**Neuronal responses by visual stimulation of main-dish foods and sweets during hunger and satiety: A functional MRI study in young Japanese men**

*Outcome: Major revision*

*Overall feedback:* The topic is of crucial importance for the prevention and treatment of eating disorders, weight management and effects of diet on neural efficiency and possibly mental health. However, I would recommend that the authors focus on a more thorough critical appraisal of the findings and add some comments on how their findings contribute to clinical practice and knowledge in the nutritional field.

*Abstract:* The background information, aims and significance of the findings are absent. Further, since the effects of food-related stimuli on the functional activation of the brain is not novel, it remains unclear why the authors conducted this study (see Paul A. Smeet’s work e.g. Functional magnetic resonance imaging of human hypothalamic responses to sweet taste and calories).

Further, the authors should consider being more cautious when they talk about neuronal activation as fMRI is an indirect measure of neural activity. I wonder if changes of cerebral vascularization relative to hunger-like feeling could have had an impact on these findings. Please comment

Did the authors check the diet of the participants as part of the eligibility criteria. For instance did they check blood sugar levels after the “catered dinner”? Similarly, the morning milkshake may lead to increased blood pressure, high rate and blood flow speed in individuals on diets poor in carbohydrates, hypoglycemic and/or diabetic-like individuals (who may have not known about/reported their condition).

Could the authors comment on whether the current findings could be gender-related or due to ethnicity.

*Methods:* I would have a query regarding the following statement: “…whereas the voxels with activated numbers of less than five in each region were considered to be not reliable and were ignored…”. Could the authors comment on the choice of clusters with minimum 5 contiguous voxels? Also what kind of multiple comparison correction did they use.

Further could the authors explain why the fMRI investigation for the fasting condition was scheduled for 12:00 noon. Were cortisol levels measures and could authors comment the relationship between cortisol and hunger.

Further, is well known that intake of carbohydrate and sugar (e.g. fructose, syrop) may induce an acute state of hunger regardless of the amount of food previously ingested. Could the authors comment on this.

Limitations of the study and future directions are missing.

*Technical comments:* I would recommend a thorough editing and proofreading of of this paper. For instance, I am not sure that “main-dish foods” is meaningful in the English language.