A preparation for infertility treatment includes the following elements: lepidium meyenii walp; manganese; vitamin E; selenium, zinc.
A PREPARATION FOR INFERTILITY TREATMENT

FIELD OF THE INVENTION

The present invention relates to a preparation for infertility treatment.

At present, there are known pathologies, which can damage the human being reproduction capacity and consequently, can cause infertility problems.

PRIOR ART DESCRIPTION

The traditional medicine knows different remedies for infertility treatment, however some of them are characterized by considerable side effects and/or high costs.

Recent studies and researches have allowed to obtain phyto-therapeutic compounds for infertility treatment: in particular, it has appeared that suitable quantities of "lepidium meyenii walp" (tuberous plant, which grows spontaneously mainly in South America, and is known also under the name of "Maca") given to persons suffering from infertility problems, in some cases is sufficiently effective in such pathology treatment.

SUMMARY OF THE INVENTION

The object of the present invention is to propose a preparation for infertility treatment, which can improve human being reproductive capacity, either male, or female, and whose side effects are in the same time extremely limited or absent.

Another object of the present invention is to propose a
preparation, which can be easily given to a patient.

The above mentioned objects are obtained in accordance with the contents of the claims.

The characteristic features of the invention will be pointed out in the following description of a preferred, but not exclusive formulation of the proposed preparation.

DESCRIPTION OF PREFERRED EMBODIMENTS

The proposed preparation includes, for each dose unit (for example a tablet of 1 gram, or a capsule, etc.): lepidium meyenii walp in a quantity between 100 and 900 mg; manganese in a quantity between 1 and 10 mg; vitamin E in a quantity between 1 and 30 mg; selenium in a quantity between 1 and 50 µg; zinc in a quantity between 1 and 30 mg.

Each dose unit of the preparation to be given to male individuals includes also arginine in a quantity between 10 and 300 µg.

Each dose unit of the preparation to be given to female individuals includes preferably folic acid in a quantity between 10 and 600 mg.

For example, each 1 gram dose unit (for example a tablet) for male individuals includes: lepidium meyenii walp in a quantity of 800 mg; manganese in a quantity of 2,5 mg (dose allowed by the Ministry of Health and equal to 100% of RDA - Recommended Daily Allowance); vitamin E in a quantity of 3,75 mg (dose allowed by the Ministry of Health and equal to 150% of RDA); selenium in a quantity of 20,6 µg (dose allowed by the Ministry of Health and equal to 150% of RDA); zinc in a quantity of 5,63 mg (dose allowed by the Ministry of Health and equal to 150% of RDA); arginine in a
quantity of 60 mg; known excipients, for the remaining part, aimed at optimizing the amalgam and the tablet compression.

For example, each 1 gram dose unit (for example a tablet) for female individuals includes: lepidium meyenii walp in a quantity of 860 mg; manganese in a quantity of 2.5 mg (dose allowed by the Ministry of Health and equal to 100% of RDA); vitamin E in a quantity of 3.75 mg (dose allowed by the Ministry of Health and equal to 150% of RDA); selenium in a quantity of 20.6 µg (dose allowed by the Ministry of Health and equal to 150% of RDA); zinc in a quantity of 5.63 mg (dose allowed by the Ministry of Health and equal to 150% of RDA); folic acid in a quantity of 150 µg (dose allowed by the Ministry of Health and equal to 150% of RDA); known excipients, for the remaining part, aimed at optimizing the amalgam and the tablet compression.

The best way of taking the preparation includes, for example, the daily patient's consumption of four dose units (example: taking two 1 gram tablets twice a day) for a period between 3 and 8 months.

Advantageously, the proposed preparation for infertility treatment is capable of increasing human being reproductive capacity, either male, or female, without contemporary considerable side effects.

The preparation, in the above described formulation for male individuals, is capable of increasing the number, vitality and motility of spermatozoa.

On the other side, the preparation, in the above described formulation for female individuals, allows to regularize the menstrual cycle and the hormonal levels, as well as to improve the corpus luteum efficiency.

Moreover, the preparation can be easily given to a patient,
because it can be obtained, e.g. in powder, tablet form, etc.

The invention in question has been obviously described as a pure, not limiting example, therefore it is evident that all changes or variants can be applied thereto, remaining within the scope defined by the following claims.
CLAIMS

1. A preparation for infertility treatment, characterized in that it includes the following elements: lepidium meyenii walp; manganese; vitamin E; selenium; zinc.

2. A preparation, according to claim 1, characterized in that it includes, for each 1 gram dose unit, lepidium meyenii walp in a quantity between 100 and 900 mg.

3. A preparation, according to claim 1, characterized in that it includes, for each 1 gram dose unit of the same preparation, manganese in a quantity between 1 and 10 mg.

