



**TESTING LAB**

TEST YOUR PRODUCT

- Testing Lab is specified for user oriented product testing and development for sports and wellness products
- We test
  - Sports products
  - Wellness products
  - Healthy foods
  - Technology products
  - Sports equipment
  - Sportswear
  - Sports nutrition
  - Services and applications
  - Products that are already on the market
  - Products in their development phase



# Green Canine

## Objective user testing

- Content of user testing
- Tested products
- Test group
- Results
- Tested brand



# Content of user testing

- Objective user experience
- Users point out product functionality, effectivity and quality
- 25 testers
- Product was used by 42 dogs
- Test was performed in two periods:
  - Period 1: 1-1,5 months on december and on january in Finland. This means winter conditions and temperature was above and below zero degrees during the test period
  - Period 2: 1-1,5 months on june and july in Finland. This means warm and sunny conditions and temperature was 20-30 degrees during the test period



- Green Canine



# Instructions how to use the products

## ■ Green Canine

- 1-2 spoons (1 spoon = 15 ml) for basic hydration and 2-3 spoons for tougher training. Spoons could for example be mixed with 1 litre of water.
- It was recommended to use the product daily. Product could be used 1-3 times a day and the amount of spoons could be chosen based on training and conditions.

## Test group

- 25 testers
- On each tester 1-4 animals used the product
- Totally product was used by 42 dogs:
  - Cross country / competition (10), hunting (17), agility (7) and other dog use (8)
  - European champion in cross country and other competitive dogs that are training in order to get the top level were part of the test group. For those dogs, measuring the performance was important and normal.

## Blood glucose measurement

- The idea was to do 10 measurements on each animal.
- Wellion Vet Gluco Calea blood glucose meter was used.
- Blood glucose level was measured before using the product and 30 minutes after using the product because after that time blood glucose level should be at the highest level
  - In addition, testers wrote down possible other given nutrition and done sport between the measurements

## Results – Green Canine



## Summary of the test results

- 80 % of the testers would recommend Green Canine to a friend
- 64 % of the testers were pleased to an increased performance
- 68 % of the testers were pleased to recovery
- Energy increased
- Drinking increased
- Tasty
- Stomach friendly



# Green Canine – Objective user testing



## The effects of using the product on different weather conditions

- The results were similar on winter and summer test periods. Anyhow, on sunny and warm summer weather testers noticed the effects of using the product a bit more clear/efficient way then during the test period on the winter conditions. This was shown especially on stamina.
- During the both test periods, using the product had similarly positive effect on drinking. Animals drink more compared to drinking only water.

# Performance

- Dogs were more playful and energetic
- Green Canine helped well on the performance of tougher training sessions and activities. The effect was shown more clear the longer the dogs had used the product.
- Dogs also drink and eat better when using the product and in addition to electrolytes this also had a positive effect on performance
- Few testers noticed increased performance clearly from cycling training sessions in which the dogs were able to run on a faster speed than normally
- Tester comment: "New records were done on all the test routes during the test period. Surely routes also became a bit faster when ground froze in the beginning of a winter time."
- The performance stayed good despite the warm and sunny summer conditions
- Some of the dogs were in the basic season (not a race season or an tough activity season) and they were not able to estimate the performance and recovery easily. The estimation was performed after the test period on winter time.
- 64 % of the testers were pleased or very pleased on an increased performance
- 36 % of the testers were not able to estimate the effect on performance



# Stamina

- Agility dogs were able to do more repeats than normally and the speed on each round did not decrease.
- Dogs had more stamina than normally. Especially older dogs had a significant difference on their stamina and those dogs were able to drive the whole long day when they were using the Green Canine.
- Dogs were able to run whole day better on the forest. They had more stamina also on cross country running and they could train longer times than before using the product.
- Increased stamina was noticed on the best way on a long duration activities and especially when dog had no rest times.
- Tester comment: "The dog had enough stamina also on over 5 hour trainings".
- Despite the warm summer weather, the dogs had plenty of stamina and they were not tired after running on the forest. During the long summer period, using the product increased the stamina of the dogs.
- The product was clearly efficient and it improved the stamina.



