

Do-it-yourself weight loss

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Introduction

There is no shortage of slimming ‘secrets’ waiting to be disclosed to the consumer at every turning point in today’s jungle of commercial slimming products and services. The weight management industry is a lucrative one and preys easily on populations of image-conscious individuals. Americans spend \$33 billion on weight loss products and programmes every year.¹ The European weight loss industry was estimated to be worth \$93 billion in 1992,² which has surely risen beyond this.

With overweight and obesity rapidly increasing in Ireland, it may come as little surprise to know that 19.8% of women and 5% of men are following a weight reducing diet.³ Indeed, with 39% of the adult population overweight and 18% obese⁴, one would hope that numbers choosing a weight reducing lifestyle would increase to match the growing epidemic.

‘Do-it-yourself’ (DIY) and non-clinical weight loss programmes are often attractive to would-be dieters (see table 1). Health professionals (HPs) have little control over information the public gain from these sources and how they ultimately use it for the purpose of weight loss. This group is, however, in a position of influence when questioned by patients about the commercial weight loss sector.

A group of 38 HPs (general medical practitioners, practice nurses, public health nurses) took part in a telephone survey carried out in a Midlands county in 2003. This survey investigated HPs’ knowledge, opinions and practices in relation to commercial weight loss options. Results indicated that primary care HPs are regularly asked for advice on weight loss programmes and products by patients. Those surveyed, however, did not always have adequate training or resources to advise patients appropriately.⁵

Clinical weight management programmes

Clinical weight management programmes usually find attrition rates to be high and one of the big reasons for this is the search for the ‘miracle’ diet.⁶ A survey in the USA of over 30,000 adults found that only a third of those attempting to lose weight were practicing dietary restriction combined with physical activity,⁷ which is the foundation of advice given by

qualified HPs. Instead, strategies such as skipping meals, eating food supplements, taking diet pills, taking diuretics, or fasting for 24 hours are more popular with dieters.

Table 1. Three broad categories of weight loss options

Do-it-yourself programmes	Non-clinical programmes	Clinical programmes
Non-prescription diet pills or herbal supplements Meal replacement products Fad diets	Commercial weight loss programmes e.g. Weight Watchers, Unislim	HP working alone or part of team e.g. nutrition, behavioural therapy, psychology, drug/surgery options

HP knowledge

Surveys have shown that there is a general uncertainty among primary care HPs about effective weight management strategies.⁸ Current evidence-based practice in relation to effective weight management programmes suggest that behaviour change strategies and long-term follow-up are essential components.^{9,10} Among the Irish HPs surveyed, these were ranked relatively low when compared to factors such as medical assessments and written advice.⁵

Weight loss goals

When asked about setting appropriate weight loss goals for patients, the majority of HPs were aware of current guidelines: i.e. that small, sustainable weight losses of 1-2lbs per week should be promoted.^{11,12} Those who did not know the recommendations for weight loss were more likely to be working longer. This may be a reflection of the change of opinion about the definition of successful weight loss that has taken place among researchers in the last decade. During the 1980s there was a greater emphasis on reduction of body weight to ‘ideal’. Treatments during this era focused on producing large weight losses, which were seldom retained in the long term. Current guidelines advocate more moderate, sustained losses as a successful outcome of treatment.¹³

Table 2. DIY weight loss and commercial weight loss options – claims, safety, and evidence

DIY	Claims for weight loss	Safety	Evidence
Herbal supplements	Metabolic stimulation or appetite modulation.	Processing techniques unregulated. Active components vary as a result of origin, processing techniques and storage. ¹⁴ Risk of psychiatric, autonomic or gastrointestinal adverse events and heart palpitations. ^{15,16}	Little positive evidence in published literature that ingredients contained in these products are effective in bringing about weight loss. ¹⁶
Diet pills	Metabolic stimulation or appetite modulation.	Ingredients such as hormones, appetite suppressant phenethylamines and diuretics represent a threat to health when taken inappropriately.	Have not been associated with effective weight loss. ¹⁷
Meal replacements	Structured meal plans thought to reduce the number of decisions required for food choices, which may help to prevent unintended dietary failures.	Typically entered into without health professional support. Diet plan should be assessed to ensure all micronutrient requirements are being met.	Success for the first six months, with participants typically entering a relapse cycle. One meal replacement per day for four years associated with maintenance of a 5-10% weight loss and significant improvement in insulin, triacylglycerol and systolic blood pressure. ¹⁸
Internet based programmes E.g. Slim-fast, Ediets	Online personalised dieting information, fitness and support service.	Little input from healthcare professionals.	Reviewers of these sites suggest that they may be useful as a support method for weight maintenance. ¹⁹
Fad diets			
Most do produce weight loss, which is primarily owing to an energy deficit rather than any metabolic changes produced by modifying the diet. ¹⁷			
Low carbohydrate diets	Carbohydrate intake is limited to 13-60 grams per day. This forces the body into a state of ketosis, whereby fat is used as the primary source of energy.	Unresolved, long-term health issues related to high protein diets, including risk of renal damage, and osteoporosis.	Weight loss is significantly greater in the first three to six months than that on a low-fat diet during this time; ^{21,22} but difference disappears at one year. ²⁰ Compliance is poor and diet appears to be unsustainable in the long term. ²¹
The glycaemic index (GI) diet	Supposes that a person will become satiated more quickly and feel full for longer than someone eating the same amount of high GI food.	Safe, but can be a confusing concept for patients.	No conclusive evidence to show that it causes significant weight loss or helps to control appetite. ²²
Commercial weight loss programmes			
Weight Watchers (WW)	Weight watchers involves weekly, peer-led group meetings and 'weigh-ins'. Group support and regular contact used to maintain	Dietary plans based on points system of food exchanges to help count calories. Classes run by non-HPs with varied training, but programme does emphasis good nutrition and exercise.	Modest weight loss achievable with compliance, which may be more effective than brief counselling and self-help for overweight and obese adults. ²³
Others	motivation. Depending on type, E.g.: - Branded programmes with meal replacement element (see above). - Point system for calories.	Generally based on good lifestyle advice but have same concerns: e.g. the type of eating plan they recommend. Can be costly for participants.	There is a lack of available information about their efficacy.

