Saraya Co., Ltd.

Best Sanitizers, Inc.

URL: https://www.bestsanitizers.com

Best Sanitizers Kentucky Factory

Saraya International, Inc.

Saraya USA, Inc.

URL: https://www.lakanto.com

Chagaroot, Inc.

URL: https://chagaroot.com

Saraya Natural Products Co., Ltd.

Saraya Hygiene de Mexico S.A. de C.V.

URL: https://www.sarayamexico.com

Saraya Brasil Ltda

Saraya Australia Pty Ltd.

URL: https://www.saraya.com.au

Saraya New Zealand

URL: https://www.saraya.co.nz

Saraya (Cambodia) Co., Ltd. URL: https://saraya-cambodia.com

Saraya (Shanghai) Biotech Co., Ltd.

URL: https://www.saraya.com.cn

Saraya (Shanghai) International Trading Co., Ltd.

Saraya (Taixing) Manufacturing Co., Ltd.

Saraya (Dongguan) Hygiene Products Co., Ltd.

Guilin Saraya Biotech Co., Ltd.

URL: http://www.sarayaguilin.com.cn

Shinva Medical Biotechnology Co., Ltd.

Saraya HongKong Co., Ltd.

Saraya (Hong Kong Sales) Co., Ltd.

URL: http://www.saraya.hk

Yangzhou Saraguard Medical Supplies Co., Ltd.

Saraya Wellness Products Co., Ltd.

Saraya Mystair Hygiene Pvt. Ltd.

URL: https://sarayamystair.in

Saraya Korea Co., Ltd.

URL: https://www.sarayakorea.com

Saraya Hygiene Malaysia Sdn. Bhd.

Saraya Glove Industries Sdn. Bhd.

Saraya Goodmaid Sdn. Bhd.

URL: https://www.goodmaid.net

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Phone: +81-6-6703-6336 E-mail: hands@global.saraya.com

URL: https://saraya.world/

Goodmaid Chemicals Corporation Sdn. Bhd.

URL: https://www.goodmaid.net

PT. Salim Saraya Indonesia

Saraya Myanmar Co., Ltd.

Taiwan Saraya Hygiene Co., Ltd.

URL: https://www.saraya.tw

Saraya International (Thailand) Co., Ltd.

URL: https://www.saraya-thailand.com

Saraya MFG. (Thailand) Co., Ltd.

URL: https://sarayamfgthailand.com

Saraya Greentek Co., Ltd.

URL: https://www.sarava.vn

Saraya Greentek Hanoi Office URL: https://www.saraya.vn

Saraya Europe SAS

URL: https://www.saraya-europe.com/fr

Saraya Medtech SAS

Saraya Co., Ltd. Europe

URL: https://www.saraya-europe.com

Saraya Poland Sp.z o.o

URL: https://www.saraya-europe.com/pl

Saraya Germany GmbH

Saraya CIS LLC.

URL: https://saraya-cis.ru https://saraya-shop.ru

Saraya Ukraine LLC.

URL: https://saraya-shop.com.ua https://saraya.com.ua (Coming soon)

Saraya Manufacturing (U) Ltd.

URL: https://saraya.ug

Saraya Beauté et Santé

Saraya Middle East for Industrial Investment J.S.C. URL: https://saraya.me

Saraya Egypt For Medical Products

Saraya Middle East Trading DMCC

URL: https://saraya.me

Saraya Kenya Co., Ltd.

