

# 'I'm searching for solutions': why are obese individuals turning to the Internet for help and support with 'being fat'?

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## Abstract

**Introduction** This study explores what types of information obese individuals search for on the Internet, their motivations for seeking information and how they apply it in their daily lives.

**Method** In-depth telephone interviews with an Australian community sample of 142 individuals with a BMI  $\geq 30$  were conducted. Theoretical, purposive and strategic samplings were employed. Data were analysed using a constant comparative method.

**Results** Of the 142 individuals who participated in the study, 111 (78%) searched for information about weight loss or obesity. Of these, about three quarters searched for weight loss solutions. The higher the individual's weight, the more they appeared to search for weight loss solutions. Participants also searched for information about health risks associated with obesity ( $n = 28$ ), how to prevent poor health outcomes ( $n = 30$ ) and for peer support forums with other obese individuals ( $n = 25$ ). Whilst participants visited a range of websites, including government-sponsored sites, community groups and weight loss companies, they overwhelmingly acted upon the advice given on commercial diet websites. However, safe, non-judgemental spaces such as the Fatosphere (online fat acceptance community) provided much needed solidarity and support.

**Conclusions** The Internet provides a convenient source of support and information for obese individuals. However, many turn to the same unsuccessful solutions online (e.g. fad dieting) they turn to in the community. Government and community organisations could draw upon some lessons learned in other consumer-driven online spaces (e.g. the Fatosphere) to provide supportive environments for obese individuals that resonate with their health and social experiences, and address their needs.

## Introduction

Obesity is an increasing public health concern around the world. Whilst there are many messages about the causes and consequences of obesity, there are few appropriate and accessible interventions and supports for obese individuals within the community.<sup>1,2</sup> It is also a highly stigmatised condition.<sup>3,4</sup> Stigma may limit the ways that individuals can engage in activities that improve their health and well-being. For example, physical exercise programmes may be socially challenging in public spaces, whereas diets can be applied in the privacy of individuals own home.<sup>1,5,6</sup>

The Internet has become an important source of both information and support for individuals with highly stigmatised health conditions.<sup>7</sup> Large cross-sectional surveys have shown that individuals with highly stigmatised health conditions, such as herpes, urinary incontinence and mental health problems, are significantly more likely than individuals with other chronic illnesses to: (i) use the Internet for health information; (ii) communicate with an online clinician about their health and (iii) apply what they find on the Internet to their own health and well-being.<sup>8</sup>

The Internet provides a never ending source of information related to obesity and weight loss solutions.<sup>9</sup> For example, a Google search on the 9th November 2009 for the term 'obesity' revealed a possible 22.6 million websites for information about the risks, treatment, diagnosis, symptoms and causes of obesity. A similar search for the term 'weight loss' provided over 100 million websites.

The types of websites aimed at obese individuals vary immensely – from a myriad of commercial dieting options, to government and medical sites about the health risks, to the fat acceptance community or Fatosphere. The Fatosphere is an online network of blogs and personal sites where 'fat' people write about and discuss issues related to fat, body image, physical and mental health and well-being, and anti-fat stigma. Members embrace and celebrate their size, and challenge mainstream beliefs about

obesity, weight loss and dieting.<sup>10,11</sup> However, studies that have examined the quality of obesity-related websites have found the information provided is often inaccurate, misleading or conflicting<sup>12-15</sup>, and that commercial diet programmes delivered via the Internet are no more effective in helping obese individuals improve their health and well-being than face-to-face programmes.<sup>16</sup>

What is almost completely missing from the literature is an understanding, from the obese individual's point of view, about the types of information they search for on the Internet; the motivations for seeking certain types of information; and how they apply the information they find. Are individuals interacting with information that is unhelpful in improving their long-term health outcomes, contributing to information and misinformation overload<sup>17</sup>, or does the Internet provide access to support, that is difficult to find in the broader community, for a highly stigmatised group? Understanding how individuals interact with different types of information about weight and well-being is essential in tailoring appropriate responses to meet their needs and also to perhaps counter information that may be unhelpful in improving their health and well-being.

This study aims to explore what information obese individuals search for on the Internet, their motivations for information seeking and how they apply what they find in their daily lives.

