

Frame 1. Characteristics of included studies according to study design (n = 14)

Authors (year)	Location	Aim	Study Design	Sample Size	Population used	Intervention	Outcome measured tool/data collection	Main findings
Asil (2023)	Turkey	Effect of social media use on orthorexia nervosa.	Cross-sectional study	2526 participants	Internet users between the ages of 19 and 65 living in Turkey	Questionnaire form, announced on various social media platforms (Instagram, Facebook, WhatsApp, Twitter).	Questionnaire form, announced on various social media platforms (Instagram, Facebook, WhatsApp, Twitter).	This study indicates that increasing social media usage, especially web pages that include health and nutrition recommendations, may boost the tendency to ON.
Azzi (2023)	Lebanon	Effect of self-esteem and attachment styles on orthorexia nervosa.	Cross-sectional study	555 participants	Adolescents aged 15 to 18 residing in Lebanon	Questionnaire form with Düsseldorf Orthorexia Scale.	Linear regression with DOS score and Macro PROCESS.	Higher fearful and preoccupied attachment styles, female gender, and more physical activity were significantly associated with more ON tendencies.

Demirer (2024)	Turkey	Investigate the relationship between mindful eating and orthorexia nervosa (ON) among adults and contribute to establishing ON diagnostic criteria.	Cross-sectional descriptive study	197 participants	105 females and 92 males, Total sample Mage = 30.60 years, SD = 6.80.	Face-to-face interviews using a questionnaire questioning demographic characteristics. Five results of scales along with demographic data were analyzed.	SPSS version 23, with a significance level of 0.05 and a 95% confidence interval. The normality of the data was tested using the Kolmogorov-Smirnov test. Descriptive statistics were used, and the Student's t-test compared quantitative data between two groups. Spearman's correlation coefficient was calculated to assess relationships	Mindful eating of individuals with ON is higher than those who do not have ON, and this is important in determining the diagnostic criteria of ON.
----------------	--------	---	-----------------------------------	------------------	---	--	---	--

							between continuous variables and the ORTO-15 score. Multiple linear regression was applied to identify predictors of the ORTO-15 score.	
Dolapoglu (2023)	Turkey	Analyzing if ON is a non-specific eating disorder or a disease in the spectrum of obsessive-compulsive disorder.	cross-sectional and retrospective study.	142 participants	Students between the 1st and 6th grades of medical school of the Balıkesir University Medical Faculty, ages ranging from 18 to 31 years old.	Questionnaire for University students	Univariate analysis	Orthorexia was affected by the total scores of the eating disorder scale, body image scale, and awareness scale in univariate analysis. When all variables were re-evaluated in the multivariate analysis, it was seen that the

								total scores of the body image scale and conscious awareness scale affected the diagnosis of orthorexia.
Kalika (2023)	United Kingdom	The role of mindfulness, mindful eating, and self-compassion on the relationship between eating-disordered quality of life and orthorexia nervosa	cross-sectional descriptive study.	288 participants	288 female participants who were all adults (18 years or over; $M = 24.79$, $SD = 7.08$) with a mean Body Mass Index (BMI) of $M = 24.26$ kg/m ² ($SD = 6.45$). A total of 69.1% of participants identified as White, 19.8% as Asian,	Questionnaire, advertised on several social media platforms and forums such as Facebook, Instagram, Twitter, LinkedIn and MiniMins	Self-reported scales to assess key psychological constructs. The following tools were used: ONI, FFQM, MEBS, SCS	Individuals with orthorexic behaviors display high levels of distress, self-judgment, and self-punishment when dietary violations occur. However, individuals with high orthorexic tendencies displayed low levels of acting with awareness. Such a relationship with acting with awareness goes

					3.5% as Black, 2.8% as Mixed and 4.9% as Other, Furthermore, the type of diet was also collected, the sample consisted of 75.4% of Omnivores, 22.2% of vegetarians and 2.4% as vegans.			against findings in the orthorexia literature, as research suggested that such individuals engage in obsessions with nutrition, where their entire focus is on the preparation of food and ensuring the quality of food before consumption, which may or may not be a different description of being aware that needs further exploration.
Levin (2023)	Canada	Clarify the relationships between ON	Cross-sectional study	333 participants	333 students at a large urban	Participants were given partial course	Outcomes were measured	The study identified three distinct

