



## Complementary Therapies in Medicine

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# Preventive use of Bach flower Rescue Remedy in the control of risk factors for cardiovascular disease in rats

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### Summary

#### Objectives

To evaluate the effect of Bach flower Rescue Remedy on the control of risk factors for cardiovascular disease in rats.

#### Design

A randomized longitudinal experimental study.

#### Methods

Eighteen Wistar rats were randomly divided into three groups of six animals each and orogastrically dosed with either 200  $\mu$ l of water (group A, control), or 100  $\mu$ l of water and 100  $\mu$ l of Bach flower remedy (group B), or 200  $\mu$ l of Bach flower remedy (group C) every 2 days, for 20 days. All animals were fed standard rat chow and water *ad libitum*.

#### Main outcome measures

Urine volume, body weight, feces weight, and food intake were measured every 2 days. On day 20, tests of glycemia, hyperuricemia, triglycerides, high-density lipoprotein (HDL) cholesterol, and total cholesterol were performed, and the anatomy and histopathology of the heart, liver and kidneys were evaluated. Data were analyzed using Tukey's test at a significance level of 5%.

## Results

No significant differences were found in food intake, feces weight, urine volume and uric acid levels between groups. Group C had a significantly lower body weight gain than group A and lower glycemia compared with groups A and B. Groups B and C had significantly higher HDL-cholesterol and lower triglycerides than controls. Animals had mild hepatic steatosis, but no cardiac or renal damage was observed in the three groups.

## Conclusion

Bach flower Rescue Remedy was effective in controlling glycemia, triglycerides, and HDL-cholesterol and may serve as a strategy for reducing risk factors for cardiovascular disease in rats. This study provides some preliminary “proof of concept” data that Bach Rescue Remedy may exert some biological effects.

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## Introduction

Estimates show that 80% of the world population use alternative medicine and that 85% of them use plants or plant-based preparations.<sup>1</sup> Bach flower remedies are based on the essences of 38 wild flowers. According to the philosophical theory of Dr. Edward Bach, the creator of the Bach flower therapy, these essences are able to restore harmony and balance to changes in mood and personality, which eventually lead to physical illness.<sup>2, 3</sup> Previous studies have proposed that Bach flower remedies act through vibration, interacting subtly with biochemical and molecular reactions.<sup>3, 4, 5</sup> This theory explains the transfer of energy from one body to another through vibrations at similar frequencies.<sup>2, 3, 4</sup> The Bach flower therapy acts in the limbic system or directly in the hypothalamus, balancing the bioenergy and stress levels, and bringing harmony.<sup>4</sup>

Bach flower remedies are part of the alternative medicine in which therapies are based on a holistic perspective of the human being. Based on this holistic approach, several studies in animals and humans have suggested the use of Bach flowers as a complementary therapy.<sup>5, 6, 7, 8, 9, 10</sup> Bach flower therapy was recognized by the World Health Organization in 1974,<sup>11</sup> and introduced in Brazil in 1980.<sup>3</sup> The practice of complementary medicine was implemented in the Brazilian Unified Health System, according to the Regulation No. 971 of May 15, 2102 by the Ministry of Health, focusing on quality improvement in health care through preventive

and therapeutic actions more accessible to the general population.<sup>1</sup>

Some studies have found that Bach flower therapy reduce anxiety.<sup>3, 10</sup> Rescue Remedy is one of the formulations of the Bach system of flower remedies for the treatment of anxiety.<sup>10, 12</sup> A combination of flower remedies have a synergistic effect, and therefore one may opt to use single remedies or a selection of remedies may be combined into one treatment composite.<sup>13</sup> Because anxiety may interfere in the body physiology,<sup>14</sup> it was hypothesized that anxiety may affect risk factors for cardiovascular diseases.

Cardiovascular diseases have been ascribed to several etiopathological factors and atherosclerosis has been identified as the main cause of coronary heart and cerebrovascular diseases.<sup>15</sup> Ischemic heart disease is the leading cause of death in the world.<sup>16</sup>

The lack of studies on the use of Bach flower remedies for preventing physical illness and the recent implementation of complementary therapies in Brazilian public health institutions have motivated this study. Thus, the aim of our study was to evaluate the effects of Bach flower Rescue Remedy on the control of risk factors for cardiovascular disease in rats.

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## Section snippets

### Material and methods

The study was approved by the Research Ethics Committee of the Universidade do Vale do Sapucaí (UNIVÁS), Brazil (approval no. 139/11). All animals received humane care in strict compliance with the Guide for the Care and Use of Laboratory Animals.<sup>17</sup>

A sample consisting of 18 healthy 3-month-old male Wistar rats (*Rattus Norvegicus albinus*, *Rodentia mammalia*), weighing 188–225 g was used in the study. The animals were housed in individual metabolic cages on a 12:12 h light–dark cycle and provided...

### Results

No significant difference was found in food intake between groups. However, group C (200- $\mu$ l group) had a significantly lower body weight gain than group A (control group). There were also no significant differences in feces weight, net and proportional weight of the kidneys, urine volume, and uric acid levels between groups (Table 1).

A significantly lower level of glycemia was found in group C compared with groups A and B (100- $\mu$ l group). Groups B and C had significantly higher HDL-cholesterol...

## Discussion

Significant values of lower weight gain and lower glycemia levels were found on group C; lower triglycerides and higher HDL cholesterol levels on groups B and C. These results provide preliminary data on biological action resulting from the use of Floral Rescue Remedy on glycidic and lipidic metabolism and as a consequence, acting as a preventive factor for cardiovascular diseases.

These results may be associated with reduction in anxiety produced by the Rescue Remedy, that is a formulation that ...

## Conclusion

Bach flower Rescue Remedy showed to be efficient in the regulation of glycemia, HDL-cholesterol and triglyceride levels, and therefore as a preventive measure to control risk factors for cardiovascular disease in rats. Further studies are necessary to investigate underlying mechanisms of the therapeutic actions of Bach flower remedies....

## Funding

There was no external funding for this study....

## Conflict of interest statement

None declared....

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## References (41)

S.S. Lim *et al.*

[A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990–2010: a systematic analysis for the Global Burden of Disease Study 2010](#)

Lancet (2012)

K. Narita *et al.*

[Associations between trait anxiety, insulin resistance, and atherosclerosis in the elderly: a pilot cross-sectional study](#)

Psychoneuroendocrinology (2008)

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BMC Complement Altern Med (2009)

A.C. Maia

**Emoções e sistema imunológico: um olhar sobre a psiconeuroimunologia**

Psicol teor prá (2002)



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## Cited by (4)

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