URL: https://saraya.co.ke



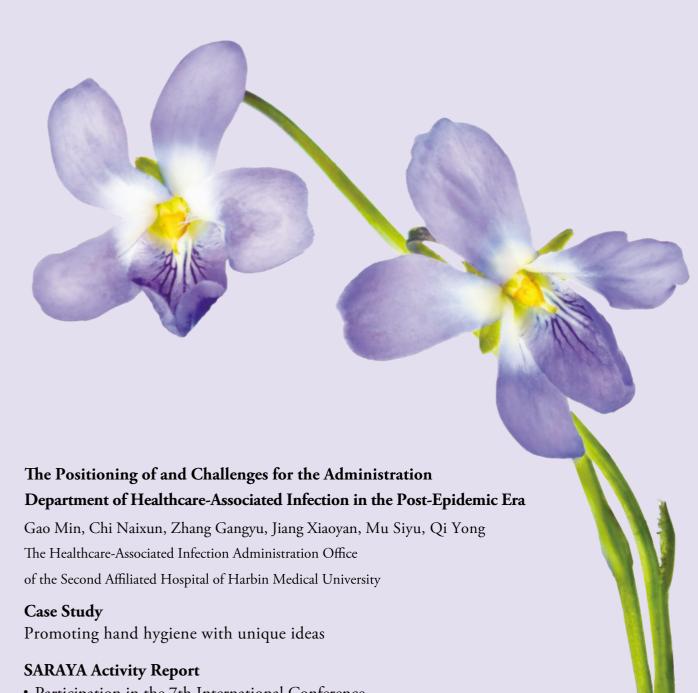
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- Participation in the 7th International Conference on Prevention and Infection Control (ICPIC)
- SARAYA-Sponsored Event: New York opera performance of Semmelweis

SARAYA Healthcare News

Risk factors for postprandial hyperglycemia and the use of low-GI foods



World Information

The Positioning of and Challenges for the Administration Department of Healthcare-Associated Infection in the Post-Epidemic Era

Gao Min, Chi Naixun, Zhang Gangyu, Jiang Xiaoyan, Mu Siyu, Qi Yong

The Healthcare-Associated Infection Administration Office of the Second Affiliated Hospital of Harbin Medical University



Background

The Administration Department of Healthcare-Associated Infection (ADHI), established with the intention of controlling healthcare-associated infection (HAI) and ensuring patient safety. Combined with clinical work, upholding scientific management, and rational monitoring, an infection prevention and control (IPC) system suitable for the development of hospitals was established. As an important auxiliary and functional department that supports first class clinical work, the ADHI has always had the role of a rear guard, in charge of monitoring infection levels in hospitals and developing the HAI administration system. Since the outbreak of the atypical pneumonia (SARS) pandemic in 2003, the functional role of the ADHI has evolved from that of a single backstage monitor to that of a frontier unit with multisectoral collaboration, which also carries out initial research into a regionalized IPC system. The sudden outbreak of the novel coronavirus (COVID-19) in late 2019 and the subsequent global pandemic led the ADHI to the next level of development.

The Functions and Positioning of the ADHI in Times of Epidemics

With COVID-19, humanity experienced the worst global public health emergency since World War II. In the early stages of the outbreak, because of the failure in the early warning of HAI, the lag in the emergency response, public panic, deficiencies in the material reserves, and the incidence of HAI, the previous weaknesses of ADHI were exposed. As the epidemic moves into a normalized phase, the ADHI faces huge challenges in strengthening the control of HAI, repairing shortcomings, and enhancing multisectoral collaboration. The main aspects can be summarized as follows [1]:

1. Establishment and application of fever clinics

Since their establishment during the SARS pandemic in 2003, fever clinics have provided great convenience for the rapid diagnosis and diversion of the majority of fever patients, serving as an extremely successful working model for IPC [2]. The establishment of fever clinics enabled hospitals to respond positively and to control flexibly when the COVID-19 epidemic suddenly emerged, because the clinics served as the outposts for HAI and became the first line of defense for IPC in healthcare facilities [3]. During the COVID-19 epidemic, fever clinics fully utilized the regional coordination mechanism, following the principles of regional coordination and a graded response. Hardware appliances and elastic isolation areas equipped for maximum capacity have been provided. A sufficient medical team has been set up as emergency reserve personnel, which greatly reduces the pressure on IPC [4]. In addition, fever clinics also have a primary emergency response function. In the event of abnormal epidemic trends or unknown infectious diseases, fever clinics should report such trends and diseases to the ADHI and the Center for Disease Control and Prevention as soon as possible and then initiate the response isolation procedures and

the preparatory teams. In this way, the waste of medical resources can be cut, the ability to respond to sudden infections can be strengthened, and the occurrence of HAIs can be reduced.

