



Dr. Dadangmi Introduction

Dr. Dadangmi

a functional rice that lowers blood sugar for diabetics, was patented in May 2018 for its method of manufacturing blood sugar-lowering rice. It has been proven to be very effective in improving blood sugar levels through a cooperative research between the Department of Food and Nutrition at Kyungnam University.

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 닥터다당미

Dr. Dadangmi

Developed a functional rice for lowering blood sugar for diabetics

Patented in May 2018 as a method of producing rice for lowering blood sugar

Proved its excellent effect on blood sugar individuality Through industry-academic cooperation research with Kyungnam University's Food and Nutrition Department



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1st patent 2018. 05. 15

How to make rice for lowering blood sugar

2nd patent 2022. 08. 22

How to make rice for lowering blood sugar
(How to make rice that lowers blood sugar
without generating wastewater)



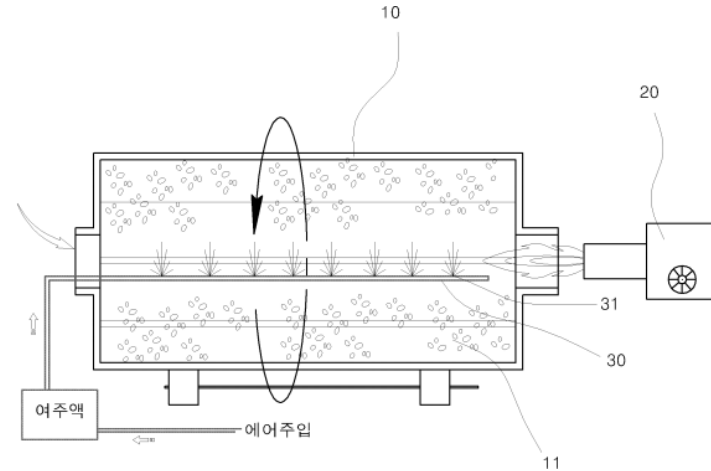
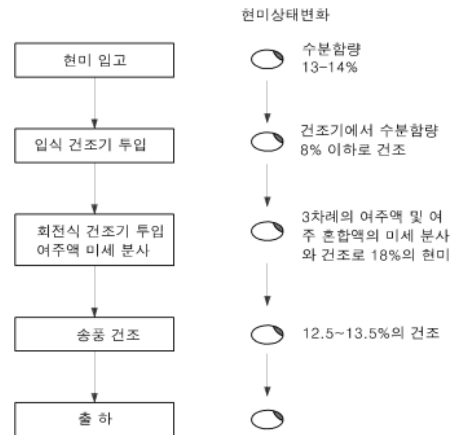
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Rice Manufacturing Method (Focusing on the 2nd patent registration)

1. Brown rice (unpolished rice) is ready, moisture content is 13-14%
2. Dry the brown rice in a dryer to a moisture content of 8% or less
3. Manufacture brown rice having a moisture content of 18% by fine spraying and drying of bitter melon juice including some of mixtures at three times
4. Dry to a moisture content of 12.5 to 13.5% by blowing-drying

Bitter melon and mixture juice manufacturing method

1. Put 30g of bitter melon in 1L of water and boil at 60°C for 20-24 hours.
2. Add 15g of water-soluble silk amino acids, 10g of turmeric powder, and 3g of water-soluble dietary fiber and mix-up

1st patent content

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Showed blood sugar changes in each round when diabetic patients eat the patented functional rice in clinical trial (total 12 people)

| clinical participant | Blood sugar after eating white rice | Blood sugar changes after eating the patented functional rice | | | | | | |
|----------------------|-------------------------------------|---|-----|-----|-----|-----|-----|-----|
| | | 1회차 | 2회차 | 3회차 | 4회차 | 5회차 | 6회차 | 7회차 |
| 여(A) 58세 | 273 | 221 | 226 | 177 | 180 | 178 | 171 | 161 |
| 남(B) 55세 | 280 | 174 | 190 | 182 | 161 | 184 | 171 | 201 |
| 남(C) 53세 | 195 | 180 | 160 | 99 | 159 | 91 | 166 | 127 |
| 여(D) 75세 | 248 | 213 | 188 | 167 | 193 | 171 | 142 | 113 |
| 남(E) 55세 | 260 | 210 | 218 | 230 | 190 | 180 | 175 | 170 |
| 남(F) 63세 | 240 | 171 | 133 | 142 | 153 | 120 | 132 | 141 |
| 여(G) 50세 | 233 | 216 | 183 | 201 | 174 | 158 | 136 | 128 |
| 여(H) 57세 | 310 | 211 | 190 | 180 | 191 | 220 | 198 | 180 |
| 여(I) 64세 | 240 | 162 | 148 | 136 | 125 | 133 | 141 | 123 |
| 남(J) 52세 | 238 | 197 | 134 | 114 | 103 | 108 | 127 | 178 |
| 남(K) 64세 | 350 | 240 | 251 | 248 | 230 | 259 | 270 | 223 |
| 여(L) 67세 | 256 | 200 | 201 | 190 | 178 | 178 | 176 | 165 |

