

The Effect of Nutritional and Homeopathic Treatments Versus Exclusive Nutritional Treatments in Patients with Obesity or Overweight

DEL CASTILLO SALAZAR GÓMEZ MARÍA PAOLA¹,
PEÑA CISNEROS ERIK MISAEL² and RUVALCABA LEDEZMA JESÚS CARLOS^{3*}

¹Nutrition Counselor, Atemajac Valley University, Student of the Master of Clinical Nutrition UAD Autonomous University of Durango.

²Professor Researcher (UNAG) Anthropological University of Guadalajara, in the Degree in Homeopathy. Jalisco, Mexico.

³PhD. In Public Health Sciences, Full time Research Professor in the Academic Area of Medicine and Professor of the Master's Degree in Public Health, Coordinator of the Master's Degree in Health Sciences with emphasis on Public Health (ICSa-UAEH) Health Sciences Institute, Autonomous University of the State of Hidalgo, Mexico. and at UAD Autonomous University of Durango. Los Mochis Sinaloa Mexico.

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ABSTRACT

Evaluate the influence of using a nutritional treatment accompanied by a homeopathic treatment for weight reduction. A prospective comparative quasi-experimental study was conducted, in 30 people with obesity or overweight who were subjected to a nutritional treatment accompanied by a homeopathic treatment and a control group integrated by 30 people who were subjected to an exclusive nutritional treatment. The sampling method was probability, randomizing subject types. When comparing the weight loss to the difference of the initial weight and final weight registered in both groups, it was found that in the group which had a unique nutritional treatment, the average weight loss was 0.776 kg with a standard deviation equal to 0.910, while in the group that received a nutritional treatment accompanied by homeopathy the result was 2.257 kg with a standard deviation of 1.625. Through an analysis of mean difference concerning the weight loss, the group with nutritional treatment and the group with nutritional treatment and homeopathy obtained a $P=0.000$, because the value is < 0.05 there is a significant difference, detecting that the loss of weight was greater in the group of nutritional treatment complemented with homeopathic treatment, but when comparing the BMI there is no significant difference detected since the $p= 0.497$ is > 0.05 . The use of a homeopathic treatment accompanied by a nutritional treatment has better results in the reduction of weight.

Key words: Nutritional treatment, Homeopathic treatment, Obesity, Overweight, Weight reduction.

INTRODUCTION

Obesity is a pandemic affecting over 300 million people worldwide. Nowadays, it contributes, to a number close to 200,000 deaths per year in our country, Mexico¹. Obesity, overweight and related diseases are largely avoidable. We know exactly what the causes are and how to prevent them; overweight and obesity can be treated and if

carried out with proper monitoring and treatment, it is easy to eradicate them. Obesity is defined as a complex, multifactorial disease that results from the interaction between the genotype and the environment. As it has been described, it is the result of the integration of various factors such as the environment, culture, physiology, metabolism and genetics². According to figures from the Ministry of Health, every hour 12 people die in Mexico as a

result of cardiovascular diseases, seven due to diabetes and seven due to problems caused by neoplasms³.

There are several methods for the treatment of obesity. Homeopathy is a gentle effective method for treating diseases and ailments. It is of holistic nature, which means that, in order to decide the treatment it requires to take into account the whole person, as well as the disease or the specific problem. Drugs or medicines that are used consist of small doses of natural substances extracted from plants, animals or minerals⁴.

Nutrition is important for maintaining the state of health at a preventive and curative level, improving the quality of life. Although this is something that has been known for centuries, the reality is that human beings eat worse every time. Most schemes promise immediate results without regard to whether a particular method is ideal for those who will use it⁴. Nutrition is a process through which the body uses nutrients from food. A nutrient is a substance that usually comes from the diet involved in metabolic processes⁵. Healthy eating allows the individual maintaining an optimal state of health, while allowing the practice of different activities. History is full of episodes that demonstrate man's efforts to preserve or restore health by a certain feeding. Behind a dietary practice there is always a justification, a certain doctrine or set of beliefs that relate to food and the human body in both, health status and diseases⁶.

