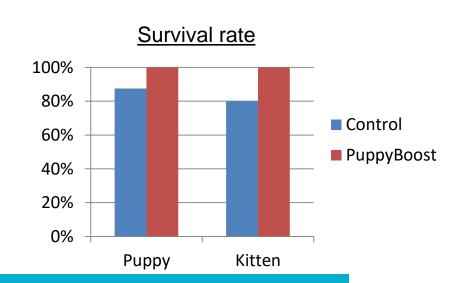






Trial

- 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.





- 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









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



Birth

5 hours

Day 2

Hypoglycemia in adult

Take home message



PuppyBoost, an 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

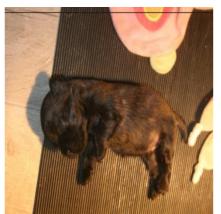


Very weak puppy at birth

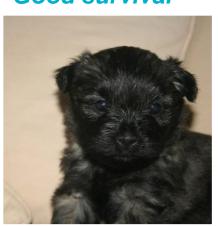
So efficient that you can see a visual effect on animals only few hours after use!!



Fast recovery



Good survival



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 !

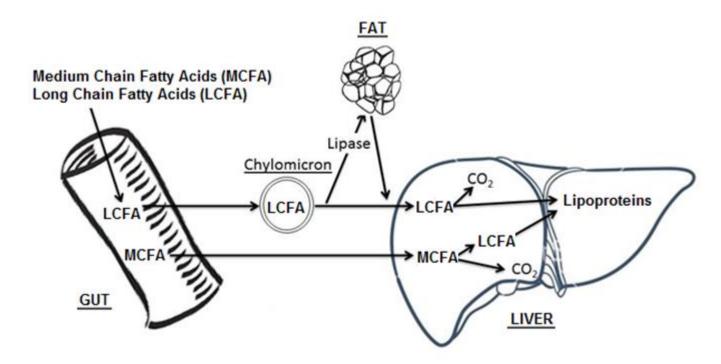






Absorption of fatty acids

No need of lipid enzymes to use MCFA



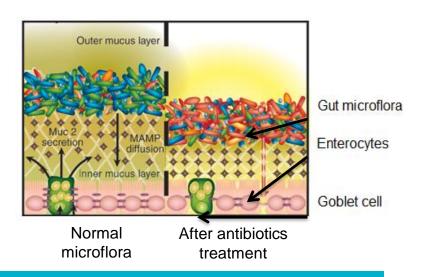






Gut microflora

- 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





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







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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