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## Supplemental Figure e1 Selected questions from the *ad-hoc* online questionnaire sent to assess the changes in lifestyle patterns.

### SLEEP PATTERNS

- 1.) Indicate approximately how many hours you used to sleep at night before the Covid-19 confinement.
  - a.) Less than 7 hours
  - b.) 7 to 8 hours
  - c.) 8 to 10 hours
  - d.) 10 to 12 hours
  - e.) More than 12 hours
- 2.) Indicate approximately how many hours you sleep at night during Covid-19 confinement.
  - a.) Less than 7 hours
  - b.) 7 to 8 hours
  - c.) 8 to 10 hours
  - d.) 10 to 12 hours
  - e.) More than 12 hours
- 3.) Indicate how your use of sleeping pills has changed during Covid-19 confinement.
  - a.) I have stopped consuming
  - b.) I have decreased the consumption
  - c.) I have not changed the consumption
  - d.) I have increased the consumption moderately
  - e.) I have increased the consumption significantly

### EATING, DRINKING AND SMOKING HABITS

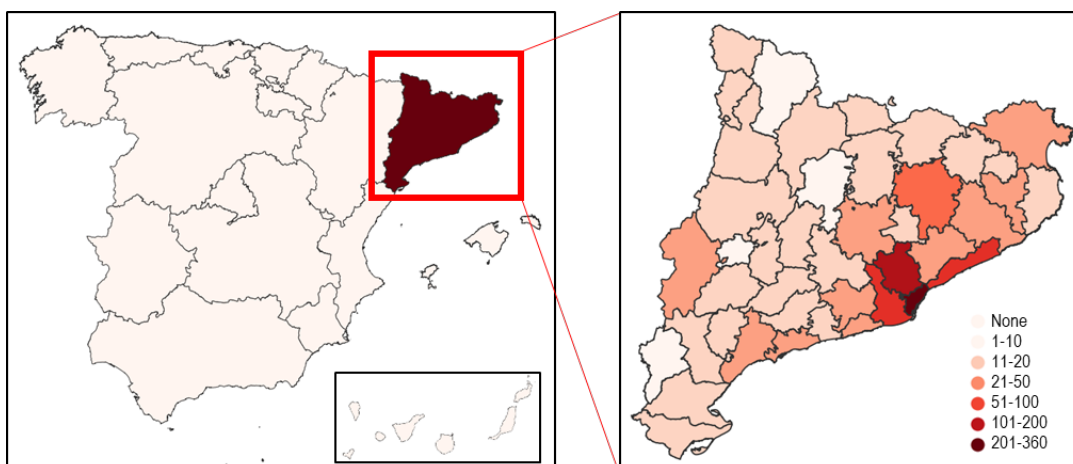
- 4.) Indicate how your caloric food consumption has changed during Covid-19 confinement.
  - a.) I have stopped consuming
  - b.) I have decreased the consumption
  - c.) I have not changed the consumption
  - d.) I have increased the consumption moderately
  - e.) I have increased the consumption significantly
- 5.) Indicate how your alcohol consumption has changed during Covid-19 confinement.
  - a.) I have stopped consuming
  - b.) I have decreased the consumption
  - c.) I have not changed the consumption
  - d.) I have increased the consumption moderately
  - e.) I have increased the consumption significantly
- 6.) Indicate how your tobacco consumption has changed during Covid-19 confinement.
  - a.) I have stopped consuming
  - b.) I have decreased the consumption
  - c.) I have not changed the consumption
  - d.) I have increased the consumption moderately
  - e.) I have increased the consumption significantly

### MEDICATION USE

- 7.) Indicate how your use of anxiolytics / antidepressants has changed during Covid-19 confinement.
  - a.) I have stopped consuming
  - b.) I have decreased the consumption
  - c.) I have not changed the consumption
  - d.) I have increased the consumption moderately
  - e.) I have increased the consumption significantly
- 8.) Indicate how your use of analgesics has changed during Covid-19 confinement.
  - a.) I have stopped consuming
  - b.) I have decreased the consumption
  - c.) I have not changed the consumption
  - d.) I have increased the consumption moderately
  - e.) I have increased the consumption significantly

### Supplemental Figure e2 Location map showing the distribution of the study participants across the regions of Catalonia (Northeastern of Spain)

From the available data of 914 participants, 95.2% of them were from the northeastern region of Spain in the autonomous community of Catalonia as outlined in red on the map of Spain, 2.7% were from the rest of Spain and the remaining 2.1% of the data were missing. As indicated on the map of Catalonia, the vast majority of the study participants were from the area of *Barcelonès* and mainly from *Barcelona* city.