4. A preparation, according to claim 1, characterized in that it includes, for each 1 gram dose unit of the same preparation, vitamin E in a quantity between 1 and 30 mg.

5. A preparation, according to claim 1, characterized in that it includes, for each 1 gram dose unit of the same preparation, selenium in a quantity between 1 and 50 µg.

6. A preparation, according to claim 1, characterized in that it includes, for each 1 gram dose unit of the same preparation, zinc in a quantity between 1 and 30 mg.

7. A preparation, according to claim 1, characterized in that it includes, for each 1 gram dose unit of the same preparation: lepidium meyenii walp in a quantity between 100 and 900 mg; manganese in a quantity between 1 and 10 mg; vitamin E in a quantity between 1 and 30 mg; selenium in a quantity between 1 and 50 µg; zinc in a quantity between 1 and 30 mg.
8. A preparation, according to claim 3 or 7, characterized in that it includes, for each 1 gram dose unit of the same preparation, manganese in a quantity of 2,5 mg.

9. A preparation, according to claim 4 or 7, characterized in that it includes, for each 1 gram dose unit of the same preparation, vitamin E in a quantity of 3,75 mg.

10. A preparation, according to claim 5 or 7, characterized in that it includes, for each 1 gram dose unit of the same preparation, selenium in a quantity of 20,6 µg.

11. A preparation, according to claim 6 or 7, characterized in that it includes, for each 1 gram dose unit of the same preparation, zinc in a quantity of 5,63 mg.

12. A preparation, according to claim 2 or 7, characterized in that it includes, for each 1 gram dose unit of the same preparation for male individuals, lepidium meyenii walp in a quantity of 800 mg.

13. A preparation, according to claim 7, characterized in that it includes, for each 1 gram dose unit of the same preparation for male individuals: lepidium meyenii walp in a quantity of 800 mg; manganese in a quantity of 2,5 mg; vitamin E in a quantity of 3,75 mg; selenium in a quantity of 20,6 µg; zinc in a quantity of 5,63 mg.

14. A preparation, according to claim 1, for male individuals characterized in that it includes arginine.

15. A preparation, according to claim 14, characterized in that it includes, for each 1 gram dose unit, arginine in a quantity between 10 and 300 mg.

16. A preparation, according to claim 15, characterized in that it includes, for each 1 gram dose unit of the same
preparation, arginine in a quantity of 60 mg.

17. A preparation, according to claim 2 or 7, characterized in that it includes, for each 1 gram dose unit of the same preparation for female individuals, lepidium meyenii walp in a quantity of 860 mg.

18. A preparation, according to claim 7, characterized in that it includes, for each 1 gram dose unit of the same preparation for female individuals: lepidium meyenii walp in a quantity of 860 mg; manganese in a quantity of 2,5 mg; vitamin E in a quantity of 3,75 mg; selenium in a quantity of 20,6 \(\mu\)g; zinc in a quantity of 5,63 mg.

19. A preparation, according to claim 1, for female individuals characterized in that it includes folic acid.

20. A preparation, according to claim 19, characterized in that it includes, for each 1 gram dose unit of the same preparation, folic acid in a quantity between 10 and 600 \(\mu\)g.

21. A preparation, according to claim 20, characterized in that it includes, for each 1 gram dose unit of the same preparation, folic acid in a quantity of 150 \(\mu\)g.
# INTERNATIONAL SEARCH REPORT

**International application No**
PCT/IB2007/002046

### A. CLASSIFICATION OF SUBJECT MATTER

INV. A61K36/31 A61K31/355 A61K33/04 A61K33/30 A61K33/32
A61P15/08 A61K31/198 A61K31/505

According to International Patent Classification (IPC) or to both national classification and IPC

### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database consulted during the international search (name of database and, where practical, search terms used)

EPO-Internal, WPI Data, BIOSIS, EMBASE, CHEM ABS Data

### C. DOCUMENTS CONSIDERED TO BE RELEVANT

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<th>Relevant to claim No</th>
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Further documents are listed in the continuation of Box C

See patent family annex

* Special categories of cited documents

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

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"P" document published prior to the international filing date but later than the priority date claimed

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Date of the actual completion of the international search

29 November 2007

Date of mailing of the international search report

12/12/2007

Name and mailing address of the ISA/

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Authorized officer

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<td>COMHAIRE F H ET AL: &quot;THE ROLE OF FOOD SUPPLEMENTS IN THE TREATMENT OF THE INFERTILE MAN&quot; REPRODUCTIVE BIOMEDICINE ONLINE, REPRODUCTIVE BIOMEDICINE ONLINE, CAMBRIDGE, GB, vol. 7, no. 4, 2003, pages 385-391, XP009077584 ISSN: 1472-6483 page 387, column 2, paragraph 1 page 388, column 1, paragraph 3 page 388, column 2, paragraph 3</td>
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