

DIETOX Juice cleansing therapy study





According to the World Health Organization (WHO), obesity, one of the main health risk factors, has almost tripled worldwide in the last 40 years.

Poor dietary habits contribute substantially to the incidence of obesity and overweight, as well as chronic diseases. The beneficial role of plant-based foods in health has been described (Angelino et al., 2019 and Aune et al., 2017). For this reason, the WHO recommends a minimum consumption of 5 servings of vegetables and fruits in the diet, which entails a low energy intake and a high nutritional value (minerals, vitamins and fiber), as well as a high content of phytonutrients.

The increase in obesity, poor dietary habits and the prevalence of chronic diseases have increased interest in diet programs for weight loss. Different diets have been proposed that involve a high consumption of plant-based foods and caloric restriction. A recent study has shown that fasting and caloric restriction could lower diastolic and systolic blood pressure (Kord-Varkaneh et al., 2020). However, carefully designed clinical trials are needed to elucidate its short- and long-term health effects and the mechanisms involved. In line with the objective of maintaining a healthy lifestyle, detox diets have emerged in the last decade. This type of diet involves a low energy intake and a high intake of plant-based products.

The study by Kim et al., showed an improvement in body composition, insulin resistance and the balance of other hormones related to energy metabolism, as well as a decrease in C-reactive protein in 84 premenopausal Korean women who followed a detox program with a caloric restriction (400kcal) for 7 days, followed by a transition period (1000 kcal) for 4 days (Kim et al., 2015). In addition, a detoxification plan could reduce the secretion of hormones secreted by adipose tissue, such as adipokines, and thus influence insulin sensitivity, the generation of reactive oxygen species and the inflammatory response (Havel, 2002). However, some studies have observed that energy deprivation caused by low-calorie diets can increase the release of cortisol, producing negative effects such as an increase in appetite stimulation, which leads to long-term weight gain (Klein and Kiat, 2015).

The hypothesis that this project raises is that the incorporation of a detox plan as the starting point of a well-structured healthy diet could have beneficial effects on health. For this reason, it is proposed to carry out a crossover, randomized and controlled clinical study in adult women aged between 25-45 years who will consume this diet plan (detox juices) for 10 days compared to a vegan diet (control), and evaluate changes in health status.



OBJECTIVES

The main objective of this study is to evaluate the effect on women's health of a hypocaloric detox diet based on Dietox Juice Cleansing Therapy.



For this, the following specific objectives are proposed:

- **1** Determine if the body composition improves after the intervention with a detox diet.
- 2 Examine whether there are improvements in the lifestyle and well-being of the volunteers after the intervention.
- 3
- Analyze the biochemical and hormonal changes in relation to metabolism after consume a hypocaloric detox diet.
- **4** Demonstrate the effect of the intervention on the inflammatory state.

Study design

On the study, we have selected a group of volunteers with different profiles in order to participate in our Dietox Juice Cleansing Therapy Study.

Before starting the study and right after finishing the plan, all participants got a blood test done that we carried out together with the Echevarne laboratory in order to fully understand all of the biochemical changes due to the Dietox Juice Cleansing Therapy.

Furthermore, a qualitative survey was also conducted before and after the study on stress levels, level of physical and mental well-being and mood throughout the program and obviously there was also a weight control. In addition to other parameters such as sleep, the appearance of the skin, the improvement of digestion, etc.



Results

The results will consist of 4 sections:

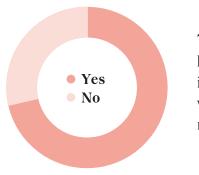
- Pre-study questionnaire
- Pre-study analytics
- Post-study questionnaire
- Conclusions and claims



Pre-study questionnaire

First, we are going to analyze the pre-study questionnaire answered by the volunteers. This questionnaire will help us to better evaluate the results of the study, as well as to get to know the volunteers better.

a) Have you ever done a detox plan?



71.4% of the volunteers' state that they have already done a detox at some point in their life, compared to 28.6% of the volunteers who declare that they have not done any detox diet in their life.

