

# The long-lasting cycle of transformations in eating habits and the emergence of Orthorexia Nervosa: Covid-19 implications and future challenges

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## Abstract

The unprecedented outbreak of the Covid-19 pandemic has altered various aspects of social and everyday life, making individuals at a global level more conscious about wellness and healthy dietary practices. Long before the ongoing health crisis, however, a cultural shift in consumers has taken place, and attitudes towards food strikingly remodelled. Throughout the decades, different eating habits and body shapes have been idolized leading to contrasting standards and a consequent rise in body image disturbance and eating disorders (ED). Obesity spread rapidly across regions and several demographic groups while anorexia nervosa and bulimia nervosa retained the life-threatening prevalence rates. In more recent years, a novel disordered eating pattern called orthorexia nervosa (ON) that refers to a fixation with healthy eating and unprocessed food has emerged. The newly identified concept of ON has raised several controversies, that to date remain unresolved, but, more notably, the current orthorexic society has radically restructured our symbolic relationship with food. This paper draws on the literature while commenting on the different eating habits and body ideals that have unfolded, the concept of ON and the possible impacts of Covid-19 restrictions on diet. The discussions presented within the paper offer a framework on the perpetual manner of eating habits and ON that is anticipated to persevere and bring transformations in mental health practice.

## How have eating habits and body ideals changed throughout the years?

Over the past decades, eating habits and perceptions pertaining the ideal body type has undergone radical changes with clear societal influences. Food was strongly associated with family, symbolizing love rituals and socializing (Conroy, 2014). In the past, food shortages led to stricter rationing, with individuals eating more home-cooked meals and fresh home-grown vegetables. Contrast to our current days, convenience food simply meant food in tins because it allowed people to consume fruits and vegetables out of season. In societies characterized by food scarcity, for instance, fatness and full-figured silhouettes typified signs of prosperity and fertility (Brazier & LeBesco, 2001). In the meantime, agricultural and technological advances increased food availability, as the international trade of food was growing, making countries more reliant on each other so that adequate and varied food supply could be secured (Daviron & Douillet, 2013).

Under those circumstances, the shift to the Western ideal that emphasized on slim body figures accentuated the desire to abide by the promoted beauty standards, with depictions

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of self-starvation and purging practices being evident (Pimenta et al., 2009). Additionally, evidence of rampant eating followed by deliberate vomiting and laxative abuse started to grow (Gordon, 2015). The Western aesthetic standards (e.g. lean female bodies and muscular males) heightened weight concerns among individuals who, even though their anthropometric properties were within the average range, developed distorted perceptions related to their shape or weight. It could possibly be argued that the materialistic scourge of contemporary society was significantly projected to our bodies. Whilst in 1990s images of anorexic females flashed across media, between 2005 and 2014 the number of hospital admissions for ED in males aged 10-24 rose by 20% (NHS, 2017). Despite the stereotype that posits ED as a 'female phenomenon', disordered eating is increasingly common in males too. Due to cultural biases, however, they seldom seek treatment (K. Ali et al., 2017) – indicating that the percentage of male sufferers might be bigger- and when they do, they are less responsive and emotionally open (Tragantzopoulou & Giannouli, 2020).

In parallel, obesity spread rapidly, reaching epidemic proportions across a range of socio-demographic groups (World Health Organization, 2020a). As a consequence of the fast-paced and sedentary life, ready-made meals, nutritionally chaotic and high in fat, were widely marketed. Food industry annually channel multibillion-dollar expenditures on advertising in order to raise product awareness, enhance preferential attitudes and increase profits (Kelly et al., 2015). Through clearly language-stated promotions and virtually captivating environments, food low in nutritional value and high in fat is largely promoted (M. Ali et al., 2009). Children and adolescents, who are believed to be susceptible to the persuasive intent of the disseminated information, are the main targets (M. Ali et al., 2009). This strategic marketing has the capacity to shape eating behaviours and it is thought to be a catalyst for childhood obesity (Lobstein et al., 2015).

The stark divide in body representations, where thin figures reflect beauty standards whereas overweight/obese figures mirror individuals with lack of self-control, fuelled societal pressure to conform to a specific beauty ideal. The concept of healthism that posits individuals as solely responsible for their health and the consumption of biological products amplified food dichotomy ('bad' and 'good' food). Accordingly, the surge of mixed messages regarding the 'correct' diet in conjunction with the unlimited availability of food and the growing health-consciousness, developed a significantly anxiety-inducing stance towards food (Ryman et al., 2019). Nicolosi (2006) introduces the notion of the 'orthorexic society' where alimentary fears have captured our symbolic relationship with food, claiming that the advent of the industrial globalized society are main contributing factors. More specifically, the diffusion of alimentary fears is a social response induced by the uncertainty and the development of capitalist societies where food has become a mere commodity (Nicolosi, 2006). Therefore, in a neoliberal society with infinite choices, a reign of unconstrained consumption has been established that instead of prolonging the indisputable right of freedom of choice, entraps humans in a distressing environment of the 'right' option.

## **Orthorexia Nervosa**

The relative emphasis on healthy eating and the induced alimentary fears are thought to have contributed to the emergence of ON, a pathological fixation with healthy and 'clean' food that

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emphasizes on the quality rather than the quantity of food (Bratman, 2017). The avoidance or the treatment of modern diseases – the medicalization of food has become an integral part of medical and social discourses – and the desire to achieve optimum physical health are usually the most prevailing reasons for adhering to a restrictive diet (Varga et al., 2013). While there is little doubt that healthy eating is the pillar of good health, a well-balanced nutrition absolved of extreme behaviours is equally important.

