

Feiolix® for Metabolic support

Feiolix - Multifactorial Metabolic Health Benefit

Numerous in vivo and clinical studies have shown that Feiolix supports metabolic health by:

- increasing insulin secretion from pancreatic β cells
- enhancing glucose absorption by skeletal muscle cells
- regulating metabolism by decreasing inflammation and increasing GLP-1 secretion
- increasing satiety through improved leptin signaling
- reducing blood triglycerides and HDL cholesterol
- increasing post-prandial (post-meal) thermogenesis
- reducing weight gain from a high fat diet

What is Metabolic Syndrome and how can Feiolix help?

Metabolic syndrome is diagnosed when a patient has 3 of 5 criteria:

Metabolic Syndrome Criteria ¹	Clinical effects of 12 weeks of Feiolix consumption in adults with Type 2 Diabetes ²
Central obesity	Prevents weight gain (24% less)
High HbA1c and/or High blood glucose	Decrease HbA1c by -0.86%
	Decrease fasting blood glucose by 36.3 mg/dL
High triglycerides and/or High cholesterol	Decrease blood triglycerides by 38 mg/dL
	Decrease total cholesterol by 17.5 mg/dL
High LDL:HDL ratio	Decrease LDL cholesterol by 18.1 mg/dL, maintain HDL
High blood pressure	Decrease systolic blood pressure by 6.7 mmHg

Metabolic Syndrome Pandemic

- Metabolically healthy people have optimal levels of all five of the above variables.
- Worryingly, over 80% of American adults are metabolically unhealthy³.
- Metabolic diseases increase risk and severity of other infections.
- In the first year of the SARS-CoV-2 pandemic, 89% hospitalisations were attributed to metabolic co-morbidities:
 - 30% attributed to obesity
 - 26% to hypertension
 - 21% to diabetes
 - 12% to heart failure⁴.

Feijoa – A complex fruit

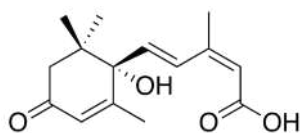
Described as tropical and aromatic, with notes of berries, guava, and pineapple, and a pear-like gritty texture, this unique superfruit is beloved by New Zealanders.

The complex flavour and texture is influenced by uniquely high concentrations of a universal signalling hormone known as abscisic acid, as well as anti-inflammatory polyphenols and dietary fibre. These components are also the main health promoting compounds in feijoa.

Feiolix Bioactives for Metabolic Health Support

Abscisic acid

- Universal signalling hormone found in plants and secreted by the human pancreas
- Binds to the GLUT4 receptor on skeletal muscle
- Binds to the LANCL2 receptor on the β cells of the pancreas.



Absciscic acid

GLUT4
receptors

LANCL2
receptors on β
cells of pancreas

Stimulates glucose
absorption:

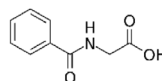
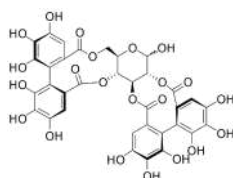
**Lowers blood glucose
(and triglycerides) to
healthy levels.**

Stimulates GLP-1 Secretion:

Enhances insulin signalling.

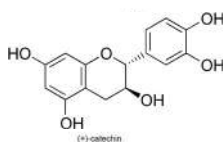
Ellagitannins

- α & β pedunculagin account for 60% of total polyphenols. They are converted into anti-inflammatory and insulin stimulating urolithins by the gut microbiota.
- Flavans (catechin, gallocatechin, and epicatechin) account for 40% of total polyphenols. They are converted into anti-inflammatory hippuric acid by the gut microbiota.

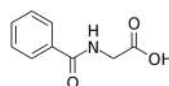


Urolithins

Stimulates insulin secretion from the pancreas: **Insulin signalling increases glucose absorption.**



Catechins



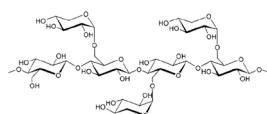
Hippuric acid

Anti-inflammatory:

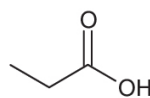
**Improves insulin signalling/
decrease insulin resistance.**

Dietary fibre

- Xyloglucans in the cell walls of feijoas are converted into propionate by the gut microbiota.



Cell Wall
Xyloglucans



Propionate

Increased satiety:

**Decreases appetite/reduces
blood glucose spikes.**

Decreased fat synthesis:

Reduced weight gain.



Feiolix

- Natural, whole fruit ingredient
- Proprietary freeze drying technique retaining a high level of bioactives
- Non-GMO
- NZ grown and produced
- Free from added sugars and preservatives

REFERENCES

¹ Eckel, R. H., Alberti, K. G., Grundy, S. M., & Zimmet, P. Z. (2010). The metabolic syndrome. The lancet, 375(9710), 181-183.

² Taghavi, M., Farid, H. R., Rafat, P. H., Sharifian, R. M., & Watson, R. (2012). Effect of feioa supplementation in patients with type 2 diabetes.

³ Araujo, J., Cai J., Stevens J. Prevalence of optimal metabolic health in American adults: national health and nutrition examination survey 2009 – 2016. Metabolic Syndrome and Related Disorders, 2019, 17(1): 46-52

⁴ Editorial. Metabolic health: a priority for the post-pandemic era. The Lancet Diabetes & Endocrinology. Volume 9, Issue 4, P189, APRIL 01, 2021