DELPHINOL® is currently the only known natural active ingredient which moderates absorption of refined carbohydrates with pure glucose (patent pending).

DELPHINOL® may represent an interesting new component for combination product formulations, such as with alpha-glucosidase inhibitors, commonly oligomeric proanthocyanidins, dedicated to optimal blood sugar control to include the previously unaddressed glucose.

### Delphinol® Mechanism

The mechanism of action of DELPHINOL® for delayed absorption of pure glucose is understood to support better balanced blood glucose levels.

Studies in progress suggest that postprandial peaks are less pronounced and glucose levels are maintained for longer periods of time, with absence of rapidly dropping blood glucose.

- The superior antioxidant maqui berry
- Natural glucose control with Delphinol®
DELPHINOL* is a standardized water extract of maqui berries, which exclusively grow in Patagonia (Chile). Maqui berries by nature are very rich in specific flavonoid species known as anthocyanins, especially a subcategory of these known as delphinidins.

**Delphinol** Quality

DELPHINOL* is prepared from selected fresh maqui berries by water-extraction and purification on resin under strict GMP conditions. Delphinol* represents a pure flavonoid composition and is standardized to bear minimum 25% delphinidins and minimum 35% total anthocyanins. Delphinol* is certified Kosher and Halal.

**Delphinol** Safety

DELPHINOL* originates from food quality maqui berries which were historically consumed by the indigenous people of Chile, the Mapuche. Safety investigations have confirmed absence of health risks related to regular consumption of Delphinol*. In the USA, Delphinol* has been affirmed as Generally Recognized As Safe (GRAS).

**Delphinol** Efficacy

DELPHINOL* superior antioxidant potency

DELPHINOL* presents with exceptionally high antioxidant powers, with a total ORAC 5.0 value of 30,852 μmol TE/g certified by Brunswick Laboratories.

DELPHINOL* maqui berry extract lowers postprandial glucose

The mechanism of action of DELPHINOL* for blood sugar control is distinct from other flavonoids which impair the enzymal activity of alpha-glucosidase, the latter dissociating starch such as from rice, bread, potatoes or pasta into glucose.

DELPHINOL* affects the activity of the sodium-glucose symport (co-transporter). The symport transports one glucose molecule together with one sodium ion into cells lining the colon and from there the glucose enters the blood stream ([Hidalgo et al., Panminerva Med, 2014]).
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**Delphinol® Efficacy**

- **DELPHINOL® superior antioxidant potency**

  ![Antioxidant Chart](chart)

  - ORAC 5.0
  - 30,852 μmol TE/g
  - 21.4 ng/ml blood plasma concentration of oxidised LDL

  *In a double-blind, placebo-controlled, crossover clinical study, Delphinol® significantly decreased oxidised LDL cholesterol in study participants after 4 weeks of placebo treatment (Singaram et al., 2014). A reduction of oxidized LDL is beneficial because of the known participation in atherosclerosis onset.*

  - DELPHINOL® presents with exceptionally high antioxidant powers, with a total ORAC 5.0 value of 30,852 μmol TE/g certified by Brunswick Laboratories.

- **DELPHINOL® maqui berry extract lowers postprandial glucose**

  ![Glucose Chart](chart)

  - Subsequent relative glucose increase in blood stream

  *The mechanism of action of DELPHINOL® for blood sugar control is distinct from other flavonoids which impair the enzymal activity of alpha-glucosidase, the latter dissociating starch such as from rice, bread, potatoes or pasta into glucose.*

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DELPHINOL® is currently the only known natural active ingredient which moderates absorption of refined carbohydrates with pure glucose (patent pending).

DELPHINOL® may represent an interesting new component for combination product formulations, such as with alpha-glucosidase inhibitors, commonly oligomeric proanthocyanidins, dedicated to optimal blood sugar control to include the previously unaddressed glucose.

- Starchy food items
  - ✔ DELPHINOL®
  - ✔ OPCs (grape seed, cocoa etc.)
- Refined sugars
  - ✔ DELPHINOL®
  - ✗ OPCs

Delphinol® Mechanism

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