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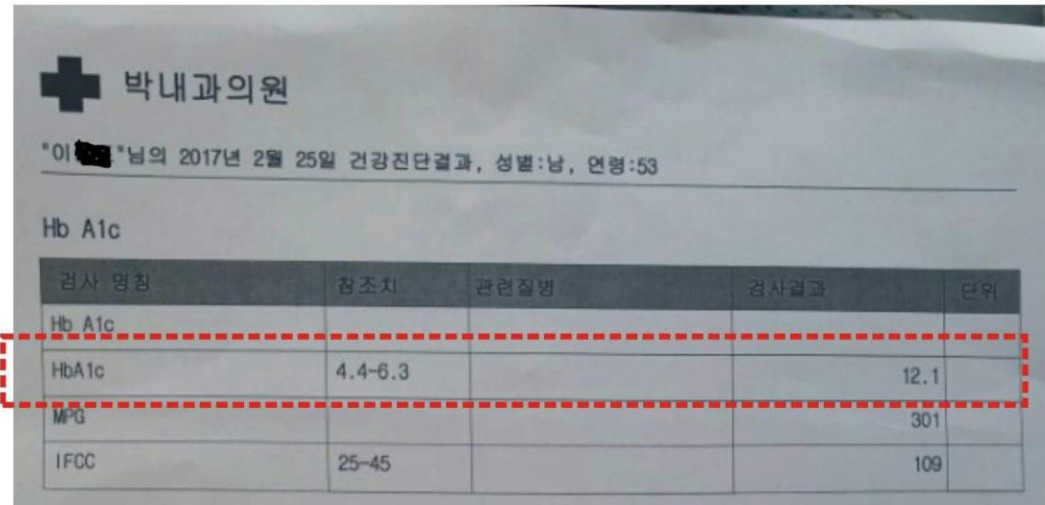
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Showed blood sugar changes in each round when diabetic patients eat the patented functional rice in clinical trial



박내과의원

"이" 님의 2017년 2월 25일 건강진단결과, 성별:남, 연령:53

Hb A1c

| 검사 명칭 | 검조치 | 관련질병 | 검사결과 | 단위 |
|--------|---------|------|------|----|
| Hb A1c | | | | |
| HbA1c | 4.4-6.3 | | 12.1 | |
| MPO | | | 301 | |
| IFCC | 25-45 | | 109 | |

Male (C) 53-year-old blood glucose test results_2017.02.25

"C" (male), who participated in the blood glucose test as an experimenter had a glycated hemoglobin level of 12.1 It can be confirmed in the inspection table dated February 25, 2017

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Showed blood sugar changes in each round when diabetic patients eat the patented functional rice in clinical trial

| | | | | |
|----------|-----------------------------|----------|----------------------|---|
| 02280003 | Creatinine | 1.32 H | 0.50 - 1.20 mg/dL | S |
| | eGFR | 56.52 L | ≥ 60 mL/min/1.73m(2) | S |
| 03061003 | HbA1c | | | B |
| | HbA1c-NGSP | 8.2 H | 4.0 - 6.0 % | B |
| | HbA1c-IFCC | 86 H | 20.0 - 42.0 mmol/mol | B |
| | HbA1c-eAG | 189 H | ≤ 126 mg/dL | B |
| 03001003 | HbA _{1c} Ag (SUHA) | Negative | Negative | S |