# Recovery

- Dogs recovered faster for the next day after a tough training activity
- Dogs had better performance than normally on the second driving day when they had two long driving days next to each other. This shows that recovery was more efficient when Green Canine was used.
- Tester comment: "The dog had good performance and stamina on both tough cycling training sessions done on two days next to each other".
- Tester comment: "The massager said that the state of dogs muscles was great"
- The product made recovery faster, when the product was given between the attempts.
- 68 % of the testers were pleased or very pleased on recovery
- 32 % of the testers were not able to estimate the effect on recovery

## Increased attentiveness

- Dogs were more attentive at home and they followed activities of their family members more than normally. Dogs were always ready to do something and as a sign of that they stood up themselves.
- Dogs were more alert and especially older dogs were more alert than normally

# Hunting

- Testers said that in the beginning of the hunting season the dogs had surprisingly good stamina and the dogs were more ready for the next hunting day than normally.
- During the hunting season, the dogs were more energetic and the dogs had more stamina. The dogs were able to drive the whole long day and the dogs could run the whole day better on the forest than normally. Increased stamina was noticed on the best way on a long duration activities and especially when the dogs had no rest times. The dogs also performed the challenges of the day better than normally due to better stamina. The dogs were also able to concentrate better. When using the product, some of the dogs were more alert than normally.
- In addition to increased stamina, the dogs were better recovered for the next hunting day on the following day. The recovery was better overall on the hunting dogs. Especially older dogs had a significant difference on their stamina and recovery.
- On the hard training sessions of the hunting dogs, the performance was better than normally. By using the Green Canine, the dogs also drink and eat better than normally. Testers said that it gave a positive effect also on the performance, stamina and recovery.
- 80 % of the owners of the hunting dogs would recommend Green Canine to a friend.



## Hydration

- Product was tasty.
- Dogs which normally did not drink well, drink well water mixed with the Green Canine product. Dogs drink easily and more than normally. The desire of drinking increased during the whole day and not only when dogs were drinking water mixed with the Green Canine product.
- When using the product, the dogs drink more compared to drinking only water
- Product worked without any problems on dogs who normally easily have stomach problems.

