



Diet cure Jehotang composition having blood circulation improvement effect

Composition of Sikchi Jehogatang with Effects of Blood Flow Improvement



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Patent title Diet cure Jehotang composition having blood circulation improvement effect

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Patent application No. KR 10-2019-***** (2019.11.12)

Authority status Filed

Technicality

Technology overview

- This technology is a technology about a diet cure Jehotang composition having a blood circulation improvement effect.
- Jehotang is a traditional royal soft drink and is a prescription composed of mume fruit, amomum medium, white sandalwood, and an Amomum villosum LOUR. fruit medicine. Jehotang is mainly used as a medicine to relieve heat in summer and quench thirst.
- However, amomum medium and white sandalwood are not listed in the Food Code and thus cannot be commercialized as a food. The technology resolves such a problem by using alternative raw materials.

Development background and problem to be solved

- Blood circulation refers to the movement of blood through blood vessels to each part of a human body. Blood supplies oxygen and nutrients to each body tissue, removes bodily waste from cells, transports hormones necessary for a human body, defends cells from external harmful substances, maintains a proper body temperature, and performs hemostasis. Thus, the technology plays an important role of maintaining homeostasis in a human body.

Excellence and discrimination of technology

Excellence of technology

- By using alternative herbal medicines, it is possible to commercialize amomum medium and white sandalwood, which are not permitted as food, into food.
- The same blood circulation improvement effect as that of commercially available aspirin is ensured.
- Side effects are minimized with herbal medicinal ingredients.
- Thrombotic diseases such as high blood pressure, arteriosclerosis, and myocardial infarction are alleviated, and blood circulation is improved.

Discrimination of technology

- A scientific basis is prepared by conducting bioequivalence evaluation on diet cure Jehotang.
- A production process of diet cure Jehotang is rationalized through a physicochemical analysis, and a uniform production method is established.
- Diet cure Jehotang modernly improved by restoring traditional royal food is developed.
- Efficacy is proven through comparative experiments between existing Jehotang and aspirin.



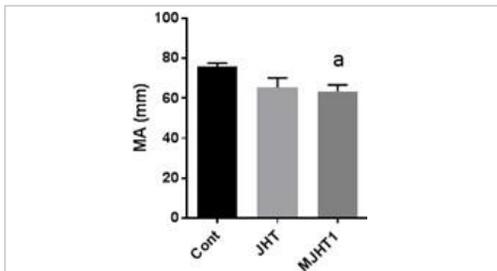
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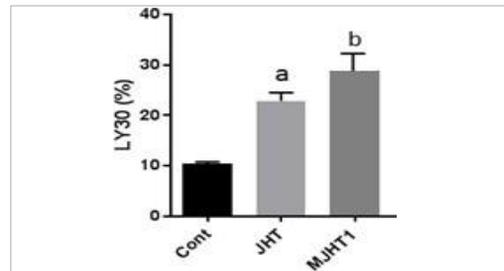
Implementation method

The present invention is implemented as follows.

- Hot water extraction
- Reduced pressure concentration
- Taste adjustment: homogenization after adding honey to a dilution-magnified concentrated sample
- Dilute magnification: It is an optimal condition to drink honey and a homogenized concentrate with cold water added with ice.



Picture 1 Analysis of thrombus inhibition efficacy using TGE



Picture 2 Analysis of thrombus inhibition efficacy using TGE

Degree of technology completion (TRL)

Degree of technology completion: TRL7 (quasi-commercial product development)

| TRL1 | TRL2 | TRL3 | TRL4 | TRL5 | TRL6 | TRL7 | TRL8 | TRL9 |
|----------------------------------|----------------------------|---------------------------------|---------------------------------|---|----------------------------------|--------------------------------------|--------------------------------|-----------------------------------|
| Technical principle presentation | Technology concept setting | Technology concept verification | Lab Scale prototype development | Implementation environment application experiment | Full Scale prototype development | Quasi-commercial product development | Commercial product development | Commercial product implementation |

Utilization

Utilization field and applied product

Utilization field

- Traditional soft drinks
- Blood circulation improvement functional drinks



Picture 1 Functional beverage
<Data: highball glasses>

Applied product

- Blood circulation improvement herbal medicine



Picture 2 Blood circulation improving agent
<Data: Shutterstock>



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Technology trend

- It is a trend that treatments for chronic diseases are produced in a "complex formulation" method, which combines two types of drugs for hyperlipidemia and high blood pressure that often occur together in old age.
- Recently, the concept of "electronic medicine" is drawing attention as one of the technologies for chronic disease patients.
- Electronic medicine is a method which inserts a small mechanical device that can give electrical stimulation into a human body to enable expectation of a therapeutic effect. In a broad sense, cardiac pacemakers (pacemakers) are also included in electronic medicine.
- Various R&D processes are being carried out to improve blood circulation, which is the cause of chronic diseases such as high blood pressure, arteriosclerosis, and cerebrovascular disease. Also, not only therapeutic agents but also health functional foods that improve blood circulation are being produced.

Family patent status

| Application nation | Application No. (Application date) / Registration No. | Title of the invention |
|--------------------|---|--|
| KOR | KR 10-2019-***** (2019.11.12) | Diet cure Jehotang composition having blood circulation improvement effect |
| KOR | PCT/KR2019/*****(2019.11.12) | Diet cure Jehotang composition having blood circulation improvement effect |

Market prospect

Target market size and prospect

- The global cardiovascular disease treatment agent market was valued at USD 141.1 billion in 2017 and is expected to reach USD 149.4 billion by 2022, growing at a CAGR of 1.2%.



Table Global cardiovascular disease treatment agent market size
 <Data: Cardiovascular Drugs, Global Markets to 2022 / reconfigured>

Technology transfer query

Technology transfer process

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Explore promising technologies → Contract consultation → Apply for technology sign contracts → Negotiate and support → Follow-up support