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**Carbohydrate in the mouth enhances activation of brain circuitry involved in motor performance and sensory perception**

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**Supplemental Material**

Table S1      Random effects data analysis.

Contrast	Region	Coordinates (MNI space)			Max Z-Score	Cluster size
		x	y	z		
<b>Active &gt; CON</b>						
<i>Left hemisphere</i>						
	Left pre-central gyrus	-38	-14	53	4.30	23645
	Left post-central gyrus	-55	-23	49	4.27	23645
	Left lateral occipital cortex, inferior division	-45	-70	-13	3.74	5642
	Left central opercular cortex	-43	-3	8	3.81	5415
	Left insular cortex	-41	-6	5	3.61	5415
	Left cingulate gyrus, anterior division	-1	2	43	3.65	1823
	Left supplementary motor cortex	-1	5	56	3.61	1823
<i>Right hemisphere</i>						
	Right cerebellum	10	-51	-21	4.88	22265
	Right lateral occipital cortex, superior division	37	-86	13	3.93	22265
	inferior division	51	-74	-11	3.88	22265
	Right central opercular cortex	56	1	-1	3.81	2503
	Right insular cortex	44	0	2	3.37	2503
	Right cingulate gyrus, anterior division	1	2	45	3.52	1823
	Right supplementary motor cortex	1	0	60	3.51	1823
<b>PLA &gt; CON</b>						
<i>Left hemisphere</i>						
	Left pre-central gyrus	-35	-15	63	4.18	15032
	Left post-central gyrus	-52	-20	54	4.08	15032
<b>CHO &gt; CON</b>						
<i>Left hemisphere</i>						
	Left central opercular cortex	-58	-22	18	4.08	26602
	Left post-central gyrus	-40	-27	45	4.04	26602
	Left pre-central gyrus	-34	-14	67	4.00	26602
	Left insular cortex	-42	-2	8	3.93	5740
	Left lateral occipital cortex, inferior division	-47	-72	-14	3.78	4268
	Left supplementary motor cortex	0	4	47	3.81	3892
	Left cingulate gyrus, anterior division	-3	4	43	3.60	3892
<i>Right hemisphere</i>						
	Right inferior temporal gyrus	49	-55	-21	4.49	24079
	Right lateral occipital cortex, inferior division	48	-67	13	4	24079
	Right cerebellum	13	-47	-18	3.89	24079
	Right supplementary motor cortex	2	-1	64	3.79	3892
	Right superior frontal gyrus	4	20	59	3.62	3892
	Right supramarginal gyrus, posterior division	50	-37	56	3.96	3796
	anterior division	45	-26	36	3.62	3796
	Right post-central gyrus	45	-24	42	3.81	3796
	Right parietal operculum cortex	62	-34	30	3.62	2243
	Right angular gyrus	59	-50	23	3.54	2243
	Right pre-central gyrus	56	8	1	3.70	1925
	Right temporal pole	58	7	-3	3.61	1925
	Right central opercular cortex	54	7	-2	3.53	1925
<b>CHO &gt; PLA</b>						
<i>Left hemisphere</i>						
	Left superior frontal gyrus	-11	12	70	3.82	2086
	Left supplementary motor cortex	-7	-2	71	3.49	2086
<i>Right hemisphere</i>						
	Right temporal occipital fusiform cortex	24	-51	-13	3.85	3250
	Right lingual gyrus	14	-56	-9	3.82	3250
	Right intracalcarine cortex	5	-87	1	4.03	2752
	Right occipital pole	6	-90	8	3.64	2752
	Right superior frontal gyrus	9	-3	71	3.60	2086
	Right supplementary motor cortex	8	-8	72	3.49	2086

Table S1. MNI coordinates and statistics for peak activation clusters from the contrasts Active > CON, PLA > CON, CHO > CON and CHO > PLA during the active task. Z-statistic values are thresholded at  $Z > 2.3$ , corrected cluster significance threshold  $p = 0.05$ . Data are generated from a mixed effects analysis using the FLAME 1 + 2 model. No significant regions of activation were identified from the PLA > CHO contrast.