

Supplemental table 1: Effects of group, endogenous GLP-1 and treatment with liraglutide vs insulin on CNS responses to chocolate milk receipt

Contrast used	Comparison	Region	Side	Cluster	Z	p-FWE	MNI coordinates (x, y, z)
Group differences							
Choco > baseline	Healthy controls > T2DM (placebo)	Insula	R	43	2.92	0.04	39, 10, -14
		OFC	L	37	3.80	0.003	42, 32, -11
	T2DM > Healthy controls (placebo)	-	-	-	-	-	-
Choco > tasteless	Healthy controls > T2DM (placebo)	Insula	R	22	2.90	0.04	30, 20, -14
		T2DM > Healthy controls (placebo)	-	-	-	-	-
Endogenous GLP-1							
Choco > baseline	Healthy lean: placebo > ex9-39	Insula	R	15	3.07	0.03	45, 20, -11
		Insula	L	17	3.26	0.02	-45, 17, -14
	Healthy lean: ex9-39 > placebo	-	-	-	-	-	-
Choco > tasteless	Healthy lean: placebo > ex9-39	Insula	R	20	3.33	0.01	33, 22, -14
		Insula	L	5	3.07	0.03	-39, 14, -14
	Healthy lean: ex9-39 > placebo	-	-	-	-	-	-
Choco > baseline	T2DM: placebo > ex9-39	-	-	-	-	-	-
	T2DM: ex9-39 > placebo	-	-	-	-	-	-
Choco > tasteless	T2DM: placebo > ex9-39	-	-	-	-	-	-
	T2DM: ex9-39 > placebo	-	-	-	-	-	-
Effects of liraglutide vs insulin							
Choco > baseline	10 days: lir > ins	Caudate nucl.	R	26	3.32	0.01	9, 11, 1
		Insula	R	11	3.00	0.03	42, 23, -2
Choco > tasteless		-	-	-	-	-	-
Choco > baseline	10 days: ins > lir	-	-	-	-	-	-
Choco > tasteless		-	-	-	-	-	-
Choco > baseline	12 week: lir > ins	-	-	-	-	-	-
Choco > tasteless		-	-	-	-	-	-
Choco > baseline	12 weeks: ins > lir	<i>Region of amygdala</i>	<i>R</i>	<i>171</i>	<i>3.92</i>	<i>< 0.001</i>	<i>30, -7, -23</i>
Choco > tasteless		<i>Region of amygdala</i>	<i>R</i>	<i>113</i>	<i>4.02</i>	<i>0.001</i>	<i>39, 5, -26</i>

This table describes the areas where significant differences in activations were observed between groups (healthy lean vs. T2DM), during exendin 9-39 vs. placebo and effects of

liraglutide treatment vs. insulin treatment after 10 days and 12 weeks. For each comparison, the contrast choco > baseline or choco > tasteless is presented, determining in which areas activation in response to chocolate milk receipt is greater compared to baseline or tasteless solution receipt. The areas with significant differences are listed, including the cluster size of this effect, the Z value and the FWE corrected p-value after small volume correction. The last column describes the coordinates of the peak voxel of the observed difference in MNI space. T2DM, obese type 2 diabetes patients; R, right ; L, left; FWE, family wise error; MNI, Montreal Neurological Institute.