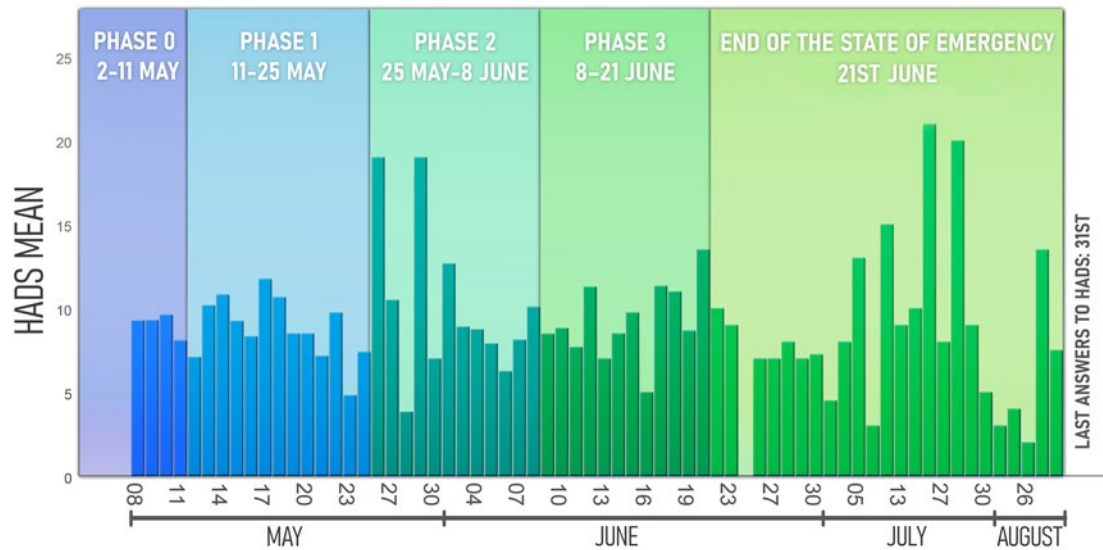


### Supplemental Figure e3 HADS mean scores over time and along the confinement de-escalation phases

The mean of the HADS total scores collected between May 8, 2020 and August 31, 2020 from the whole sample are shown over time and through de-escalation phases of the COVID-19 confinement in northeastern Spain, Catalonia.

The HADS scores did not show any significant difference between months ( $F=.445$ ,  $p=.721$ ) or de-escalation phases ( $F=.687$ ,  $p=.601$ ).

Abbreviations: HADS= Hospital Anxiety and Depression Scale.



**Supplemental Table e1 Distribution of women and caregivers in HADS-Anxiety and HADS-Depression categories pre and during COVID-19 confinement**

Data are presented as numbers (percentages) in each category and reported for the whole sample.