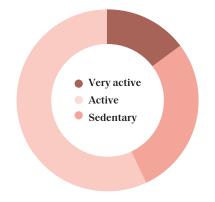
b) Have you ever been on a diet?

100% of the volunteers declare that they have been on a diet at some point in their life.

c) Do you have any intolerance / allergy / disease that we should know about?

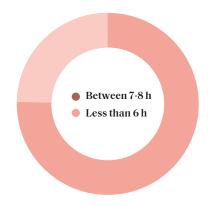
71.4% declare that they do not present any type of pathological condition, whereas 28.6% declare that they have some type of pathological condition.

d) How is your lifestyle?



First of all, 14.3% of the volunteers' state that they have a very active lifestyle (work with physical involvement or a daily exercise routine of more than 2 hours). On the other hand, 28.6% of the volunteers declare that they have an active lifestyle (standing work or daily exercise routine of 1h or more) and, finally, 57.1% declare that they have a sedentary lifestyle (office work and no exercise at all).

e) How many hours do you usually sleep?



85.7% of the volunteers declare that usually sleep between 7 and 8 hours a day. On the other hand, 14.3% state that they sleep less than 6 hours a day.

f) Do you usually practice sports? If so, what sport do you play and how often?

The most practiced sports by the volunteers are: spinning, swimming, running, and strength exercises.

Pre-study analytics

As explained before, some parameters were analysed through a blood test right before and the last day of the study. Specifically, some of the following parameters were analysed:

• Blood glucose

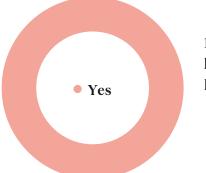
Total cholesterol

- HDL cholesterol
- LDL cholesterol
- Triglycerides
- Insulin
- Cortisol
- Leptin
- TNF-α
- C-reactive protein

Post-study questionnaire

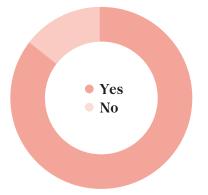
We are going to analyze the questionnaire answered by the volunteers once the therapy was finished.

a) Has the therapy been difficult for you



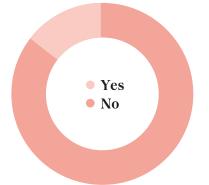
100% of the volunteers declare not having had difficulties to carry out the Dietox Juice Cleansing Therapy.

b) Have you noticed that your digestions are now less heavy?



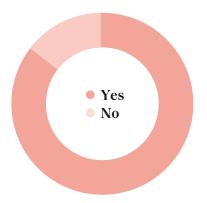
Firstly, 85.7% of the volunteers have noticed an improvement in their digestion. On the other hand, 14.3% have not noticed improvement, although this is due to the fact that 1 participant suffers from digestive pathology, so the lack of improvement in their digestions is not relevant.

c) Have you ever felt nervous or anxious?



First of all, 85.7% of the volunteers did not feel nervous or feel anxious during the course of the Dietox Juice Cleansing Therapy. On the other hand, 14.3% of the volunteers have felt these feelings of nervousness or anxiety.

d) Have you noticed more energy and vitality than before starting therapy?



85.7% of the volunteers have noticed higher levels of energy and vitality at the end of the Dietox Juice Cleansing Therapy. On the other hand, 14.3% have not felt this improvement.

e) How has your mood been during therapy?



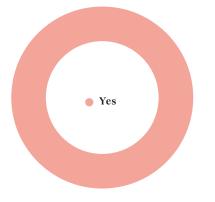
On the one hand, 71.4% of the volunteers felt good humor during the therapy. On the other hand, 14.3% have felt in a very good mood and, finally, 14.3% of the volunteers have felt in a regular mood during the Dietox Juice Cleansing Therapy.

f) How was your rest during the therapy days?



57.14% of the volunteers declared that they had a very good rest during the Dietox Juice Cleansing Therapy days and 42.9% of the volunteers declared that they had had a good rest.

g) Have you played sports during therapy days?

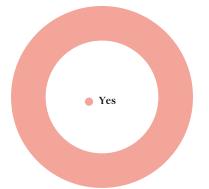


100% of the volunteers have practiced sports during the Dietox Juice Cleansing Therapy days.

h) How have you noticed the skin after doing our therapy?