2. Strengthening training in the use of Personal Protective Equipment (PPE)

As one of the most important guarantees of the safety of healthcare workers (HCW) during an epidemic, PPE can directly reduce the probability of exposure for HCW and plays an important role in controlling HAIs. In the early stages of the COVID-19 epidemic, it was quite common for HCW to contract the infection because of the poor use of PPE [5]. In order to ensure the safety of HCW, the ADHI has organized training in the use of PPE many times, and only those who pass the test on this training course can continue to work. Diversified training methods and systematic and comprehensive assessment have led to an improvement in the use of PPE. As a result, the safety awareness of HCW has been enhanced, and the risk of exposure has been lowered.

3. Coordination of multisectoral cooperation

In order to achieve effective control of HAIs, the full cooperation of the ADHI and other departments is essential. The cooperation between different departments, such as the Logistics Department, the Disinfection Center, and the Nursing Department, is also one of the crucial links in IPC. Environmental disinfection conducted by cleaning staff, screening of staff in risk areas executed by security staff, ward management, and sterile operations carried out by the Nursing Department are all important components of hospital IPC. In addition, the ADHI has formulated a management system for medical waste and is responsible for supervising, training, and providing the corresponding technical guidance. By working with various departments to scientifically dispose of medical waste, problems can be identified quickly, and rectification can be carried out under supervision. During the epidemic, the collaboration between departments has greatly reduced the occurrence of HAIs.

The Future and Challenges of the ADHI in the Post-Epidemic Era

With the advent of the post-epidemic era and the implementation of the Class B infectious disease policy, which is subject to less stringent preventive and control measures, the main work of the ADHI has changed from prevention to control. In other words, the ADHI has moved from preventing the emergence of contracted cases in hospitals to controlling the outbreak and the level of HAI. This change has led to certain changes in the functions of the ADHI. In order to better standardize and improve the infection management of medical institutions, the role and challenges of the ADHI in the post-epidemic era are reflected in the following aspects:



1. Management reform

The functional of the ADHI in the post-epidemic era is mainly reflected in the concept of horizontal diffusion and vertical syncing. In other words, the ADHI's role is to build hospital-based early warning centers for infectious diseases and to sync the infection control technology with the hierarchical diagnosis and treatment model. First, an early warning treatment, IPC system will be built, based in hospitals, and a responsive network platform will be established. Urban (regional) early warning centers for infectious diseases will be set up to strengthen contact between medical institutions at all levels and disease prevention and control centers. This, in turn, will facilitate the real-time release of infection information and will help to monitor infection dynamics. Second, IPC technology will be decentralized to grassroots medical organizations by using the hospital as IPC hub and uniting it with the community grid management model. In this way, coprevention and co-management at different levels can be achieved, and IPC model can be synchronized with the hierarchical diagnosis and treatment model.

2. Habit reform

First, the fundamental elements of IPC will be consolidated. With the normalized management of COVID-19, clinical-related departments, especially the Intensive Care Unit, Blood Purification Department, Endoscopy Department, and other key departments, should focus on strengthening daily infection control training and promoting management of standardization, normalization, professionalization, and refinement [6]. Second, the culture of IPC will be developed. Scientific IPC still requires good implementation by HCW. Whether it is pre-prescription, in-process disposal, or post-event prevention and control, IPC always run throughout the whole process. Multidepartmental cooperation is required. Therefore, it is essential to establish IPC culture that prioritizes the concepts of "Patient Safety First" and "Zero Cases of HAI."

3. Conceptual reform

First, hospitals should pay more attention to HAI and change the concept of prioritizing medical care over HAI. At the beginning of the epidemic, because of poor infection management and delayed responses, a large number of people contracted COVID-19, exposing the problems of weak IPC by HCW and insufficient awareness of HAI management. Second, a multidisciplinary IPC team will be organized. The nursing sector, as the main subject of HAI management in the past, has gradually been unable to meet the growing demand for IPC. Today's IPC departments should contain diversified scientific teams that include specialists in clinical medicine, microbiology, statistics, lemology, and public health to adapt to the evolving discipline construction in HAI management.

4. Technological reform

In the post-epidemic era, HAI technology will no longer rely only on passive monitoring by the ADHI. With the popularization of informatization and the advent of the era of the Internet of Things, the real-time monitoring system of HAI will play a greater role. In addition to conventional environmental health monitoring and multidrug-resistant bacteria monitoring, a patient's medical instructions, tests, medical records, image reports, and other clinical diagnostic and treatment data will be analyzed from multiple angles. This will allow the IPC staff to have a more comprehensive and detailed understanding of IPC situation across the whole hospital, thus providing real-time data support for the accurate prediction of trends in the incidence of the relevant infectious diseases and reducing the level of HAI, as well as providing a decision-making basis for hospitals to formulate relevant policies.

The arrival of the post-epidemic era and the adjustment of epidemic prevention policies do not mean that we can be less vigilant. Instead, we need to continue to move forward and adjust the focus of HAI management. The future direction of the work of the ADHI can be summarized as follows. First, the groundwork for IPC will be carried out efficiently, in accordance with laws, regulations, and departmental rules. Second, greater importance will be placed on the spread of acute respiratory infectious diseases, such as COVID-19, in hospitals. Third, active measures will be implemented to prevent the occurrence of HAI among patients, including endogenous infections and exogenous infections. Finally, the protection of HCW against infections will be strengthened. Protective measures should be implemented to avoid not only the occurrence and development of respiratory infectious diseases in hospitals but also family transmission and social transmission.

The job of preventing and controlling HAI is complicated and difficult to manage, and it is still necessary for IPC staff to continue to learn from and persevere with this challenge.



Picture of ADHI team

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日本語要約

アフターコロナにおける医療関連感染管理部門の位置づけと課題

ゼロから出発した医療関連感染管理部門(以下、ADHI)はSARSやCOVID-19のパンデミックを経験し、臨床での補助的役割から、最前線で地域全体の感染対策を行う多職種から成る組織へ進化した。COVID-19流行下では、発熱外来の設置、PPE着脱訓練の強化など部門間の垣根を超え、病院一体となって感染対策に注力した。

パンデミック後、中国ではCOVID-19はクラスB感染症に分類され、感染対策規制を緩和、これをきっかけにADHIは院内感染のレベル管理とアウトブレイク予防が主業務となった。今後は病院、地域でレベルごとに診断、治療を行うシステムの確立、「感染ゼロ」目標の雰囲気づくり、臨床医学、微生物学、統計学、公衆衛生学など様々な専門家を交えたチーム作り、リアルタイムデータ収集のための技術見直しなどを積極的に実施していく。

Case Study

Promoting Hand Hygiene with Unique Ideas



Interviewees

From left,
Ms. Puan Zurina Mohamad Saleh
Dr. Nur Ayuni Ahamad Faudzi
Dr. Maliha Farah Nurhazirah
Ms. Siti Rokiah Yusof
Ms. Puteri Fairuz Izyan Zainuddin
Ms. Siti Amirah Ramli

Facility Information

Facility Name: Hospital Canselor Tuanku Muhriz UKM (HCTM) Address: Jalan Yaacob Latif, Bandar Tun Razak, 56000 Kuala Lumpur, Wilayah Persekutuan Kuala Lumpur, Malaysia Number of beds: 1,300

Total number of staff: 4,000

Located in Kuala Lumpur, Malaysia, Hospital Canselor Tuanku Muhriz UKM (HCTM), provides high-quality medical services to the community and residents in training. The hospital's predecessor was the Faculty of Medicine UKM, established in 1973, which produced specialists in various fields of medicine and health. HCTM provides comprehensive and integrated training through advanced facilities to both undergraduate and postgraduate students from the Faculty of Medicine, Faculty of Allied Health Sciences, and Faculty of Dentistry under the motto "Integrating Learning and Research for the Betterment of Society."



Product in use

Alcohol-based hand rub (ABHR) Alsoft Liquid Hand Disinfectant A (Alsoft A)

Steps Taken To Introduce Alsoft A

When did you hear about Alsoft A for the first time?

I first heard about Alsoft A over 15 years ago. I had heard from other alcohol disinfectant manufacturers that its formulation is excellent, and I was always very curious about it. Then, finally, in 2018, with the recommendation of the Ministry of Health, it was adopted by the hospital. This was just the year before the global pandemic of COVID-19 began.

After The Introduction of Alsoft A

What did you feel after using Alsoft A?

