Will the real vegetarian please stand up? An investigation of dietary restraint and eating disorder symptoms in vegetarians versus non-vegetarians

C. Alix Timko a,*, Julia M. Hormes b, Janice Chubski a

a Department of Psychology, Towson University, Towson, MD 21252, USA
b Department of Psychology, University of Pennsylvania, Philadelphia, PA 19104, USA

A R T I C L E   I N F O

Article history:
Received 4 March 2011
Received in revised form 5 February 2012
Accepted 7 February 2012
Available online 14 February 2012

Keywords:
Vegetarianism
Disordered eating
Eating disorders
Semi-vegetarian
Meat avoidance

A B S T R A C T

Adherence to a vegetarian diet has been hypothesized to be a factor in the onset and maintenance of disordered eating behavior; however, evidence to support this assumption has been largely mixed. The two studies presented here sought to address the causes of inconsistent findings in previous research, including: small samples of true vegetarians, lack of appropriate operational definitions of “vegetarianism”, and uncertainty about the appropriateness of existing assessments of eating behaviors for semi-vegetarians. Study 1 assessed eating behaviors in the largest samples of confirmed true vegetarians and vegans surveyed to date, and compared them to semi-vegetarians and omnivores. Semi-vegetarians reported the highest levels of eating-related pathology; true vegetarians and vegans appeared to be healthiest in regards to weight and eating. Study 2 examined differences between semi-vegetarians and omnivores in terms of restraint and disordered eating and found little evidence for more eating-related pathology in semi-vegetarians, compared to omnivores. Semi-vegetarians’ higher scores on traditional assessments of eating behaviors appeared artificially inflated by ratings of items assessing avoidance of specific food items which should be considered normative in the context of a vegetarian diet. Findings shed light on the sources of inconsistencies in prior research on eating behaviors in vegetarians and suggest that semi-vegetarianism – as opposed to true vegetarianism or veganism – is the most likely related to disordered eating.

© 2012 Elsevier Ltd. All rights reserved.

Introduction

“Vegetarianism” refers to a spectrum of inter-related food selection and food avoidance patterns (Beardsworth & Keil, 1993). Technically, ovo-vegetarians include eggs but no dairy products in their diet, lacto-vegetarians include dairy products but exclude eggs, and lacto-ovo vegetarians include both eggs and dairy products in their diet (Messina & Burke, 1997; Trautman, Rau, Wilson, & Walters, 2008). Semi-vegetarians restrict the type of meat they consume only to a certain extent, with some consuming only fish (pesco-vegetarian), some only poultry (pollo-vegetarian), and some consuming both fish and poultry (pesco pollo vegetarians). Finally, individuals who adhere to a vegan diet exclude all red meat, fish, poultry, dairy, and other animal-origin foods such as eggs from their diets, and generally also avoid non-edible animal products such as leather.

Although the popularity of vegetarian diets has varied over the centuries, the prevalence of vegetarianism is currently at an all time high (Amato & Partridge, 2008). The increased frequency of individuals adhering to a vegetarian diet has served as an impetus for exploration into differences in behaviors and characteristics of those who chose a vegetarian diet versus those who do not. Specifically, the belief that a vegetarian diet could be used as a “socially acceptable” method to restrict intake and control weight has raised questions regarding the role of such a diet in the development or maintenance of disordered eating patterns or clinical eating disorders (Gilbody, Kirk, & Hill, 1999; Kadambari, Gowers, & Crisp, 1986; Klopp, Heiss, & Smith, 2003; O’Connor, Touyz, Dunn, & Beumont, 1987; Perry, McGuire, Neumark-Sztainer, & Story, 2001; Sullivan & Damani, 2000; Trautman et al., 2008; Worsley & Skrzypiec, 1998).

The majority of research in this area has been cross-sectional in nature; with generally mixed findings regarding differences in eating attitudes and behaviors between vegetarian and non-vegetarians. Results of studies investigating differences in levels of dietary restraint between omnivores and those who eliminate some form of meat from their diet are especially inconsistent. Several studies find evidence for higher restraint scores in vegetarians (Barr, Janelle, & Prior, 1994; Gilbody et al., 1999; Trautman et al., 2008; Worsley & Skrzypiec, 1998), others suggest higher scores in non-vegetarians (Curtis & Comer, 2006; Janelle, & Prior, 1994; Gilbody et al., 1999; Trautman et al., 2008; Worsley & Skrzypiec, 1998), and yet another set of studies fail to find any differences in dietary restraint between the two groups (Barr & Broughton, 2000; Fisak,
Peterson, Tantleff-Dunn, & Molnar, 2006; Larsson, Klock, Aström, Haugejorden, & Johansson, 2002). A possible explanation for these inconsistent findings is that there are major differences between semi-vegetarians and vegetarians (who are often combined into one group), with semi-vegetarians exhibiting more dietary restraint than vegetarians. This hypothesis is supported by findings that suggest that semi-vegetarians are twice as likely than true vegetarians to restrict their meat intake for weight concern reasons (Curtis & Comer, 2006; Perry et al., 2001).

When differences in restraint are found between groups, higher restraint scores in vegetarians are often interpreted as indications of disordered eating or maladaptive attitudes towards food; however, it can be hypothesized that higher scores are an artifact of the specific elimination of meat products from the diet, not restriction in general. Furthermore, it is possible that certain items on restraint scales are not relevant for vegetarians (e.g., related to eating red meat); therefore the restraint scales may not be valid measures of the construct in vegetarians (Pisak et al., 2006).