A healthy and proper diet must comply with the following characteristics: comprehensive, balanced, innocuous, enough, varied, and appropriate⁵.

A nutritional treatment is the one the individual usually performs daily and allows the preservation of health, which is defined by the World Health Organization (WHO) as this full biopsychosocial well-being of the person⁷. Nutritional treatment considers that food should:

- ' Provide the individual the necessary nutrients for growth, development and proper functioning.
- ' Be an emotional satisfaction for the ones who prepare it by experiencing the selection

and preparation of food, the consumption of the food for its taste, color, smell, texture and presentation.

' Coexist in a pleasant climate during specific times, without tension and allow human living together⁷.

The short and medium term goals of nutrition treatments are defined as:

- ' Maintain the optimal nutritional status of the individual at pathophysiological circumstances.
- ' Correct nutritional deficiencies that arise.
- ' Get obese and / or malnourished people a healthy weight range and keep it. Avoid weight loss.
- ' Provide physiological rest to the affected organ (if necessary).
- ' Provide energy and other nutrients required by the body in sufficient quantity.
- ' Provide nutritional orientation to individuals and their families.
- ' Offer an attractive sensory feeding.
- ' Ensure that meals are made in a special place and accompanied, preferably with family or the group to which the person belongs.

In theory, one kilogram of body fat is equivalent to 7,000 kcal, so that an energy deficit of 7,000 kcal produces a decrease of one kg of body fat. Therefore, to decrease about half kg per week is recommended weekly energy deficit of 3,500 kcal or 500 kcal per day⁷.

The distribution of energy substrates will be normal and adequate vitamins and minerals. The proteins are 10-15% of the GET, 20-25% lipids, and carbohydrates 50-55%. Consume 3-5 meals a day⁷.

Obesity, a public health problem.

About 12,000 years ago some human groups changed the hunter-gatherer food production habit, this change required the domestication of plants and animals; this economic transformation, known as the Neolithic revolution, can be considered as the most important event in human history and the distant history of modern societies that promote obesity, since it allowed the

population growth and the evolution towards complex and civilized societies⁹. In several human cultures, obesity was associated with physical attractiveness, strength and fertility. In cultures where food was scarce, so being obese was a symbol of wealth and social status. This was also true in European cultures. Then it was most visible sign of "lust for life", appetite and immersion in the kingdom of the erotic. This meaning was used particularly in the visual arts^{9,9}. It is until the second half of the twentieth century when it makes a sustained and growing effort to improve therapeutic results in the necessary struggle to treat obesity. Dietary advice and increased exercise are still the essential recommendations, as in ancient times. Behavior

modification, psychological treatment and use of drugs are methods that can be useful for many patients. Bariatric surgery to treat selected cases of morbid obesity has been a growing boom. In this century, the data concerning the increased prevalence of obesity is worrying^{8,20, 21}.

Therefore, obesity is a current public health problem whose prevalence increases in most countries worrying both health workers and sociologists, anthropologists and professionals of the oda and constitute a major health problem⁷. The WHO defines overweight as a BMI equal to or higher than 25 kg/m², and obesity as a BMI equal to or higher than 30 kg/m². These thresholds provide

