			Cro	ss-sectional studies					
		Selection					Outcome		
First author (year)	Representativeness of the sample	Sample size	Non-respondents	Ascertainment of exposure	The subjects in different outcome groups are compa- rable, based on the study design or analysis. Con- founding factors are controlled.	Assessment of outcome	Statistical test		
Di Renzo L et al. (2020)	*	*	*	**	**	*	*	9/10	
	Truly representa- tive	3,533 Italian citizens, 674 students among them	A total of $n = 4.500$ participants started the survey, $n = 3,533$ considered valid	The EHLC-COVID19 questionnaire was specif- ically built by using Google Form by the Sec- tion of Clinical Nutrition and Nutrigenomic, De- partment of Biomedicine and Prevention of the University of Rome Tor Vergata and the MEDAS questionnaire to assess adherence to the MD.	Residence region, age, gender, BMI, current employ- ment	Self report	The Shapiro–Wilk test, the Spearman correlation coeffi- cient, Chi square test, McNeman analysis, Mann– Whitney U and Kruskal–Wallis tests, binary and multi- nomial logistic re- gression analyses		
Ruiz-Rosso MB et al. (2020)	*	*	*	**	**	*	*	9/10	

## Table S1. Newcastle Ottawa Scale for cross-sectional and cohort studies.

	Truly representa- tive	820 adoles- cents	From a total of $n = 828$ eligible in the final sample was $n = 820$	Dietary practices were evaluated using a stand- ardized adolescent ques- tionnaire, the National School Health Survey- PeNSE; Pesquisa Nacional de Saúde do Escolar, which was slightly modified	Age, gender, country, maternal education, num- ber of family members, watch- ing TV during mealtimes	Self report	Paired two-way Student's t- test,ntwo-way ANOVA. A signifi- cance level of $p <$ 0.05 was applied to all statistical anal- yses.	
Ruiz-Rosso MB et al. (2020) 32751721	*	*	*	**	**	*	*	9/10
	Truly representa- tive	726 adoles- cents	Among those, eight (1.1%) declined to par- ticipate.	To assess the level of physical activity, the In- ternational Physical Ac- tivity Questionnaire (IPAQ) was used. For ultra-processed food consumption, was con- sidered the assessment of the weekly consumption of ultra-processed foods, so named according to the NOVA classification	Country, sex, physical activity status, ultra- processed food consumption, maternal educa- tion, number of residents at home	Self report	Chi-squared tests, multinomial logistic regression model and univariate lo- gistic regression were used	
Fernández-Aranda F et al. (2020)	*	*	-	*	* *	* *	*	8/10
	Truly representa- tive	121 partici- pants (87 ED patients and 34 patients with obesity)	No description	COVID Isolation Eating Scale (CIES), a newly created scale for measur- ing the impact of con- finement	Sex, age, eating disordes diagno- sis, obesity	Record linkage, self report	Confirmatory factor analyses, paired- sample t-tests for interval scaled vari- ables, and the Mc Nemar test for cate- gorical measures	
Adams EL et al. (2020)	*	*	*	* *	* *	*	*	9/10

	Somewhat represantative	584 parents	A total of $n = 1,342$ parents started the survey, $n = 584$ con- sidered valid	6-item United States De- partment of Agriculture Household Food Security Module, Child Feeding Questionnaire (CFQ)	Parents age, chil- dren age, race, marital status	Self report	Chi-square test, Paired sample t- tests, univariate re- gression models	
Fernandez-Rio J et al. (2020)	*	*	-	*	* *	*	*	7/10
	Snowball sam- pling	4379 Spanish citizens	No description	On-line questionnaire	Sex, age, BMI, depressive symp- toms, optimism	Self report	Chi-square test, mul- tinomial logistic re- gression analyses, restricted cubic splines models	
Sidor A and Rzymski R (2020)	-	*	-	*	**	*	*	6/10
	Specific group of subjects	1097 Polish citizens	No description	Online self-designed, structured questionnaire	Age, gender, weight, bmi, oc- cupation	Self report	Mann–Whitney U test or Kruskal– Wallis analysis of variance (ANOVA) with Dunn's post- hoc method	
Rolland et al. (2020)	-	*	*	*	* *	*	*	7/10
	Convenience sampling method	11.391 French citizens	Among the 20,235 par- ticipants who started the questionnaire, 11,742 (58.0%) com- pleted it. After exclud- ing inoperable ques- tionnaires and re- spondents from coun- tries other than France, 11,391/20,235 questionnaires (56.3%) were included	Online questionnaire	Age, gender, mar- ital status, em- ployment status, educational level	Self report	Logistic regression models, raw odds ratios (ORs) and ad- justed odds ratios (aORs) are provided with their 95% con- fidence intervals	

	in the analyses			

	Cohort studies										
	Selection						Comparability Outcome				
First author (year)	Representativeness of the exposed cohort	Selection of the non- exposed co- hort	Ascertainment of exposure	Demonstration that outcome of interest was not present at start of study	Comparability of co- horts on the basis of the design or analysis controlled for con- founders	Assessment of outcome	Was follow- up long enough for outcomes to occur	Adequacy of follow-up of cohorts			
Pietrobelli A et al. (2020)	*	*	*	-	*	-	*	*	good quality		
	Children and adoles- cents with obesity (range, 6–18) years	Same com- munity	Structured inter- view	No	Sex, age, living area	Telephone interview	Yes	Complete follow up			
Dunton GF, Do B, Wang SD (2020)	*	*	*	*	**	-	*	*	good quality		
	Children 5 to 13 years, with an aver- age age of 8.71 years (SD = 2.58)	Same com- munity	Structure inter- view, self report	Pre-COVID-period (February 20,200 and early-COVID- 19 period (April- May 2020)	Parental age,sex, marital status, work status, annual household income, child age, sex, ehnic- ity, race	Self report	Yes	Complete follow up			

An R (2020)	*	*	*	-	* *	*	*	*	good quality
	Children 5-6 years in US	Same com- munity	ECLS-K:2011	No	Sex, racial/ethnic differences, physical acivity	Record linkage	Yes	Complete follow up	
Jia P et al. (2020)	*	*	*	-	* *	-	-	*	fair quality
	Youths in China	Same com- munity	COVID-19 Im- pact on Lifestyle Change Survey (COINLICS)	No	Sex, age, ethnic group, living areas	Self report	No	Complete follow up	
Allabadi et al. (2020)	*	*	×	-	* *	-	-	*	fair quality
	Ain Palestine	Same com- munity	Structure inter- view, self report	No	Sex, age, marital status, education	Self report	No	Complete follow up	
Yang S. et al. (2020)	*	*	×	-	* *	-	-	*	fair quality
	Youths in China	Same com- munity	COVID-19 Im- pact on Lifestyle Change Survey (COINLICS)	No	Sex, age, education, ethnic group, living areas	Self report	No	Complete follow up	
Dutta M (2020)	*	*	*	-	*	*	-	-	poor quality
	Schoolage children USA	Same com- munity	COVID-19 track- ing project	No	Age	Record linkage	No	No state- ment	