## Methods

### Approach

We used a qualitative design for this study to enable participants to reflect on their experiences, describe their processes of and reasons for information seeking and to explore the assumptions underlying their assertions and beliefs. The information presented in this paper was part of a broader qualitative study 'Obesity: Have Your Say!' which aimed to explore the health and social outcomes of obese Australians.<sup>2,18,19</sup> Ethics approval was gained from the Monash University Human Research Ethics Committee.

## Sampling and recruitment

We employed a diverse range of purposive, theoretical and strategic sampling methods<sup>20,21</sup> to attract study participants who were from different socio-demographic backgrounds. This strategic approach to sampling enabled us to include individuals who were actively trying to lose weight; individuals who were happy with their weight and individuals who had 'given up' trying to address their weight. We employed six different mechanisms for recruiting individuals to the study.

1. Local media (including radio, newspaper, television and magazine articles);
2. Internet advertisements (including electronic advertisements, mailing lists, a study website and postings on Internet newsletters and forums);
3. Referrals (through health professionals and personal trainers);
4. Obesity and weight loss centres (including Jenny Craig and Overeaters Anonymous);
5. Posters and flyers left in community areas, (including shopping centres and local gyms); and
6. Workplace, university and hospital mailing lists and newsletters.

An 1800 free-call number was provided, as was an email address and website.

## Data collection

In-depth semi-structured telephone interviews were conducted between April 2008 and March 2009 by SL and a research assistant. Interviewers were trained by ST in a pilot study which interviewed 76 obese individuals.<sup>1</sup> Interviews lasted between 60 and 90 min were audio-taped with participants' permission and transcribed by a professional transcribing service within 7 days of being conducted. We began each interview by explaining that the:

aim in conducting this interview is to enable you to tell your story about what it is like to live with obesity in Australia today. I am going to ask you a few details about yourself, the early and recent experiences you have had with your weight, your

relationships with others, and the types of things you might have done to lose weight. We will also talk to you a little bit about your overall health and wellbeing. We will ask a few questions to guide you, but feel free also to talk about the things that you think are most important to you.

For this section of the study, participants were asked six broad questions to stimulate discussion. Initially, three questions were asked:

1. Do you use the Internet to search for information about obesity, being overweight, weight loss or dieting?
2. What do you look for?
3. What do you find? Can you remember any websites that you have visited recently?

In keeping with the iterative process of data collection and analysis, the interview schedule was modified progressively, allowing insights from earlier interviews to inform the content of later interviews. As data emerged from the study, we added three additional questions:

4. How do you assess the credibility of what you find? (added after interview 12)
5. Do you apply any of the information you interact with to your own life? (added after interview 27)
6. What have you found the most helpful and/or unhelpful? (added after interview 39)

## Data analysis

SL and ST analysed the data continuously throughout the study, using a constant comparative method – by reading and rereading transcripts and coding and identifying categories/themes (and similarities and differences between these), sorting data to ensure that the concepts/theories were appropriate, and noting differences between different groups of individuals.<sup>22,23</sup> Regular meetings were held between SL, ST, DC, WB, JH and PK to interpret and discuss findings and to build thematic areas and theoretical concepts, and to identify and refine new research questions and directions as they emerged from the data. QSR NVIVO 8 (QSR International Pty Ltd. Doncaster, Vic, Australia) was used to help manage and sort the data.

## Results

Quotes are used throughout this paper to illustrate the research findings. Whilst it is uncommon to quantify qualitative research, we have added numerical values to some clusters of the responses. This allows us to identify the proportions and types of individuals who responded in certain ways. Where numbers are not used, we have used the terms 'a few' to refer to less than a quarter of participants; 'some' to refer to 25–50% of participants; 'many' to refer to 50–75% of participants and 'most' to refer to over 75% of participants. These figures are not designed to suggest that these percentages apply to the general population. They serve as a guide to indicate how many individuals within this sample responded in certain ways to the questions asked.

### General demographics

A total of 172 individuals enquired about the study and 142 participated in the interview. We stopped recruiting participants after interview 142 when saturation was reached with the majority of the questions asked. Eight respondents decided not to participate, whilst 22 were excluded from the study because they did not fit the study criteria (i.e. had a BMI < 30, or were living outside Australia). Those who enquired about the study were asked to report their height and weight and we then calculated their BMI based on this information. We used the World Health Organisation classification of obesity which is a BMI of 30 or more.<sup>24</sup>

In this paper we report on those individuals who used the Internet to search for information about obesity and weight loss ( $n = 111$ , 78%). These individuals were aged between 19 and 75 (mean = 44), and were mainly women ( $n = 84$ ), married or in a de facto relationship ( $n = 77$ ), and tertiary educated ( $n = 70$ ). For a more detailed description of participants' demographic characteristics, refer to Table 1. The key findings of this study are summarised in Table 2.