I like that it is not sticky after use. It dries quickly and makes it easy to move on to the next procedure. Although it does not feel sticky, it is moisturizing. Particularly during the pandemic, alcohol-based hand rubs from various manufacturers became available, but they sometimes caused roughness and cracking of skin on the hands. In this regard, Alsoft A was highly effective in moisturizing, and even after frequent use, skin cracks did not occur, and the product could be used with peace of mind. We often hear from students and residents that Alsoft A is well tolerated, and they like the texture of it.

Where do you place Alsoft A?

We have placed Alsoft A in every area considered necessary, such as clinical wards, the outpatient area, and the pharmacy counter to provide patients and healthcare workers with immediate access to hand disinfectants.



Alsoft A on each cashier counter



Alsoft A on the information counter

HosCom Int'l



Alsoft A on the table for filling out medical questionnaires

What type of hand hygiene education/training activities are you engaged in?

We train about 4,000 people in hand hygiene, ranging from staff members, residents working in the hospital, and students. We teach them how to wash their hands, how to hand rub, and when to perform hand hygiene. The techniques themselves are simple and easy to follow, but it is difficult to get everyone to make it a habit. We conduct regular assessments and repeat the instructions.

Are there any activities that are particularly effective for young staff members and students?

We had a TikTok competition for the World Hygiene Day campaign. Each department had to create a TikTok video promoting hand hygiene. The department with the most interesting video was the winner. The young staff members and students took the lead in creating the videos and made the competition a lot of fun. It was a great opportunity to learn the importance of hand hygiene.



Do you have any training for patients?

Yes, we have a hand hygiene booth set up in the hospital and occasionally hold hand hygiene events for patients and their families. Children's events are especially popular, and we sing hand hygiene songs together, give quizzes, and prepare prizes. We hope that it is a good chance to learn about hand hygiene in a fun

Next Step

What is your next step?

The goal is to maintain a high hand hygiene compliance rate among students and staff members at all times. Because of these efforts, hand hygiene compliance rates have increased over the past two years. We will continue to promote the Hand Hygiene Relay to ensure that hand hygiene becomes a routine medical practice for all of us.

SARAYA Activity Report

Participation in the 7th International Conference on Prevention and Infection Control (ICPIC)

SARAYA participated as a Gold Sponsor in the International Conference on Prevention and Infection Control (ICPIC) held in Geneva, Switzerland, from September 12 to 15, 2023. At the conference, a symposium titled "Hand hygiene: lessons learned from Asia-Pacific and Africa" was also held under the sponsorship of SARAYA, and it was attended by many healthcare workers from around the world.

At the symposium, Professor Hiroshige Mikamo of Aichi Medical University in Japan; Professor Hiroyuki Kunishima and Dr. Hiroki Saito of St. Marianna University of Medicine in Japan; Dr. Yew Fong Lee of Sarawak General Hospital, Malaysia; and Dr. Phung Manh Thang of Cho Ray Hospital, Vietnam presented their research results on infection control efforts and the issues being faced in healthcare facilities around the world. After the presentations, many questions were raised, and the event was highly lively.

SARAYA-Sponsored Event: New York Opera Performance of Dr. Semmelweis On December 5, 2023, an opera performance sponsored by SARAYA was held at the New York

Academy of Medicine in New York, USA, and the performance was shown on YouTube. The opera, by the Brooklyn-based American Opera Project, depicts the life of the father of hand hygiene, Dr. Ignaz Semmelweis (1818–1865), with spectacular music.

An obstetrician, Dr. Ignaz Semmelweis advocated "hand hygiene" as a method of preventing infectious diseases at a time when such microorganisms as bacteria and viruses were not recognized as contributing such diseases. However, he died without acceptance from the medical community of the time, long after which the validity of his theory was proven. Today, hand hygiene is a basic infection control measure, largely thanks to

Dr. Semmelweis.

Dr. Elaine Larson of the New York Academy of Medicine further introduced the importance of public health and the impact of Dr. Semmelweis's work on the world, and many healthcare workers and academics were deeply moved by the performance.





The full opera can be viewed on YouTube: https://youtu.be/JU DhOSzmzo?si=x6BUEizXUrgWC-xs

SARAYA Healthcare News

Risk factors for postprandial hyperglycemia and the use of low-GI foods

Dr. Yuji Murata, SARAYA Co., Ltd.