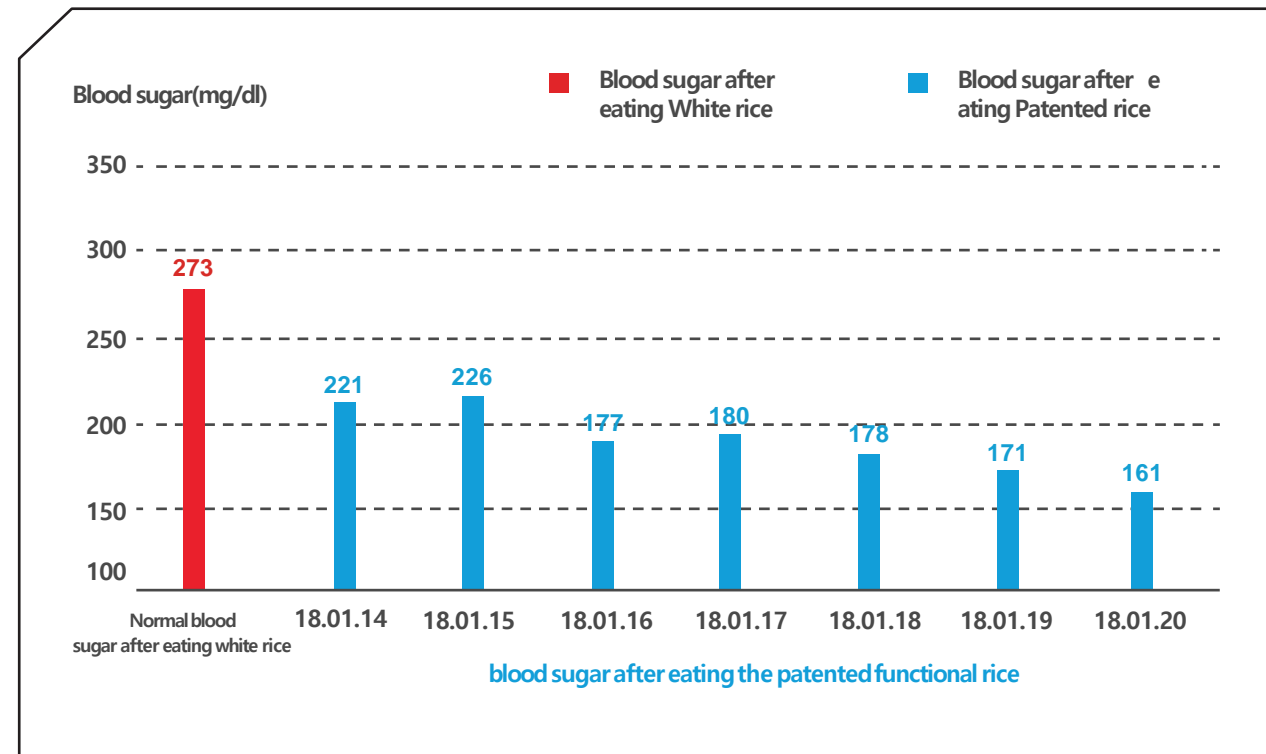
Male (C) 53-year-old blood glucose test results_2018.01.13



Considering that it was checked as 8.2 on the test table on January 13, 2018, it can be confirmed that the patented functional rice lowers blood sugar in diabetic patients and prevents him from progressing to diabetes

1st patent content

Showed blood sugar changes in each round when diabetic patients eat the patented functional rice in clinical trial