The gradual avoidance of the perceived ‘impure’ products is believed to result to the elimination of entire food groups with significant impairments in functionality (Morozé et al., 2015). Although ON has not yet been recognized as a new ED, anecdotal evidence highlight that serious health conditions may be attributable for this rigid avoidance of food. For instance, the absence of a well-balanced intake with adequate nutrients could be followed by hormonal imbalances, bradycardia, anaemia or malnutrition (Koven & Abry, 2015; Morozé et al., 2015). From a psychosocial standpoint, orthorexics are perceived to struggle with guilt and self-loathing, especially when their ritualized eating habits are being disrupted, while their strong focus on self-imposed dietary rules socially isolate them (Varga et al., 2013). Both physical and psychosocial impacts reflect an arguably dangerous eating pathology that eventually may lead to a lower quality of life and a series of other mental health problems.

Increased demand for transparency in food has even led food industries to reformulate their products, the economic driver is profound, and restaurants to offer health-conscious menus featuring calories. Could these tactics conduce to healthier choices or could these act as deteriorating factors for vulnerable individuals? The lack of consensus over diagnostic criteria and the existing debate within the scientific community on whether ON is a distinct ED or merely a lifestyle syndrome complicates the clarification of such contributing factors. Provided that ON is a disruptive obsession cultivated by an array of mediators, research should thoroughly explore this newly identified condition so that early intervention could be attained.

Although individuals get consistently bombarded by adverts and campaigns that promote the socially approved practice of healthy eating (Eriksson & Machin, 2020; Mazzocchi et al., 2015), the widespread understanding of ON is minimal. On the contrary, the prevalence rates of ON are believed to be rising. In 2011, more than 100 Dutch-speaking ED professionals reported having encountered individuals with extreme healthy eating practices in their private practice (Vandereycken, 2011). Further, a recent qualitative study remarked the growing number of clients with ON tendencies and the rigidity in their thought process (black and white thinkers) (Cheshire et al., 2020). These findings suggest that there is a potentially serious issue developing in current society but the clinical world is still trying to understand the etiology of this phenomenon or how best to treat it.

## **Covid-19: Has the pandemic influenced our relationship with food?**

On March 11, 2020, the novel Covid-19 disease was declared a global pandemic following the implementation of a plethora of preventative measures and restrictions, with the scope to limit the spread of the infectious virus (World Health Organization, 2020b). Undoubtedly,

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social distancing and limitations in physical activity, which were some of the primary implemented measures, deeply disrupted our daily lives. Amid this global context, the pandemic was considered accountable for profound mental health difficulties (Holmes et al., 2020). For instance, high prevalence of psychological distress, irritability, increased anger, depression and emotional exhaustion, as a response to the uncertainty of the quarantine's duration and the adjustment to the new lifestyle, were observed (Wilder-Smith & Freedman, 2020). In the same vein, health concerns and anxiety-provoking media exacerbated the risk of disordered eating symptomatology either in those with pre-existing vulnerabilities in ED or in the general population (Phillipou et al., 2020). Despite the fear of contamination, grocery shopping was the only freedom allowed; thus, exposure to food was enhanced.

Poor mental health and prolonged staying at home significantly impacted eating habits, as distinct groups of individuals with heterogeneous responses, in terms of eating, started to surface. Some individuals developed hypercaloric diets leading to weight gain, others were spending more time to prepare and cook their dinners and others were regularly buying fully-prepared meals (Gallo et al., 2020; Sidor & Rzymiski, 2020). The lack of a clear routine in combination with social restrictions amplified the relationship between food intake and emotions in an attempt to counteract emotional dysregulations and strengthen the perception of self-control (Castellini et al., 2020; Rodgers et al., 2020), a feeling that is rather provisional and highly deceptive.

In this wider context of eating patterns, a particular cohort became more vigilant of its food intake adopting restrictive diets that were thought to minimize the danger of contamination and maximize immunity (Rodgers et al., 2020). In light of the widespread clean eating trend, the fear of contamination might have exacerbated individuals' tendency to be excessively obsessed and meticulous with their food intake. Further, individuals with orthorexic tendencies could possibly have found a solid ground for additional restrictions in their daily diet, justifying their food choices under the veil of Covid-19. During the pandemic, the risk of overlooking dietary restrictions and orthorexic behaviours is high, since healthy diet has been considered crucial in strengthening immune functions and combating Covid-19. Could Covid-19 trigger an outbreak of ON or transformations to future eating habits? The answer to this question can only be based on hypothetical scenarios since studies are absent. Therefore, the impact of Covid-19 and its influences on eating habits requires further analysis in populations either with no history of disordered eating or with a presence of an ED. Since the possibility of establishing eating behaviours or developing disordered eating habits that may last for a lifetime is high, research aiming early detection is considered paramount.

## Conclusion

The shift to the Western society significantly impacted eating habits and body ideals. Fresh home-cooked meals were replaced by ready-made meals high in fat whereas slenderness and masculinity were highly promoted. Further, the increased focus on outward appearance and the continuous encouragement to conform to a preconfigured ideal that was primarily unrealistic and unattainable, led to a long-lasting cycle of eating pathology in both genders. Amid the global spread of ED and obesity, healthy eating practices were widely endorsed, paving the way for a novel disordered eating pattern. ON, the outcome of modern societal

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depictions, is the most representative example of the unceasing perpetuation of ED that is expected to be further unfolded. During the unexpected Covid-19 outbreak, clear impacts on mental health and eating habits were observed due to restrictions and unpredictability. As a result, a specific group of individuals became more obsessed with food quality, raising the question if orthorexic symptoms have been increased due to the rise in concerns about healthy eating and immunity. Could the pandemic be part of the ongoing, long-lasting cycle of transformations around eating habits? Although conclusions cannot be drawn, future research will be able to enlighten the long-term consequences of Covid-19 on eating habits, and more specifically on the course of ON.

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