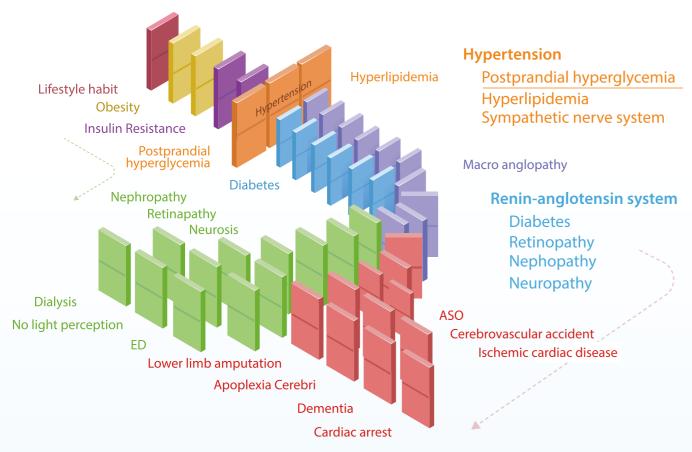
While Japan has the world's longest life expectancy, its incidence of cardiac and vascular diseases triggered by lifestyle-related diseases is increasing. This effect, "metabolic dominoes," (Figure 1) has been introduced in many publications. If one continues to have inappropriate lifestyle habits, the dominoes of obesity, hyperglycemia, hypertension, lipid disorders, etc. will fall and eventually lead to metabolic syndrome. (1)

When these metabolic dominoes topple over, they can cause life-threatening diseases, such as angina pectoris, myocardial infarction, and stroke. Therefore, it is important for individuals to mitigate or prevent the development of lifestyle-related diseases in their early stages. Diabetes, dyslipidemia, hypertension, and other lifestyle-related diseases are known as "silent killers" because they progress with few or no subjective symptoms. In other words, the increase in cardiovascular disorders is not due solely to hypertension and lipid abnormalities; it can also be attributed to the lack of awareness of postprandial glycemic control.

In particular, prediabetics and those who require specific health guidance due to higher blood glucose levels than normal often have fasting blood glucose levels below 110 mg/dL—the normal range in Japan. If only fasting blood glucose levels are measured, postprandial hyperglycemia may be overlooked. Even if a patient should undergo a thorough physical examination, the postprandial blood glucose test (oral glucose tolerance test, OGTT) is generally not performed, which can lead to the development and progression of unnoticed

Postprandial hyperglycemia causes a decrease in the amount and hampers the function of insulin secretion (insulin resistance), resulting in the inability of body tissues to adequately process glucose, which leads to impaired glucose tolerance. This state of impaired glucose tolerance tends to promote atherosclerosis. Furthermore, as arteriosclerosis progresses, the risk of macrovascular complications such as stroke increases, ultimately resulting in death. For this reason, it is important to manage not only fasting blood glucose levels but also postprandial blood glucose. It has also been reported that abnormal postprandial blood glucose levels worsen when HbA1c exceeds 6.5%. Therefore, improving postprandial hyperglycemia in its early stages and maintaining an appropriate HbA1c levels will reduce the onset and progression of diabetes and elevated fasting blood glucose levels.

In the past, fasting blood glucose levels were used mainly to control health. In recent years, it has been found that a rapid postprandial rise in blood glucose levels contributes to impaired blood flow and vascular damage, which is deeply related to arteriosclerosis and other vascular lesions. (2)(3) The relationship between postprandial hyperglycemia and vascular lesions can be compared to a road



Modified from Hiroshi Ito. Japanese journal of clinical medicine. 2003;61(10), 1837-1843

Figure 1. Concept of Metabolic Domino Effect in metabolic syndrome

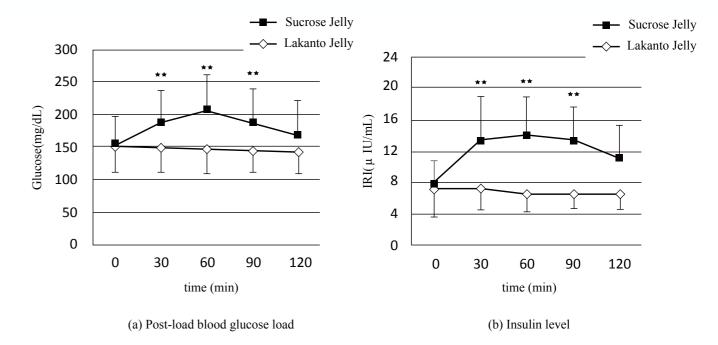


with a high volume of traffic that may be severely damaged and in need of repair. The greater the amount of sugar, carbohydrates, and lipids flowing through the blood vessels, the more likely the vascular cells are to become damaged.