		and related forms of psychopathology. In addition, explored whether there may be subtypes of ON and if ON is associated with <u>BMI</u> , gender, or social media use.			university in Canada (72% female, Mage = 20.9, SDage = 4.3, age range = 17.3–47.3).	credit in exchange for participation. Prior to completing the survey, each student filled out an electronic consent form. All questionnaires were completed electronically via Qualtrics.	using Latent Profile Analysis (LPA)	subtypes of orthorexia nervosa (ON) within a non-clinical sample: low, moderate, and high ON symptom groups. Those with high ON symptoms exhibited more psychological distress, perfectionism, and restrictive eating behaviors, which negatively affected their social and functional well-being, mental health and their lifestyle.
Mahfoud (2023)	Italy, Lebanon and	Identify factors that may predict the	Cross-sectional study	977 participants	(mean age: 21.94 ± 3.14 years, 77.1%	Participants were randomly	outcomes were measured	individuals with low self-mastery,

	Poland	development of ON.			females)	selected from the general population using snowball sampling. They were recruited during university lessons and invited to participate via email, with the requirement of confirming participation. After receiving a link to a Google form, participants filled out questionnaires during a single online session, starting with informed	using self-report questionnaires to assess the key psychological traits related to orthorexia nervosa. The ORTO-15 scale, was used to assess dietary restrictions and obsessions with healthy eating. Additionally, statistical methods like correlation and regression analyses were employed to explore relationships	characterized by low self-esteem and high levels of obsessive perfectionism, are more likely to exhibit ON tendencies. This study emphasizes the need to have a comprehensive understanding of how cultural and psychological factors interact in the development of eating disorders.
--	--------	--------------------	--	--	----------	--	---	--

						consent.	between these traits and orthorexia symptoms.	
Majoch (2023)	Poland	Determine the occurrence of orthorexia in the study group and to assess the associations between selected risk factors and the prevalence of orthorexia	Cross-sectional study	4405 participants	348 women (85.93 %) and 57 men (14.07%). Four age groups were identified during the study: 18-25, 26-35, 36-45 and ≥ 46 years old.	The survey was conducted in April 2023 among students of the Faculty of Health Sciences of the Academy of Applied Sciences in Nowy Sącz and via social media. A diagnostic survey method was employed using a questionnaire technique developed by the authors	The analysis used Statistica 13.3 and Microsoft Excel 365, with significance set at $p \leq 0.05$. The Mann-Whitney U Test compared means for multiple groups, and the chi-square test with Yates correction assessed the impact of age, gender,	statistically significant association between orthorexia and chronic diseases at <40 points, and between orthorexia and both BMI and physical complaints at <35 points. Other factors, such as education level, were not found to be significantly related to orthorexia prevalence, suggesting the need for

						and the ORTO-15 questionnaire .	BMI, education, and profile on response frequency. Cronbach's alpha was calculated for test reliability, yielding $\alpha = 0.72$, indicating the test's reliability.	continued research into risk factors and improved diagnostic tools
Atsizata (2024)	Turkey	Investigating the relationship between orthorexia nervosa and cyberchondria levels among nurses.	Cross-sectional study	399 participants	Average age of the nurses was 29.2 ± 6.4 years, with 73.2 % being under 30 years old, 75.4 % being female,	Face-to-face interviews. The data were collected using a participant information form, the	The study used SPSS version 25.0 for statistical analysis. Normality of data was tested using the	Positive correlation between orthorexia nervosa (ON) and cyberchondria among nurses. Nurses with

					60.7 % being single, 75.2 % having an ideal BMI level,	Cyberchondria Severity Scale, and the Orthorexia Nervosa-11 scale (ORTO-11).	Kolmogorov-Smirnov test. Descriptive statistics and item analysis were conducted. The independent sample t-test compared two groups, while one-way ANOVA assessed differences across multiple groups, with the Scheffe test identifying specific group differences. The Spearman correlation test was used to	higher ON tendencies also exhibited higher levels of cyberchondria
--	--	--	--	--	--	--	---	--

							examine relationships between continuous variables.	
Rossi (2023)	Italy	Investigate how obsessive-compulsive thoughts and concerns about food impact the relationship between dieting habits and orthorexia nervosa.	Cross-sectional study	1328 participants	[352 males (26.5%) and 976 females (73.5%), <i>age</i> mean = 28.70; <i>age</i> SD = 5.843]	Participants were recruited voluntarily through advertisements placed on social media platforms and were asked to fill in an online survey.	The study used structural equation modeling (SEM) to assess these relationships, focusing on how worries about food mediate the connection between dieting and ON. The effectiveness of this mediation process was evaluated through the SEM model and	Both obsessive-compulsive thoughts and symptoms and dieting had a direct effect on ON and that food preoccupation partially mediated these relationships.

