



Lactium

**CDB test in vivo on
Wistar male rats**

**Comparison between
lactium™ versus
St John's Wort and
Kava- Kava**

February 2006



Comparison between lactium, St John Wort, Kava-Kava and Diazepam on rats
(CDB model)

1- MATERIEL & METHODS

Conditioned Defensive Burying method

- Acclimatization of the rats during a 7-days period. Oral administration was made 1 hour before the test
- After shock administration (stressing event), the behavior of the rats were recorded during 5 minutes
- Global anxiety score = Sum of the rankings for three parameters:
 - duration of probe-burying;
 - number of head stretching towards the probe
 - percentage of approaches towards the probe followed by retreats



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Products orally administrated (per os) :

Reference : saline solution

Diazepam : 3 mg/kg

=> *Equivalent for a 70 kg man to 15-20 mg daily intake*

St John's Wort : 41.5 mg/kg of dry plant extract at 0.3 % of hypericin.

=> *Equivalent for a 70 kg man to 500 mg daily intake*

Kava-Kava : 12 mg/kg of plant extract at 30 % of kavalactones

=> *Equivalent for a 70 kg man to 120mg daily intake*

lactium™ : 15 mg/kg

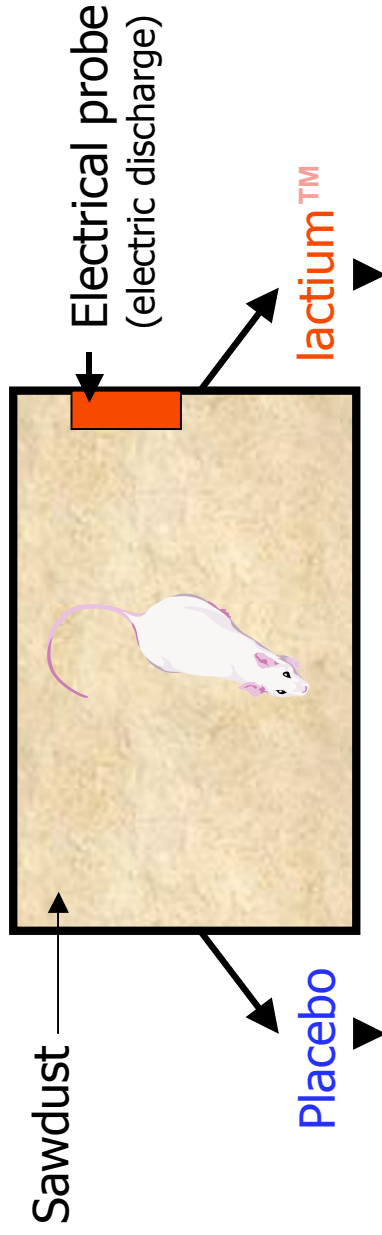
=> *Equivalent for a 70 kg man to 150 mg daily intake*



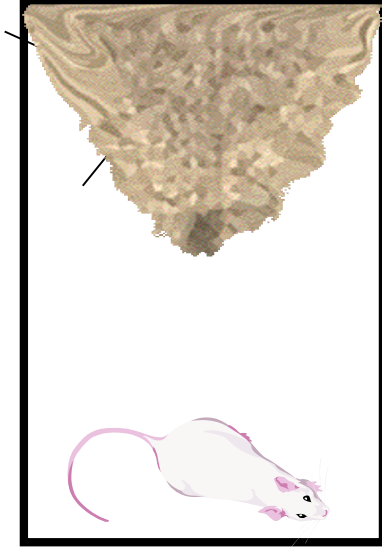
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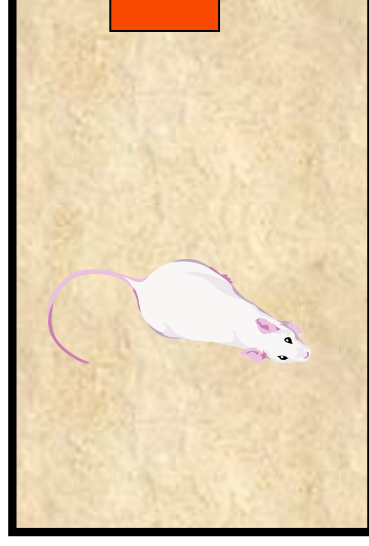