Beyond differences in restrained eating, researchers have postulated that vegetarianism may be a precursor to the development of an eating disorder. To date, two studies have attempted to determine causality in the relationships between vegetarianism and eating disorders via retrospective chart reviews of patients seeking treatment for eating disorders. In one study, out of 200 patients receiving treatment for anorexia nervosa, just under half were considered to be vegetarian (Kadambari et al., 1986). In another, out of 116 individuals with anorexia nervosa, just under half of the patients claimed a vegetarian (defined in this particular study as not eating red meat) diet (O'Connor et al., 1987), yet only four of these individuals adhered to a vegetarian diet prior to the onset of the eating disorder. Across both of these retrospective reports, the majority of the women interviewed reduced their meat intake after the onset of the eating disorder (O'Connor et al., 1987), that is, the vegetarian diet was adopted during or after the development of the eating disorder. The adoption of a vegetarian diet after the onset of a disorder may indicate that rather than being a causal factor, a vegetarian diet may play a maintenance role in eating disorders pathology.

Given the wide variety of reasons for choosing a vegetarian diet (e.g., health, weight control, ethics), it is unlikely that vegetarianism is in and of itself enough to be a risk factor for developing an eating disorder. However, choosing a vegetarian diet for the purposes of weight control might play a role in the etiology of disordered eating. In prior studies, combined groups of vegetarians and semi-vegetarians who chose a reason other than weight concerns (e.g., ethical/political reasons, health concerns, religious reasons, or taste preferences) had significantly lower levels of dietary restraint than semi-vegetarians who chose weight concerns as their reasons for restricting consumption of meat (Curtis & Comer, 2006). True vegetarians were also less likely to participate in healthy and unhealthy weight control behaviors than semi-vegetarians (Perry et al., 2001). Thus, it may be that it is not vegetarianism per se that leads to disordered eating, but rather a partial restriction of meat (semi-vegetarian) for the purposes of weight control, possibly in combination with other risk factors related to the development of eating disorders. Full vegetarianism may, as has been noted, play more of a role in the maintenance of the disorder.

The fact that findings regarding the role of restricted meat consumption in the onset or maintenance of disordered eating have been quite mixed may be due not only to the reasons for the restriction, but also to problems with the operational definition of “vegetarian.” In the majority of studies investigating meat restriction, vegetarianism is defined as eliminating red meat; however, this does not reflect a true vegetarian diet (which would also eliminate all fish and poultry) but rather what is more accurately described as a semi-vegetarian diet (Gilbody et al., 1999; Kadambari et al., 1986; Klopp et al., 2003; O’Connor et al., 1987; Trautman et al., 2008; Worsley & Skrzypiec, 1998). Few studies have looked at true vegetarianism or even veganism, with the largest published true vegetarian sample consisting of twenty individuals (Curtis & Comer, 2006), and the largest vegan sample of a mere eight participants (Janelle & Barr, 1995). In most studies vegetarians and semi-vegetarians are combined in the “vegetarian” group due to low sample sizes (e.g., Pisak et al., 2006). Thus, the majority of research reports that find differences between “vegetarians” and non-vegetarians use a mixed sample of semi-vegetarians and true vegetarians.

The studies described herein are a first step in attempting to address some of the inconsistencies and difficulties with previous research on the relationship between disordered eating and vegetarianism and seek to lay the groundwork for more specific hypotheses in this area. Specifically, the current studies were designed to examine differences that exist between true vegetarians, semi-vegetarians, and omnivores in a large sample and using strict operational definitions to allow for more accurate investigation of between-group differences. The utility of traditional assessments of disordered eating patterns in meat restrictors was also evaluated.

**Study 1**

This first study was conducted in order to clarify the correlates of a true vegetarian diet by accurately categorizing levels of vegetarianism and assessing any differences between groups on measures traditionally employed in research on vegetarianism. It was hypothesized that vegans and vegetarians would have healthier attitudes towards food and less eating pathology than semi-vegetarians. Measures of general health (e.g., exercise, anxiety, and depression) were also included as those who adhere to a semi-vegetarian diet may be more depressed and less invested in being healthy than omnivores (Perry et al., 2001).

**Method**

All methods were reviewed and approved by the Institutional Review Board at Towson University and the University of Pennsylvania.

**Participants**

Participants were recruited via several methods: from psychology department research pools of two urban universities, via flyers distributed to local health food stores, and through the internet. On the internet, the study was posted on general psychology study sites as well as on pages devoted to vegetarianism. Participants recruited via the former method were given either course credit or extra credit for their participation. Of the 714 individuals who began the questionnaires, 564 (78.99%) completed the survey. Seventy-two of the completers were excluded because they either did not provide their age or reported being younger than 18. Thus, 486 participants (68.07%) were considered completers. Of those 77.00% (n = 374) were female and 23.00% (n = 111) were male. The average age of participants was 24.90 (SD = 9.54). The majority (69.50%, n = 338) of participants were between 18 and 25 years old, 20.60% (n = 100) were 25 to 39 years old, and 9.90% (n = 48) were over the age of 40. Caucasians comprised 80.20% of the participants (n = 388) with Asian/Pacific Islanders following with 8.30% (n = 40). The remainder were African American (4.70%, n = 23), Hispanic/Latino (3.10%, n = 15), biracial (2.30%, n = 11), and self-designated as “other” (1.40%, n = 7). The average BMI was 24.02 (SD = 5.26).
دریافت فوری
متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات