

The “cutting-edge matcha science” that is attracting worldwide attention
A new step towards the prevention and coexistence of dementia: What are the possibilities of matcha?
"10th ITO EN Wellness Forum"
How to thrive in a society with dementia in the era of the 120-year life span

ITO EN, Ltd. (President: Daisuke Honjo; Headquarters: Shibuya-ku, Tokyo) held the "10th ITO EN Wellness Forum" (sponsored by the ITO EN, Ltd. Central Research Institute) on Thursday, February 27, 2025 in Chuo-ku, Tokyo, with a simultaneous live stream on the ITO EN official YouTube channel.



This forum was held under the theme of “Cutting-edge matcha science: A new step towards the prevention and coexistence of dementia.” The latest research on matcha and cognitive function was discussed through keynote speeches by experts and a panel discussion, examining the multifaceted benefits to society of the “cutting-edge matcha science” that is attracting worldwide attention.

*Click here to watch the archived stream (https://youtu.be/Zrr_ESvFam4)

The effects of matcha on social cognitive functions (emotion perception from facial expressions) and sleep quality

MCBI, Inc. (President: Yoshihisa Tokumi; Headquarters: Chiyoda-ku, Tokyo), University of Tsukuba (President: Kyosuke Nagata; Location: Tsukuba City, Ibaraki), Memory Clinic Toride (President: Takashi Asada; Headquarters: Toride City, Ibaraki), and ITO EN, Ltd. conducted a joint clinical trial entitled, “A Study to Evaluate the Effect of Matcha on the Prevention of Cognitive Decline” targeting elderly individuals with mild cognitive impairment (MCI) (*Term 1), a pre-stage of dementia, and subjective cognitive decline (SCD) (*Term 2), and confirmed that continuous intake of matcha improves social cognitive functions and tends to improve sleep quality. The results of this study were published in the academic journal PLOS ONE*.

Principal investigators: Kazuhiko Uchida (Chairman of the Board of Directors, Director of Research and Development, MCBI, Inc.), Tetsuaki Arai (Professor, Department of Psychiatry, University of Tsukuba), Takashi Asada (Director of Memory Clinic Toride), Takanobu Takihara (Central Research Institute, ITO EN, Ltd.)

*Uchida K. et al., Effect of matcha green tea on cognitive functions and sleep quality in older adults with cognitive decline: A randomized controlled study over 12 months. PLOS ONE | Published: 30 August 2024 (<https://doi.org/10.1371/journal.pone.0309287>)

Keynote speeches by experts on the relationship between measures to combat dementia and cutting-edge matcha science

■ Keynote speech by Tetsuaki Arai: “Measures required to deal with dementia in the era of the 120-year lifespan”



Dementia does not refer to a single disease, but is a general term for a condition in which one's cognitive functions decline, making it difficult to perform work or everyday tasks. Aging is deeply related to the onset of dementia, and it is possible for anyone to develop it as they get older. The stage between the “state in which the brain functions normally” and “dementia” is called mild cognitive impairment (MCI) and, of those with MCI, one in ten will go on to develop dementia within a year, but some will recover their cognitive functions and others will remain with a state of MCI. In other words, it is important to have a correct understanding of MCI and to work towards early detection at the MCI stage in order to prevent dementia and maintain one's lifestyle afterwards. Up until now, the methods used to treat dementia have been those that alleviate symptoms. With the emergence of new drugs, treatment methods that slow the progression of the disease are being established, and we are at a turning point in the treatment of dementia.

Although the new drugs are effective, they cannot be prescribed to everyone, and they do not completely stop cognitive decline, so prevention remains an important approach. Mediterranean cuisine (green and yellow vegetables, fruit, fish, beans, olive oil, and others) is known to reduce the risk of dementia, and by paying attention to your lifestyle, including diet and exercise, it is possible to reduce the risk of developing dementia. Research has also shown that catechins, which are abundant in green tea and matcha, have the ability to inhibit the conversion of proteins into fibers (which contain toxins that cause cognitive decline).

In recent years, the definition of dementia has been changing, and a society where people can coexist with the disease with dignity and hope is being realized. I hope that people will consult with their local comprehensive support center as early as possible, and enjoy living in this era of a 120-year lifespan without being overly fearful of dementia.

■ Keynote speech by Kazuhiko Uchida: “The latest research on the relationship between matcha and cognitive functions”



According to various studies, we now know that the lifestyle habits of middle-aged people are extremely important for the prevention of dementia. We started our research by focusing on food, which is the easiest way to improve lifestyle habits, from the perspective of how to incorporate dementia prevention into our daily lives.

For this matcha research, we solicited 939 elderly subjects between the ages of 60 and 85, and selected 99 subjects who were diagnosed with mild cognitive impairment (MCI), a pre-stage of dementia, or subjective cognitive decline (SCD), a pre-clinical stage. The effects of long-term consumption of matcha on cognitive functions were verified through a double-blind, placebo-controlled, randomized controlled trial, and this 12-month long-term study was the first of its kind to be conducted anywhere in the world. As a result, we observed improvements in the scores evaluating the quality of sleep due to the continued intake of matcha, as well as a trend towards improvements in social cognitive functions.

Through such knowledge, we hope that everyone will work hard to prevent this disease. Through the visualization of risks and preventative effects, we are providing a free platform service called MCBI Members to help prevent the onset of dementia.

*MCBI Members (<https://mcbi.jp/members/>)

Panel discussion ~What are the multifaceted benefits to society of the “cutting-edge matcha science” that is attracting worldwide attention?~

During the panel discussion featuring experts who are conducting research at the forefront of their respective fields, the panelists discussed the multifaceted benefits that matcha has to offer to society, focusing on the “cutting-edge matcha science” that is attracting worldwide attention.

■ “Cutting-edge matcha science” that is attracting worldwide attention

The popularity of matcha among foreigners is extremely high, with the value of green tea exports at 36.4 billion yen, which is about five times higher than it was ten years ago. As Dr. Arai mentioned in his keynote speech, even from a global perspective, it is said that Mediterranean cuisine is good for your health. Studies are also being conducted into the “green Mediterranean diet,” which adds drinks like green tea and “aojiru” (green juice) to Mediterranean cuisine, and there is actual data showing that it can inhibit the deterioration of cognitive functions. Matcha contains vitamin K, which is garnering attention around the world as a potential anti-aging vitamin, and is also rich in dietary fiber, which helps to maintain gut health. It also coincides with important keywords in the global health trend, and it is a drink that can be easily and deliciously consumed. (Kunihiro Nishizawa)

Matcha is the ultimate tea, as it contains a concentrated blend of healthy ingredients such as amino acids (including theanine), catechins and vitamins. For many Japanese people, matcha is seen as a traditional drink or just another flavor used in sweets, but overseas, matcha is strongly associated with health benefits, and this is thought to be one of the reasons for the increase in overseas exports. In addition, the popularity of matcha among people overseas is also leading to further research into the health benefits of matcha. (Takanobu Takihara)



■ Matcha is a drink that can be easily incorporated into your daily life and also helps to improve cognitive functions

While new drugs are being developed to deal with dementia, their range of application is limited and they do not completely alleviate the symptoms, and therefore, “early diagnosis,” “prevention,” and “proper lifestyle habits” are extremely important from the onset of MCI. In addition to performing regular exercise and eating a well-balanced diet, it is also important to avoid isolating yourself, by going outside and communicating with others. Facial expression recognition is related to the frontal lobe, and there is a possibility that it is also strongly related to social cognitive functions (facial expression recognition). Until now, dementia was not diagnosed until the symptoms became strong to a certain extent, but there is the possibility that it can be detected earlier through tests of facial recognition. (Tetsuaki Arai)

Dementia is a unique condition that is only diagnosed when a person is no longer able to perform everyday activities, so I think it is important to visualize the internal state of the body before symptoms appear, and to introduce preventative measures at an early stage so that everyone can put them into practice. (Kazuhiko Uchida)

I felt that a decline in facial expression recognition is a very important factor in early intervention for the prevention of dementia, as it can lead to isolation due to a decline in the ability to communicate. One of the reasons why it is important to intervene as early as possible is that, according to large-scale data on blood proteins collected in recent years, there are people in their 20s and 30s whose brains are aging faster than their bodies, and research has shown that their lifestyles may be a major contributing factor. LDL cholesterol in middle age is also an important factor. On the other hand, a study conducted in Nagano Prefecture showed that middle-aged people who drank 2-3 cups of green tea a day had a lower risk of cognitive impairment. It is important to start prevention early, regardless of age. (Kunihiro Nishizawa)

We know that the accumulation of amyloid beta (which leads to aging of the brain) begins in the 40s, but I also felt today that it is necessary to start preventative measures in your 20s and 30s. It is also known that exercise can help prevent brain atrophy, but if it is not done on a regular basis, there is a risk of deterioration. Eating a well-balanced diet (including fish,

vegetables and small amounts of dairy products) and drinking tea are easy ways to prevent this. (Tetsuaki Arai)

In addition to its effects on cognitive function, green tea and matcha are also expected to be effective in lowering LDL cholesterol in the blood. Furthermore, the antioxidant and anti-inflammatory effects of green tea and matcha may also be effective in treating symptoms that can lead to communication disorders such as hearing loss and depression, and we hope to continue our research in this area. (Takanobu Takihara)



■ The possibilities of matcha in a future society of coexistence and the impact it will have on society

Although there are systems in place to prevent those who have been diagnosed with dementia from becoming isolated, including day services and home visits, there are no places for those with MCI to come together and socialize, so the challenge is to create communities and services that can meet their needs. (Tetsuaki Arai)

Exercise is the most effective way to combat dementia, but it can be a bit of a hurdle to incorporate it into your daily life on a continuous basis. I think a drink like matcha tea would be relatively easy to incorporate into your daily life. (Kazuhiko Uchida)