Name:Female A

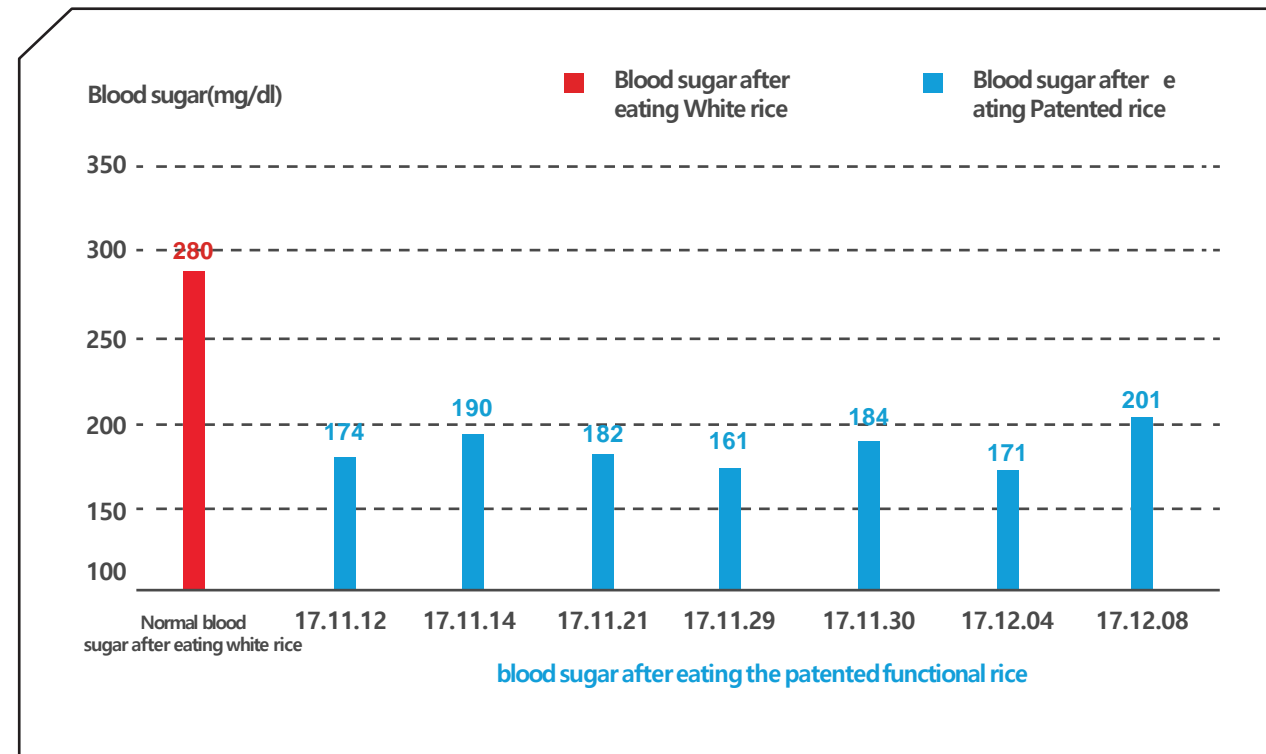
Address : Joongrangu, Seoul

Age : 58

Mobile phone number : 010 -***3-5261

1st patent content

Showed blood sugar changes in each round when diabetic patients eat the patented functional rice in clinical trial



Name : male B

Address : Ehyun-dong, Jinju city

Age : 58

Mobile phone number : 010 -***3-5261

2nd Patent contents

Showed blood sugar changes in each round when diabetic patients eat the patented functional rice in clinical trial

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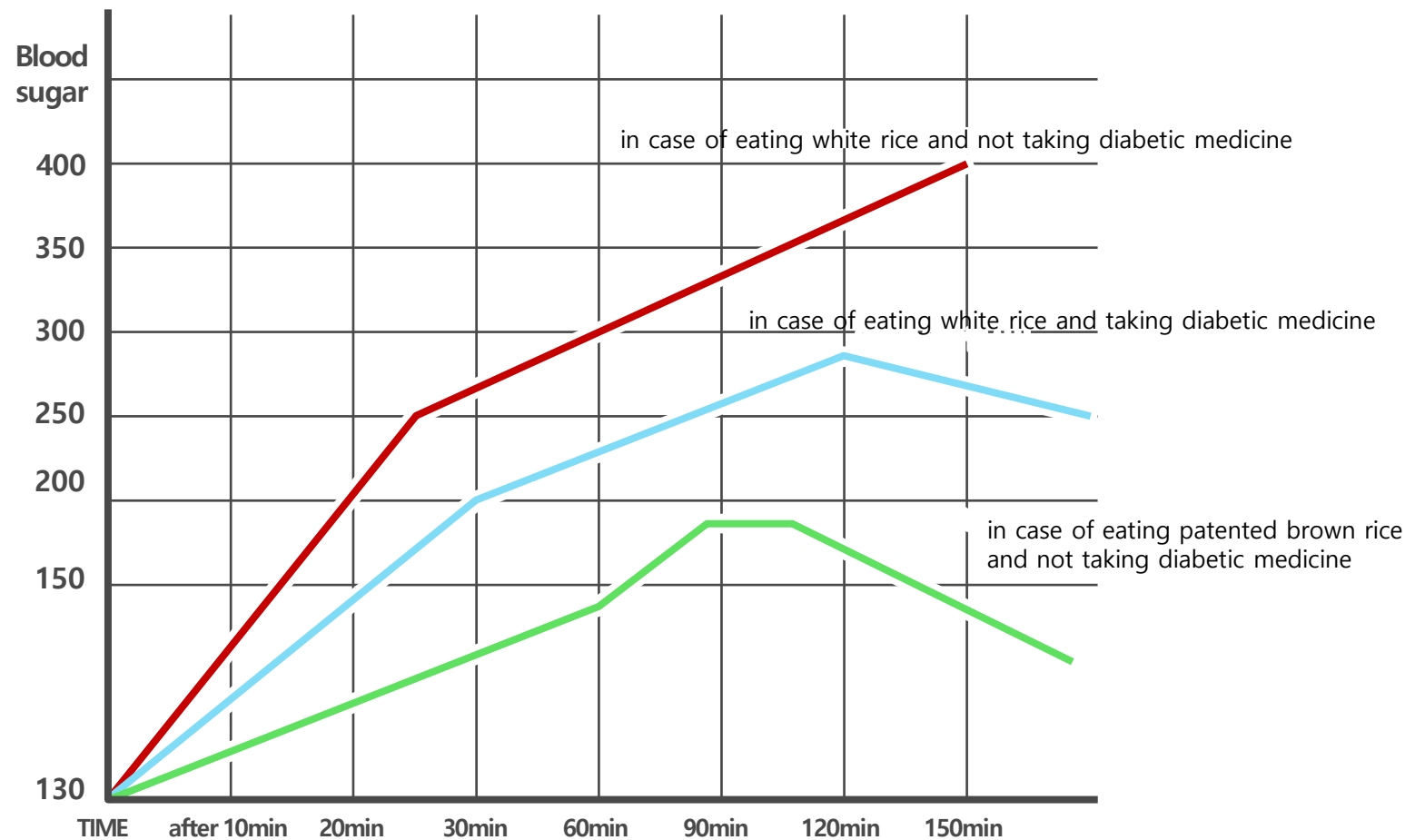
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Red line : in case of eating white rice and not taking diabetic medicine
 Sky Blue line : in case of eating white rice and taking diabetic medicine
 Green line : in case of eating patented brown rice and not taking diabetic medicine



