Response to the Comments of Reviewer 1

We wish to thank the reviewer for his/her comments. We have made the following modifications in response to the comments:

- 1. This has been corrected. Image profiles are now reported only for short times of immersion, when the water penetration from the top and the bottom of the tablets did not affect the middle part of the tablets and thus the effect can be neglected (as can be seen in the profiles in Figure 7).
 - 2. Normally, T_1 of water decreases with decreasing concentration. We have measured that the maximal T_1 of water inside the tablet was about 800 ms, which corresponds to the highest water concentration. Since the recovery time was fixed at 2 s, no attenuation should arise from the difference of T_1 . These comments are now added in the text (pages 4-5).
 - 3. We have added one sentence to explain how the tablet size was extracted from images (page 6, top, 2nd paragraph).
 - 4. We agree with this comment. We restrict now the application of Frisch equation for immersion times when the swelling and the effect of diffusion in the longitudinal direction (i.e., top and bottom of the tablets) could still be neglected. Thus, only the kinetics of diffusion at 25°C could be obtained when the diffusion of water is slower. The corresponding paragraph has been rewritten (pages 6-8).
 - 5. See Response #1 above. The interpretation of the shape of the concentration profiles has been modified (page 8, middle).
- 6. This has been modified. As stated in Response #4, the Frisch equation could not be applied at 37°C. In this case the kinetics of the diffusion of water inside the tablet could no longer be determined. Therefore, we have taken the advice of the reviewer and restricted our discussion to the qualitative aspects only.

Moreover, we have added some descriptions of the structure of high amylose starch in the conclusion.