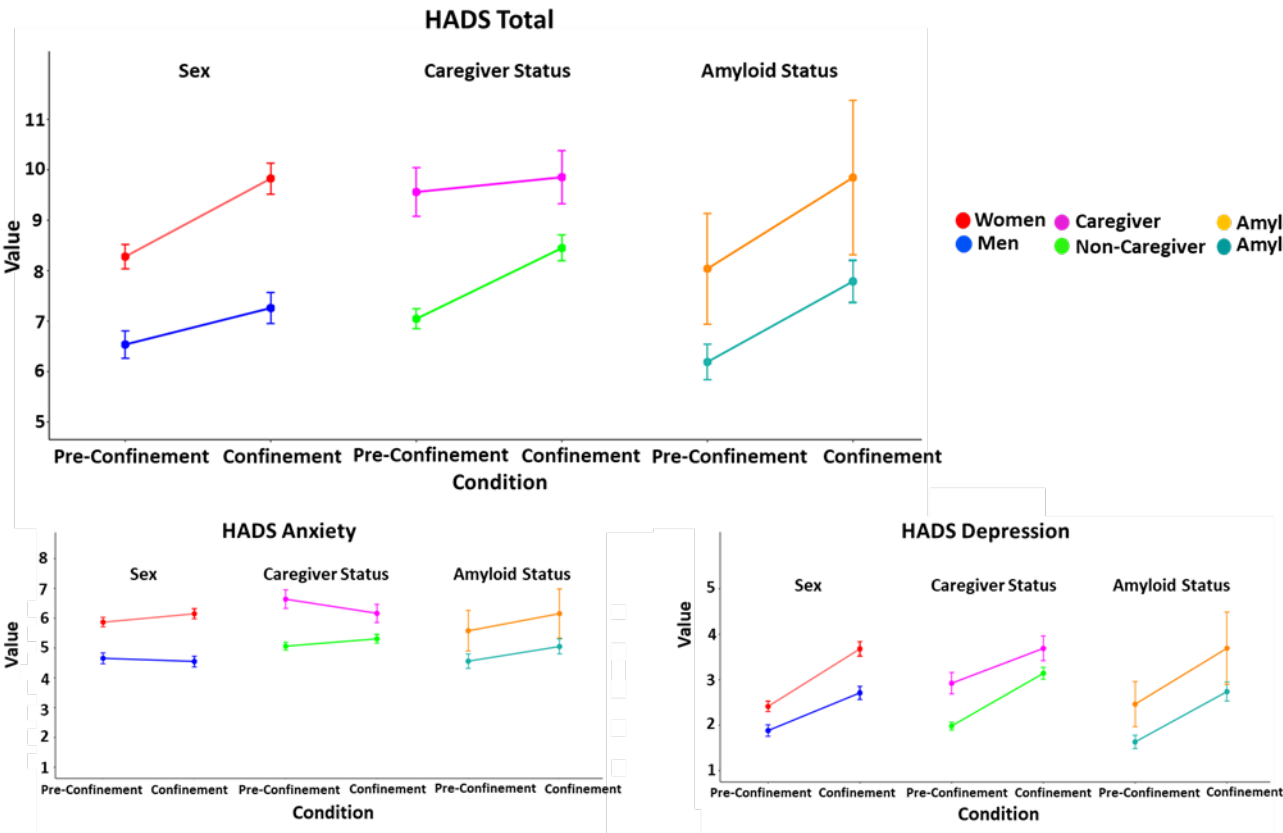
Abbreviations: HADS= Hospital Anxiety and Depression Scale. a: N= 463, b: N= 116.

	<b>Women <sup>a</sup></b>			<b>Caregivers <sup>b</sup></b>		
<b>HADS-Anxiety</b>	<b>Normal</b>	<b>Borderline</b>	<b>Probable</b>	<b>Normal</b>	<b>Borderline</b>	<b>Probable</b>
<b>Pre-Confinement</b>	329 (71.1%)	89 (19.2%)	45 (9.7%)	72 (62.1%)	30 (25.9%)	14 (12.1%)
<b>During Confinement</b>	304 (65.7%)	102 (22%)	57 (12.3%)	80 (69%)	24 (20.7%)	12 (10.3%)
<b>HADS-Depression</b>	<b>Normal</b>	<b>Borderline</b>	<b>Probable</b>	<b>Normal</b>	<b>Borderline</b>	<b>Probable</b>
<b>Pre-Confinement</b>	441 (95.2%)	19 (4.1%)	3 (0.6%)	108 (93.1%)	7 (6%)	1 (0.9%)
<b>During Confinement</b>	400 (86.4%)	38 (8.2%)	25 (5.4%)	102 (87.9%)	12 (10.3%)	2 (1.7%)

# Supplemental Figure e4 Average HADS total, HADS-Anxiety and HADS-Depression scores by sex, caregiver and amyloid status during pre-confinement and confinement

The mean HADS scores are shown by sex and caregiver status in the whole sample and by amyloid status in the biomarkers sample. Error bars represent the variability in HADS scores in each group. The clinical categories of HADS-Anxiety and HADS-Depression scores are as follows:  $\leq 7$  = normal, 8 -10 borderline,  $\geq 11$  probable cases of anxiety or depression.

Abbreviations: HADS= Hospital Anxiety and Depression Scale.