Types of weight loss diet

A positive finding among this group of Irish HPs was their knowledge of the most suitable diet for weight reduction. This is a diet based on the food pyramid with an emphasis on low fat food choices. However, several participants also indicated that diets not consistent with national healthy eating guidelines are

suitable for patients trying to lose weight: e.g. low carbohydrate diets and low protein diets. Other research has also shown that some HPs may be advising diets which are contrary to national healthy eating guidelines.¹² This may be partly due to the fact that many primary care HPs find current interventions available to them inadequate, and that there is a general uncertainty among

HPs about the most effective interventions to offer patients.^{8,24}

Information sources

Magazines and newspapers were found to be a more commonly used source of information than textbooks among the group of HPs surveyed. Medical journals were also rated as a popular source of information. Textbooks and the internet were reported to be used less often. It was a worrying finding that national recommendations or protocols were not cited as an important information resource. It must be noted, however, that this survey was carried out pre-Obesity Task Force recommendations.

DIY dieting

DIY programmes are varied and include any attempt by an individual to lose weight without professional or group support. These programmes can represent the biggest risk to consumers because they have the least input from qualified HPs. The use of non-prescription diet pills and herbal supplements, meal replacement products and fad diets are examples of DIY weight management programmes.

A quarter of our survey participants report being asked frequently about non-prescription diet pills/supplements, and half of those HPs were frequently asked by patients about fad or popular diets.

One third of HPs surveyed were aware of adverse side effects caused by using non-prescription weight loss pills or supplements. Examples given were 'stimulant effects', 'diuretic effects', 'dizziness' and 'mood changes'. No one strongly agreed that meal replacements are of benefit to patients who need to lose weight.

Table 2 outlines some DIY-type products/programmes/diets, their safety and effectiveness.

Commercial weight loss programmes (CWLPs)

Non-clinical programmes: These primarily include commercially franchised weight loss programmes, usually run by non-HPs with varied training. Guidance materials used in such programmes may be prepared in consultation with HPs: e.g. dietitians, psychologists and doctors. Well known examples include Weight Watchers and Unislim.

Almost all HPs in our survey were in agreement that CWLPs were of benefit to patients who need to lose weight. Referral to CWLPs is common among GPs. Surveys have shown that 95% of GPs in the US²⁵ and 54% of British GPs²⁶ regularly advise overweight and obese patients to join a CWLP. Referral of obese patients to a CWLP by the primary care team has been shown to be an effective weight management intervention in terms of cost and weight loss levels achieved.²⁷

The problem that the HP encounters in recommending CWLPs is a lack of available information about their efficacy. Commercial groups have argued that providing outcome data, in particular details of short- and long-term weight

maintenance success, is not feasible - primarily due to the cost of collecting data.

Weight Watchers is one of few commercial weight loss programmes whose efficacy has been demonstrated in a large, multi-site, randomised, controlled trial. Overall results from this study show that participation in Weight Watchers provides modest weight loss and it is likely to be more effective than brief counselling and self-help for overweight and obese adults.²⁸

The best advice for patients

It was recognised by the majority of HPs surveyed that they have an important role in counselling patients in relation to weight management and commercial weight loss options. Clearly the public do look to their primary care health providers for advice on all aspects of weight loss options.

Given the popularity of 'self-help' approaches to weight loss and the eternal search for that 'miracle' diet, it is advisable to question patients seeking advice on weight loss about their use of alternative weight loss products/programmes in the course of a primary care consultation.

Addressing the obesity epidemic requires input and support from informed HPs, especially in the primary care setting where we have the opportunity to reach a large number of people.

One of the findings from primary care HPs in this survey indicated that interdisciplinary communication with other HPs was the most important source of information for them about weight loss products and programmes. This suggests that educating any number of HPs could improve the knowledge of the entire group by allowing them to provide support and information for each other.

HPs also require appropriate reference material in order to help patients make informed decisions. Several expert bodies have produced guidelines to aid HPs evaluate and assess weight management programmes and products. These include:

- The Obesity Task Force Report, 2005.²⁸
- The National Institute of Diabetes and Digestive and Kidney Diseases.²⁹
- The Scottish Intercollegiate Guidelines Network.³⁰
- The American Heart Association.³¹

The American Dietetic Association has produced a reference text on dietary supplements.¹⁰ The Institute of Medicine has also produced a comprehensive text 'Weighing the Options',³² which comprises of specific criteria for the evaluation of commercial weight loss programmes and over-the-counter weight loss products. In contrast to consumers obtaining lots of biased information on the internet, HPs and others may access an abundance of peer reviewed research from sources such as the Cochrane Collaboration or MEDLINE.³³

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Table 3. A checklist for health professionals to aid the assessment of weight loss diets:³⁴

- Does the diet promote a newly discovered fact or secret?
- Does the diet involve the purchase of a commercial product?
- Is there a promise of rapid weight loss?
- Has the diet been independently tested and the results published in a reputable journal?
- What are the credentials of the author or promoter?
- Will the diet result in only small amounts of carbohydrates being eaten?
- Does the diet promote the recommended servings from all food groups?
- Is there an overemphasis on any one food or food type?
- Is the energy balance equation considered and, physical activity promoted in conjunction with diet?

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