

# Journal

of Negative & No Positive Results



## Artículo Especial

Artículo inglés

## Fad diets, miracle diets, diet cult... but no results.

## Dietas de moda, dietas milagro, culto a las dietas... sin resultados.

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### Abstract

Fad diets, miracle diets (in sum, diet cult) are diets that make promises of weight loss or other health advantages (e.g. longer life) without backing by solid science, and usually they are characterized by highly restrictive or unusual food choices. These diets are often supported by celebrities and some health "professionals", and they result attractive among people who want to lose weight quickly. By means of pseudoscientific arguments, designers of fad, miracle or magic diets usually describe them as healthy diets with unusual properties but always with undoubted benefits. After revising the history of these diets and exploring the scientific evidence, it must be noted that there is not a diet better than eating less, moving more and eating lots of fruits and vegetables. In addition, it is necessary to be aware of our general daily habits, remembering that eating is important but it is not everything. Getting active is also very relevant to improve (or recover) our health. Summarizing, eating healthy and taking care of yourself are a duty but not a miracle.

### KEYWORDS

*Fad diets; miracle diets; diet cult; weight loss; healthy eating*

### Resumen

Las dietas de moda o dietas milagro (culto a las dietas) son dietas que hacen promesas de pérdida de peso o beneficios para la salud (por ejemplo, prolongar la vida) sin tener un sólido soporte científico y habitualmente se caracterizan por ser muy restrictivas o por elecciones dietéticas inusuales. Muchas veces estas dietas están promocionadas por celebridades y por algunos "profesionales" de la salud y suelen resultar atractivas para la gente que desea perder peso rápidamente. Mediante argumentos pseudocientíficos, los diseñadores de estas dietas milagrosas o mágicas habitualmente las describen como saludables y con extrañas propiedades pero siempre con indudables beneficios. Tras revisar la historia de estas dietas y explorar la evidencia científica, debe decirse que no hay una dieta mejor que comer menos, moverse más y comer gran cantidad de frutas y verduras. Además, es necesario ser consciente de nuestros hábitos diarios en general, recordando que comer es importante pero no lo es todo. Estar activo es también muy importante para mejorar (o recuperar) nuestra salud. En resumen, comer de modo saludable y cuidar de sí mismo son una obligación pero no un milagro.

### PALABRAS CLAVE

*Dietas de moda, dietas milagro, culto a las dietas, pérdida de peso, comer sano*

## AT THE BEGINNING...

The word diet, usually referred to food and drink usually consumed, did not appear in Western languages until the thirteenth century and it also had another meaning: "a way of life." In this regard, "a way of life" was the meaning of diet in ancient Greece, the term coming from "diaita". "Diaita" was a way of life and the way of living following the advise of physicians so it included not only "food" but other daily habits. Similar to "diaita", the Latin concept of "diaitan" meant to conduct, govern or lead one's life. Finally, the Latin term "diaeta" comes from these roots ("diaita", "diatan"), including a diet in one's way of life. Diet had other meanings such as regimens prescribed (dietary or others) by doctors (for example in the Middle Ages). It was common that diets were "fasts" or strict ways of eating for specific purposes (often religious). This idea of diet survives from the Middle Ages to now in the popular knowledge thus describing a way of eating specifically done to achieve a weight loss goal<sup>1</sup>.

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Followers of the ancient Greek physician Hippocrates recommended a diet of light and emollient foods, slow running, hard work, wrestling, sea-water enemas, walking about naked and vomiting after lunch. The Greeks believed that being fat was morally and physically detrimental, the result of luxury and corruption, so food and living should be plain with nothing to unduly stir the passions or arouse the appetites<sup>2</sup>. In 1087, the "first" documented liquid diet appeared when William "the Conqueror" had become too heavy to ride his horse, so he decided that he would stop eating solid foods and only partake in a "liquid diet" that consisted only of alcohol in an attempt to lose weight. If the tale is true, this is the first recorded instance in which an individual changed his or her food intake habits to lose weight<sup>3</sup>.