Table. 1: Operational definition of variables

DEPENDENT	
WEIGHT	It is a global indicator of body mass, easier to obtain and reproducible (23).
INDEPENDENT	
NUTRITIONAL INDIVIDUALIZED TREATMENT	The method by which the diet of a healthy or sick individual designs. According to several factors among which are the nutritional, physiological and pathological condition, energy and nutrient needs, supply routes and the type of diet, the subject is assigned an equivalent number of servings per day and distributed at different meal times. It is desirable to design with the end user thereof and is accompanied by a menu (5).
NUTRITIONAL TREATMENT WITH INDIVIDUALIZED HOMEOPATHIC TREATMENT	The previous method is added the administration of a homeopathic medicine. The homeopath should know the patient in its mental, psychic, general and local symptoms in their own reactional modalities and their sensations, Concomitant and alternating symptoms and, especially, rare, peculiar, characteristic symptoms, the set of all which reveals the constitution, temperament, that is, the unitary vital subject's reaction (14).
INTERVENING	
EXERCISE	Voluntary act freely accepted, with the intention of obtaining improvement or maintenance of physical condition and which is essential to control qualitatively and quantitatively (22).
TYPE OF EXERCISE	Aerobic or Anaerobic (22).
DURATION OF EXERCISE	Period of a workout (26).
DIURETICS	These are drugs that stimulate the renal excretion of water and electrolytes because of their perturbing action on the ion transport along the nephron (23).
LAXATIVES	Purgative medicines or preparations that work without irritating the intestine.(25).
ALLOPATHY	Additional food to regular meals to increase or supplement the intake of nutrients (24).
NUTRITIONAL SUPPLEMENTS	Therapeutic system based on the law of contrary and opposed to homeopathy. It is what is known as traditional medicine (14).
EXISTING PATHOLOGIES	Diseases and disorders that occur in the organism (25).

a benchmark for individual assessment, but there is evidence that the risk of chronic disease in populations increases progressively from a BMI of 21 kg/m²^{10,20, 21}.

The fundamental cause of obesity and overweight is an imbalance between energy intake and caloric expenditure. Global increases in overweight and obesity are attributable to several factors, among which:

- The global modification in diet, with a trend towards increased intake of energy-dense foods high in fat and sugars but low in vitamins, minerals and other micronutrients.
- The trend towards decreased physical activity due to the increasingly sedentary nature of many forms of work, changing modes of transportation, and increasing urbanization. Overweight and obesity lead to serious health consequences. The risk increases as progressively as BMI does. Elevated BMI is an important risk factor for chronic diseases such as:
 - Cardiovascular disease (mainly heart disease and stroke), which are already the leading cause of death worldwide, with 17 million deaths every year.
 - Diabetes, which has rapidly become a global epidemic. The WHO projects that diabetes deaths will increase worldwide in more than 50% over the next 10 years.
 - Diseases of the musculoskeletal system, particularly arthritis.
 - Some cancers, such as endometrial, breast and colon¹⁰.

Obesity, overweight and related chronic diseases, are largely avoidable. At the individual level, people can:

- Achieve energy balance and a healthy weight.
- Reduce the intake of calories from fats and

shift fat consumption away from saturated fats to unsaturated fats.

- Increase consumption of fruits and vegetables, legumes, whole grains and dried fruits.
- Reduce intake of sugars.
- Increase physical activity (at least 30 minutes of regular physical activity of moderate intensity, most days)¹⁰. Genetic and environmental factors may play a role in the pathogenesis of obesity in certain individuals¹¹.

There are several classifications of obesity, some of them completely obsolete and other with little pathophysiological significance despite being very used, such as dividing the endogenous and exogenous obesity⁶.

Another classification quite used takes into account morphological types, such as the basis of the fat mass of the man and woman which are different, not only in quantity but also in their distribution. Thus, the male has 12-20% of fat and 20-30% in the women. Based on this concept, we will divide the android and gynecoid obesity, and even as hyperplastic and hypertrophic obesity and mixed (6). Its complications are vascular diseases, diabetes, hypertension, hyperlipidemia, respiratory diseases, neoplastic, osteoarticular and other diseases which incite to consider a periodic review conducted at least annually or, going to the preventive medicine service or the family doctor.

