What can be expected from this technology

Using Nutritional approaches to help address the social issue of dementia associated with aging

The preservation of brain health is becoming a social issue



Source: Statistics Bureau, Ministry of Internal Affairs and Communications

Appropriate measures for early prevention

Appropriate early measures lead to the preservation of brain health



Source: Ninchisho Netto (Dementia Net)

Focus on epidemiological reports that dairy intake reduces the risk of dementia





Relationship between consumption habits of fermented



J. Am. Geriatr Soci, 2014

The preventive effect of Camembert cheese against dementia was first discovered in collaboration with the University of Tokyo





Ano et al., PLoS ONE 2015



Shed light on the relationship between Camembert cheese consumption and the onset of Alzheimer's disease

Camembert cheese can be fermented and aged with white mold and lactic acid bacteria



We have independently discovered a peptide that can improve cognitive function, and have developed a processing method that facilitates its intake

We have independently discovered beta-lactolin — an active ingredient in dairy products that improves cognitive function We have established a manufacturing method for food ingredients that facilitates beta-lactolin intake



Improvement in cognitive function (memory/ability to pay attention and concentrate) confirmed in clinical trials



Bars represent means±SE, Placebo; N=53, Beta-lactolin; N=51

Kita et al., Front Neurosci, 2019

Uniqueness of this technique

Beta-lactolin exerts a positive effect on both memory and attention by reaching the brain and increasing neurotransmitter levels

Comparison with other ingredients

	DHA	Ginkgo biloba	Beta-lactolin	Commentary
Ingredients involved	DHA	Flavonoids Terpene lactones	GTWY(1.8mg)	Since a small amount of beta- lactolin can produce a large effect, its use may be expanded to a wide range of food and beverages
Background research	Mediterranean cuisine	None	Epidemiology and Camembert	New functions discovered as a result of epidemiological research
Effectiveness (in humans)	Memory improvement, Limitation of neutral fat	Memory improvement	Memory improvement Attention improvement Increased cerebral blood flow	Target ranges that can stimulate brain function are several
Mechanism of action	Hypermobility of cell membrane	Increased cerebral blood flow	Increased dopamine	Increases neurotransmitter dopamine, which directly regulates the improvement of cognitive function
Non-clinical evidence	Antioxidant, Anti- inflammatory Alzheimer's disease prevention	Antioxidant	Prevention of Alzheimer's disease, Anti-aging, Improvement of depression	May also potentially improve brain function



Future potential

Achieve sustainable brain health support by combining nutrition with other solutions