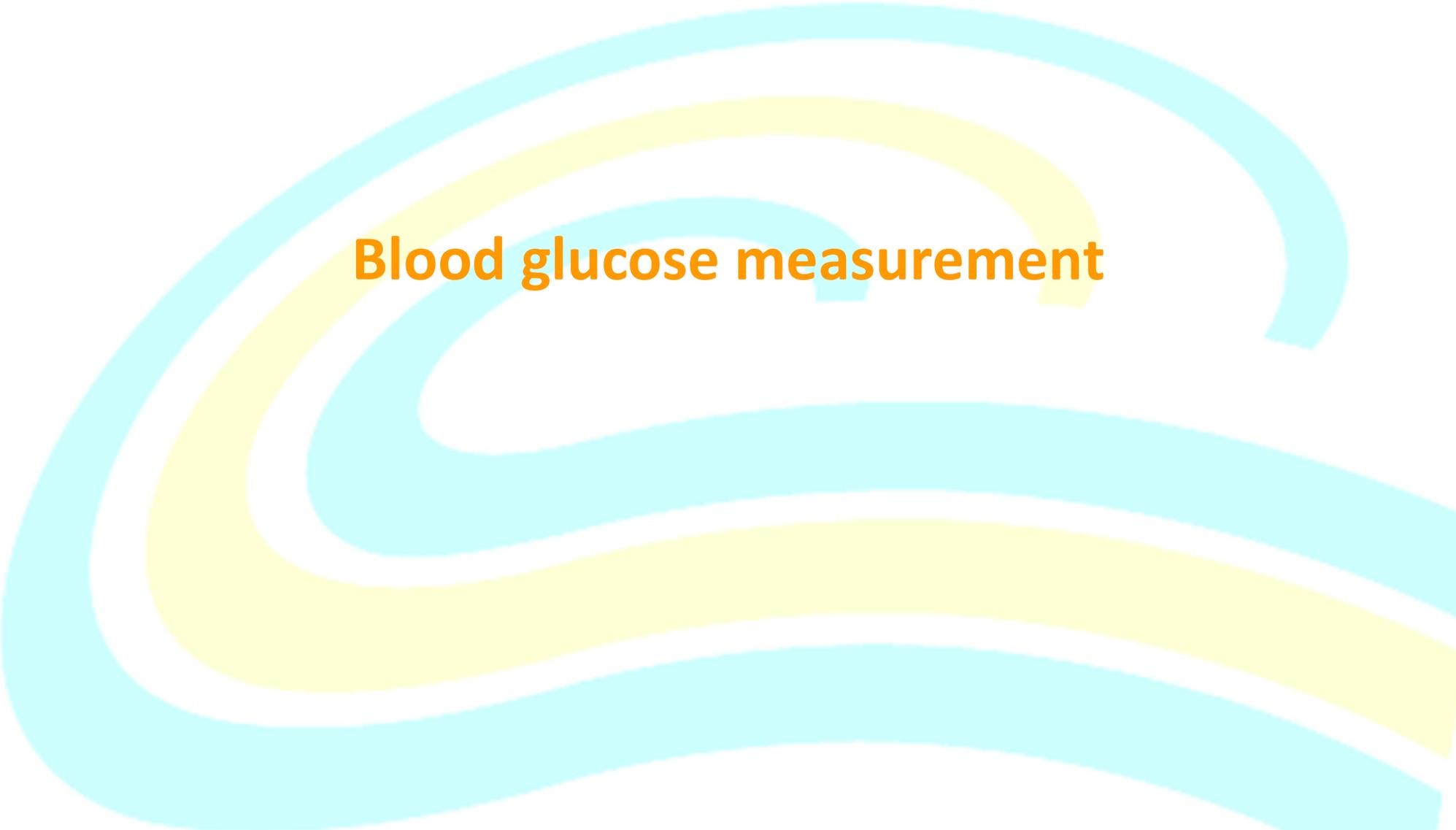
## Adverse effects

- One tester mentioned that dog became a bit over energetic at home. This happened because of the extra energy given by the product.

# The Tested Testing Lab brand

- Tested Testing Lab is a sign of quality!
- Sport and wellness products are tested on sporting people
- Tested high quality products are awarded the Tested Testing Lab brand licence
- Green Canine is awarded the Tested Testing Lab brand licence





# Blood glucose measurement

# Blood glucose measurements

- 10 measurements on each animal.
- Wellion Vet Gluco Calea blood glucose meter (own chip for dogs and horses) and Wellion Vet Gluco Calea test stripes were used
- Blood glucose level range reported on the test stripes for the dogs were 5,4-8,7 mmol/L
- Blood glucose level was measured before using the product and 30 minutes after using the product because on that time blood glucose level should be at the highest level
  - In addition, testers wrote down possible other nutrition and sport between the measurements
- If single measurements were not reliable, those were not included to the results. For example, if blood glucose of the second measurement was decreased compared to the first measurement before the product was used.