Homeopathy for the problem of obesity

Homeopathy is a relatively new medical discipline born in Germany with Dr. Hahnemann¹²⁻¹⁴. In Mexico this discipline comes through a group of Spanish doctors more or less at the same time and who attracted the interest of the community at effective treatments that are less aggressive than some drugs are to the body. The Catalans trained

Inclusion criteria	Non Inclusion criteria	Elimination criteria
Male or female gender, BMI higher than 24.9 kg/m ² , Volunteers, over 18 years old.	People who performed high-intensity exercise, were using diuretics, were using laxatives, were pregnant women, presented some aggregate pathology that modifies the percentage of fat directly or indirectly, were on medication, used herbalist to lose weight.	People who decided not to continue the study voluntarily, people who have undergone an operation, women who initiated a period of gestation during the study, people who would develop an allergy caused by the treatment, people whose health was affected by the treatment, who initiated the use of any drug treatment or decided not to take the homeopathic treatment, missing some checkups or consultations.

homeopaths and their Mexican counterparts in the first steps in the field of homeopathy in our country keeping evidence about its effectiveness in relevant healing. Homeopathy considers the body's natural defenses are able to overcome most diseases. Homeopathic Medicine is an energy medicine type, in which the individual is taken as a unique and special being who is able to sense and perceive the disorders itself, either psychic or physical in a particular way. Homeopathic treatments see the person as a whole, not as an affected or diseased organ, whereas in the case of obesity homeopathic medicine will be administered according to the totality of symptoms and according to the law of similarity^{15, 16}.

Fundamentals of Homeopathy

The word homeopathy comes from the Greek *homeo* - similar and *pathos* - suffering or disease. Similar to disease (14). Homeopathy in its definition is a medical science, a philosophy, therapeutic and healing art, from the law of similars, to solve health problems. Stressing on the following fundamental principles: the Law of Similars, The morbid and drug individuality¹⁴⁻¹⁷ homeopathic healing mechanisms and laws that rule.

Healing should be seen from the inside out, from the most important to less important organs, and in the reverse order of their appearance (the last to appear will be the first to disappear). In short, the law states that the first improvement in a patient is mental in his spirit, character, courage, decreased anxiety, improvement in his sleep. If there is a renal, heart, lung or liver disease that improves before the skin or stomach (provided that he does not have a fatal disease). The order of appearance of disease will also be maintained in the patient's history and will go in reverse in order to relieve it. If the patient achieves an improvement, the homeopath should always do within the Law of Healing. Otherwise, the improvement will be temporary and partial, often achieving produce a general worsening of the patient's vitality. In other words, the only possibility of real improvement, must fall within the Law of Cure; otherwise there will not be a durable improvement in the patient or his prognosis is worse¹⁸.

Medication

The doctor should seek the specific drug to his illness and according to his disease. Each person will have their own flu, angina or your own eczema; the patient is going to develop symptoms and ways that will be considered personal and which guide the doctor in choosing a specific homeopathic medicine¹³. The book of Organon paragraph 210 states that mental illnesses are not a separate type of disease clearly of other called bodily diseases. The frame of mind and the mind are always altered and in all cases the disease must be cured, the frame of mind of the patient is of particular importance with all its symptoms for taking into account the characteristic symptoms, if we treat a disease picture that matches reality, that would enable us to successfully treat homeopathically¹⁶⁻¹⁸.

Hypothesis

H_T = The use of a nutritional treatment accompanied by a homeopathic treatment is better for weight loss than an exclusive nutritional treatment.

H_0 = The use of a nutritional treatment accompanied by a homeopathic treatment does not have better results for weight reduction than an exclusive nutritional treatment.

H_A = The use of a nutritional treatment accompanied by a homeopathic treatment has the same results for weight reduction than an exclusive nutritional treatment.

Aim. To assess the influence of the use of a nutritional treatment accompanied by a homeopathic treatment aimed for weight reduction.

MATERIAL AND METHODS

A quasi-experimental study was conducted among 30 people aging over 18 with obesity or overweight and 30 women with unique nutritional treatment, randomly selected.

General plan.

During the first week of the study each patient was on a nutritional advice date at UNIVA's nutritional office, where they answered an interview with the purpose of collecting their information and medical histories as well as keeping record of their weight and height. Subsequently, an individualized

nutritional treatment based on the analysis of their expedient was calculated. Treatment consisted of a diet by equivalent. Once explained his eating plan the patient was asked to go to the office of homeopathy where the homeopath took the case and made a repertorization in order to determine the best drug according to the totality of symptoms¹⁹. The patient returned a month later in order to assess whether there were changes in their weight or not.