## Supplemental Table e2 Tables showing the chi square comparisons in lifestyle patterns by sex, caregiver and amyloid status.

Differences in lifestyle patterns (sleep patterns, eating, drinking and smoking habits, and medication use) during the COVID-19 confinement are reported by sex and caregiver status in the whole sample and by amyloid status in the biomarkers sample.

a: Women N= 477, Men N= 318; b: Women N= 60, Men N= 23; c: Women N= 263, Men N= 193; d: Women N= 174, Men N= 191; e: Women N=67, Men N= 27; f: Women N= 64, Men N= 24; g: Women N= 118, Men N= 50; h: Caregiver N= 121, Non-caregiver N= 668; i: Caregiver N= 15, Non-caregiver N= 68; j: Caregiver N= 78, Non-caregiver N= 377; k: Caregiver N= 57, Non-Caregiver N= 307; l: Caregiver N= 25, Non-caregiver N= 69; m: Caregiver N= 25, Non-caregiver N= 62; n: Caregiver N= 32, Non-caregiver N= 135; o: Amyloid Positive N= 23, Amyloid Negative N= 158; p: Amyloid Positive N= 2, Amyloid Negative N= 12; r: Amyloid Positive N= 13, Amyloid Negative N= 75; t: Amyloid Positive N= 11, Amyloid Negative N= 98; s: Amyloid Positive N= 2, Amyloid Negative N= 17; u: Amyloid Positive N= 3, Amyloid Negative N= 13; v: Amyloid Positive N= 3, Amyloid Negative N= 35.

	Women (%)			Men (%)			<i>p-value</i>
	No Change	Increased	Decreased	No Change	Increased	Decreased	
Sleep							
Hours of Sleep <sup>a</sup>	75.6	10.8	13.6	83.6	7.4	9	.023*
Sleeping Pills Use <sup>b</sup>	70	28.3	1.7	69.6	26.1	4.3	.768
Eating, drinking, smoking							
Food Consumption <sup>c</sup>	41.1	47.9	11	65.8	20.2	14	<.001*
Alcohol Use <sup>d</sup>	67.2	21.8	10.9	62.8	17.8	19.4	.072
Tobacco Use <sup>e</sup>	52.2	35.8	11.9	55.6	29.6	14.8	.827
Medication Use							
Antidepressant Use <sup>f</sup>	76.6	18.8	4.7	79.2	16.7	4.2	.967
Analgesics Use <sup>g</sup>	67.8	19.5	12.7	70	14	16	.639
	Caregivers (%)			Non-Caregivers (%)			<i>p-value</i>
	No Change	Increased	Decreased	No Change	Increased	Decreased	
Sleep							
Hours of Sleep <sup>h</sup>	75.2	11.6	13.2	79.5	9.4	11.1	.568
Sleeping Pills Use <sup>i</sup>	73.3	20	6.7	69.1	29.4	1.5	.406
Eating, drinking, smoking							
Food Consumption <sup>j</sup>	46.2	47.4	6.4	52.5	34	13.5	.041*
Alcohol Use <sup>k</sup>	57.9	22.8	19.3	66.4	18.9	14.7	.451
Tobacco Use <sup>l</sup>	52	40	8	53.6	31.9	14.5	.616
Medication Use							
Antidepressant Use <sup>m</sup>	72	20	8	79	17.7	3.2	.592
Analgesics Use <sup>n</sup>	62.5	25	12.5	69.6	16.3	14.1	.514
	Amyloid Positive (%)			Amyloid Negative (%)			<i>p-value</i>
	No Change	Increased	Decreased	No Change	Increased	Decreased	
Sleep							
Hours of Sleep <sup>o</sup>	91.3	4.3	4.3	81	8.9	10.1	.481
Sleeping Pills Use <sup>p</sup>	100	-	-	75	25	-	.425
Eating, drinking, smoking							
Food Consumption <sup>r</sup>	45.5	36.4	18.2	61.2	25.5	13.3	.599
Alcohol Use <sup>s</sup>	84.6	-	15.4	70.7	12	17.3	.39
Tobacco Use <sup>t</sup>	50	-	50	47.1	29.4	23.5	.586
Medication Use							
Antidepressant Use <sup>u</sup>	100	-	-	84.6	15.4	-	.468
Analgesics Use <sup>v</sup>	66.7	-	33.3	65.7	22.9	11.4	.429

### Supplemental Table e3 Results from the multivariable linear regression analyses with HADS-Anxiety and HADS-Depression scores

Abbreviations: HADS= Hospital Anxiety and Depression Scale, CI= Confidence Interval, AD= Alzheimer 's Disease, IL-6= Interleukin-6.