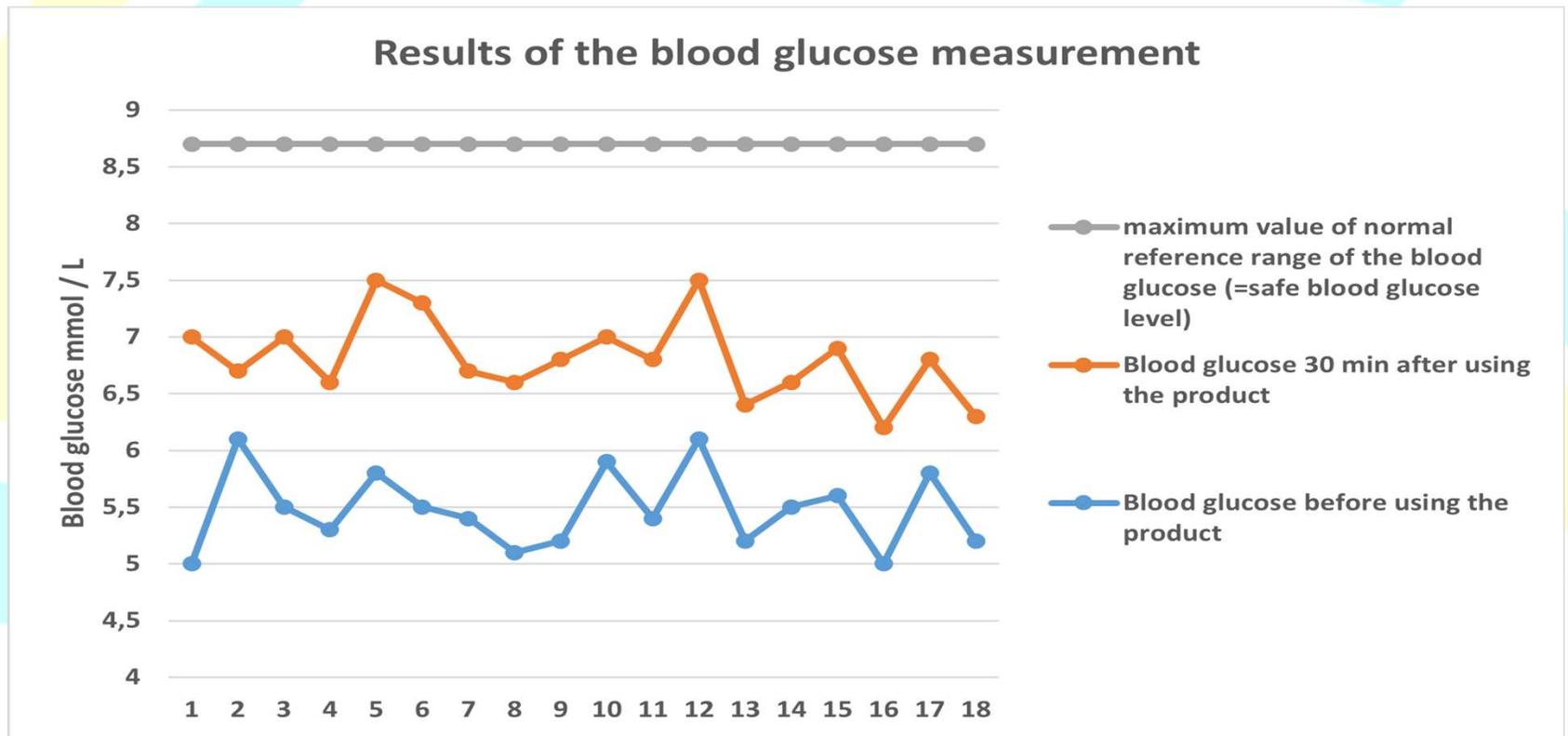
## Results of the blood glucose measurement

Dog	Blood glucose before using the product	Blood glucose 30 min after using the product				Given nutrition	
	Average	Average	Standard deviation	Increase in blood glucose	Max. Value	Given serving	Other nutrition
1	5,0	7,0	0,3	2,0	7,3	45 ml	Dry dog food
2	6,1	6,7	0,2	0,6	7,0	15 ml	Dry dog food
3	5,5	7,0	0,7	1,5	7,7	30 ml	Dry dog food
4	5,3	6,6	0,3	1,3	6,9	30 ml	no
5	5,8	7,5	0,4	1,7	7,9	45 ml	Dry dog food
6	5,5	7,3	0,2	1,8	7,7	45 ml	Dry dog food
7	5,4	6,7	0,3	1,3	7,1	30 ml	no
8	5,1	6,6	0,4	1,5	7,2	30 ml	no
9	5,2	6,8	0,3	1,6	7,2	30 ml	Dry dog food
10	5,9	7,0	0,4	1,1	7,4	30 ml	Dry dog food
11	5,4	6,8	0,2	1,4	7,0	30 ml	no
12	6,1	7,5	0,4	1,4	7,9	30 ml	no
13	5,2	6,4	0,4	1,2	6,8	30 ml	Dry dog food
14	5,5	6,6	0,3	1,1	7,3	30 ml	Dry dog food
15	5,6	6,9	0,4	1,3	7,5	30 ml	Dry dog food
16	5,0	6,2	0,4	1,2	6,7	30 ml	Dry dog food
17	5,8	6,8	0,3	1,0	7,4	30 ml	Dry dog food
18	5,2	6,3	0,4	1,1	6,8	30 ml	Dry dog food