**Table 1** Participant demographics

Demographic category	<i>n</i> (111) (%)
<i>Gender</i>	
Female	84 (75.7)
Male	27 (24.3)
<i>Age</i>	
Mean	44.0 (SD 11.5)
Range	19–75
<i>BMI</i>	
Mean ( $n = 110^1$ )	39.1 (SD 7.5)
Range	30–71.7
<i>Obesity class</i>	
Class I (BMI 30–34.9)	38 (34.2)
Class II (BMI 35–39.9)	31 (27.9)
Class III (BMI $\geq 40$ )	42 (37.8)
<i>Marital status</i>	
Single	34 (30.6)
Married/ <i>de facto</i>	77 (69.4)
<i>Education</i>	
< High school	14 (12.6)
High school graduate	27 (24.3)
< University degree	
University or postgraduate degree	70 (63.1)
<i>Income before tax (AUD)</i>	
< 50 000	29 (26.1)
50 000–100 000	51 (45.9)
> 100 000	29 (26.1)
Not revealed	2 (1.8)
<i>Place of birth</i>	
Australian born	83 (74.8)
Overseas born	17 (15.3)
Not revealed	11 (9.9)

<sup>1</sup>One participant did not reveal their height and weight for us to calculate their Body Mass Index.

### Searching strategies and motivations

Most participants stated that the majority of their searches were about weight loss ( $n = 82$ , 74%). The higher the participant's weight, the more they appeared to search for weight loss solutions online. Those with a BMI over 40, more often reported that they searched for weight loss solutions. Five participants said that they searched at least twice a day for weight loss remedies. Participants reported searching for a range of weight loss solutions, including commercial diets ( $n = 67$ ); bariatric surgery ( $n = 30$ ); complementary medicines and thera-

**Table 2** Key findings

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How did participants use the Internet, and what did they search for?

- Most participants searched for information and strategies about how to lose weight, despite recognising that this was unhelpful for them in the long term
- Those who were severely obese were more likely to search for information about weight loss than those who were moderately obese

What motivates participants' online searching?

- Desperation; shame and self blame; advertisements about commercial and fad diets; and perceived lack of support from health professionals, were all strong drivers for participants seeking weight loss information and solutions
- Concerns about the health risks of obesity encouraged individuals to look for information about the negative health consequences of obesity, and ways to protect themselves from these consequences
- Lack of social acceptance and support, and fat stigma led individuals to look for online support groups

What are the outcomes of online searching for participants?

- Commercial and fad dieting websites negatively impacted on participants' self esteem and body image
  - Participants often blamed themselves for not being able to successfully apply information from weight loss websites
  - Information about the negative health consequences of obesity was often perceived as discouraging or unhelpful
  - Non-dieting support groups positively impacted on participants' self esteem and their sense of social acceptance
- 

pies ( $n = 6$ ) and pharmaceutical medicines ( $n = 3$ ). Specific search terms included 'diet', 'dieting', 'weight loss', 'weight reduction', 'causes of obesity', 'lap banding', 'stomach stapling', 'liposuction' and pharmaceuticals such as 'Xenical'. Examples of the different types of websites most recently accessed by participants are included in Box 1.

The overriding motivation for searching for diets was that of 'desperation'. Many used this word specifically to describe why they regularly searched for weight loss solutions. However, many also stated that they felt shame and embarrassment at 'begging for help' on online forums. For example, one woman stated that she had written to the *Oprah Winfrey website* 'to give me some advice. That is how low I have stooped.' Some stated that they searched online rather than in the community because they felt so ashamed at how large they had become. Many blamed themselves for 'allowing myself to gain so much weight' and felt that they alone were responsible for finding a solution to their 'fatness'.

About half of all participants searched for specific types of websites after seeing promotions for particular diets in advertisements or magazine style programmes. Most of these participants stated that the claims of amazing weight loss in severely obese individuals encouraged them to search for specific types of diets.

