

1 **COMPARISON OF THE EFFECTS OF LOCKDOWN DUE TO COVID-19 ON GLUCOSE**
 2 **PATTERNS AMONG CHILDREN, ADOLESCENTS, AND ADULTS WITH TYPE-1 DIABETES: A**
 3 **CGM STUDY**

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 5 **SUPPLEMENTARY MATERIAL**

6 **Supplementary Table 1. Continuous glucose monitoring (CGM) parameters before and after**
 7 **lockdown in Italy due to COVID-19 pandemic in the whole population.**

	Pre-lockdown	Post-lockdown	P value
Sensor use, %	95.6 (91.1-98.1)	95.7 (89.8-98)	0.201
Mean glucose, mg/dL	168 (152-191)	165 (146-182)	<0.001
Median glucose, mg/dL	159 (142-188)	158 (140-172)	<0.001
Glucose Management indicator (GMI), %	7.4 (7-7.9)	7.3 (6.8-7.7)	<0.001
Glucose Management indicator (GMI), mmol/mol	57 (52-63)	56 (51-60)	<0.001
Standard deviation (SDglu)	63.3 (55.1-71)	59.9 (52-70.2)	0.002
Percent coefficient of variation (%CV), %	36.8 (33.1-40.7)	36.3 (33.1-40.4)	0.491
Time in range (TIR), %	57.6 (44.2-65.5)	60 (52-67.6)	<0.001
Time below range 1 (TBR1), %	1.9 (0.8-4.5)	1.7 (0.9-4.6)	0.131
Time below range 2 (TBR2), %	0.4 (0.1-1.2)	0.3 (0.1-1.1)	0.954
Time above range 1 (TAR1), %	26.8 (21.2-31.8)	26 (19.6-30.3)	0.002
Time above range 2 (TAR2), %	11.3 (5.4-19.2)	9.5 (4.3-16.3)	0.001
Low blood glucose index (LBGI)	0.7 (0.3-1.4)	0.6 (0.3-1.4)	0.337
High blood glucose index (HBGI)	8.6 (6.2-12.3)	8.1 (5.5-10.5)	<0.001

Data are expressed as median with interquartile range in parentheses. TIR: time in range 70-180 mg/dL. TBR1: time below range 1 (54-69 mg/dL). TBR2: time below range 2 (<54 mg/dl). TAR1: time above range 1 (180-250 mg/dL). TAR2: time above range 2 (>250 mg/dL).

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Supplementary Table 2. Continuous glucose monitoring (CGM) parameters during the period January 30, 2020 - February 19, 2020 (School-open) and before lockdown (February 20, 2020 - March 10, 2020), when the schools have been closed, in Italy due to COVID-19 pandemic in children (≤12 years), teenagers (13-17 years), and adults (≥18 years).

	Children (≤12 years) (n=30)			Teenagers (13-17 years) (n=24)			Adults (≥18 years) (n=76)		
	School-open	Pre-lockdown (schools closed)	P value	School open	Pre-lockdown (schools closed)	P value	School open	Pre-lockdown (schools closed)	P value
Sensor use, %	96.4 (87.2-98.4)	96.5 (87.5-98.8)	0.605	94.8 (88.2-98.4)	97 (93.4-98.5)	0.082	95.8 (90.1-97.9)	95.1 (91-97.5)	0.530
Mean glucose, mg/dL	171 (155-199)	181 (161-206)	0.753	167 (150-179)	168 (141-180)	0.273	166 (148-188.)	164 (145-191)	0.692
Median glucose, mg/dL	164 (146-192)	171 (153-196)	0.594	160 (141-173)	157 (135-172)	0.423	162 (143-181)	159 (137-189)	0.481
Glucose Management indicator (GMI), %	7.4 (7-8.1)	7.7 (7.2-8.3)	0.753	7.3 (6.9-7.6)	7.4 (6.7-7.6)	0.273	7.3 (6.9-7.9)	7.3 (6.8-7.9)	0.692
Glucose Management indicator (GMI), mmol/mol	57 (53-65)	60 (55-67)	0.753	56 (52-59)	57 (50-60)	0.273	56 (52-62)	56 (51-63)	0.692
Standard deviation (SDglu)	65.6 (57.7-71.2)	67.4 (58.6-74.8)	0.538	62.6 (54.8-69.3)	59.1 (48.6-66.9)	0.041	62.5 (52.7-70.6)	63 (54-70.9)	0.586
Percent coefficient of variation (%CV), %	35.4 (33.7-40)	37.4 (33.4-40.4)	0.913	37.6 (32.5-41.7)	36.3 (32.4-41.6)	0.211	36.8 (32-41.6)	36.6 (33.1-41.8)	0.709
Time in range (TIR), %	58.3 (43.8-66.7)	53.3 (39.8-62)	0.266	57.2 (52.2-70.9)	61 (50.8-72.4)	0.219	55.3 (45.5-65)	57.7 (43.5-67.3)	0.127
Time below range 1 (TBR1), %	1 (0.6-2.1)	1.2 (0.7-2.7)	0.719	2 (0.7-4.9)	1.6 (0.6-4.9)	0.452	2.9 (1.1-4.8)	2.5 (1.1-5.4)	0.507
Time below range 2 (TBR2), %	0.2 (0.1-0.5)	0.4 (0-0.8)	0.645	0.3 (0.1-1)	0.2 (0-0.7)	0.290	0.5 (0.1-1.8)	0.4 (0.1-1.7)	0.078
Time above range 1 (TAR1), %	25.5 (21.8-31.3)	28.1 (25.1-31.0)	0.047	26.9 (18.3-29.2)	24.4 (17.5-34.4)	0.524	26.8 (19.2-31.5)	26.5 (19.3-31.7)	0.169
Time above range 2 (TAR2), %	11.8 (8.3-23.1)	14.5 (9-26.3)	0.741	12.6 (5.1-14.6)	9.6 (4.3-15.2)	0.186	9.9 (4.5-18.5)	11.1 (4.5-19)	0.935
Low blood glucose index (LBGI)	0.4 (0.3-0.8)	0.5 (0.3-0.9)	0.765	0.6 (0.3-1.4)	0.7 (0.2-1.3)	0.636	0.8 (0.4-1.8)	0.8 (0.4-1.7)	0.132
High blood glucose index (HBGI)	9 (7-13.4)	10.3 (7.5-15)	0.792	9.1 (5.4-9.8)	8.3 (5-10.1)	0.204	8.3 (5.3-11.6)	8.3 (5.4-12.2)	0.518

Data are expressed as median with interquartile range in parentheses. P values refer to paired samples T-tests performed for each parameter in the three groups of patients divided by age range. CV: coefficient of variation. TIR: time in range 70-180 mg/dL. TBR1: time below range 1 (54-69 mg/dL). TBR2: time below range 2 (<54 mg/dl). TAR1: time above range 1 (180-250 mg/dL). TAR2: time above range 2 (>250 mg/dL).