

Plant Origin Ferment  
**MARUMI ENZYME**

Presented by  
Good Life Planning

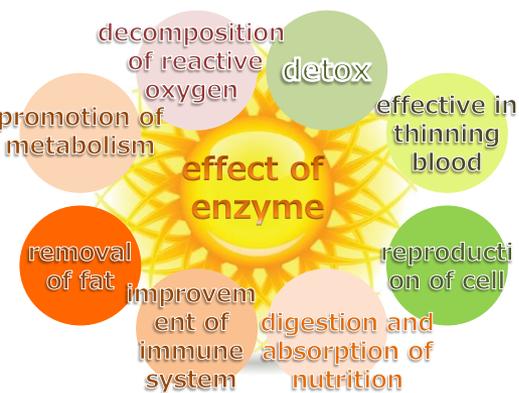
# What is plant origin ferment (Marumi Enzyme)?



Because foods tend to be rotten in hot and humid Japan, we have created "fermented foods" from ancient period. Many of Japan's own fermented foods such as miso, soy sauce, soy beans natto, rice wine sake, pickles, dried bonito, have shown it for themselves.

However fermented foods of modern period, soy sauce, miso, vinegar, etc. few of them are made by natural brewing. There are price issue and actual situation that many people use synthetic vinegar and soy sauce containing preservative.

Eating habits in modern period have lack of absolute amount & kinds of such "fermented food." In order to correspond to the problem, "plant origin ferment" has been developed.



Medicine only decomposes (destroys) things, but enzyme decomposes things and removes unnecessary things and collects only necessary things and synthesizes, and absorbs necessary nutrients with organ, and changes unnecessary elements to sweat and urine and excretes in the end. Enzyme promotes the "Big Four metabolism".

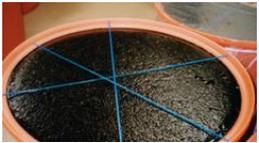
If metabolism goes up, body starts to work out normally. It can be expected to bring any effects against stress, lifestyle-related diseases, aging which modern people have.

# Characteristics of plant origin enzyme (Marumi Enzyme)



## ① Natural raw materials are mainly used.

Deep mountain wild plants, which survive strongly in nature and contain plenty mineral and vitamin, are main raw materials.



## ② Natural brewing fermented for more than 5 years

Raw materials were prepared in accordance with season. It took over a period of 5 years from fermentation until aging. It is like Japanese sake, such as "Daiginjo" and is a product that has commitment. In the manufacturing plant without adjusting room temperature artificially, natural seasonal difference of heat and cold throughout the year is used. It is natural brewing which prepare seasonal materials in good season, and is a manufacturing method of natural fermentation.



## ③ 25 kinds of raw materials

It is not a single item or several kinds of raw materials such as brown rice enzyme and papaya enzyme, but Marumi Enzyme mainly uses brown rice, seaweed, wild plant, etc. 25 types of raw materials in accordance with four seasons, and is a composite fermented food. You would often see ferment that is appealing abundance of more than 100 kinds or 300 kinds of raw materials, but "the more raw materials, the more enzyme" is not correct. Too many raw materials are just simply put, it cannot be nutritionally controlled. It is necessary to manage raw materials combination with no competition.

By a combination of more effective raw materials, it becomes the most suitable balanced ferment.



## ④ contains more than 30 kinds of natural minerals

Marumi Enzyme has more than 30 kinds of minerals in total such as calcium, magnesium, silicon, selenium, phosphorus, etc. Most of those minerals activate internal enzyme effects.

## ⑤ Low calorie food

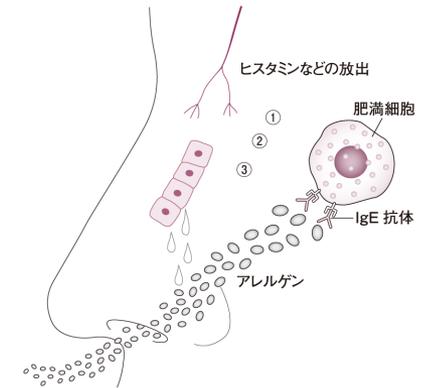
Marumi Enzyme is different from general enzyme beverage (which a lot of white sugar is added in order to rush aging, so that high calorie), and Marumi Enzyme has very low calorie which is 287kcal per 100g. (Brown sugar is used.)



