

Matcha and Healthy Blood Sugar

Within Matcha, known for its vibrant green hue, lie benefits that rival Chinese teas. Professor Takako Yokozawa of the Toyama University Comprehensive Chinese Medicine Research Institute announced in the October edition of an American magazine that Matcha contains components that help maintain healthy blood sugar levels.

Extracting the Active Components

“Originally, Japanese tea was brought back as medicine by Japanese envoys, known as Kentoushi, sent to China. Exactly which of those components are beneficial has been an age-long mystery. However, after twelve hundred years it has become increasingly clearer through modern science. The tea that maximizes beneficial effects is none other than Japanese Matcha.”

Professor Yokozawa began studying the benefits of tea during the tea boom, which occurred around fifteen years ago. Among the numerous compounds extracted, Professor Yokozawa focused on epigallocatechin gallate (EGCG), a compound contained more abundantly in green tea and Matcha compared to 'brown teas' such as Oolong and black tea. This compound has been shown to have strong antioxidant and inflammation suppressing effects that can help slow the effects of aging. This news alone created a media stir, however, Professor Yokozawa's goal was to utilize this finding in actual treatments for various diseases.

“First we wondered whether we could create a new medicine from this compound. However, we realized that experiments containing multiple components produced better results than those using a pure extract of epigallocatechin gallate. The numerous components contained in tea were producing a synergistic reaction.”

The Compounds' Synergistic Quality

Professor Yokozawa discovered, through animal testing, that epigallocatechin gallate's blood-sugar lowering quality was enhanced by ingesting it with dietary fiber. The key ingredient, dietary fiber, is abundant in tea leaves. In other words, instead of the traditional method of drinking the components that seep out of the tea leaves, the method of ingesting tea leaves that have been ground into a powder produced significantly more beneficial effects.

“We kept focusing on the purity of the compounds, but we then realized that the tea leaf's effects are not 'one plus one equals two' but multiples of that. Matcha can realize the tea leaf's potential.”

Nutritional Analysis

Ceremonial Matcha

(Per 1 gram)

Total Calories	2.91 cal/g	Total Catechins	121 mg/g
Calories from Fat	0.36 cal/g	Epigallocatechin Gallate	66 mg/g
Carbohydrate	348 mg/g	Epigallocatechin	30 mg/g
Sugars	16.2 mg/g	Epicatechin Gallate	15mg/g
Total Dietary Fiber	332 mg/g	Epicatechin	6 mg/g
Water soluble fiber	43 mg/g	Gallocatechin	not detected
Water insoluble fiber	289 mg/g	Gallocatechin Gallate	1 mg/g
Protein	289 mg/g	Catechin Gallate	1 mg/g
Total Fat	40 mg/g	Catechin	2 mg/g
Saturated Fatty Acid	9.6 mg/g		
Monounsaturated Fatty Acid	3.4 mg/g	Total Amino Acid	49.76 mg/g
Polyunsaturated Fatty Acid	27 mg/g	L-Aspartic Acid	7.23 mg/g
Trans Fatty Acid	not detected	L-Glutamine Acid	5.59 mg/g
Tannin	89 mg/g	L-Asparagine	2.28 mg/g
ORAC Score	1384 unit	L-Serine	1.25 mg/g
		L-Glutamine	1.08 mg/g
Iron	0.17mg/g	L-Threonine	0.91 mg/g
Calcium	3.25 mg/g	L-Arginine	8.33 mg/g
Zinc	0.047mg/g	L-Alanine	0.64 mg/g
Potassium	21.13 mg/g	L-Theanine	19.5 mg/g
Sodium	0.074 mg/g	L-Tyrosine	0.37 mg/g
Vitamin A		L-Valine	0.27 mg/g
β-carotene	292 µg/g	L-Methionine	not detected
retinol equivalent	24.3 µg/g	γ-Amino Butyric Acid	0.18 mg/g
Vitamin C	1.6 mg/g	L-Isoleucine	0.36 mg/g
Vitamin E	220 µg/g	L-Phenylalanine	0.56 mg/g
		L-Leucine	0.32 mg/g
Caffeine	34 mg/g	L-Lysine	0.09 mg/g
Cholesterol	not detected		

Source:
 Eco Pro Research
 Brunswick Laboratories
 Covance Laboratories

The nutritional values shown are based on sample testing. Aiya does not guarantee these values with each product and these values will not be displayed in the actual Certificate of Analysis.