Blood vessels are composed of three layers: intima, media, and adventitia. The intima is in contact with the blood circulation in the intravascular lumen and is composed of endothelial cells—a thin layer of cells that make up the inner surface of the vessel. It has been found that vascular endothelial cells constantly produce nitric oxide (NO) and exhibit vascular sclerosis inhibitory effects, vasodilatory effects, and anti-arteriosclerotic effects, thus preventing the vascular wall from developing atherosclerosis. However, when high blood

glucose and lipids are present after a meal, these endothelial cells are damaged, the protective action of blood vessels is reduced, and the intima thickens and hardens, leading to arteriosclerosis. The development of arteriosclerosis further leads to the clogging (infarction) of blood vessels, thus resulting in cerebral infarction, myocardial infarction, and other life-threatening conditions.

In response to this, SARAYA provided the world with LAKANTO®, a zero-calorie sugar-substitute sweetener made by adding monk fruit extract to erythritol. (4), LAKANTO® is a vegetative sweetener that undergoes thorough quality control and does not affect blood sugar levels or insulin.



Blood sugar level and insulin level after loading test diet (♦)/ control diet (■) on 12 examinees

Modified from Yuji Murata et al. The journal of Metabolism and Clinical Nutrition 12(1): 41-44, 2009

Figure 2. Effects of LAKANTO® on blood glucose and insulin in diabetics

Figure 2 shows the effects of LAKANTO® on blood glucose and insulin in diabetics. Prototype jellies containing 25 g of LAKANTO® (test meal) and jellies containing 25 g of sucrose (control meal) were consumed by 12 diabetic patients, and blood glucose levels were measured at 30-minute intervals up to 120 minutes after consumption. The results of these clinical studies confirmed that LAKANTO® had absolutely no effect on blood glucose and insulin

As derivative products of LAKANTO®, SARAYA launched seasonings including "LAKANTO® Sukiyaki Sauce" and "LAKANTO® Low Carb All-purpose Vinegar" as well as "Healthy Rice," a low Glycemic

index (GI) food that suppresses the rapid rise in blood glucose after meals. "Healthy Rice," which can be eaten as a staple food, consists mainly of special barley, which is rich in dietary fiber and does not easily raise blood sugar, combined with high-amylose rice. This product is the world's first rice designed to prevent a rapid rise in blood glucose levels after consumption (patent registered No. 5614982).



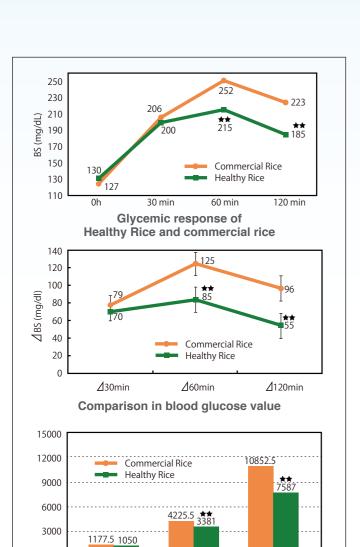


Figure 3. Glycemic responses of "Healthy Rice" compared to commercial rice

Comparison in blood glucose area (AUC)

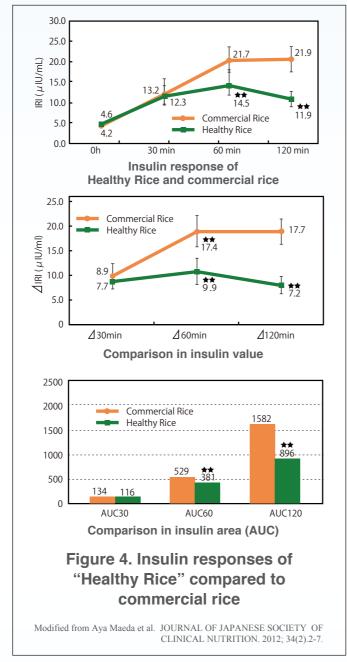
AUC60

AUC30

Modified from Aya Maeda et al. JOURNAL OF JAPANESE SOCIETY OF CLINICAL NUTRITION. 2012; 34(2),2-7.