## ⑥ Immune system gets strengthened and sex hormone gets activated.

Inspection and research data of typical supplement is research data by experiment of mouse and rat. But Marumi Enzyme has been testified by human clinical testing under severe conditions, stimulation & strengthening of immune system, activation of teston & follicle stimulating hormone (FSH) in cooperation with National University.

case	medication case	improved case	improved case	improve d rate
Immune disorder	20	20	18	90%
Endocrine disorder	20	20	4	20%
Biochemical abnormality	20	20	15	75%
Amino acid abnormality	20	7	4	57%
Trace metal abnormality	20	10	2	20%
Vitamin abnormality	20	3	1	33%



## ⑦ Usage in various fields

When Marumi Enzyme is diluted 500 to 1,000 times and given to crops and ornamental plants, crop yield gets increased and immune system gets improved and used pesticides gets drastically reduced. Also, if you add one tea spoon of Marumi Enzyme into bathing liquid and put into bathtub, it is effective for atopy, etc.



# Difference with normal enzyme

	Marumi Enzyme	Normal enzyme	Reaction
Raw material	<u>Strictly selected 25 kinds of raw materials</u> such as mainly wild plants	Raw materials extremely little or too much, mainly grown in greenhouse	Mineral balance of numbers and quantity is bad.
Ferment period	At least <u>5 years or more</u>	3 to 6 months	Due to short ferment period, too much sugar is added and too sweet, absorption rate is bad.
Ferment method	<u>40°C or more temperature difference</u> per year due to natural fermentation, makes strength & hardness.	Room temperature is kept to 20 to 25°C or more, fermented in high temperature for a short time	Stronger and tougher good bacteria & enzyme are difficult to be born.
Sense of taste	Brown sugar is kept to a bare minimum, so <u>less sweet</u>	White sugar is used 3 times as much as raw material, too sweet	Blood sugar level is easily increased.
Clinical test	There are not only animal test but also <u>human clinical test data.</u>	There are just pharmacological test and animal test data.	Effectiveness for human body is unknown.
Manufacturing method	<u>Raw materials are continued to be prepared in best season at all times</u> , naturally fermented for 5 years or more, naturally brewed	Raw material is prepared at one time, simple fermentation with short time	Due to simple fermentation, good bacteria number is little.

# Raw Materials

Classification	Raw material name	Place of origin
Large fruit	apple, persimmon, peach	Near Saihaku-gun, Tottori-prefecture
Saccharide	brown sugar	Okinawa
	corn	Hokkaido
Small fruit	plum, wild vine, gummi	Foot of Mt. Daisen
Strawberry	wild strawberry, mulberry, garden strawberry	Foot of Mt. Daisen
Rhizome	carrot	Near Saihaku-gun, Tottori-prefecture
Leafy vegetables	cabbage, broccoli	Near Saihaku-gun, Tottori-prefecture
Seaweed	Hijiki edible seaweed, kelp	Hokkaido
Grain cereal	brown rice	Near Saihaku-gun, Tottori-prefecture
Others	soy bean	Hokkaido
	prince melon, mater melon, kiwifruit, tomato	Near Saihaku-gun, Tottori-prefecture
	pineapple, banana	Philippines

※Because enzyme preparation is conducted in February,  
pineapple & banana are imported.

# Specialty of Natural Fermentation

## Culture medium method (February)

First, around early February, which is the coldest season and the same season with Japanese sake brewing, is selected for raw materials preparation. Apple, banana, pineapple, in whole (whole body of food), are put into high concentrated liquid of brown sugar base, enzyme & nutrition contained in the fruits are extracted.



## Fermentation method (from April)

Corn is inserted. Starch is converted into glucose.



## (From June)

To let white koji rice malt to be brown rice protein & soy protein amino acid, best spring season wild fruits (mulberry, raspberry,) which contain lots of wild yeast, are inserted.



## (From August)

After waiting for the best timing of fermentation, seaweeds are added. Plum, peach, prince melon are added, too.



