

Review of: "Effect of Yogurt on Fluoride Induced Toxicity in Rabbits"

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Potential competing interests: No potential competing interests to declare.

The authors have done a lot of experimental work but in writing the manuscript may have made a few errors in the description of the study.

Abstract: the reader does not know the identity of the groups labelled with letters. The Abstract needs to be rewritten with less detail of results and more on methods. We do not know the units of excretion (mmol/L or mmol/day?) nor do we know the amount of F to induce fluorosis nor the amount of yogurt provided.

Introduction: the authors target the role of microorganisms in gut absorption, which is fine, But they fail to mention that yogurt contains a lot of calcium and that others have shown that calcium (i.e., Ca++) reduces F- absorption by forming a compound (CaF₂) that is difficult to absorb.

Objectives: what is hypothesis? Are there secondary objectives?

Methods:

Groups – Groups C and D are not matched to a F dose. Animals are given 15g yogurt (C) or 50 g yogurt (D). The only F+yogurt group is G. Why did you test different levels of yogurt? It should be explained in Objectives section. Yogurt is food with protein and electrolytes that can affect renal handling of nitrogen and Na, Cl and K.

Creatinine- it is not clear why group F had lower Cr excretion. The amount of yogurt given in F is less than that of group D so the microbe explanation does not explain what could have happened.

Conclusions: After examining all the results and the figures it appears group F showed a treatment effect. However the authors report group F was given 30 grams of yogurt. Only group G was F+yogurt. Did the authors mislabel the groups?

References:

The authors are missing some important references:

- Pius, A.; Viswanathan, G. Determination of calcium dose for minimizing fluoride bioavailability in rabbits *Curr. Sci.* **2008**, *95*(6), 770-773.
- Kebede A.; Retta, N.; Abuye, C.; Whiting, S.J.; Kassaw, M.; Zeru, T.; Woldeyohannes, M.; Malde, M.K. Minimizing bioavailability of fluoride through addition of calcium-magnesium citrate or a calcium and magnesium-containing

vegetable to the diets of growing rats. *Int. J. Biochem. Res. Rev.* **2016**, *10*(2), 1-8. doi:10.9734/IJBCRR/2016/23693

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