2nd patent content

Clinic trial results of 30 people by age over 3 months (Medical standard glycated hemoglobin 6.4 or less = normal)

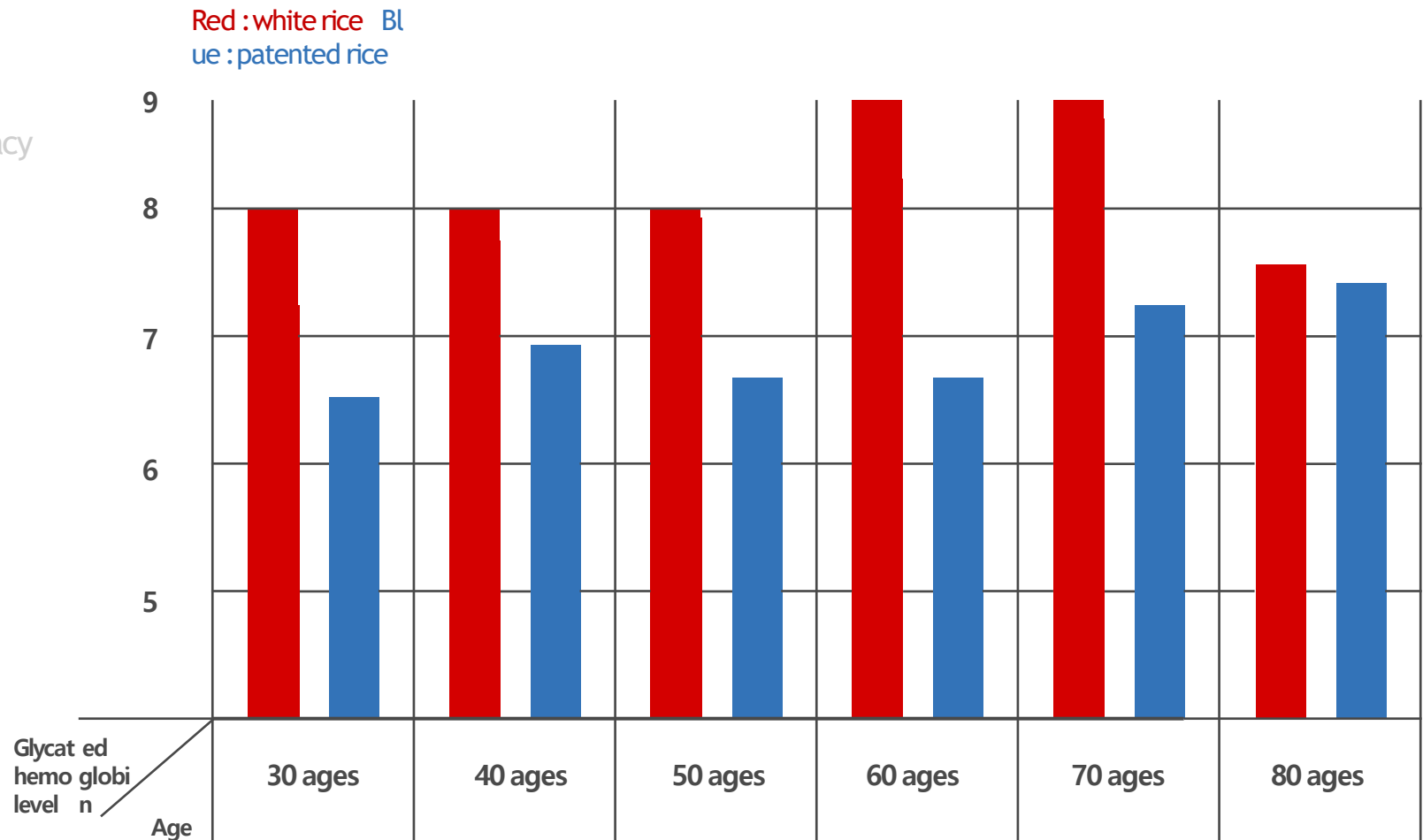
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Results of scientific efficacy verification of the patented functional rice (Kyungnam University Industry-Academic Cooperation Research)