## (From September to October)

Using a variety of fruits such as watermelon, tomato, in preparation for autumn, glucose & amino acids are alcoholized using wild yeast.



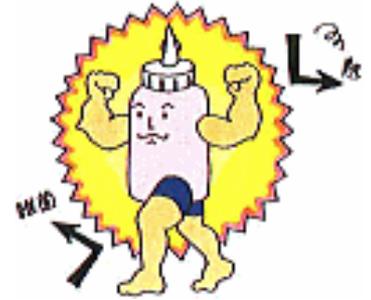
## Long steady fermentation & aging (5 years or more from November)

Due to natural fermentation, in winter season, low temperature fermentation is used to keep being natural.



## Fermentation method (2<sup>nd</sup> year)

25 kinds of culture medium raw materials such as wild plants, brown rice, fruits, seaweeds, in accordance with four seasons in the first year of culture medium method, are brewed & proliferated to be useful bacteria which contains strong tough enzyme by natural fermentation with cold and warm temperature difference of 40 degrees or more throughout year, from mild fermentation to active fermentation in summer, by obtaining step-by-step enrichment process & winter low temperature condition.

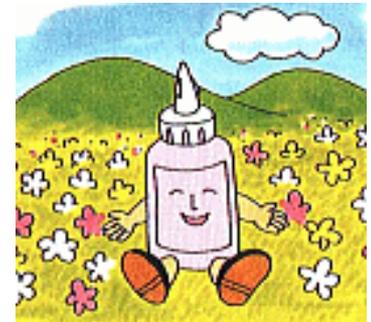


## Acclimated cultivation method (3 to 5 years)

After entering into aging stage by natural fermentation through four seasons in the second year, esterase of final purpose (aroma promoting factor) is produced from secreted substance of useful bacteria. (In normal fermentation method, natural fermentation usually causes corruption, and the fermentation method is too difficult, so that most of normal methods ferment by setting a fixed temperature.) In order to feel esterase, intuition that comes from long years of experience is essential.

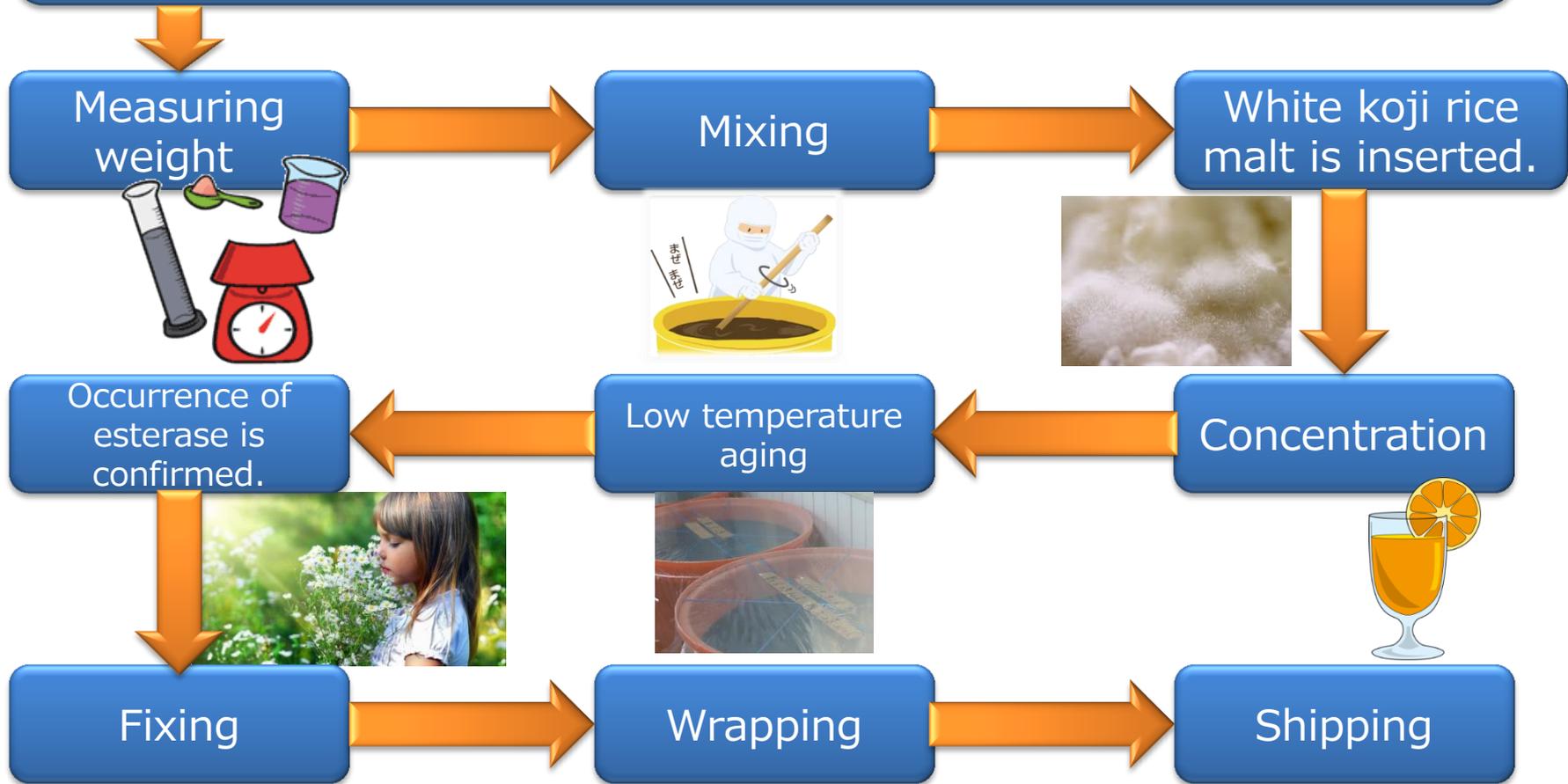
✂Esterase : complex ester of advanced molecular structure, which the same kind of effect as food effect comes with, by only smelling the aroma in the nose. In other words, aroma effect.