While the tea itself is highly effective, I hope that people will use it as a communication tool regardless of their age. Also, when you hear the word “matcha,” many people probably imagine a tea ceremony where the tea is whipped with a bamboo whisk, but you can also enjoy it simply by mixing water and matcha powder in a thermos bottle and shaking it. My hope is that people will incorporate it into their everyday lives in a more casual way. (Takanobu Takihara)





ITOEN
Wellness Forum

【 For preventing and living with dementia 】

1. Early action is key. Don't face it alone - seek advice first.
2. Sharing the enjoyment of matcha together sparks communication.
3. Don't be overly afraid of dementia; equip yourself with correct knowledge.

Panelists



Tetsuaki Arai (Professor, Department of Psychiatry, Institute of Medicine, University of Tsukuba)

Graduated from the School of Medicine and Health Sciences, University of Tsukuba, in 1990, and became a physician at the University of Tsukuba Hospital. After working at Kurita Hospital, the Department of Psychiatry at Tokyo Metropolitan Matsuzawa Hospital, and the Tokyo Metropolitan Institute of Medical Science, became a lecturer at the Graduate School of University of Tsukuba in 2010, and a professor at the Department of Psychiatry at University of Tsukuba Hospital and the Director of the Dementia Center at University of Tsukuba Hospital in 2016. Served as Dean of the Graduate School of Comprehensive Human Sciences at the University of Tsukuba, professor of psychiatry at the Faculty of Medicine at the University of Tsukuba, and at the University of Tsukuba Hospital since 2022.



Kazuhiko Uchida (Chairman of the Board of Directors, MCBI, Inc.)

Graduated from the Faculty of Medicine at Nara Medical University in 1983, and majored in tumor pathology at the Graduate School of Medicine at the same university. Received a Doctor of Medicine degree in 1987. After working at the National Cancer Center Research Institute, became a lecturer specializing in tumor biology at the Institute of Basic Medical Sciences, University of Tsukuba, in 1989. Established MCBI, Ltd. in 2003. Became an associate professor at the Institute of Medical and Health Sciences, University of Tsukuba in 2008. Became chairman of the board of directors of MCBI, Ltd. in 2022.



Kunihiro Nishizawa (President, Salta Press Co., Ltd.)

(Visiting Researcher, Nikkei BP Medical & Healthcare Institute)

Joined Nikkei Business Publications, Inc. after graduating from Waseda University and working at Shogakukan, Inc. Appointed deputy editor-in-chief of Nikkei Health upon its launch, and later became editor-in-chief. Launched “Nikkei Health Premier” in 2008 and also served as editor-in-chief. Served as Vice President of Techno Associates from 2010, and became a senior researcher at the Marketing Strategy Research Institute of Nikkei BP Research in 2014, and a chief researcher in 2016. Left Nikkei BP in March 2018 and became a visiting researcher at the Nikkei Research Institute. Established Salta Press Co., Ltd. in the same year. Currently serves as a commissioned lecturer at the Faculty of Life and Medical Sciences, Doshisha University; a collaborative researcher at the Faculty of Medicine, Juntendo University; a trustee of the Japan Kidney Association; an executive advisor to the Japan Gut Frailty Consortium; and a trustee of the Wellness Food Promotion Association. Apart from being active as a speaker at lectures and seminars, also writes health columns for magazines and online media.



Takanobu Takihara (Director, Central Research Institute, ITO EN, Ltd.)

Graduated from the School of Agriculture, Osaka Prefecture University in 1988, joined ITO EN, Ltd., and was assigned to the Central Research Institute. As a specialist in the fields of plant physiology, food engineering and health psychology, involved in research on the production of useful substances through the hydroponic cultivation of tea and cell culture, oral hygiene using tea catechins, the development of food products with functional claims based on tea ingredients, and the effects of matcha and tea ingredients on cognitive functions. Former Director of the Central Research Institute.



Moderator: Takeo Ohashi

(Principal Researcher, Healthcare Business Division, Mitsubishi Research Institute, Inc.)

Received a master's degree in management engineering from the Graduate School of Science and Technology at Keio University in March 1999. Joined Mitsubishi Research Institute, Inc. in April of the same year. Involved in research and consulting on human factors and human-centered design in various industrial fields, as well as data health and health management in the healthcare field since joining the company.

About the ITO EN Central Research Institute

At the ITO EN Central Research Institute, researches are conducted to create unique products centered on the areas of “health and delicious taste” by making use of a wide range of cutting-edge technologies. We believe that healthiness is particularly important for increasing the value of products in terms of how dietary habits should be in response to the challenges of an aging society in the future, and we are using the results of our research to promote the development of products such as foods for specified health uses and foods with functional claims. We also believe that by scientifically identifying the elements that comprise delicious taste and proposing new scenarios for enjoying drinks, it will be possible to make your meals even more delicious and enjoyable.