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The following research results are derived from the blood sugar improvement effect and antioxidant component analysis experiment of the patented functional rice prepared by the method of producing rice for lowering blood sugar

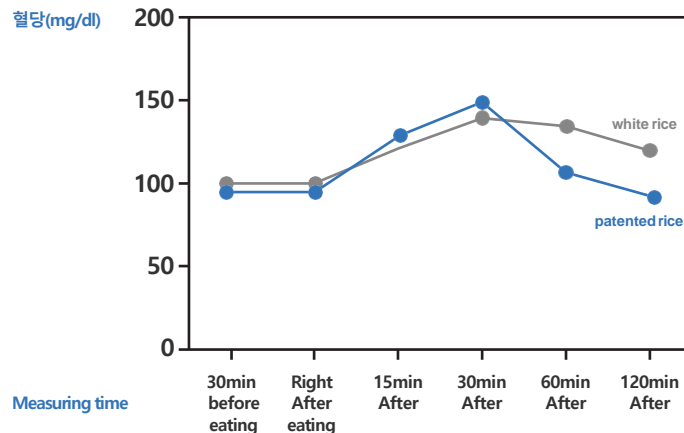
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The patented functional rice has the effect of suppressing blood sugar rise after meals, and an oral glucose test was conducted on healthy adults, confirming that blood sugar decreased significantly in the group that consumed blood sugar 60 minutes after intake and 120 minutes after intake compared to white rice

Patent Efficacy

Validation of Patent Efficacy

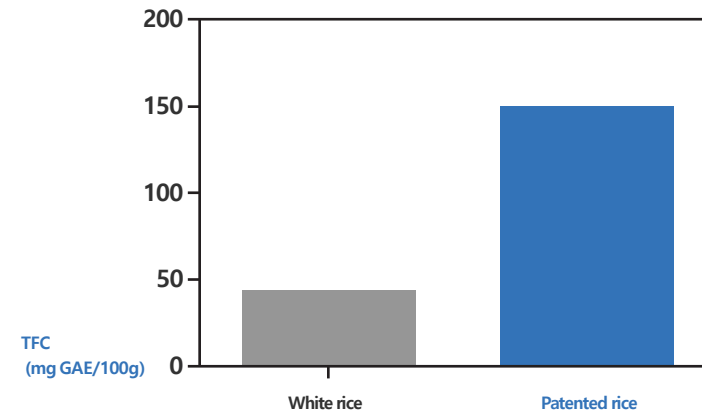
Comparison of blood sugar-lowering effects of the patented functional rice and normal white rice



Results of measurement of total flavonove and an antioxidant content of the patented functional rice

- Measured significantly higher than regular white rice by 242%
- Antioxidant activity is also significantly higher than white rice

Comparison of antioxidant components of the patented functional rice and normal white rice



What is the Antioxidant ingredients?