In this way over taking over five years, enzyme made in body is activated, and it becomes ferment food which can work jointly.



# Production Flow

Raw material 24 kinds (big fruit, grain cereal, saccharide, small fruit, root crop, vegetable leaf, seaweed) are prepared in the best season taking a year



# Marumi Enzyme story

Marumi Enzyme founder, Ryoji Maeda was born in 1940 at farm family. He loved richness of nature from childhood, and went on high school and studied at Department of Applied Chemistry and, joined mountaineering club. He was impressed by heroic figure of alpine plants that live under severe conditions in mountains, and had special love at plants.

He joined a metal catalyst company after graduating. He learned role of catalyst, then was very interested in growth (photosynthesis) of plants. He wondered why alpine plants can grow on cliff with no fertilizer or nothing at a glance, and began to focus on enzyme which controls photosynthesis.

After quitting the company, he served for 2 masters for total 8 years from 1964, and learned oxidation (decomposition of organic matter) and reduction (synthesis of organic matter), static and dynamic characteristic of enzyme, and "enzymatic method." For efficient growth of crop from the study, he decided to develop liquid enzyme. Finally he succeeded in production by himself in 1973. He repeated practical experiments for 3 years of vegetables, fruit vegetables, fruits, rice, and wheat. And he realized faster growth, low-cost, safe, delicious, and revenue growth.

【Mr. Maeda's commitment】

## ◎ Importance of plants

Breathing, life energy (nutrition) as well, of animals, including humans, are supported by plants. Plants, human beings also, have fermentation in ecology reaction. For example, we take food, and turn it in nutrition to live. Our body breaks apart food into molecules in stomach, and food is fermented in bowels to produce nutrients for maintaining life, and nutrients spread to whole body as mechanism.

To maintain our life, an important role is fermentation. Marumi Enzyme, plays important roles for human beings, even for plants. Because it is important how he easily can make high nutrition agricultural products, he thought he wanted to make something that promises safe, fast-acting, delicious, revenue growth.

## ◎ Nature of Mt. Daisen area

For importance of making things, I believe that environment & material are the base, and the foothills of the nature of the environment Mt. Daisen foot, at factory utilizing natural environment of Mt. Daisen foot & benefit of raw materials, while borrowing work of useful microorganisms, throughout year, I have been engaged my heart into making strong life force fermented food.