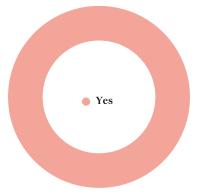
69% of the volunteers declare that their skin is brighter, smoother and more hydrated.

i) After doing therapy, do you feel motivated to continue taking care of yourself in your day-to-day life?



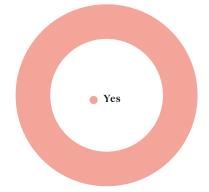
100% of the volunteers, after having done our Dietox Juice Cleansing Therapy, feel more motivated to continue taking care of themselves in their day-to-day life

j) Are you satisfied with the results of the plan?



100% of the volunteers feel satisfied with the results obtained in the Dietox Juice Cleansing Therapy.

k) After your experience, would you recommend doing a detox to someone?



100% of the volunteers would recommend our Dietox Juice Cleansing Therapy to someone.

1) Which extra effects have you felt in your body with the Dietox Juice Cleansing Therapy?

The volunteers mention the following positive effects:

















CONCLUSIONS AND CLAIMS

Thus, the following conclusions and claims can be drawn:

100%	100% of the volunteers declare having carried out the Dietox Juice Cleansing Therapy without difficulties.
42,9 %	42.9% of the volunteers declared that they had not been hungry during the Dietox Juice Cleansing Therapy.
85.7 %	85.7% of the volunteers have noticed an improvement in their digestion.
85.7%	85.7% of the volunteers did not feel nervous or feel anxious during the course of the Dietox Juice Cleansing Therapy.
85.7 %	85.7% of the volunteers have noticed higher levels of energy and vitality at the end of the Dietox Juice Cleansing Therapy.
71.4%	71.4% of the volunteers felt good humor and 14.3% felt good humor.
57.14%	57.14% of the volunteers' state that they had a very good rest during the days of the Dietox Juice Cleansing Therapy.
69 %	69% of the volunteers declare that their skin is brighter, smoother and more hydrated.
100%	100% of the volunteers, after having done our Dietox Juice Cleansing Therapy, feel more motivated to continue taking care of themselves in their day-to-day life.
100%	100% of the volunteers feel satisfied with the results obtained in the plan.
100%	100% of the volunteers would recommend detoxing someone.

CONCLUSIONS AND CLAIMS

The volunteers mention the following positive effects:

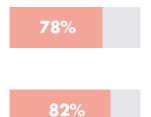
- Less heaviness
- Greater sensation of hydration
- Better digestions
- Greater energy and vitality
- Better good mood
- Better attitude
- Greater regularity when going to the bathroom
- Deflated body
- Much more satiety with the prescribed diet
- Feeling of lightness
- Better sleep quality
- Wanting to continue to feel good

The Dietox Juice Cleansing Therapy has also caused the following changes:

• Improvements in the lipid profile after therapy. Specifically, the levels of: TG, total cholesterol, LDL cholesterol have been decreased and HDL cholesterol levels have been increased.

80%	80% of the participants improved their cholesterol levels by 10%.
80%	80% of the volunteers reduced their triglyceride (TG) levels by 43.3%.
66.6 %	66.6% of the study participants increased their HDL cholesterol levels by $3%$.
60%	60% of the volunteers reduced their levels of what is known as bad cholesterol or LDL cholesterol by 10%.

• Improvements in glucose metabolism. Specifically, blood glucose levels have been lowered.



78% of the volunteers improved their blood glucose levels (glycaemia) by 7%.

82% of the participants have improved their insulin levels by 55%.

Improvements at the inflammation level.



83.3% of the volunteers improved their inflammatory status.

Improvements in stress levels:



80% of the volunteers improved their cortisol levels.

- Decrease in body weight:
- The volunteers reduced their body weight by 2.5 3 kg.
- Greater physical and mental well-being.



• Improvements at satiety level:



100% of the participants improved their levels of the hormone leptin, more commonly known as "satiety hormone".

• Reduction of the risk of suffering from chronic non-communicable diseases due to the effect of antioxidants provided by a diet rich in fruits and vegetables.