Despite these ideas of diet, mainly related to lose weight (for several reasons), women immortalized in Stone Age sculpture were fat; there is no other word for it<sup>4</sup>. In fact, obesity was already a fact of life for Palaeolithic man (or at least for Palaeolithic women). Images of obesity have recurred over the ages. But from ancient Greece and early Christian concepts on, diet has been related to duty and morality. Thus "diatetica" is a plan for living and eating that, though relevant today, has been largely discarded in favour of the faster and more superficial approaches that have their roots in popular early modern diet regimens<sup>2</sup>.

## NEW ERA OF DIETS

Apart from these historical curiosities, it was William Banting who wrote (in 1863) a booklet called *Letter on Corpulence, Addressed to the Public*. In this letter, Banting explained the particular plan for the diet he had followed. He was not feeling healthy, and noticed that he had put on weight so his doctor recommended to cut sugars and starches from his meals, thus becoming the first to record the progress achieved by consuming a low-carbohydrate diet. He ate only protein (meat and fish, poultry) along with a combination of green vegetables and fruits. As result, William lost 22-23 kilos in less than 12 months<sup>5</sup>. Banting took four meals per day (meat, greens, fruits, and dry wine) and his emphasis was on avoiding sugar, saccharine matter, starches, beer, milk and butter. His success was indubitable and nowadays questions such as "do you bant?" or "are you banting?" are in use referring to his method, and sometimes even to dieting in general.

Not long after Banting's success several companies began marketing a variety of products to promote weight loss by means of different ingredients not always clearly healthy. The objective was to lose weight with chemicals (e.g. thyroid hormones, amphetamines). Later, at the beginning of the 20<sup>th</sup> century, the focus changed from chemicals to calories. A successful book in 1918 (*Diet and Health*, L.H. Peters)<sup>6</sup> introduced the concept of counting calories. The basic idea was: *view the calories as a measurement and rather than judge meals by portion size*. Peter's point of view was that in order to lose weight one must stay under 1200 kcal/day., counting calories was the base of hundreds of diets After chemicals. In fact, conventional diets, books and health education are clearly based on the concept of restricting calories as a sure way to lose weight. But would there be a difference in case 1,500 kcal/day were consumed from fruits and vegetables vs. 1,500 kcal/day from cookies and candies? Now we know that a proper calorie intake is only one part of good nutrition. We can obtain more than 50 nutrients in any food, which we need. Calories and nutrition are not the same. Balance of nutrients is the key in order to avoid overweight and undernutrition states.

## FAD DIETS, MIRACLE DIETS

Taken into account the above-mentioned concepts (chemicals, counting calories, balance of nutrients) it is possible to state what a healthy diet is or to explain the bases of medical nutrition therapies. Nevertheless, many *fad diets* emerged by means of different intentional manipulations of those concept (we can refer to them as *miracle diets* or *diet cult*, among other terms). All these fad diets are designed for individuals and/or companies trying to convince followers that their diet is the one true way to eat in order to reach the best health status. These diets usually promise fast weight loss and great physical health., The designers try to convince people with pseudoscientific arguments despite not being based on established scientific results. Celebrities or medical professionals are usually involved in order to promote fad diets. Branded products, conferences, books, etc. are the common way to spread the supposed benefits of such diets.

Fad diets have their misleading weight loss claims such as the promise of solving weight problems without having to change the lifestyle in any way, a rapid weight loss (more than 9-10 kilos of body fat/week), magical fat-burning effects of some foods (e.g. grapefruit diet) or hidden ingredients in foods (the coffee diet). They promote avoidance or severe limitation of a whole food group (e.g. dairy products or a staple food such as wheat) suggesting their substitution for expensive doses of vitamin and mineral supplements. In addition, these diets advise eating mainly one type of food (e.g. cabbage soup, chocolate or eggs) or avoiding all cooked foods (e.g. the raw food diet). They recommend eating foods only in particular combinations based on the genetic type or blood group, and they spread the idea that being overweight is related to food allergies, east infections, etc. Other characteristics of these diets are the recommendation of "detoxing" or avoiding foods in certain combinations (such as fruit with meals), offering evidence based only on a celebrity or claims that one can survive without food or having liquid meals only. All these recommendations are focused on the appearance rather than on health benefits. Finally, selling products or supplements, the recommendation of eating non-food items (e.g. cotton wool), recommendations based on a single study, the same diet recommended for everyone (without accounting for specific needs) and diets based on "secrets" that doctors are yet to discover are other topics of these diets<sup>7</sup>.

