The Role of Primary Care Men's Perspectives on Attempting to Lose Weight through a Community-based Dietician Service

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Introduction

Obesity has emerged as a critical public health issue globally, accounting for 2.8 million deaths annually (World Health Organisation 2013a). In terms of increasing obesity rates internationally, Ireland tops the pile for expanding waistlines. An unpublished World Health Organisation (WHO) report, presented to the European Congress on Obesity, has revealed that the obesity rate in Irish men is expected to almost double the last recorded rate from 26% to 48% and by 2030, the amount of obese and overweight men in Ireland will rise to 89% (Flaherty 2015).

Men are more likely than women to become overweight earlier in life. The first State of Men's Health in Europe Report highlighting that 46% of men in the 25-34 year age range were overweight compared to 25% of women in the same age range (White et al 2011). Central (or visceral) obesity is more prevalent among men than women and is associated with an increased risk of hypertension, diabetes and metabolic syndrome (World Health Organisation 2009). The substantial increase in obesity, particularly amongst Irish men in recent times, draws attention to the inadequacies of existing policy measures to address obesity (Department of Health and Children 2008). This highlights the importance of this study's findings in the role of primary care on men attempting to lose weight through a community-based dietician service and thereby informing future policy and practice to tackle this significant public health issue.

It is well established that men's diets are less healthy than women's diets, with men eating more fried foods and high-caloric items and less fruit and vegetables than women (Hartmann et al. 2012; White et al. 2011; Morgan et al. 2008; Safefood 2014). Men are also more likely than women to drink more than recommended weekly limits of alcohol and to engage in episodic binge drinking (White et al. 2011; Morgan et al. 2008), both of which have been found to be associated with increased risk of obesity (Wannamethee et al. 2005). Although men tend to be more physically active than women, nevertheless, a majority of European men have been found to be insufficiently active for health (White et al. 2011).

Underpinning these worrying male obesity statistics and sex differences in lifestyles are a

number of important and previously established gendered aspects to male obesity. In the context of diet, men tend to be less knowledgeable than women about the health benefits of particular foodstuffs (Kiefer et al. 2005; Safefood 2014), are less likely to check and use food label components (Satia et al. 2005), and tend to rely on women for advice and support on food and dietary matters (Gough and Conner 2006). Men often regard healthy food as insubstantial and 'bland' and tend to be sceptical and cynical towards health eating messages filtered through the media (Gough and Conner 2006; Richardson 2010). Men tend to conceptualise food as fuel for their bodies (Safefood 2012; 2014) and men who are overweight/obese tend not to see their excess weight as a cause of concern until their weight has reached obesity proportions or has become associated with obesity-related co-morbidities (Mc Pherson 2004). Men also tend to be more open to dietary change or to losing weight when prompted to do so by their GP (Gough and Conner 2006; Robertson et al. 2014); highlighting the potency of appropriate medical advice in altering the dietary behaviours of men. In terms of alcohol consumption, men tend to play down the seriousness of heavy or binge drinking (Richardson 2010) with such drinking patterns frequently being used as a means of defining masculinity (Brooks 2001). From the point of view of weight management, men tend to see physical activity and sport as more relevant than nutrition/dieting (Kiefer et al. 2005). A recent systematic review on obesity management in men (Robertson et al. 2014) concluded that weight reduction for men is best achieved and maintained through a combination of a reducing diet, physical activity advice or a physical activity programme, and behaviour change techniques. The same study highlighted men's preference for interventions that were individualised, fact-based and flexible, and that used business-like language with simple to understand information. Further research has shown that diet counselling through primary health care has the potential to change behaviours related to obesity and diabetes (World Health Organisation 2013b).

The increasing spotlight on men's health in recent years is reflected, in part, by an emerging policy focus on men's health (Department of Health and Children 2008; Department of Health and Ageing 2010) and by a growing concern about what has been described as 'the burden of ill health' experienced by men (Department of Health and Children 2008). The contribution of obesity to this

'burden' is clearly gaining momentum. An earlier systematic reviews of evidence-based research on tackling obesity (NICE 2006), highlighted the need for targeted action through the development of tailored lifestyle interventions for obese men in primary care. Whilst the recent publication of best practice guidelines for practitioners on tackling obesity in men (MHF 2014) is to be welcomed, there is still a need for an increased focus on examining the effectiveness of existing community based weight-loss interventions in tackling male obesity – fundamentally by tracking referral patterns to such services but also by examining obese men's perspectives on their excess weight and on their experiences of such services in attempting to lose weight. This study was conducted to address this need and is based on a review of referral data to a community-based Primary Care Nutrition and Dietician Service (PCNDS) delivered in Ireland and on obese men's experiences of attending the service. The PCNDS is a lifestyle intervention run by dieticians in the Health Service Executive (HSE) Southern area in Ireland. The service specialises in lifestyle counselling with obesity management a core element of the service. Referrals to the service are made by general practitioners (GPs) through primary care teams. The overall focus of this study was to explore obese men's perspectives on reasons for having gained weight, motivations for weight-loss, their experiences of being overweight and of attempting to lose weight through a community based dietician service. There was a particular focus on examining the perceived impact of the service on the men's dietary and lifestyle patterns and its perceived usefulness as a means to weight loss. This is important from the point of view of applying a gender lens to tackling male obesity and establishing the key factors that health practitioners should take into account when tailoring lifestyle interventions directed at overweight/obese male patients.

Methodology

In advance of undertaking this study, ethics approval was authorised from the Institute of Technology Carlow Research Ethics Committee. As a precursor to the main study, PCNDS managers were asked to collate data pertaining to referral patterns to the PCNDS within their service area for the previous year. This was to give an indication of the numbers of men (i) being referred through the primary

care system to the PCNDS and (ii) actively taking up a consultation with the PCNDS. Such data is important in ascertaining whether sex differences exist either in rates of referrals or rates of follow through, and, if so, to consider this as a backdrop to the main focus of the study.

The main focus of the study was a telephone questionnaire, designed to explore overweight/obese men's perspectives on: the factors that they believed had contributed most to their excess weight; the impact of PCNDS intervention on their dietary and lifestyle patterns; the perceived challenges and barriers to achieving sustained weight loss; and the perceived usefulness of PCNDS as a means to weight loss. The questionnaire comprised a mixture of open ended and closed questions and was modelled on relevant sections of a previously validated National Lifestyle Survey (Morgan et al. 2008) and from an in-depth review of the literature. The questionnaire was piloted to community dieticians (n=16), men's health workers (n=2) as well as to a convenience sample of men (n=10) to secure the content validity and reliability of the questionnaire items. Following feedback from this phase, modifications were made to the survey.

Due to budgetary and resource constraints within the research project, a small, geographical sub-section of the PCNDS - the South-East Nutrition and Dietician Service (SENDS) was chosen as the most feasible geographical area in which to target participants for the study. Men selected as study participants were referred to the SENDS on the grounds of being overweight/obese or having a medical condition such as diabetes or hypertension for which overweight/obesity was identified as an underlying cause. Based on referral data for the year 2008, it was established that 102 men had been referred to SENDS by their GP. To safeguard patient confidentially, names and dates of birth were collated by the SENDS manager who then sought the co-operation of the men's GPs, to write to the men, inviting them to participate in the study. At this point, three Practices decided against participating in the study which led to 23 men being excluded from the study; 5 men were deemed by participating Practices to be unsuitable; 4 men had emigrated; and 3 were deceased). This resulted in a final sample size of 67 men. A letter requesting consent to partake in the study was sent to these 67 men from each man's respective GP and, once consent was received, each man was contacted by telephone and asked to complete a telephone survey at a date and time convenient

to him. All telephone surveys were recorded with the men's permission. Telephone survey was the methodology deemed to be most appropriate, in light of budgetary and resource constraints, and to ensure a maximum response rate with due consideration also being given to the sensitivity of the topic being investigated (Opdenakker 2006) and concerns over literacy issues (Sticht and White 2000).

The BMI of respondents was recorded using self-report height and weight measurements and classified in accordance with WHO guidelines (World Health Organisation 2013a; World Health Organisation 1998). Questionnaire data were entered onto the Statistical Package for the Social sciences (SPSS V.18) and analysed using descriptive statistics. Data from open-ended questions were transcribed and analysed using a thematic analysis approach.

Results

An analysis of referral data to the PCNDS during the year preceding the study revealed that there were 8,424 new referrals to the service, 62% (n=5,224) of which were women and 38% were men (n=3,200). This equates to a ratio of 1.6:1 women to men being referred to the service. The most common grounds for referral (male and female) was overweight/obesity (69%; n=5,783). Notably, only one region within the PCNDS (SENDS; n=599) recorded referrals according to sex. This data revealed that 65% (n=151) of all male referrals and 62% (n=225) of all female referrals were on the grounds of overweight/obesity, and that 34% of both male referrals (n=51) and female referrals (n=76) did not follow through to attend for a consultation.

For the main study, the 67 men included in the analysis were aged between 24-76 years (median age of 51), 76% (n=51) were married/cohabiting and 66% (n=44) had no more than second level education (Table 1). Over half of the participants (55%; n=37) were unemployed or unable to work due to disability, being retired, or looking after family or home (Table 1). The majority of respondents (69%; n=46) perceived their general health to be in the category 'good' or better. This, despite the fact that 79% (n=53) of the respondents were obese or morbidly obese based on self-reported BMI measures (Table 1).

Table1: Profile of Study Participants

	Age (years)					
	20-29 n(%)	**30-39 n(%)**	**40-49 n(%)**	**50-59 n(%)**	**60-69 n(%)**	**70-79 n(%)**
Men	3(5)	4(6)	20(29)	23(34)	9(13)	8(11)
Education						
Primary	1(7)	0	0	4(29)	3(21)	6(43)
Secondary	2(7)	1(3)	10(33)	12(40)	3(10)	2(7)
Third level	0	3(13)	10(43)	7(31)	3(13)	0
Employment Status						
Employed	1(3)	2(7)	9(30)	14(47)	3(10)	1(3)
Unemployed able to work	1(8)	2(15)	7(54)	2(15)	0	1(8)
Unemployed unable to work	1(4)	0	4(17)	7(29)	6(25)	6(25)
Marital Status						
Married/cohabiting	0	4(8)	14(27)	18(35)	9(17)	7(14)
Widowed/separated/ divorced/ single	3(20)	0	6(40)	5(33)	0	1(7)
Health Status						
Excellent/very good / good	1(2)	3(7)	16(35)	12(26)	6(13)	8(17)
Fair/Poor	2(10)	1(5)	4(19)	11(52)	3(14)	0

The number of times respondents reported attending SENDS ranged from 1 to 17, with 60% (n=40) of respondents having attended the service on 3 or 4 occasions. As a result of attending SENDS the majority of respondents (93%; n=62) reported having implemented dietary changes, such as adopting healthier diets (i.e. reduced fat intakes, increased fruit and vegetable consumption) through increasing knowledge of what constituted a healthy diet and of food preparation. All but two (96%; n=60) of those who implemented dietary changes reported having reduced their portion sizes. The percentage of respondents who categorised their diet as 'good' or better increased from 39% to 96% as a result of attending the SENDS (Figure 1).

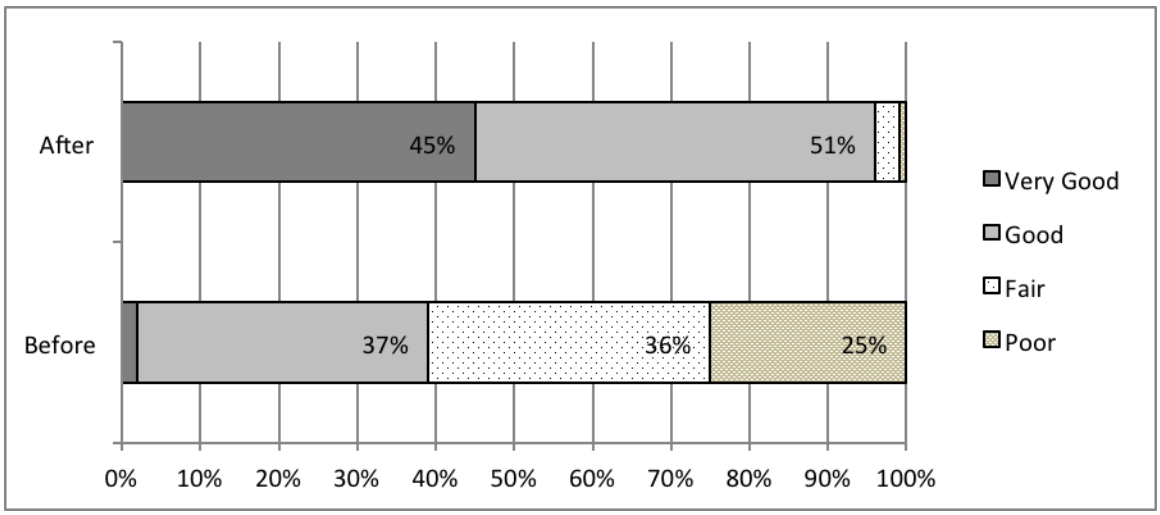

Figure 1: Description of 'diet' before and after attending SENDS

The service was also associated with a reduction in those reporting as 'inactive' (28%; n=19 v 4%; n=3). The reasons cited by respondents for not meeting adequate levels of physical activity included; poor health (15%; n=10), lack of time (13%; n=9) and the nature of their work (12%; n=8). SENDS was also associated with an increase in the percentage of non-drinkers (18%; n=12 v 28%; n=19) and a reduction in weekly 'heavy' drinking (>21 standard drinks) from 51% (n=28) to 30% (n=15). However, it had no impact on the reported number of drinks consumed per sitting (80%; n=44 v 81%; n=38) nor on the self-monitoring of alcohol consumption (4%; n=7 v 2%; n=4).

Table 2 outlines what respondents felt were the key contributory factors to them gaining excess weight, their motivation for weight loss, and the challenges and barriers they perceived in attempting to lose weight. Respondents were asked to state all applicable answers; therefore categories are exclusive of one another. Eating too much of the 'wrong foods' (82%; n=55) and simply eating 'too much' (67%; n=45) were the factors that were perceived to have contributed most to gaining excess weight. Notably, the most pertinent 'other' factor was sedentary work patterns, particularly among truck drivers, who reported that they 'eat to keep energy levels up over long journeys' and generally 'feel too tired to do any exercise in their free time'.

Table 2: Contributory factors to gaining excess weight, motivation for weight loss and challenges and barriers to weight loss

Dietary factors	**n**	**(%)**
Excessive portion size	59	(88)
Eating sugary snacks	50	(75)
Snacking too often	48	(72)
Eating too much fried foods	45	(67)
No control over food preparation	36	(54)
Alcohol consumption*		
>21 standard drinks per week	28	(51)
≥ 6 standard drinks per sitting	44	(80)
Did not monitor alcohol consumption	51	(93)
Physical Activity		
Active	48	(72)
Sedentary	19	(28)
Motivation for weight loss		
Health reasons	62	(93)
Improve fitness	20	(30)
Improve appearance	27	(18)
Confidence/ self-esteem	13	(9)
Other	9	(6)
Challenges and barriers to weight loss		
Giving up favourite food	37	(55)
Increasing physical activity	23	(34)
Lack of motivation	12	(18)
Not looking forward to the challenge	11	(16)
Not enough time	7	(7)
Not enough support	3	(3)
Other	21	(21)

Figure 2 outlines respondents' perceptions of the extent to which excess weight impacted negatively on different aspects of their lives. Over half of respondents 'agreed/strongly agreed' that excess weight had a negative impact on their confidence (55%) and self-esteem levels (56%). A minority of respondents reported that excess weight had a negative impact on relationships (10%) and career progression (14%).

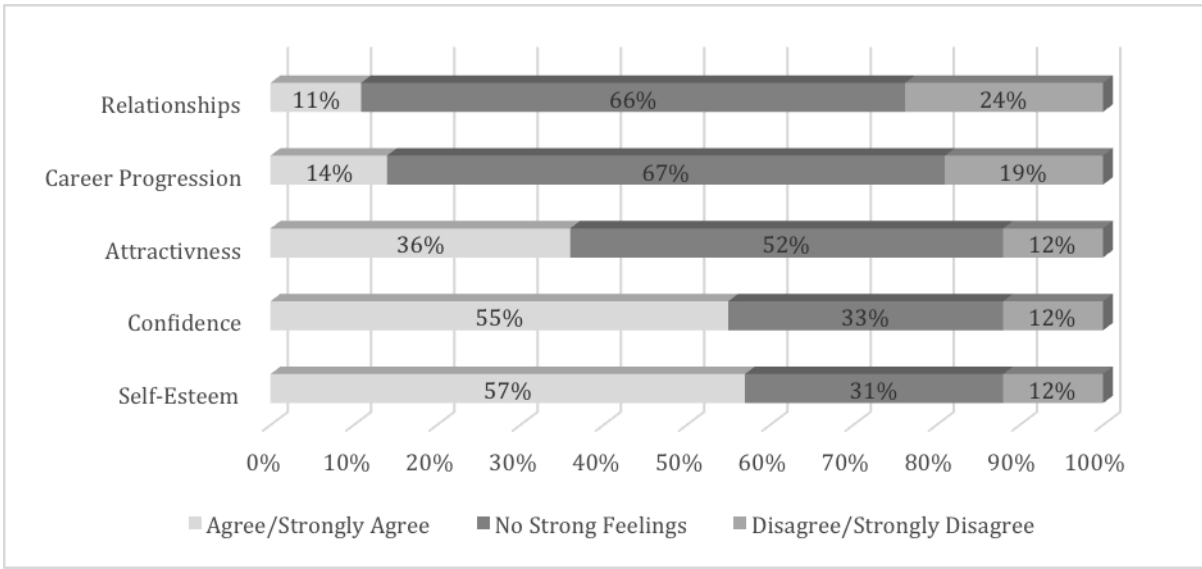

Figure 2: The extent to which excess weight was perceived to have impacted negatively on respondents (n=67)

The main motivation for wanting to lose weight was 'for health reasons' (93%; n=62), whilst giving up one's 'favourite food' (55%; n=37) was cited as the biggest challenge/barrier to successful weight loss. 'Other' challenges/barriers once again revolved principally around long working hours coupled with 'comfort eating' and insufficient time/motivation for physical activity/exercise. In response to an open-ended question that probed what participants felt were the key factors or tipping points that led them to initiate weight loss attempts or to implement lifestyle changes, two prominent themes emerged. A number of participants described being 'told' by their GP to lose weight and not daring to question the authorative position of the GP on such matters. Two such responses exemplified this sense of compulsion to act in response to 'advice' from a GP:

> "He (the GP) said that I had to lose weight whether I liked it or not" (Participant 11, 56)
>
> "I needed to be told I had to lose weight…. in the first place otherwise I wouldn't have done anything about it." (Participant 9, 42)

The other key catalyst was the onset of an obesity-related ill-health issue or the progression of such a health issue beyond a certain threshold of severity. Whilst excess weight in itself did not emerge as a factor in driving behaviour change, linking the ill-health consequences of excess weight did:

> "When I was younger I had no interest in weight or healthy lifestyle or in fitness or nothing, until I got this health problem [diabetes] two years ago and that was a wake-up call" (Participant 6, 52)

The majority of respondents (76%; n=51) felt that they had made satisfactory progress as a result of attending SENDS. The vast majority (97%; n=65) were happy both with the duration and frequency of their consultations and cited, in particular, the rapport and the friendly, open environment of SENDS. In an open-ended question that asked participants to comment on what they valued most about SENDS, responses almost unanimously alluded to the supportive, non-judgemental approach of the dieticians that underpinned a patient-centred, partnership approach, which was based on rapport and trust, and simple, step-by-step advice:

> "She helped me, the doctors didn't – they were always giving out to me. She just talked to me and gave me friendly, straightforward advice." (Participant 19, 41)

> "With my knee I can't really exercise, so it was all mainly dietary advice I received – I liked that as she wasn't getting on to me to do things that I just can't do." (Participant 2, 58)

> "She was very nice and open, she asked me about myself and general little everyday things. It was as if she was really trying to get to know me and understand what it (excess weight) was like for me." (Participant 14, 41)

More follow-up (19%; n=13) and tailoring the service to individual needs (13%; n=8) were the most prominent suggestions for improving the service. The majority of respondents reported being 'comfortable'/ 'very comfortable' in discussing their weight with a health practitioner (GP 83%, dietician 86%, practice nurse 76%) or close family member (84%) but less so with male (33%) or female (33%) friends.

Discussion

This study identified that the numbers of GP referrals to the PCNDS were skewed heavily towards

women (62%) compared to men (38%) despite the fact that obesity levels at a population level are higher in men than in women (Department of Health and Children 2008). This study also identified that it was predominantly older men (median age 51 with just 10.5% of participants aged less than 40) who were referred through primary care to nutrition/ dietician services despite men being more likely than women to become overweight earlier in life (White et al. 2011). Additionally the burden of disease associated with obesity falls disproportionately upon men, as overweight men have greater abdominal fat tissue compared with women, which increases their risk of cardiovascular disease (Wirth and Steinmetz 1998). The findings from this study therefore suggest both a gender bias in favour of women being referred through primary care to community-based nutrition/dietician services and also an age bias as highlighted by the referral of predominantly older men, despite the early onset of overweight/obesity more generally among men. Previous research suggests that physicians are more likely to routinely advise female patients to lose weight than male patients (Anderson et al. 2001). In general women show more dissatisfaction with their body weight, while 'bigness' can be associated with more dominant notions of masculinity, leading many men to strive for a large body frames as opposed to a 'normal' body weight (McCreary and Sadava 2001). Scherer et al. argue that the expression of vulnerability may inspire a sense of fear in men, who have been taught or who have learned that to explore their emotional selves may lead to humiliation and rejection, especially by other men (Scherer et al. 2004). This may explain men's reluctance to openly initiate dialogue with GPs in relation to weight management, particularly those men whose weight may have had a negative bearing on them emotionally. It might also help explain why patient-resistance has been found to be one of the major barriers posed to GPs in soliciting effective lifestyle counselling in primary care (Lambe and Collins 2010). Men's reluctance to openly initiate conversation relating to weight issues makes it all the more important that the GP prompts initial conversation and opens the dialogue on weight (Foster et al. 2003).