Every diet plan I see on the telly [I'll] get on the website and look at that. Every time there's a new diet. It astounds me how many new ways there are to lose weight on telly! Everybody has a different plan. I get on the net constantly. (Female aged 47)

A quarter of participants searched for information about the health risks associated with their obesity ( $n = 28$ ). Some of these participants searched for information after being diagnosed with a weight-related issue such as Type II Diabetes or Cardiovascular Disease.

When I first was diagnosed with diabetes I tried to read up as much as I could online. (Female aged 74)

Some participants wanted to assess their chances of developing a serious illness (e.g. diabetes, heart problems, cancer and depression) as the result of their obesity. Whilst this may seem a positive first step for individuals wishing to improve their health and well-being, some commented that the results presented through these websites left them feeling disheartened and disempowered:

There's been a couple of sites where I've gone about the body mass indicator. One of them was rather upsetting because I was far too overweight for it to calculate. [Laughing] That made me feel really good. (Male aged 33)

Others ( $n = 30$ ) searched for information to 'educate' themselves about ways that they could



<b>Box 1</b> Websites recently visited by participants		
Description of website	Website	URL address
Dieting and weight loss information, products (e.g. food diaries, weight loss progress charts, and calorie counters) and services (e.g. commercial diet companies).	The Atkins Diet	<a href="http://www.atkins.com">http://www.atkins.com</a>
	Jenny Craig	<a href="http://www.jennycraig.com.au">http://www.jennycraig.com.au</a>
	Lite N Easy	<a href="http://www.liteneasy.com.au">http://www.liteneasy.com.au</a>
	The Zone Diet	<a href="http://www.drsears.com">http://www.drsears.com</a>
	Weight watchers	<a href="http://www.weightwatchers.com.au">http://www.weightwatchers.com.au</a>
	TOWN (take off weight naturally)	<a href="http://www.townclubs.com.au">http://www.townclubs.com.au</a>
	CSIRO Total well being diet	<a href="http://www.csiro.au/science/TWD.html">http://www.csiro.au/science/TWD.html</a>
	The Biggest Loser Club	<a href="http://www.thebiggestloser.com.au">http://www.thebiggestloser.com.au</a>
	Blackmores weight management	<a href="http://www.beyondyourbest.blackmores.com.au/shape">http://www.beyondyourbest.blackmores.com.au/shape</a>
	Gutbusters	No longer accessible
	Health crusaders	<a href="http://www.healthcrusaders.com.au">http://www.healthcrusaders.com.au</a>
	Sue Stanley Health & Wellbeing	<a href="https://www.suestanley.com.au">https://www.suestanley.com.au</a>
	The Lemon Detox Diet	<a href="http://www.lemondetox.com.au">http://www.lemondetox.com.au</a>
	The Soup Diet	<a href="http://www.kickstartdiet.com.au">http://www.kickstartdiet.com.au</a>
	Dr Amanda 'connect with your body'	<a href="http://www.dramandaonline.com">http://www.dramandaonline.com</a>
	The Gabriel Method	<a href="http://www.jongabriel.com.au/">http://www.jongabriel.com.au/</a>
	Dr Tickell – The Fat Club	<a href="http://www.drjohnstickell.com/site-wide/all/fat-club-262.html">http://www.drjohnstickell.com/site-wide/all/fat-club-262.html</a>
	3 Fat Chicks on a diet	<a href="http://www.3fatchicks.com">http://www.3fatchicks.com</a>
	Losing weight for idiots	<a href="http://www2.fatloss4idiots.com">http://www2.fatloss4idiots.com</a>
	"The New Me" weight loss retreat	<a href="http://www.thenewme.com.au">http://www.thenewme.com.au</a>
	Calorie King	<a href="http://www.calorieking.com.au">http://www.calorieking.com.au</a>
	Cross Trainer	<a href="http://www.crosstrainer.com">http://www.crosstrainer.com</a>
	Skinnyr	<a href="http://www.skinnyr.com/">http://www.skinnyr.com/</a>
	Optifast	<a href="http://www.optifast.com.au">http://www.optifast.com.au</a>
	Optislim	<a href="http://www.optislim.com.au">http://www.optislim.com.au</a>
	Tony Ferguson	<a href="http://www.tonyferguson.com">http://www.tonyferguson.com</a>
	Trim meal replacements	<a href="http://www.trimbodysystem.com.au">http://www.trimbodysystem.com.au</a>
Oprah Winfrey	<a href="http://www.oprah.com/">http://www.oprah.com/</a>	
Xenical	<a href="http://www.xenical.com.au">http://www.xenical.com.au</a>	
Pharmaceutical interventions		
Clinics, surgeons, and information about obesity surgery.	Ozband	<a href="http://www.ozband.com">http://www.ozband.com</a>
	Epworth Obesity Clinic site	<a href="http://www.obesity.com.au">http://www.obesity.com.au</a>
Medical and scientific websites related to obesity and the health conditions associated with it.	Gastric Banding Surgery	<a href="http://www.lapband.com.au">http://www.lapband.com.au</a>
	American Medical Association	<a href="http://www.ama-assn.org">http://www.ama-assn.org</a>
	Diabetes Australia	<a href="http://www.diabetesaustralia.com.au">http://www.diabetesaustralia.com.au</a>
	Diabetes Victoria	<a href="http://www.diabetesvic.org.au">http://www.diabetesvic.org.au</a>
	Cancer Council Australia	<a href="http://www.cancer.org.au">http://www.cancer.org.au</a>
	Polycystic Ovarian Syndrome	<a href="http://www.posaa.asn.au">http://www.posaa.asn.au</a>
	Association of Australia	
	Practiva health	<a href="http://www.practivahealth.com">http://www.practivahealth.com</a>
	The Heart Foundation	<a href="http://www.heartfoundation.org.au">http://www.heartfoundation.org.au</a>
	Mayo Clinic	<a href="http://www.mayoclinic.com">http://www.mayoclinic.com</a>