Active oxygen: Oxidation of cells and tissues to promote various chronic diseases and aging

Antioxidant ingredients: Remove active oxygen from our body, and as a result, suppressing chronic diseases and aging

A significant decrease in blood sugar when the diabetic eating the patented functional rice

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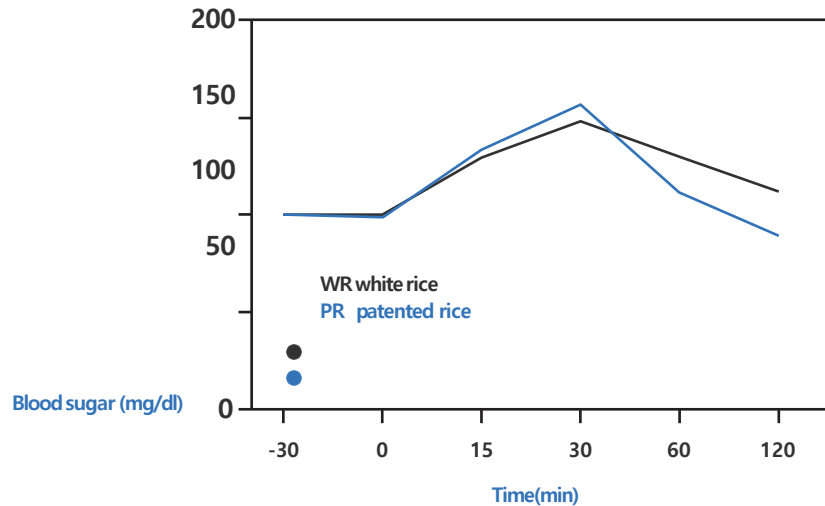
Patent Efficacy

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Additional Reference

OGTT(Oral glucose tolerance test) of the patented functional rice lowering blood sugar effect

After comparing two groups, the group eating patented rice and the group eating white rice, OGTT result showed that eating the patented rice group has been significantly decreased by 20% - 23% in blood sugar



OGTT (Oral glucose tolerance test) comparison

Group Stastics

| | V1 | N | Average | Standard Deviaatio n | Standard Deviation of the mean |
|-----|----|---|---------|----------------------|--------------------------------|
| -30 | 1 | 6 | 95.83 | 9.218 | 3.763 |
| | 2 | 5 | 99.80 | 6.261 | 2.800 |
| 0 | 1 | 6 | 96.00 | 20.396 | 8.327 |
| | 2 | 5 | 99.40 | 11.261 | 5.036 |
| 15 | 1 | 6 | 128.33 | 26.598 | 10.859 |
| | 2 | 5 | 121.20 | 10.545 | 4.716 |
| 30 | 1 | 6 | 148.67 | 14.010 | 5.719 |
| | 2 | 5 | 139.80 | 18.075 | 8.083 |
| 60 | 1 | 6 | 106.67 | 17.108 | 6.984 |
| | 2 | 5 | 134.40 | 19.982 | 8.936 |
| 120 | 1 | 6 | 92.00 | 9.737 | 3.936 |
| | 2 | 5 | 120.60 | 16.592 | 7.420 |

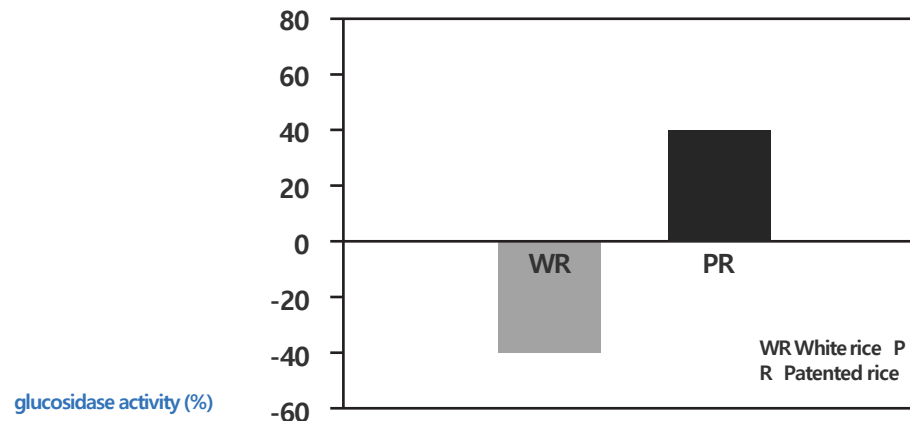
1 : Patented rice, 2 : White rice

N:Population number

Efficacy of controlling blood sugar levels after meals

α -glucosidase activity of the patented functional rice with blood sugar-lowering effect

