The Optifast Diet

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Overview:
The Optifast program is a meal replacement program that works via calorie restriction. Therefore, more energy is being used than is being taken in, thus causing the body to use up energy stores e.g. fat stores. In addition, the diet is low in carbohydrate; this induces a state of ketosis, which helps weight loss by reducing appetite (1). Being in ketosis means your body has burned fat in response to not having sufficient glucose available for energy. When intake of carbohydrates is limited for a long period of time, the body draws on other energy stores such as fat for fuel. For the body to burn fat, it turns it into ketones, which are used as an energy source (2).

Optifast is also known as a Very low Energy Diet (VLED) or a Very Low Calorie Diet (VLCD). These are diets that provide all nutritional requirements in less than 800 calories a day (1). This program has been designed as a weight management program which lasts 26 weeks (6 months). Initially participants use full meal replacements in the form of shakes and then over time transition to self prepared meals of everyday foods (3).

Optifast has been designed for those who are obese and at medical risk due to their excess body fat (1). Optifast promotes the diet under the basis of the health benefits obtained by weight loss (1). Weight loss is a key factor in the control and prevention of coronary heart disease, hypertension, type 2 diabetes, hyperlipidaemia and cardio-respiratory failure. If the weight loss is sustained in the long term the person continues to benefit from the weight reduction (4).

The exact number of people using this diet in the community could not be obtained. Although, the diet is recommended by health professionals for those undergoing bariatric surgery in the near future.

Diet plan:
The Optifast diet occurs in four stages, intensive, transition, maintenance and stabilisation.

One: Intensive Phase (450-800kcal per day)
This occurs for 12 weeks, it involves eating 3x Optifast products per day, 1 teaspoon of oil, 2 cups of non starch vegetables, and 2 litres of water

Two: Transition Phase (800 – 1000kcal per day)
This involves eating 2 Optifast, 1 meal, 1 fruit, 1 dairy, 2 cups of vegetables and 2 litres of water

Three: Maintenance Phase (1000-1200kcal per day)
This phase involves eating 1 Optifast, 2 meals, 2 fruit, 1 dairy, 2 cups of low starch vegetables

Four: Stabilisation Phase (1200-1500kcal per day)
This phase involves eating 3 meals, 2 fruit, 1 dairy and 2 cups of vegetables.
Visual representations of the Optifast diet plan (1).

**Success of the dietary trend:**

- **Short Term Weight Loss**
  In terms of success in the short term Optifast can be considered effective in those with obesity, an immediate weight loss of 1.0-2.5 kg per week is seen in which it is mainly fat mass (1). Studies investigating low calorie diet programs have found varying degrees of weight loss, with those whom completed the treatment losing around 11% - 25% of their weight (5 & 6).

- **Long Term Weight loss Maintenance**
  The success of a diet cannot be evaluated by the short term weight loss, instead the long term maintenance of keeping the weight off is more important in terms of health and well being. Various studies report differing degrees of weight loss maintenance with losses of 8-10% after one year, 7% at three years and 5% after five years (5) noted. But many regain 50% or more of the weight they lost within 1-2 years (5 & 7).

A main challenge identified with the maintenance occurs with the reintroduction of ‘normal food’. Those who had nutrition education which increased their knowledge and skills were better able to maintain their weight loss (9). A long term trial looking at the success of the program after eight years showed the main factor in maintaining weight loss was either good social support or attending some sort of counselling (7). Lifestyle education is a significant factor in long term weight maintenance (8). This highlights the importance of good education and support for those who losing weight.

- **Health Benefits of the Weight Loss**
  The weight loss from Optifast is associated with improved insulin sensitivity and glycaemic control in type 2 diabetics, improved blood pressure, lipid profiles and sleep apnoea (1, 6 & 7). If the weight loss is maintained this leads to improved health throughout life (1 & 4).

- **Dropout Rate**
  Optifast has been associated with high costs and high dropout rates with around 25% of people dropping out within the first three weeks (5 & 7). One study found that despite participants initially
being driven to participate due to the rapid weight loss, many found the diet did not agree with their lifestyle and found it very anti social (5 &6). It was found that even participants who were compliant found the diet difficult to adhere to due to the lack of dietary variety (6).

- **Bariatric Surgery**
Optifast can be prescribed by a health professional for an individual before surgery to decrease their pre-operative weight (10). This is commonly seen in individuals undergoing bariatric surgery (gastric bypass/ gastric banding). Obese patients have large amounts of intra-abdominal fat which increases their risks in surgery (11). Also fatty liver is common in obese people which further complicates surgeries and increases the likelihood of bleeding (11). Thus, pre-operative use of Optifast is effective at reducing body weight and liver size and potentially improves surgical outcome (10 & 11). Furthermore an added benefit of using Optifast before a bariatric surgery is that patients become accustomed to dietary restrictions before the surgery which remain in place after the surgery (10).

**Safety and suitability:**

- **Safety**
One safety issue is the easy access to the program, e.g. via internet or local pharmacy. This is a concern if someone who the diet is not appropriate for decides to take part e.g. normal BMI or under 18 years. The diet works by limiting calorie intake. Calories provide energy which is needed for various processes including muscular function, growth and the synthesis of new tissues. The amount of calories or energy that we need varies widely depending on gender, body size and physical activity (13). This diet provides 400-800 calories which is minimal and can be dangerous for people whom do not require such a restriction.

