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3 **Supplement 1**

4 We weighed carefully whether we would include the 2 binge eating/purging type individuals with anorexia
5 nervosa (AN) or not to have a balanced design. The behavioral data suggested no differences and the values for
6 the 2 subjects were well within the range of the restricting group (see Table S2, available online). When
7 restricting the statistical comparisons to only the 17 restricting-type anorexic individuals and the 22 controls,
8 there were similar group differences as when including the 2 binge/purge-type anorexic individuals (see Table
9 S3, available online). Neuroimaging findings were found in similar regions when comparing the 17 restricting-
10 type anorexic individuals to 22 CW as when comparing the 19 restricting-type and binge/purge-type anorexic
11 individuals to 22 CW; however, at a lower significance threshold ($p < 0.005$ and 50 voxels; see Table S4, available
12 online). Because the behavioral measures were similar between the 2 binge/purge-type and 17 restricting-type
13 anorexic individuals and neuroimaging findings were in similar regions, we decided to include the 2 additional
14 binge/purge-type individuals in our study.
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Table S1. Demographic Variables Across Adolescent and Adult Study Groups.

Anatomical Region	Control Adolescents (A)		Control Adults (B)		Anorexia Nervosa Adolescents (C)		Anorexia Nervosa Adults (D)		F	p-value	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD			
Age (years)	14.82	1.82	27.42	6.28	15.37	1.42	23.11	5.78	41.11	<0.001	B>A***, D>C***
BMI (kg/m ²)	21.26	1.92	21.64	1.26	16.17	1.10	16.00	1.09	102.22	<0.001	A>C***, A>D***, B>C***, B>D***
Novelty Seeking	22.50	4.95	17.92	5.16	15.11	5.34	13.74	6.68	10.17	<0.001	A>C***, A>D***,
Harm Avoidance	10.86	5.89	9.58	3.99	21.16	7.62	23.74	5.41	32.06	<0.001	C>A***, D>A***, C>B***, D>B***
EDI 3 Drive for Thinness	1.05	1.84	0.75	1.87	13.68	6.81	12.58	6.43	48.25	<0.001	C>A***, D>A***, C>B***, D>B***
EDI 3 Bulimia	0.64	1.05	0.13	0.45	1.05	1.47	0.90	1.85	2.25	0.09	-----
EDI 3 Body Dissatisfaction	1.46	2.22	1.38	2.14	15.58	9.10	13.58	7.81	34.76	<0.001	C>A***, D>A***, C>B***, D>B***
Sensitivity to Reward	6.09	3.75	4.42	2.84	8.42	3.82	7.21	3.82	4.94	<0.001	C>B**
Sensitivity to Punishment	4.82	3.63	4.04	1.85	10.95	4.74	13.16	4.21	31.31	<0.001	C>A***, D>A***, C>B***, D>B***
State Anxiety	40.41	10.74	32.67	11.79	53.68	11.93	50.42	9.68	15.97	<0.001	C>A**, D>A*, C>B***, D>B***
Trait Anxiety	39.86	9.51	33.92	11.35	51.79	15.54	51.68	9.68	12.41	<0.001	C>A*, D>A*, C>B***, D>B***

Note: BMI=body mass index; EDI 3=Eating Disorder Inventory–3.

*p < 0.05; **p < 0.01; ***p < 0.001

Table S2. Descriptive Statistics of the Binge/Purge Type Adolescents With Anorexia Nervosa (AN).

Descriptive Statistics	AN Restricting Type			AN	AN
	N	Minimum	Maximum	Binge/Purge 1	Binge/Purge 2
Age (years)	17	12	17	14	15
BMI (kg/m ²)	17	14.60	18.85	15.25	15.98
Novelty Seeking	17	7	27	16	11
Harm Avoidance	17	4	31	22	18
CDI Depression	17	1	41	18	15
EDI 3 Drive for Thinness	17	1	28	22	24
EDI 3 Bulimia	17	0	12	6	4
EDI 3 Body Dissatisfaction	17	0	40	25	31
Sensitivity to Reward	17	1	15	12	6
Sensitivity to Punishment	17	2	18	9	6
State Anxiety	17	40	76	61	49
Trait Anxiety	17	0	77	56	52
Pleasantness 1 Molar Sucrose	17	1	8	1	5
Sweetness 1 Molar Sucrose	17	6	9	9	8

Note: BMI=body mass index; CDI=Children's Depression Inventory; EDI 3=Eating Disorder Inventory-3.

Table S3. Statistical Comparisons Between Control Adolescents (CW) and Adolescents With Restricting-Type Anorexia Nervosa (AN).