**Box 1** (Continued)

Description of website	Website	URL address
Public health and other government run websites relating to obesity, health and wellbeing.	If not dieting then what?	<a href="http://www.ifnotdieting.com.au">http://www.ifnotdieting.com.au</a>
	The Lancet	<a href="http://www.thelancet.com">http://www.thelancet.com</a>
	10,000 steps	<a href="http://www.10000steps.org.au">http://www.10000steps.org.au</a>
	ABC Health and Wellbeing	<a href="http://www.abc.net.au/health">http://www.abc.net.au/health</a>
	ACT Health	<a href="http://www.health.act.gov.au/c/health">http://www.health.act.gov.au/c/health</a>
	Better Health Channel	<a href="http://www.betterhealth.vic.gov.au">http://www.betterhealth.vic.gov.au</a>
	Go For Your Life	<a href="http://www.goforyourlife.vic.gov.au">http://www.goforyourlife.vic.gov.au</a>
	I Village – Your Total Health	<a href="http://yourtotalhealth.ivillage.com/diet-fitness">http://yourtotalhealth.ivillage.com/diet-fitness</a>
	Monash Health and Wellbeing site	<a href="http://www.adm.monash.edu.au/community-services">http://www.adm.monash.edu.au/community-services</a>
	Revolution Health	<a href="http://www.revolutionhealth.com">http://www.revolutionhealth.com</a>
	The Department of Health & Ageing	<a href="http://www.health.gov.au">http://www.health.gov.au</a>
	Victorian Department of Health	<a href="http://www.health.vic.gov.au">http://www.health.vic.gov.au</a>
	Weight loss support groups.	Vic Health
Wellbeing		<a href="http://www.wellbeing.com.au">http://www.wellbeing.com.au</a>
Liquid diet discussion board		<a href="http://www.liquiddietdiscussion.com">http://www.liquiddietdiscussion.com</a>
Tony Ferguson weight loss forum		<a href="http://forum.tonyferguson.com">http://forum.tonyferguson.com</a>
Yahoo Groups – Weight Watchers Forum		<a href="http://au.messages.yahoo.com/lifestyle/Yahoosupport_group/">http://au.messages.yahoo.com/lifestyle/Yahoosupport_group/</a>
Yahoo Groups – Jewish Weight Watchers		<a href="http://health.groups.yahoo.com/group/Jewish_Weight_Watchers/">http://health.groups.yahoo.com/group/Jewish_Weight_Watchers/</a>
Yahoo Groups – “Gold Coast Bandsters”:		<a href="http://health.groups.yahoo.com/group/GoldCoastBandsters">http://health.groups.yahoo.com/group/GoldCoastBandsters</a>
Yahoo Groups – The Lap band Surgery Forum		<a href="http://au.messages.yahoo.com/lifestyle/lap-band/">http://au.messages.yahoo.com/lifestyle/lap-band/</a>
Facebook lap banding groups		<a href="http://www.facebook.com">http://www.facebook.com</a>
Fat acceptance websites and blogs.		Kate Harding’s Shapely Prose
	Fatosphere	<a href="http://www.fatosphere.blogspot.com">http://www.fatosphere.blogspot.com</a>
	Junk Food Science	<a href="http://www.junkfoodscience.blogspot.com">http://www.junkfoodscience.blogspot.com</a>
	Big Fat Blog – The Fat Acceptance Weblog	<a href="http://www.bigfatblog.com">http://www.bigfatblog.com</a>
	National Association to advance Fat Acceptance	<a href="http://www.naafa.org">http://www.naafa.org</a>