ANXIOUS BEHAVIOR



The rat buries the electrical probe

NO ANXIOUS BEHAVIOR

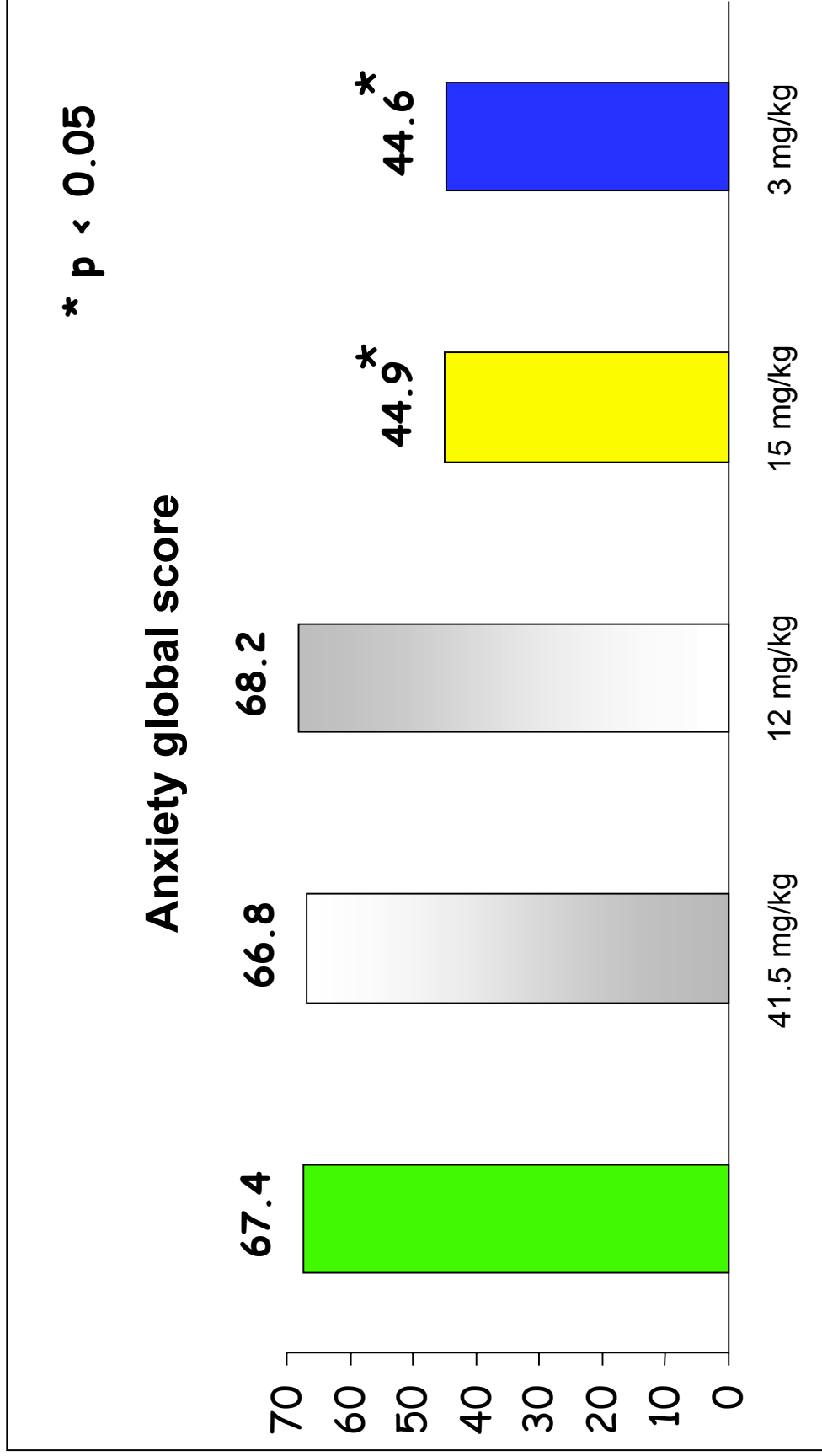


The rat doesn't bury the electrical probe



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2- RESULTS



Saline solution

St John's Wort

Kava-Kava

lactium™

Diazepam



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Conclusion

Anxiety global score on rats who have ingested lactium™ is significantly lower ($p < 0.05$) than in the saline solution group.

Anxiety global score on rats who have ingested St John's Wort and Kava-Kava is not significantly different than in the saline solution group.