Figure 3 shows the blood glucose levels of 10 Type 2 diabetic subjects (six males and four females) 120 minutes after consuming cooked "Healthy Rice" (test meal) and commercial rice (control meal). The blood glucose levels of individuals who had just consumed "Healthy Rice" (test meal) were statistically significantly lower than those who had just had commercial rice (control meal) in terms of blood sugar (BS), blood sugar elevation (Δ BS), and blood glucose area (area under the curve, AUC). Figure 4 compares insulin concentrations after consumption of commercial rice (control meal), as in Figure 3. Insulin concentrations after consumption of "Healthy Rice" (test meal) were lower than those of commercial rice (control meal) in terms of insulin value (IRI), insulin elevation value (Δ IRI), and insulin area (AUC), confirming that there are statistically significant differences between the two types of rice. (6)

Thus, we find that the food products provided by SARAYA are designed with formulations that do not cause a rapid rise in blood



glucose or insulin secretion after ingestion (low-GI foods). We hope that these products will help prevent the progression of lifestyle-related diseases and encourage individuals to take postprandial blood glucose management into consideration and prevent the dominoes of lifestyle-related diseases from toppling over

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NATURAL SWEETENER

LAKANTO S



Point 1

Plant-derived and calorie-free

A plant-derived sweetener made from a highly purified extract of monk fruit, used in herbal medicine, and erythritol, a sweetener derived from corn fermentation.



Point 2

Same sweetness as sugar, easy to use

No need for weight conversions, as its ingredients are perfectly balanced for a blend that has a sweetening quality close to that of sugar.



It has the same mass and the same sweetness as sugar. Approximate bulk: 1 tablespoon = 13g, 1 teaspoon = 4g

Point 3

Sweetness remains even when heated

Resistant to heat, it does not lose its sweetness when cooked.



What is Monk Fruit?

It is a member of the Cucurbitaceae family that originated in Guilin, China, and is said to be the "divine fruit of longevity" since ancient times. It is now designated as a protected plant, and is so valuable that it is forbidden to take fresh fruit out of the country.

Saraya has established the technology to produce high-purity monk fruits extract, which is about 300 times sweeter than sugar, using a proprietary process. At our factory in Guilin, we extract only the sweet component from fresh monk fruits under strict control by contract farmers, and manufacture lakanto in our factories in Japan and the United States.





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NATURAL SWEETENER

LAKANTO S



Calorie-free, sugar-free, plant-derived sweetener from monk fruit. It has the same sweetness as sugar and is resistant to heat, making it suitable for a variety of uses.

Lakanto S Granule

Lakanto S Liquid

Lakanto S in syrup type that dissolves quickly. Suitable for sweetening drinks and cold

SEASONING

Lakanto Low Carb All-purpose Vinegar

Seasoning vinegar using Lakanto. Pour over salads, fry foods, and make pickled foods.



Lakanto Sukiyaki Sauce

Sukiyaki-flavored sauce made with lakanto. For simmered dishes and slow cooking.

CANDY

Milk Coffee Flavor Strawberries and **Cream Flavor** Matcha Green Tea and Milk Flavor



Lakanto Zero Calorie Hard Candy

A long-selling product for 15 years, born from customer requests. Made with erythritol, less likely to cause cavities.

Daily control of your sugar levels **Healthy Rice**





A healthier alternative to white rice







For those who want to eat delicious, low-sugar rice "Healthy Rice" is a series of low-calorie and low-sugar rice products designed for people who are trying to avoid eating white rice. "Healthy Rice" was developed focusing on the taste and texture of rice. Just by replacing white rice, you can enjoy a healthy and easy meal.

Material & Taste

A plant-derived sweetener made from a highly purified extract of monk fruit, used in herbal medicine, and erythritol, a sweetener derived from corn fermentation.

Texture

The barley is polished to make the texture easy to eat, matching the shape and size of the white rice. The use of rice and barley makes it more satisfying and provides the fullness that only rice can provide.