prevent or minimise the health risks of their obesity. These participants mainly searched for healthy recipes and ideas to increase their levels of physical activity:

I search the Internet for two things. One, educating myself about diet and health. Two, downloading some sports specific exercises. (Male aged 48)

About a quarter of participants searched for networks of acceptance and support ( $n = 25$ ). Most of these participants looked for places where they would feel socially accepted. This included how to improve their self esteem and sense of self worth:

How does one hold their head up and not be ashamed to admit that they are obese? This is what I type into Google. (Female aged 41)

Nine women regularly visited the ‘Fatosphere’ to share their experiences with other ‘fat’ individuals:

I look at websites about ‘health at every size’ and the bloggers who write about fat acceptance. One site that really stood out for me was Shapely Prose, [kate.harding.com](http://kate.harding.com), that’s sort of the epicentre of a bunch of good blogs. (Female aged 36)

A few participants searched for reassurance that their size would not affect their relation-

ships or social opportunities. For example, one woman searched for websites featuring images of fat women posted by their partners or husbands, because she wanted to understand how men *'could actually find fat women attractive'*. Another, Googled *'how men prefer their women'* for reassurance that men prefer *'healthy women rather than skinny women'*.

A final group of participants searched for online support when they felt disengaged from their health-care providers. One participant stated that the Internet had become his only source of support and advice when his doctor told him, *'there's not much more I can do for you'*.

How then did individuals interact with these websites?

#### Interactions and interpretations

Most of the websites participants visited were based on paid commercial diets. These included well-recognised commercial diet programmes (e.g. Weight Watchers and Jenny Craig); personal dieting websites (e.g. Three Fat Chicks on a Diet); online diet plans (e.g. The Biggest Loser); 'fad' diets (e.g. The Soup Diet and the Lemon Detox Diet); meal replacements (e.g. Optislim and Optifast); calorie counters (e.g. Calorie King) and dieting advice (e.g. Losing Weight For Idiots). Many of the participants who visited these websites described them as *'informative'* and *'motivational'*. These websites appeared to identify with people's lifelong struggle with their weight and offered them support and understanding with catchphrases such as *'we can help you'*; *'we understand you'*; *'it's not your fault'* and personal *'success'* stories, testimonials, celebrity endorsements, support forums and help lines.

About half of participants stated that they purchased subscriptions to the websites as well as additional products (such as calorie counters, food diaries, diet books and pharmaceutical medications). Participants often described *'diet hopping'* online – that is constantly jumping from one diet to another. Others stated that they

had simultaneous paid subscriptions to dieting sites:

I belonged to an Internet weight loss group Health Crusaders. Then I was in Calorie King for years and years. And you pay money to belong to Calorie King and Health Crusaders. The Madal Bal [diet] I got from the Internet, oh and the soup diet I got from the Internet too. (Female aged 55)

A small number of participants stated that access to *'hundreds'* of fad diets and an overwhelming amount of information was unhelpful for them. Participants stated that they never had to feel committed or accountable to a particular strategy or diet plan because they could constantly change diets:

What I am doing, seems to be having some effect. If it doesn't seem to be working anymore, or I don't feel comfortable with it anymore, or I think I need a boost, I might consider something else. (Female aged 42)

Some stated that whilst they knew that there was more helpful information than fad diets online, they were still drawn back to the promises of the commercial diet industry:

I was on a government website to work out my BMI. And I got an ad off to the side, 'Dr Amanda online' or something. She's some weight loss guru lady you know. They often come up if you are looking for something else. So I had a little click on it just to see what was there – I couldn't help myself. (Female aged 45)

Whilst participants doubted these diets would have any long-term impact on their health and well-being they still held out hope that one would eventually work for them. Many participants said that they knew their involvement in commercial diet websites would make them feel worse about themselves and their bodies. Some stated they made them feel *'depressed'*, *'guilty'* and a *'failure'*:

I quite often get on the Internet and look at weight watcher websites. I always read [about] the people who are my size and their personal stories. But then I feel depressed. It puts the guilts up you. Like I should go 'she did it, perhaps I can do it'. (Female aged 48)



But participants still regularly visited the websites. Some described that they felt it was better to feel connected to something, even if unhelpful, than nothing at all:

I felt they were lying. It's a con job. But I still stayed a member [laughing]. (Male aged 54)

Rather than blaming the website for inaccurate or misleading information, most blamed themselves for not being able to apply the information they had gained from these dieting websites:

I've got a lot of dieting knowledge from the Internet, but I don't put it into action. That's my problem. It's just making that next step and actually doing something about it that's hard. (Female aged 37)

Non-dieting support groups appeared to have a much more positive impact on participants lives. Participants spoke particularly positively about online support groups and forums where they could share common experiences and having places where they could 'vent' about the way society viewed obese individuals:

Absolutely there is a lack of support. I get the support I need from people online. That's the only support I'm getting in some cases. (Female aged 43)

Many commented these websites created safe spaces in which they were allowed to '*be myself*' and '*be accepted for who I am*'. The websites that had the most impact on participants were those in the 'Fatosphere'. Whilst the websites often banned talk about dieting and weight loss, they created a sense of solidarity and support for participants:

The Fat Acceptance Movement is big on the Internet. It encourages just accepting who you are. That fat people don't deserve to be discriminated against anymore than anyone else does. (Female aged 34)

It's not about trying to lose weight. [It's about] being the healthiest you can be at the size you are now, the idea that one can be active at one's present size – start living your life now, not living your life thinking that I'll do this when I'm 60 kilos. (Female aged 37)

Participants commented that the support that they felt from this online community, and the mere absence of stigma and discussions about

weight, led them to feel better about themselves, and more confident and accepted. As such, they felt more able to engage in activities that they previously would have considered embarrassing or emotionally daunting (e.g. physical activity). They also reported improved mental health, self-esteem and resilience to the stigma that they experienced in the wider community:

I access fat blogs in what's known as the 'Fatosphere'. It provides some of the counter cultural stuff on obesity. Perceiving your body positively does affect your self-esteem positively. Perceiving your body negatively plummets your self-esteem. I mean I used to hate my body and my self-esteem was on the floor. Choosing not to buy into that and choosing to perceive your body differently has positively affected my self-esteem. (Female aged 37)

## Discussion

This study investigated the ways in which a group of obese individuals reported interacting with online information and support about obesity. Two key findings emerged.

1. Individuals repeatedly searched online for weight loss information in a desperate attempt to find a solution to their overweight. However, the information they found was unhelpful in helping them to achieve long-term sustainable approaches to improving their health and well-being.

Most participants' search for weight loss solutions was constant, ongoing, and at times characterised by desperation. Some of the time, this searching was 'reactive' and was influenced by news reporting, advertising or advice from health professionals. Most of time searching was 'proactive' and motivated by individuals' health concerns and fears, stigma and dissatisfaction with their weight. Whilst participants thought they were accessing information that would be helpful, most of the time they turned to 'quick fix' approaches to lose weight fast and to kick start their efforts to improve their health and well-being. Yet, in doing so, they turned to many of the same unhelpful fad weight loss solutions available to them within the community.<sup>25</sup>