- On average blood glucose increased 1,3 mmol/L
- Maximum value of the blood glucose did not increase over the normal reference range (8,7 mmol/L) on any dog
- 30 minutes after using the product, blood glucose level is on it's highest level and on that time the results were following:
  - Blood glucose average value 6,8 mmol/L
  - Blood glucose average value from the maximum values 7,3 mmol/L
  - Maximum value of the blood glucose did not increase over the normal reference range (8,7 mmol/L) on any dog
- Start situation before using the product compared to the end situation 30 minutes after using the product:
  - Blood glucose average value in the start situation 5,5 mmol/L
  - Blood glucose increased on average 1,3 mmol/L to value 6,8 mmol/L.
  - Normal safe reference range is 8,7 mmol/L which is much more than 6,8 mmol/L (average highest blood glucose level)

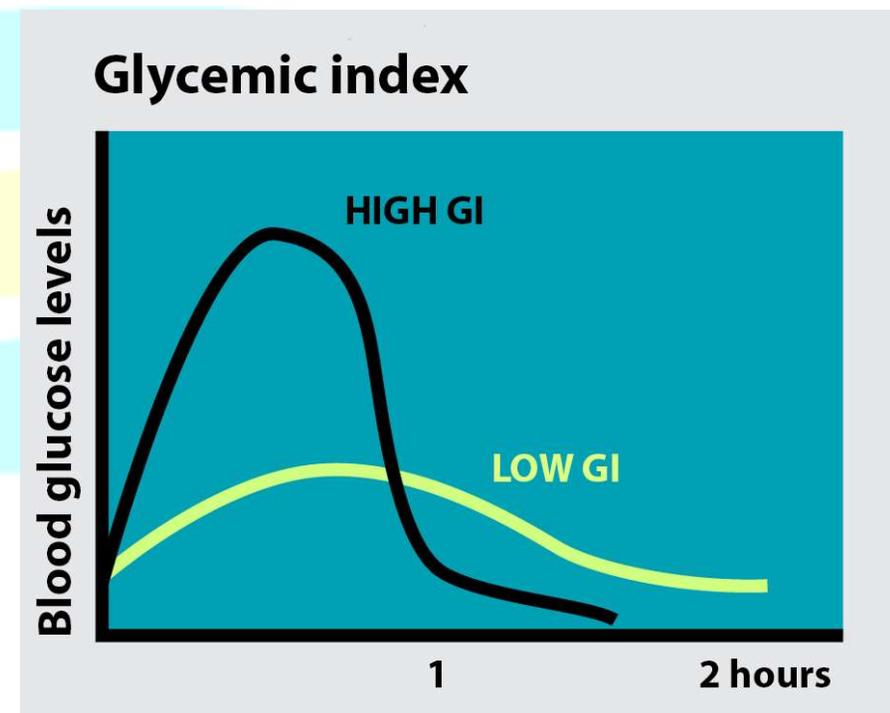
## Results of the blood glucose measurement (2)

- Figure below illustrates the effect of using the product on blood glucose. Orange curve shows blood glucose 30 min after using the product and grey curve shows the maximum value of normal reference range of the blood glucose. Results show that blood glucose is yet far from the maximum value of the normal reference range of the blood glucose (=safe blood glucose level)



# Glycemic index

- Glycemic index (GI) illustrates the absorption speed of carbohydrates on the body. This means how fast blood glucose level increases after eating some specific nutrition
- High GI means that blood glucose increases rapidly and in this case blood glucose also comes down rapidly (see black curve on the figure)
- Low GI causes smaller effect on blood glucose (see yellow curve on the figure)



## Glycemic index (2)

- Glycemic index is measured with scale 0 – 110
  - Glycemic index is low between 0 – 55
  - Glycemic index is average between 56 – 69
  - Glycemic index is high between 70 – 110
  - (Source: [askelterveyteen.com/kuinka-glykeeminen-indeksi-lasketaan](http://askelterveyteen.com/kuinka-glykeeminen-indeksi-lasketaan))
- GI of a normal cane sugar is 65 and GI of maltodextrine is 106-137 (source: wikipedia)

## Product comparison

- Green Canine is based on Masajo Intiaanisokeri-täysruokosokeri and it has low GI which means that it is absorbed slowly given mineral rich energy during a long time.
- Products similar to Green Canine are based on maltodextrine instead of full cane sugar. Maltodextrine is fastly absorbing carbon hydrate which could be compared to normal processed sugar (high GI).

## More information

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