The unstandardized B represents the variation in HADS-Anxiety and HADS-Depression with 1-unit variation in a given predictor.

**Biomarkers Sample N= 179. Whole Sample N= 695.**

	HADS-Anxiety		HADS-Depression	
Biomarkers Sample	B Value (95% CI)	p Value	B Value (95% CI)	p Value
<b>Age</b>	-0.22 (-0.33 to -0.11)	<b>&lt;.001</b>	-0.14 (-0.24 to -0.041)	<b>.006</b>
<b>Sex (women)</b>	1.05 (0.074 to 2.03)	<b>.035</b>	1.03 (0.12 to 1.94)	<b>.026</b>
<b>Years of Education</b>	-0.13 (-0.26 to 0.006)	.062	-0.14 (-0.27 to -0.013)	<b>.031</b>
<b>APOE-ε4 Carriers</b>	-0.49 (-1.45 to 0.47)	.311	0.37 (-0.54 to 1.27)	.426
<b>Caregivers</b>	-0.61 (-1.89 to 0.66)	.344	-0.66 (-1.85 to 0.54)	.278
<b>Amyloid Positivity</b>	1.6 (0.16 to 3.03)	<b>.029</b>	1.11 (-0.23 to 2.46)	.105
<b>AD Signature</b>	-0.85 (-5.89 to 4.19)	.74	-3.27 (-8.03 to 1.49)	.177
<b>IL-6</b>	-2.56 (-5.41 to 0.29)	.078	-2.35 (-5.02 to 0.32)	.084
<b>Time Difference</b>	-0.008 (-0.53 to 0.51)	.975	0.19 (-0.29 to 0.68)	.43
<b>Pre-Confinement HADS</b>	0.43 (0.29 to 0.57)	<b>&lt;.001</b>	0.25 (0.024 to 0.47)	<b>0.03</b>
<b>Whole Sample</b>				
<b>Age</b>	-0.051 (-0.083 to -0.019)	<b>.002</b>	-0.043 (-0.074 to -0.011)	<b>.007</b>
<b>Sex (women)</b>	0.9 (0.45 to 1.34)	<b>&lt;.001</b>	0.54 (0.11 to 0.97)	<b>.014</b>
<b>Years of Education</b>	-0.067 (-0.13 to -0.003)	<b>.041</b>	-0.041 (-0.11 to 0.021)	.191
<b>APOE-ε4 Carriers</b>	-0.082 (-0.52 to 0.36)	.714	-0.16 (-0.59 to 0.26)	.455
<b>Caregivers</b>	-0.22 (-0.82 to 0.37)	.458	-0.15 (-0.73 to 0.42)	.606
<b>Time Difference</b>	-0.069 (-0.28 to 0.15)	.530	-0.002 (-0.21 to 0.21)	.988
<b>Pre-Confinement HADS</b>	0.56 (0.49 to 0.63)	<b>&lt;.001</b>	0.56 (0.47 to 0.65)	<b>&lt;.001</b>



# Supplemental Table e4 Results from the multivariable linear regression analyses with HADS adjusted by stress-related variables

Abbreviations: HADS= Hospital Anxiety and Depression Scale, CI= Confidence Interval, PSS= Perceived Stress Scale, BRS= Brief Resilience Scale, AD= Alzheimer's Disease, IL-6= Interleukin-6.

The unstandardized B represents the variation in HADS total, HADS-Anxiety and HADS-Depression with 1-unit variation in a given predictor.