There may be many different explanations for why individuals who recognise that commercial diets may be unhelpful for them, still look for and engage with them. Firstly is a lack of help and support, or 'road map' at the community level for individuals. For example, in tobacco prevention, messages about quitting smoking were given for many years, before a trained group of health professionals was available to counsel and support smokers. We still do not have those supports available for obese individuals. Individuals in this study recognised that commercial dieting was not going to help them to achieve weight loss in the long term, but felt that they should be doing something rather than nothing. Secondly is the stigma attached to weight, and the feeling of self-blame and personal responsibility that individuals felt for solving a 'weight problem' that they believed was their fault. Thirdly are the seductive promises made by the weight loss industry about what individuals can achieve on their particular brand of diet in a short period of time.<sup>26</sup> For individuals who have spent a lifetime believing that the only solution to weight loss is dieting, the belief that this time the diet might just work for them may be difficult to shift, especially if there are little other options for individuals to explore.<sup>4</sup>

Desperation to find a solution to their overweight leads obese individuals to be extremely vulnerable to exploitation. Concerns have been raised about the claims made about industry websites promoting bariatric surgery and pharmaceutical medications for obesity.<sup>27,28</sup> Studies show that websites that market bariatric surgery, pharmaceuticals and weight loss supplements to consumers may not disclose information about the risks and costs of their products.<sup>15,28</sup> This raises important questions for government, health professionals and community groups about how to combat and regulate the seductive claims and promises made by the weight loss industry and how to connect individuals to websites that provide realistic sustainable alternatives to commercial diets. Obese individuals must be involved in the development of such sites so that they resonate with their experiences, needs and abilities.

2. Participants had a strong desire to connect with a community of others to share experiences, for support and accurate health information.

Like other health groups with stigmatised conditions, online support groups and networks were an important space for obese individuals to have their say about their health experiences and to connect to others with similar experiences.<sup>29-31</sup> Participants reported searching for places where they would find acceptance, reassurance and friendship. However, support groups took two very opposite forms – online dieting groups and the fat acceptance movement. Whilst online dieting groups took individuals down similar paths as described in point one above, the fat acceptance movement had a very interesting effect on individuals' health and well-being.

Participants stated that the 'Fatosphere' provided a place where they felt empowered, supported, liked and accepted.<sup>32,33</sup> It provided an alternative to weight loss websites, and the dominant rhetorics surrounding obesity. This was in marked contrast to their experiences in the 'real world' which were characterised by stigmatising experiences, isolation and shame.<sup>2,18</sup> Whilst this may be so, the 'Fatosphere' may be inherently unhelpful by promoting misinformation (for example that there is no evidence to support links between obesity and negative health outcomes) and body acceptance.

Again this raises important questions about the development of online peer support groups for obese individuals. Whilst it is clear that they are needed, there is a lack of understanding about what form they should take. Whilst we are not suggesting that the fat acceptance movement is the only way to proceed in supporting individuals, the underlying concepts associated with this movement appear to have a positive impact on some individuals' mental health and their self-reported ability to then engage in healthy lifestyle activities. Further research and consultation with obese individuals will be important in developing safe spaces for support and acceptance, which reinforce concepts of health and well-being, rather than weight loss.

## Limitations

Firstly, despite attempts to recruit a community sample, this study attracted more women than men, and those from higher socio-economic groupings. As such, generalising the findings of this study to the broader population may be limited. This study used, amongst others, online recruitment methods, which may have contributed to a higher proportion of Internet users, compared with the general population. Secondly, we know very little about the types of individuals who enrol in these sorts of qualitative studies. It may have been that individuals who enrolled in this study were more actively aware of their weight and were more actively engaged in weight loss solutions. Thirdly, our study was of obese individuals. As such, we were unable to explore how the Internet may have positively helped individuals to lose weight – and keep it off. Finally, in qualitative research, analysis is based on the researchers' interpretations of what the data means and may be interpreted differently by those with different disciplinary and theoretical approaches.

## Conclusions

Obese individuals are desperate to find solutions to their overweight and to find places of support and acceptance in a highly stigmatising world. Whilst the Internet provides an important source of support and information about obesity for obese individuals that they may not be able to access from other community-based sources, unfortunately, individuals are vulnerable to the claims of a myriad of websites offering quick fix weight loss solutions. In the short term, it is unlikely that government will regulate the claims made on these websites. However, understanding the experiences of obese individuals may help us to better tailor online supports that not only resonate with their unique needs, but also provide safe spaces for them to improve their health and well-being. Consumer-driven online networks may be important in responding to the needs and health and social experiences of obese individuals. In providing supportive environ-

ments for obese individuals on the Internet, Government and community organisations could draw upon some of the lessons learned in other consumer driven online spaces – such as the Fatosphere.

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