Another safety issue is the diet is supposed to done under medical supervision (12) although, whether this is done is dependent on the individual undertaking the diet (5). Nestle the producers of Optifast recommend that individuals have regular monitoring including blood tests and be monitored for cardiac abnormalities (1 & 7).

- **Suitability**
Optifast would be considered by a health professional in individuals with a BMI > 30, or a BMI > 27 + risk factors, or those who need weight reduction prior to surgery (1).
In contrast, contraindications for its use include, those with a normal BMI (BMI of or below 25kg/m²), pregnancy or lactation, children or adolescence (less than 18 years old), and certain medical conditions e.g. porphyria, recent cardiac event e.g. heart attack or unstable angina, or advanced liver or kidney failure (1).

Precautions should also be taken in those aged over 65 years, individuals with a history of alcohol or drug abuse or psychological disturbances, individual with a history of gall stones, pancreatitis or gout (1).Caution should also be taken in Individuals with diabetes, it is recommended that they consult a medical practitioner, the reduction in calories will lead to a decrease in blood glucose and an increased risk of low blood sugar (1).
**Cost Involved**
The Optifast diet offers various different products; these include different flavoured shakes, soups, desserts and bars. These were easily found via internet stores and retail stores, the online stores provide Optifast for a cheaper cost than retail stores. Below is a table of prices to purchase Optifast products from different stockists.

<table>
<thead>
<tr>
<th>Stockist</th>
<th>Product</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacy Direct</td>
<td>X12 Sachets Optifast shakes</td>
<td>$34.99</td>
</tr>
<tr>
<td></td>
<td>X6 Muesli bars</td>
<td>$20.65</td>
</tr>
<tr>
<td></td>
<td>X 8 sachet dessert</td>
<td>$23.60</td>
</tr>
<tr>
<td></td>
<td>X8 soup sachets</td>
<td>$26.10</td>
</tr>
<tr>
<td>Optifast Australia</td>
<td>X12 Sachets Optifast shakes</td>
<td>$36.95</td>
</tr>
<tr>
<td></td>
<td>X6 Muesli bars</td>
<td>$19.95</td>
</tr>
<tr>
<td></td>
<td>X 8 sachet dessert</td>
<td>$21.95</td>
</tr>
<tr>
<td>Your Chemist</td>
<td>X12 Sachets Optifast shakes</td>
<td>$34.99</td>
</tr>
<tr>
<td></td>
<td>X6 Muesli bars</td>
<td>$17.50</td>
</tr>
<tr>
<td></td>
<td>X 8 sachet dessert</td>
<td>$23.60</td>
</tr>
<tr>
<td></td>
<td>X8 soup sachets</td>
<td>$26.10</td>
</tr>
<tr>
<td>Life pharmacy (Retail)</td>
<td>X12 Sachets Optifast shakes</td>
<td>$49.99</td>
</tr>
<tr>
<td></td>
<td>X6 Muesli bars</td>
<td>$24.99</td>
</tr>
<tr>
<td></td>
<td>X 8 sachet dessert</td>
<td>$39.99</td>
</tr>
<tr>
<td></td>
<td>X8 soup sachets</td>
<td>$29.99</td>
</tr>
</tbody>
</table>

*Internet prices do not include postage prices. Prices are as of 03/06/2014.

The initial intensive phase of the program is run for 12 weeks. This phase requires three Optifast products per day. On average per week this diet would cost $70 - $100 and therefore the initial 12 weeks would cost $840 - $1200. After the initial 12 weeks products still need to be purchased. Also to be considered is the price of medical appointments as medical supervision is highly recommended when undergoing the diet.

Considering this is the cost for only one person in the family it is a considerable amount of money to pay.

**Other services the dietary trend offers**

For participants:
The following services are offered for free, low calorie recipes, online support videos, weight loss progress tracker, online community forum and exercise and meal plans. These can be accessed on the following link [www.optifast.com.au](http://www.optifast.com.au).

For health professionals:
Optifast offers more in depth descriptions of the programme for health professionals; this includes information regarding a clinical treatment protocol, co-morbidity guidelines, pre-operative weight loss programmes and a GP information booklet this can be found in the following link [http://www.optifast.com.au/Information-for-HCPs](http://www.optifast.com.au/Information-for-HCPs).
Marketing strategy or role model endorsement of the dietary trend

The brand Optifast is owned and produced by Nestle. Various health professionals were consulted in the development of the programme including general practitioners, dietitians, pharmacists, surgeons, diabetes educators, exercise physiologists, researchers and specialist practice nurses (1). Optifast is readily available from retail stores and online stores. Online stores such as Pharmacy Direct are one of the leading stockists of Optifast in New Zealand (14). One of the marketing strategies used by Optifast, uses Jo Turner a dietitian and sports physiologist to promote the diet, she has various YouTube videos that cover various aspects of the diet that are available on the official website.

Optifast do not use any celebrity endorsers of their product.

References