Some 34% of the males referred in the current study on the grounds of overweight/obesity did not follow through to attend for a consultation (compared to an identical 34% also of females). This indicates that the bias towards more females than males availing of community-based lifestyle

counselling for overweight/obesity is due to a referral bias at primary care level, not to males being any less likely to follow-through once referred. Indeed, the most recent evidence indicates that although men are less likely than women to join weight-loss programmes; once recruited they are less likely to drop out (Robertson et al. 2014). Non-responders to the PCNDS may have had a perception of the service as a dieting service, with previous studies highlighting that dieting can be seen as a feminine activity and that weight loss programmes generally do not appeal to men (Hunt et al. 2013; Gough 2007) (although the evidence from this study tends to refute the latter). Lack of engagement by men in weight loss programmes also reflects a lack of attention to gender differences in programme design and a failure to consider the physiological, psychological, and socio-culture gender differences that influence health behaviour (Gray et al. 2009). Men are generally not attracted to structured face-to-face programmes (Young et al. 2012) and a recent systematic review (Pagoto et al. 2012) found that group weight loss interventions had the lowest representation of men whereas self-guidance intervention had the highest representation. Weight management interventions for men have proved successful in settings which enable men to join a weight management programme, like 'Football Fans in training', in circumstances that felt 'right' rather than threatening to themselves as men (Hunt et al. 2014).

The majority of respondents (93%, n=62), reported having implemented dietary changes as a result of attending SENDS, including having an increased knowledge of what constituted a healthy diet and of food preparation, adopting healthier diets and reducing portion sizes. This is noteworthy in the context of previous findings that 'dieting' can be seen as a feminine activity and that dietary-focused weight loss programmes generally do not appeal to men (Hunt et al. 2013; Gough 2007). Previous studies have shown that poor dietary habits among men are influenced by lack of control over diet (White et al. 2011) and long or unsociable working hours – in particular for men who work shift hours and/or commute long distances, who tend to have an increased reliance on convenience foods, snacking and eating out (Irish Universities Nutrition Alliance 2011; Department of Health and Children 2005).

SENDS was also associated with a reduction in the percentage of 'inactive' respondents. It

has been proposed that men may see physical activity and sport as more relevant than nutrition in terms of approaches to losing or managing weight (Kiefer et al. 2005), although the findings from this study somewhat refute this. The most recent evidence emphasises the potency of interventions that combine diet, physical activity and behaviour change techniques (Robertson 2014). Whilst there was an increase in those reporting as 'non-drinkers' and a reduction in those reporting as 'heavy' drinkers, there was no change in patterns of binge drinking or in self-monitoring of alcohol consumption. This is troubling as the risk of obesity appears to be increased in heavy drinkers compared to non-drinkers (Schroder et al. 2007) and, for a given weekly alcohol intake, the more spread out the intake, the lower the BMI and waist circumference (Dumesnil et al. 2013). As alcohol is a high calorie beverage, it needs to be factored into recommended daily calorie intake allowances as part of any weight loss or weight management initiatives directed at men. There is also increased scope for increasing self-monitoring practices in relation to alcohol consumption in men.

Health reasons were the main motivation for weight loss, followed by improved fitness and appearance and to build confidence/ self-esteem. Grilo et al. reported higher levels of body image dissatisfaction among obese women than obese men, but the findings from this study suggest that this may also be important factor for men (Grilo et al. 1994). Participants in this study also appeared to be more open to dietary change or to losing weight when told to do so or jolted into action by their GP, reinforcing previous findings with regard to weight-loss attempts by men (Robertson et al. 2014). Simultaneously and somewhat paradoxically, participants welcomed what was seen as the less dictatorial and more patient-centred, partnership approach of the dieticians, which revolved around rapport and trust, and simple, step-by-step advice. This also reflects previous findings of effective practice or more 'men-friendly' approaches to engaging with men (Oliffe et al. 2012; Robertson et al. 2014; MHF 2014).

Male obesity has emerged as a significant public health issue in recent years. The findings from this study contribute to the application of a gender lens to dietician-led lifestyle interventions, thereby contributing to future efforts to support obese men to implement effective measures to achieve

weight loss.

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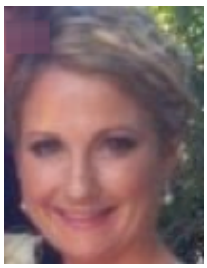

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