Once the results were obtained, an analysis was conducted in order to compare the two final weight reduction schemes. A database in Excel and statistical analysis in SPSS-13 was also performed.

Bioethical Considerations: This research comply the required specifications in accordance with current regulations and legislation of the General Health Law (DOF 30-05-2008 Last

Table. 1: frequency And Gender Percentage Of Patients With Exclusive Nutritional Treatment And Nutritional Treatment Accompanied By Homeopathic Treatment

Gender	Exclusive Nutritional Treatment		Nutritional Treatment Accompanied By Homeopathic Treatment.	
	Number Of Persons	%	Number Of Persons	%
Female	20	66.67%	25	83.3%
Male	10	33.33%	5	16.7%
Total	30	100%	30	100%

Source: Direct

Table. 2: Average age, height and body mass index of patients with exclusive nutritional treatment and nutritional treatment accompanied by homeopathic treatment

	Exclusive nutritional treatment	Nutritional treatment accompanied by homeopathic treatment
Age	0.32	0.28
Size	1.64	1.63
BMI	28.69	28.09
	n = 30	n = 30

Source: Direct

Table. 3: Average and standard deviation of the initial and final weight in exclusive nutritional therapy vs nutritional therapy accompanied by homeopathic treatment.

	Exclusive nutritional treatmentby		Nutritional treatment accompanied homeopathic treatment	
	Initial weight	Final weight	Initial weight	Final weight
Average	77.09	76.31	74.59	72.34
Standard deviation	13.63	13.11	10.10	9.96
	n = 30	n = 30		

Source: Direct

Reform), fifth title "Health Research", follows Articles 96 to 103 °. The research subject signed a letter of informed consent where accepted freely to participate in the study and claimed to know the entire research process, also the freedom to withdraw from the study without prejudice.

RESULTS

The general characteristics that were considered in the study to establish comparability regarding the groups were:

Regarding gender, the group with exclusively Nutritional treatment was formed by 20 women (66.67%) and 10 men (33.33%), while the group with nutritional treatment accompanied by homeopathic treatment was formed by 25 women (83.3%) and 5 men (16.7%). (TABLE 1)

Regarding age group for exclusively nutritional treatment, the minimum age was 18, the oldest participant was 56 and the average was 32 years old; in group for nutritional treatment

accompanied by homeopathic treatment the minimum age was 18 years old, maximum 54 and on average 28 years. In terms of size, the minimum average of people with unique nutritional treatment was 1.50 m, the maximum 1.87 m and the average size was 1.64 m, in the other group the maximum size recorded was 1.75 m, the minimum 1.53m and the average was 1.63 m. Regarding the body mass index for patients with unique nutritional treatment group the average was 28.69 kg/m² (obesity 1), the minimum recorded was 25.27 kg/m² (overweight) and the maximum was 39.85 kg / m² (Obesity 3). In the other group the average was 28.09 kg/m² (Obesity 1), the minimum equaled to 24.98 kg/m² (overweight) and the maximum was 33.79 kg/m² (Obesity 2). (TABLE 2)

In reference to the weights, the minimum initial weight of exclusive nutrition treatment group was 57kg, the maximum was 105.2 kg and the average was 77.09 kg with a standard deviation of 13.63; in the other group the minimum weight was 60 kg, the maximum of 96 Kg and averaged 74.59 kg with a standard deviation of 10.10. The minimum

Table. 4: Frequency and percentage of most used homeopathic medicines for weight loss according to the law of similars.

Medicament	Potency	Frecuency	Average
<i>Ignatia amara</i>	200 C	8	26.6%
<i>Natrum muriaticum</i>	200 C	5	16.6%
<i>Calcárea carbónica</i>	200 C y 1000 C	5	16.6%
<i>Nux vómica</i>	200 C y 1000 C	5	16.6%
<i>Lycopodium</i>	200 C	5	16.6%
<i>Phosphorus</i>	200 C	2	6.6%
n = 30			

Source:Direct

Table. 5: Weight loss average and standard deviation.

