

Supplementary Materials for

Consequences of COVID-19 pandemic on weight gain and physical activity: a prospective cohort study from Italy

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Supplementary Table 1. Distribution on 4,831 Italian adults aged 18-74 years, according to a change in weight, body mass index (BMI) and physical activity (hours per week, h/w), during the COVID-19 lockdown (April-May 2020) compared to before the COVID-19 lockdown (February 2020), at follow-up (February-March 2022) compared to during the COVID-19 lockdown and at follow-up compared to before the COVID-19 lockdown.

Supplementary Table 2. Distribution of 4,831 Italian adults, according to an increase in weight by 5 kg or more and a decrease in physical activity by 4 hours/week (h/w) or more at follow-up (February-March 2022) compared to before lockdown (February 2020), overall and by selected lifestyle habits. Odds ratios (OR) and 95% confidence intervals (CI). Italy.

Supplementary Table 1

Distribution on 4,831 Italian adults aged 18-74 years, according to a change in weight, body mass index (BMI) and physical activity (hours per week, h/w), during the COVID-19 lockdown (April-May 2020) compared to before the COVID-19 lockdown (February 2020), at follow-up (February-March 2022) compared to during the COVID-19 lockdown and at follow-up compared to before the COVID-19 lockdown

		Mean (SD) change		
		Total	Men	Women
Comparison before-during lockdown	Weight (kg)	+1.0 (2.9)	+1.1 (3.1)	+0.9 (2.7)
	BMI (kg/m ²)	+0.3 (1.0)	+0.3 (1.0)	+0.3 (1.0)
	Physical activity (h/w)	-2.0 (4.6)	-2.4 (4.5)	-1.6 (4.7)
Comparison during lockdown-at follow-up	Weight (kg)	-0.4 (6.6)	-0.5 (5.7)	-0.3 (7.5)
	BMI (kg/m ²)	-0.1 (2.6)	-0.2 (1.9)	-0.1 (3.1)
	Physical activity (h/w)	+1.8 (6.0)	+2.3 (6.0)	+1.4 (6.0)
Comparison before lockdown-at follow-up	Weight (kg)	+0.6 (6.7)	+0.6 (6.0)	+0.5 (7.3)
	BMI (kg/m ²)	+0.2 (2.5)	+0.2 (2.0)	+0.2 (3.0)
	Physical activity (h/w)	-0.2 (6.1)	-0.1 (6.1)	-0.2 (6.1)

BMI: body mass index; SD: standard deviation; h/w: hours per week.

Supplementary Table 2

Distribution of 4,831 Italian adults, according to an increase in weight by 5 kg or more and a decrease in physical activity by 4 hours/week (h/w) or more at follow-up (February-March 2022) compared to before lockdown (February 2020), overall and by selected lifestyle habits. Odds ratios^a (OR) and 95% confidence intervals (CI). Italy

Characteristics before the pandemic	N	Increase in weight by 5 kg or more at follow-up compared to before COVID-19		N ^b	Decrease in physical activity by 4 h/w or more at follow-up compared to before COVID-19	
		%	OR (95% CI)		%	OR (95% CI)
Total	4,831	17.4		2,241	32.8	
BMI						
Normal weight	2,742	16.3	1.00 ^c	1,334	29.5	1.00 ^c
Overweight	1,492	18.9	1.26 (1.07-1.50)	702	35.6	1.34 (1.10-1.65)
Obese	597	18.8	1.20 (0.95-1.52)	205	44.9	1.97 (1.45-2.67)
P for trend			0.020			<0.001
Physical activity (hours/week)						
0	1,147	18.9	1.00 ^c			
1-3	1,443	16.9	0.91 (0.74-1.11)			
4-6	1,255	17.1	0.92 (0.74-1.14)	1,255	18.0	1.00 ^c
7+	986	16.9	0.94 (0.75-1.17)	986	51.7	5.11 (4.21-6.21)
P for trend			0.597			
Smoking status						
Never	3,268	17.0	1.00 ^c	1,501	32.6	1.00 ^c
Former	443	14.7	0.89 (0.67-1.18)	209	36.4	1.16 (0.86-1.58)
Current	1,120	19.9	1.22 (1.03-1.45)	531	32.0	0.96 (0.78-1.19)
Alcohol (AUDIT-C)						
Not at risk	3,610	17.0	1.00 ^c	1,564	33.4	1.00 ^c
At risk	1,221	18.7	1.10 (0.93-1.30)	677	31.6	0.91 (0.75-1.11)
Cannabis use						
No	4,510	17.1	1.00 ^c	2,069	32.9	1.00 ^c
Yes	321	21.5	1.20 (0.91-1.59)	172	32.6	1.01 (0.72-1.41)
Gambling						
No	4,054	17.0	1.00 ^c	1,812	32.9	1.00 ^c
Yes	777	19.4	1.13 (0.92-1.38)	429	32.4	0.99 (0.79-1.25)
Sexual activity during lockdown						
Lower than before	1,291	19.1	1.00 ^c	648	34.1	1.00 ^c
Not changed	3,136	16.5	0.88 (0.74-1.05)	1,393	32.5	0.91 (0.75-1.12)
Higher than before	404	19.1	0.98 (0.74-1.31)	200	31.0	0.87 (0.62-1.22)

N: number.

^a Estimated with unconditional multiple logistic regression models after adjustment for sex, age, level of education and geographic area; estimates in bold type are statistically significant at 0.05.

^b This analysis is based on subjects who did some physical activity before the lockdown. Thus, 2,590 subjects were excluded because they were inactive (physical activity of 0 h/w) before the begin of the lockdown.

^c Reference category.