	CW, N = 22		AN-Restricting, N = 17		t	p-value
	Mean	SD	Mean	SD		
Age (years)	14.82	1.82	15.47	1.46	-1.21	0.235
BMI (kg/m ²)	21.26	1.92	16.24	1.14	10.17	<0.001
Novelty Seeking	22.5	4.95	15.29	5.57	4.27	<0.001
Harm Avoidance	10.86	5.89	21.29	8.04	-4.68	<0.001
CDI Depression	2.5	2.6	20.29	10.31	-6.95	<0.001
EDI 3 Drive for Thinness	1.05	1.84	13.41	7.16	-7.6	<0.001
EDI 3 Bulimia	0.64	1.05	0.94	1.52	-1.08	0.463
EDI 3 Body Dissatisfaction	1.45	2.22	15.53	9.62	-6.54	<0.001
Sensitivity to Reward	6.09	3.75	8.35	3.9	-1.83	0.075
Sensitivity to Punishment	4.82	3.63	11.35	4.83	-4.82	<0.001
State Anxiety	40.41	10.74	53.53	12.46	-3.53	0.001
Trait Anxiety	39.86	9.51	51.53	16.45	-2.79	0.008
Pleasantness 1 M Sucrose	5.05	2.38	3.29	2.51	2.22	0.033
Sweetness 1 M Sucrose	8.45	0.74	8.53	0.8	-0.3	0.764

	CW, N = 22		AN, N = 19		t	P-value
	Mean	SD	Mean	SD		
Age (years)	14.8	1.8	15.4	1.4	-1.11	0.292
BMI (kg/m ²)	21.3	1.9	16.2	1.1	10.19	<0.001
Novelty Seeking	22.5	5	15.1	5.3	4.6	<0.001
Harm Avoidance	10.9	5.9	21.2	7.6	-4.88	<0.001
CDI Depression	2.5	2.6	19.9	9.8	-8.02	<0.001
EDI 3 Drive for Thinness	1	1.8	13.7	6.8	-8.38	<0.001
EDI 3 Bulimia	0.6	1	1.1	1.5	-1.05	0.298
EDI 3 Body Dissatisfaction	1.5	2.2	15.6	9.1	-7.05	<0.001
Sensitivity to Reward	6.1	3.8	8.4	3.8	-1.97	0.056
Sensitivity to Punishment	4.8	3.6	11	4.7	-4.68	<0.001
State Anxiety	40.4	10.7	53.7	11.9	-3.75	0.001
Trait Anxiety	39.9	9.5	51.8	15.5	-3.01	0.005
Pleasantness 1 M Sucrose	5.1	2.4	3.3	4.7	2.35	0.024
Sweetness 1 M Sucrose	8.5	0.7	8.5	0.8	-0.3	0.763

Note: BMI=body mass index; EDI 3=Eating Disorder Inventory-3.

Table S4. Neuroimaging Findings of Group Differences Between Control Adolescents (CW) and Adolescents With Restricting-Type Anorexia Nervosa (AN-R).

Whole Brain Volumes	(CW, n = 22)		(AN-R, n = 17)		t	p-Value
	Mean	SD	Mean	SD		
GM Volume (cm ³)	667.38	68.33	667.39	55.21	-0.001	0.999
WM Volume (cm ³)	472.28	45.53	464.11	45.03	0.558	0.580
CSF Volume (cm ³)	252.35	49.23	230.38	24.47	1.684	0.101
Total Intracranial Volume (cm ³)	1,392.02	86.50	1361.88	92.79	1.05	0.303
Regional Gray Matter Volume Contrasts						
AN-R Adolescents > Controls	MNI Coordinates		Cluster Size	T/Z	Cluster Level p _{FWE-corr}	Peak Level p _{FWE-corr}
L Middle Orbitofrontal Cortex	-29, 60, -18		247	4.00/3.57	0.051	0.020
R Fusiform Gyrus	29, -31, -18		102	4.95/4.23	0.226	0.053
L Fusiform Gyrus	-32, -6, -42		268	4.69/4.06	0.108	0.009
R Hippocampus	29, -28, -6		209	3.95/3.54	0.063	0.022
L Hippocampus	-33, -19, -12		631	4.13/3.67	0.043	0.015
R Insula	41, 6, 9		103	3.17/2.93	0.391	0.197
L Insula	-39, 5, 13		293	3.34/3.07	0.071	0.138
R Parahippocampal Gyrus	18, -10, -29		696	5.50/4.58	0.011	0.001
L Parahippocampal Gyrus	-23, -15, -27		629	4.10/3.65	0.015	0.019
L Putamen	-30, 11, 9		68	3.32/3.05	0.123	0.083
L Gyrus Rectus	-9, 30, -26		54	3.40/3.12	0.111	0.056
L Gyrus Rectus	-6, 51, -24		58	3.26/3.00	0.107	0.075
Regional White Matter Volume Contrasts						
AN-R Adolescents > Controls	MNI Coordinates		Cluster Size	T/Z	Cluster Level p _{FWE-corr}	Peak Level p _{FWE-corr}
R Hippocampus	26, -16, -20		388	5.73/4.72	0.028	0.000
R Parahippocampal Gyrus	27, -18, -23		338	5.25/4.42	0.038	0.001
R Middle Temporal Gyrus	50, -31, -6		101	4.17/3.70	0.346	0.063

Note: CSF= cerebrospinal fluid; GM=gray matter; L=left; MNI=Montreal Neurological Institute; R=right; WM=white matter.