							associated statistical indicators.	
Sanzari (2023)	U.S	Health professionals' perspectives on orthorexia nervosa	Cross-sectional study	96 participants	U.S. health professionals with experience working clinically with eating disorders (trainees, Ph.D. psychologists, social workers/mental health counselors, and medical health professionals). (mean age = 35.54 years, SD = 9.78, range: 21–68 years; 92.70% ¹ female;	Qualtrics questionnaire advertised through social media (Facebook, Instagram, and Twitter) and professional discussion lists (Eating Disorders Academy, for example)	Descriptive statistics and t-tests were used to estimate ON prevalence and compare opinions by professional focus (research vs. clinical). Raters categorized participants' suggestions for additional ON criteria. Sociocultural factors were evaluated using a dedicated scale, with high reliability (α	Professionals varied in their views on orthorexia nervosa (ON) as a discrete diagnosis, with some supporting its recognition and others questioning its clinical utility. Participants recognized the significant role of sociocultural factors, particularly social media, in the development of ON. Differences were noted in perspectives based on

					93.80% White)		= 0.88). Bivariate correlations explored differences in sociocultural views based on professional time allocation. Missing data was accounted for, with valid percentages reported.	whether professionals focused on research or clinical work, with those in clinical practice more likely to support ON as a distinct condition.
Scheiber (2023)	Germany	Social media's influence on body image issues and orthorectic eating tendencies	Full report	647 participants	German-speaking sample of young men and women (18–30 years). Of these 647 participants, 64.9% identified	Quantitative online survey	These variables were evaluated through self-reported questionnaires, and structural equation modeling	Confirmed that users' involvement with health and fitness accounts on social media is positively related to ON tendencies.

					themselves as German and 35.1% as Austrian		(SEM) was used to explore the relationships between these factors and ON.	
Sener (2023)	Turkey	Investigate whether social media use and/or addiction affects the incidence of ON in obese individuals.	Cross-sectional study	174 participants	Obese individuals who applied to Başakşehir Çam Sakura City Hospital Family Medicine Clinic Obesity Polyclinic. 117 (67.2%) of the participants were female and 57 (32.8%) were male.	A total of 46 questions including demographic characteristics, weight loss experiences, Social Media Addiction Adult Form Scale (SMBÖ-YF) to measure social media addiction and ORTO-11 scale to investigate ON status were applied to the	Social Media Addiction Scale was used to assess the extent of participants' addiction to social media, while the Orthorexia Nervosa Scale (ORTO-15) was used to evaluate orthorexic behaviors. Both tools were administered to adult individuals	The incidence of orthorexia nervosa was higher in obese individuals who scored higher on social media addiction scale. Sharing on social media can have an impact on the body image and diet.

						participants.	attending an obesity clinic to identify potential correlations between social media addiction and orthorexia nervosa. The results were analyzed to determine the relationship between these two factors.	
Zohar (2023)	Israel	Effect of compulsive exercise, disordered eating as well as emotional and behavioral in ON	Cross-sectional cohort study	561 participants	561 adult volunteers (93 men, 17.09%) aged 19–72 ($M = 32.7 \pm 11$, recruited via social media networks.	Online questionnaires in social media networks	Through self-report questionnaires, focusing on three key variables: attachment styles, self-esteem, and tendencies toward	Participants with the highest levels also scored highest for compulsive exercise, insecure attachment, alexithymia, emotion regulation

							orthorexia nervosa (ON). These were measured using established psychological scales, including the Dusseldorf Orthorexia Scale (DOS) for ON, and other tools for attachment and self-esteem. The data were analyzed using structural equation modeling (SEM).	difficulties, weight and shape concerns, body dissatisfaction, restriction.
--	--	--	--	--	--	--	---	---

Source: The authors

Notes: This frame summarizes the characteristics of 14 studies investigating orthorexia nervosa (ON) and related factors. Studies vary in terms of location, sample size, population, methodologies, and tools used for data collection. Cross-sectional designs dominate, highlighting associations between ON and variables such as social media use, mindfulness, attachment styles, dieting habits, and cultural influences. Findings emphasize the multifaceted nature of ON, its relationship with psychological traits, and the potential influence of sociocultural factors like social media on its prevalence.