	Exclusive nutritional treatment	Nutritional treatment accompanied by homeopathic treatment.
Average	0.776	2.257
Standard deviation	0.910	1.625
	n = 30	n = 30

p<0.05

Source: Direct

final weight for the group that received only nutritional treatment was 56.9, the maximum was 102 Kg and 76.31 Kg on average with a standard deviation of 13.11; in the other group the minimum final weight was 58 kg, the maximum was 90 kg and an average of 72.34 kg with a standard deviation of 9.96. (TABLE 3)

Comparing weight loss based on the difference of the initial weight and final weight recorded in both groups, the following was found: in the group with unique nutritional treatment the average weight loss was 0.776 kg with a standard deviation of 0.910, whereas in the group that received nutritional treatment accompanied by homeopathy the result was of 2,257 kg with a standard deviation of 1.625. (TABLE 5)

The drugs most commonly used in the homeopathic treatment were: *Ignatia amara* to the potency of 200 C with a frequency equal to 8 and a percentage of 26.6%. *Natrum muriaticum* and *Calcarea carbonica* to the potency of 200 C and 1000 C, with a frequency equal to 5, and a percentage of 16.6% each one; *Nux vomica* and *Lycopodium* to the potency of 200 C, with a frequency equal to 5 and with a percentage of 16.6% each one and *Phosphorus* to the potency of 200 C, with a frequency equal to 2 and a percentage of 6.6%. (TABLE 4)

Through an analysis of mean difference regarding weight loss of the nutritional treatment group and the group with nutritional treatment and homeopathy a $P = 0.000$ was obtained, since the value is <0.05 , a significant difference exists, detecting the greatest loss of weight in the group with nutritional treatments accompanied by homeopathic treatments, but when compared the BMI no significant difference was detected because the value is $p = 0.497 > 0.05$, so that H_0 is accepted. (TABLE 5)

DISCUSSION

Regarding homeopathic treatment in the course of therapy, there are several ways to administer treatment but in the orthodox homeopathy, the mental symptoms are the most important, the emotional field is the center of the

homeopathic action and is the most important essence since the law of similars, hence people who were included in the present investigation were also treated from their emotional symptomatology. Unfortunately, there have been some pseudohomeopaths who handle very low potencies and without considering strictly the emotional level.

On the other hand, it should be noted that *Ignatia amara* is an acute drug where the sadness and the question is overeating by nerves, *Natrum muriaticum* is chronic drug of *Ignatia amara*, where its essence is resentment, rancor, mental rumination result of the evolution of *Ignatia amara*, *Calcarea carbonica* in its essence is the slowness in everything patients do, their metabolism is slow and emotionally slowness appears in their achievements with troubles all the time, Phosphorus itself is a very good person, but he gets angry and finally *Nux vomica* is eating and overeating, it is bossy and demanding with those around him.

Moreover, one must think in general that there must be a drug that could burn fat as well as *Fucus vesiculosus*, but then when prescribing this drug it would come out of the canons of homeopathic philosophy, unless the person is in an emotional status that matches the law of similarities.

Finally, the drugs used in this investigation may have been more varied, but the results obtained reflect the frequency and a logic based on the homeopathic treatment as determining to considering the totality of symptoms and mental symptoms from the emotional plane of the patient and including his character, sleep and his relationship to his family, himself and towards the society, because obesity is not an acute health problem but it is a chronic health problem. It is worth mentioning that, homeopathic research on this topic is practically null.

CONCLUSIONS

The use of a nutritional treatment accompanied by a homeopathic treatment is better for weight loss than an exclusive nutritional treatment, the working hypothesis is accepted

The homeopathic medicine that is used most frequently in the study group was *Ignatia amara* and was also the most effective in terms of weight loss.

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