**Biomarkers Sample N= 171, Whole Sample N=666.**

	HADS Total		HADS-Anxiety		HADS-Depression	
Biomarkers Sample	B Value (95% CI)	p Value	B Value (95% CI)	p Value	B Value (95% CI)	p Value
<b>Age</b>	-0.22 (-0.35 to -0.086)	<b>.001</b>	-0.15 (-0.23 to -0.064)	<b>.001</b>	-0.065 (-0.14 to 0.011)	.092
<b>Sex (women)</b>	1.49 (0.32 to 2.66)	<b>.013</b>	0.78 (0.012 to 1.55)	<b>.047</b>	0.61 (-0.064 to 1.29)	.076
<b>Years of Education</b>	-0.13 (-0.29 to 0.036)	.127	-0.06 (-0.17 to 0.047)	.268	-0.073 (-0.17 to 0.021)	.128
<b>APOE-ε4 Carriers</b>	-0.81 (-1.98 to 0.35)	.17	-0.87 (-1.64 to -0.104)	<b>.026</b>	0.11 (-0.57 to 0.79)	.741
<b>Caregivers</b>	-1.8 (-3.34 to -0.26)	<b>.022</b>	-0.81 (-1.82 to 0.2)	.114	-1.1 (-1.99 to -0.22)	<b>.015</b>
<b>Amyloid Positivity</b>	2.05 (0.3 to 3.79)	<b>.022</b>	1.33 (0.19 to 2.48)	<b>.023</b>	0.61 (-0.4 to 1.62)	.237
<b>AD Signature</b>	-2.99 (-9.28 to 3.31)	.35	-0.037 (-4.17 to 4.1)	.986	-3.12 (-6.8 to 0.55)	.096
<b>IL-6</b>	-2.78 (-6.2 to 0.64)	.11	-1.68 (-3.93 to 0.57)	.143	-0.94 (-2.94 to 1.05)	.352
<b>Time Difference</b>	0.006 (-0.63 to 0.64)	.985	-0.1 (-0.52 to 0.31)	.604	0.13 (-0.24 to 0.5)	.486
<b>Pre-Confinement HADS</b>	0.036 (-0.093 to 0.16)	.581	0.16 (0.034 to 0.28)	<b>.012</b>	-0.17 (-0.19 to 0.15)	0.84
<b>PSS Scores</b>	0.52 (0.45 to 0.59)	<b>&lt;.001</b>	0.26 (0.21 to 0.31)	<b>&lt;.001</b>	0.25 (0.21 to 0.29)	<b>&lt;.001</b>
<b>BRS Scores</b>	-0.58 (-1.97 to 0.81)	.414	-0.39 (-1.31 to 0.52)	.398	-0.14 (-0.94 to 0.67)	.735
<b>Whole Sample</b>						
<b>Age</b>	-0.033 (-0.075 to 0.008)	.118	-0.025 (-0.05 to 0.001)	.056	-0.008 (-0.033 to 0.017)	.524
<b>Sex (women)</b>	1.03 (0.46 to 1.61)	<b>&lt;.001</b>	0.71 (0.37 to 1.06)	<b>&lt;.001</b>	0.3 (-0.034 to 0.64)	.078
<b>Years of Education</b>	-0.041 (-0.12 to 0.042)	.333	-0.041 (-0.091 to 0.009)	.106	0.001 (-0.048 to 0.05)	.962
<b>APOE-ε4 Carriers</b>	-0.12 (-0.68 to 0.44)	.669	-0.063 (-0.4 to 0.28)	.714	-0.054 (-0.39 to 0.28)	.748
<b>Caregivers</b>	-0.84 (-1.6 to -0.077)	<b>.031</b>	-0.42 (-0.89 to 0.037)	.071	-0.44 (-0.89 to 0.005)	.053
<b>Time Difference</b>	0.051 (-0.23 to 0.33)	.717	0.005 (-0.16 to 0.17)	.953	0.043 (-0.12 to 0.21)	.604
<b>Pre-Confinement HADS</b>	0.23 (0.17 to 0.3)	<b>&lt;.001</b>	0.26 (0.21 to 0.32)	<b>&lt;.001</b>	0.23 (0.15 to 0.3)	<b>&lt;.001</b>

<b>PSS Scores</b>	0.49 (0.45 to 0.53)	<b>&lt;.001</b>	0.25 (0.23 to 0.27)	<b>&lt;.001</b>	0.23 (0.21 to 0.26)	<b>&lt;.001</b>
<b>BRS Scores</b>	-0.051 (-0.79 to 0.69)	.892	0.082 (-0.37 to 0.53)	.719	-0.13 (-0.56 to 0.31)	.567