Generally, fad diets promise fast weight loss as well as fat loss and they are related to the so called "yo-yo effect": The dieter is not able to maintain the weight loss over the long-term and begins to gain weight back. Fad diets may be classified as high-protein diets, low carbohydrates diets (low-carb diets), very low calorie diets, diets with micronutrients deficiencies, etc. The list of fad diets is almost infinite, many times with flamboyant names such as "The 4-hour body",

“5:2 diet”, “Dukan diet”, “Israeli Army diet”, “Morning banana diet”, “Palaeolithic diet”, “High carb/low fat diets”, “Food combining diets”, “Liquid diets”, “The Mayo Clinic diet”, “Ketogenic diets”, “The Montignac diet”, “The Atkins diet”, “The Moon diet”, etc.

The true characteristics of these diets are:

- These diets are usually monotonous despite their promises.
- Generally they are deficient with respect to some macronutrients as well as considering vitamins and minerals.
- Their calorie content is usually low bearing in mind the individuals' requirements.
- The person loses weight by losing fluids and electrolytes and reducing the protein stores and the body fat mass.
- The “yo-yo effect” is a frequent consequence of these diets.
- There is no “wonder-diet” one can follow without some associated nutritional or health risk.

## SOME EVIDENCES

There are many evidences about the fraud (or uselessness) of these fad and miracle diets. Recently, Zamora and Perez-Llamas<sup>8</sup> concluded that satiating and lipolytic products do not influence weight loss when taking a low-calorie diet. Weight, Body Mass Index and waist circumference were similar after following that low-calorie diet (1,500 Kcal/day) with or without satiating and lipolytic supplements.

Another study, based on ketogenic diets<sup>9</sup>, showed that ketogenic and conventional diets are similarly effective in weight loss. However, the former often show side effects. Besides, some limitations exist for use against part of conventional diets. There is evidence that adherence to the meal plan has a greater influence on the efficacy than the distribution of macronutrients. In this way, efforts to improve treatments for obesity should focus on increasing adherence.

With respect to low-glycaemic index-low-fat-high-protein diets, Dumesnil et al.<sup>10</sup> have reported that a low-glycaemic index-low-fat-high-protein content diet might have unique beneficial effects compared with the conventional American Heart Association diet for the treatment of the atherogenic metabolic risk profile of abdominally obese patients. Nevertheless they add that their study was a short-term intervention and additional trials are clearly needed to document the long-term efficacy of this dietary approach. One of the diets compared in this study was the Montignac diet.

Hypocaloric diets have been compared in another study based on two different types (40% carbohydrate/30% protein/30% fat vs. 55% carbohydrate/15% protein/30% fat). As result, authors found that after one year of follow-up there was no difference in weight loss between these two diets. After all they concluded that the hypocaloric diets with different protein/carbohydrate ratios produced similar changes in weight<sup>11</sup>.

The effect of these hypocaloric diets on hypercholesterolemic obese women was studied recently. Authors aimed to evaluate the interactions of a higher protein vs. a lower protein diet with or without a concomitant progressive resistance training program on body composition and lipoprotein profile in hypercholesterolemic obese women. The result was that resistance training played a key role in improving LDL-cholesterol and total-cholesterol; in addition, a lower protein intake (< 22% of daily energy intake as proteins) was found to achieve a significantly greater reduction in LDL-cholesterol<sup>12</sup>.

High-fat, low-carbohydrate diets have been compared with low-fat high-carbohydrate diets. In a study with these two hypocaloric diets, authors found a similar weight loss after 12 weeks<sup>13</sup>.

## CONCLUSIONS

It seems that there is not a diet better than eating less, moving more and eating lots of fruits and vegetables. People need to stay more aware of their habits. Regular meals (starting by a good breakfast) are necessary, eating lower fat foods (e.g. lean meat) and lower fat dairy products are also basic rules for eating healthy. Snacks and desserts must be generally based on fruits and vegetables. In addition people must watch the portion sizes they consume. Eating is important but it is not everything. Getting active (e.g. 30 minutes daily of moderate physical exercise) is also very relevant to improve (or recover) health. And with respect to diets, one must be realistic about weight loss. Losing 0,5-1 kg/week is a full of common sense objective, no more. Other promises, other objectives, are fraudulent and, at the end, unattainable.

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