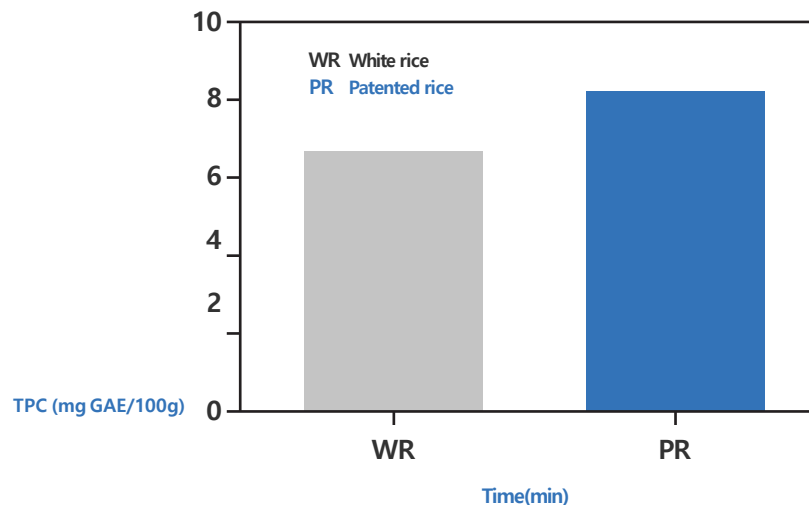
As a result of analyzing the α -glucosidase activity of the patented functional rice with the effect of lowering blood sugar, Compared to general white rice, the α -glucosidase activity of the patented functional rice was significantly high, which showed a difference of 80%.



The activity of the patented functional rice with a blood sugar-lowering effect

Total polyphenol content of the patented functional rice with blood sugar-lowering effect

As a result of measuring the total polyphenol content of the patented functional rice showed 7.6 ± 0.1 mg/GAE/100g, which was significantly higher by 12% than white rice

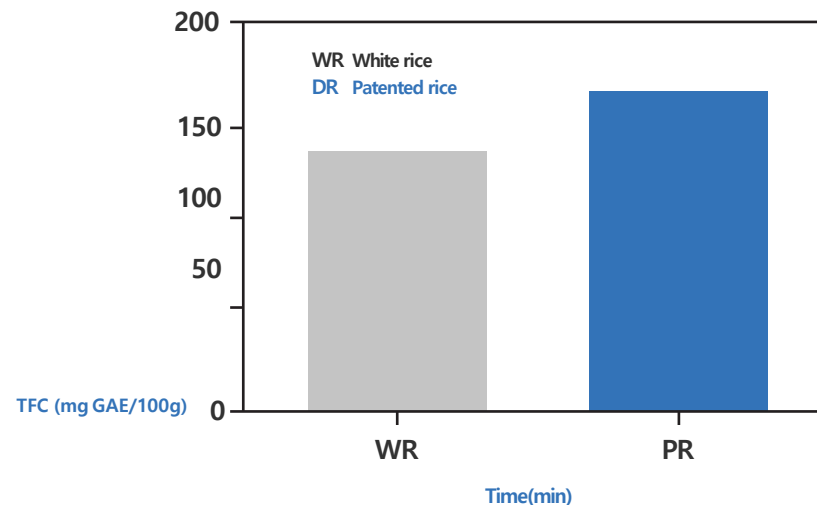


Comparison of Polyphenol content between patented rice and white rice

The patented functional rice removes active oxygen in the body and inhibits cell aging

Total flavonoid content of the patented functional rice with blood sugar-lowering effect

As a result of measuring the total flavonoid content of the patented functional rice that has the effect of lowering blood sugar, it showed 147.5 ± 4.8 mg/GAE/100g, which is significantly higher than white rice by 242%



Comparison of Flavonoid content between patented rice and white rice

Dr. Dadangmi helps lowering blood sugar with resistant starch which is created in the manufacturing process



QR code will lead you to the Youtube movie directly

Compared to normal starch producing 4 calories per gram, Resistant starch produces about half of the calories (2 kcal per gram), so it shows that calories are reduced by half percentage.

In summary of the upside of resistant starch, calories are halved Even if you eat, it slowly raises blood sugar, acts as a prebiotic similar to water-soluble dietary fiber, and burns fat to help you lose weight. Even if only 5% of carbohydrates consumed a day are replaced with resistant starch, the fat combustion rate after meals will improve by 30%.

The Johns Hopkins School of Medicine's Guide to Diabetes explains that resistant starch foods can improve intestinal health, increase satiety, reduce cholesterol, and reduce the risk of colon cancer

The method of cooking rice with resistant starch is completed by storing cooled rice in the refrigerator at 1-4 degrees for 12-24 hours. This method is exactly the same as the manufacturing process of Dr. Dadangmi rice made by refrigerating the finished rice at 1-4 degrees for 12 hours