

**Intranasal insulin enhances brain functional connectivity mediating the relationship between adiposity and subjective feeling of hunger**

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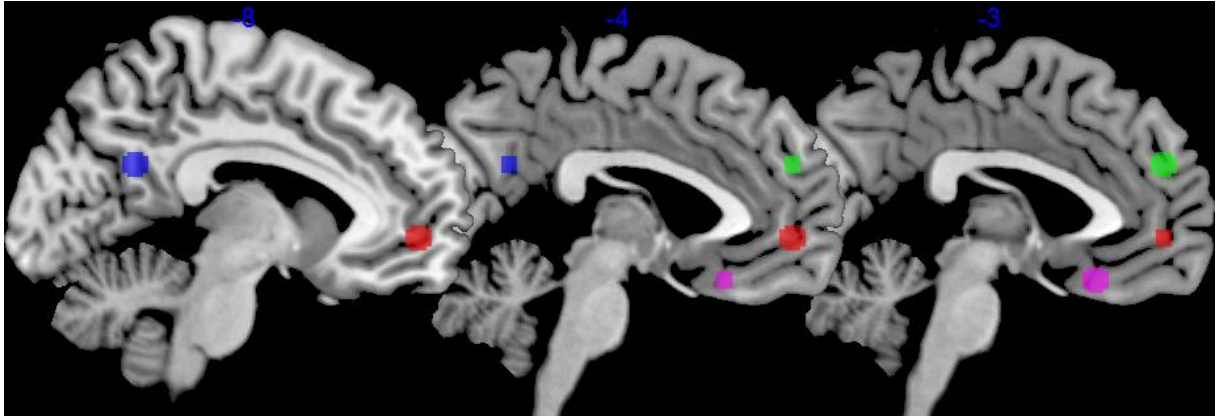
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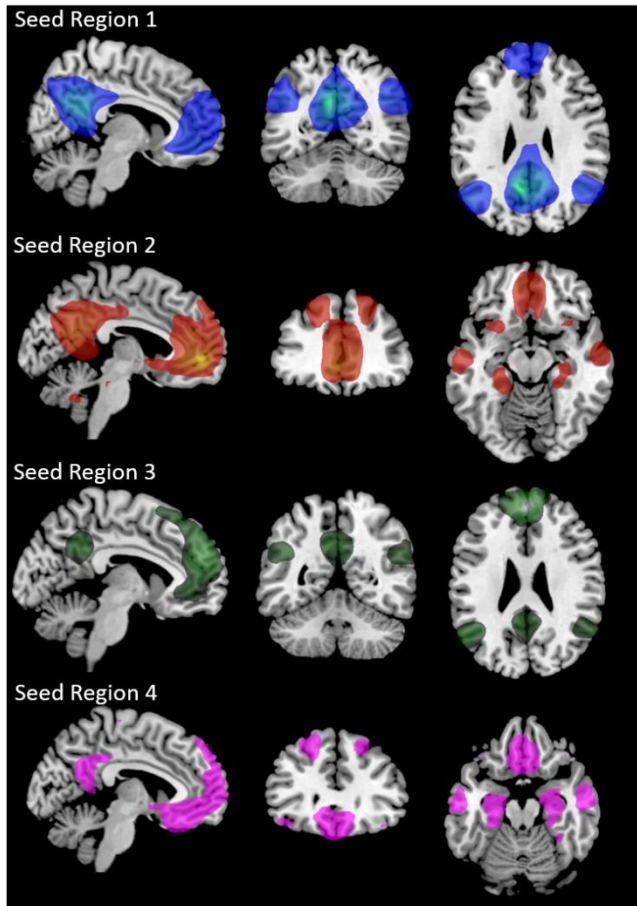
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**Supplementary Figure 1.** Default-mode network (DMN) seed regions based on Hanna-Andrews et al., displayed on a standard anatomical image (sagittal view). The four seed regions are indicated by different colors. Blue: posterior cingulate/precuneus  $x: -8$   $y: -56$   $z: 26$  (seed 1); Red: anterior medial prefrontal cortex  $x: -6$   $y: 52$   $z: -2$  (seed 2); Green: dorsal medial prefrontal cortex  $x: 0$   $y: 52$   $z: 26$  (seed 3); Violet: ventromedial prefrontal cortex  $x: 0$   $y: 26$   $z: -18$  (seed 4). All seed regions included a 5 mm sphere. Functional connectivity maps of the DMN were obtained using a seed-based voxel wise correlation approach by computing functional connectivity between the seed region and each voxel within the brain.



**Supplementary figure 2.** Group-averaged default mode network (DMN), based on Hanna-Andrews et al., of lean and overweight/obese participants under baseline condition (*rsfMRI*) for each seed separately ( $p_{FWE} < 0.05$ , whole-brain corrected). Functional connectivity maps of the DMN were obtained using a seed-based voxel wise correlation approach by computing functional connectivity between the seed region and each voxel within the brain. The four seed regions are indicated by different colors. Blue: posterior cingulate/precuneus  $x: -8$   $y: -56$   $z: 26$  (seed 1); Red: anterior medial prefrontal cortex  $x: -6$   $y: 52$   $z: -2$  (seed 2); Green: dorsal medial prefrontal cortex  $x: 0$   $y: 52$   $z: 26$  (seed 3); Violet: ventromedial prefrontal cortex  $x: 0$   $y: 26$   $z: -18$  (seed 4). All seed regions included a 5 mm sphere.