Commitment is that most of the raw materials are collected locally (Tottori Prefecture Mt. Daisen foot.) I think that foods which human beings continue eating from long time ago to today, are important.

I have devoted myself into plant fermented food world for more than 30 years, and I am proud that I could create natural brewed excellent article from wonder of life of enzyme, surprise, failure, research, enthusiasm, and commitment.

Marumi Enzyme that I have continued to care for a long time with love, and raised. I am deeply honored if Marumi Enzyme can contribute to your health greatly.

# Customer's voice

## High fast-acting effect

I was suffering from knees are cold for a long time. In 4 months after starting to drink, needs coldness are gone. I used to need warming device & supporter even in summer, but no longer need!  
(age 68 woman)

I kept suffering from constipation, but less than 1 month after starting to drink, now I have really comfortable bowel movement. I feel refreshed with stomach!  
(age 74 woman)

I was diagnosed as hepatitis C 10 years ago, and the number gradually went high. After drinking 6 months, the number started lower down, and I got physical strength not even to catch a cold.  
(age 65 woman)



I take care of my wife who is sick, and then go out and return home. Then I could not sleep at night and kept drinking alcohol, and numerical value of liver went high. 2 months after starting to drink, the number has been improved. Doctor is surprised!  
(age 53 man)

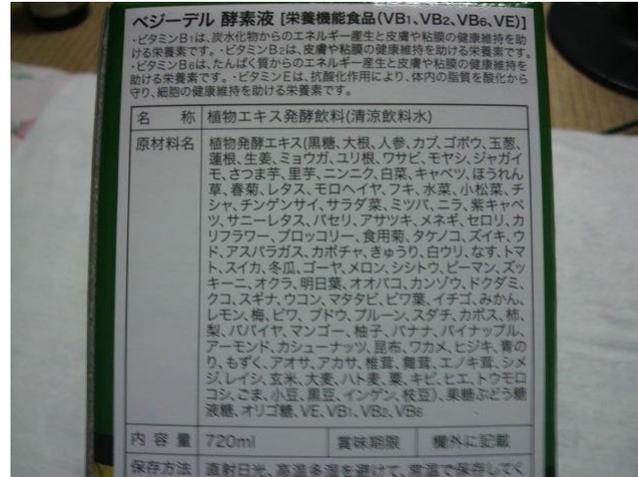
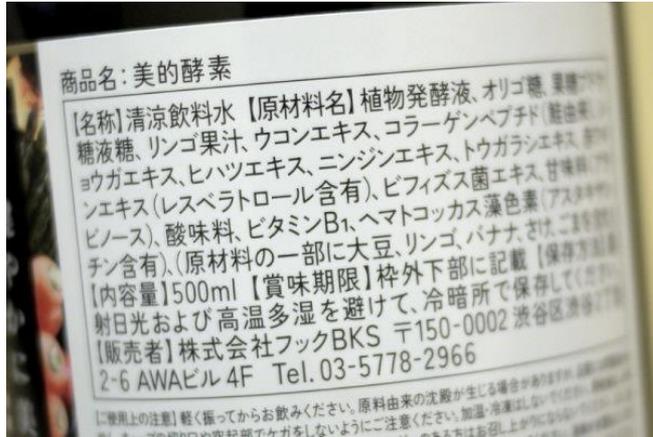
I found this when my 4-year-old son was suffering from asthma. 2 months after starting to drink, spasm was gone, and now he does not catch cold.!  
(age 4 man)

After working harder than others at farm, I got rheumatism. I was suffering from pain and pain at toilet at mid-night. After starting to drink, diarrhea, which continued every day, was gone, and the pain became less.  
(age 65 man)

I used to try esthetic & other health food due to atopy. I hated to go out and kept staying home. But now I often go out and people say to me "I became beautiful!"  
(age 29 woman)

For woman, man, child

# Raw material indication of normal enzyme drink



Food additive, extra, powder, nutrition are used for other enzyme.

Only natural raw materials are used for Marumi Enzyme.

