



ENERGY & VITALITY

ACEROLA

Source of natural vitamin C

THE POWER OF ACEROLA

ORIGIN

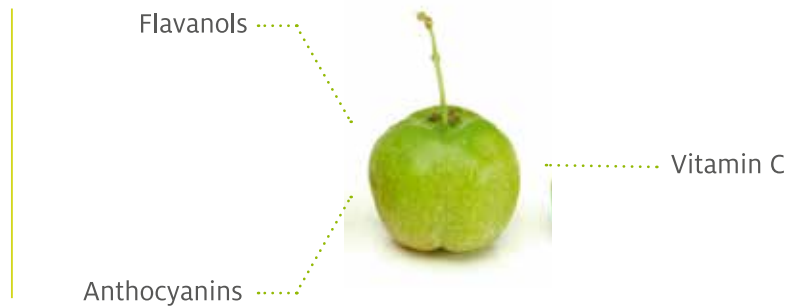
Popularly known as Barbados cherry or West Indian Cherry, *Malpighia glabra* L. or *Malpighia emarginata* D.C (also known as *Malpighia punicifolia* L.), is the fruit of acerola bush, a native plant of the West Indies. This superfruit is widely consumed in Brazil, and popularly used as a natural anti-inflammatory, stimulant for the liver and renal systems, diuretic and heart function support.

In North America, the use of acerola is mostly based on its high content of vitamin C, as a powerful antioxidant. The most frequent traditional use of Acerola is linked to its immunity-boosting, anti-ageing.

INTEREST

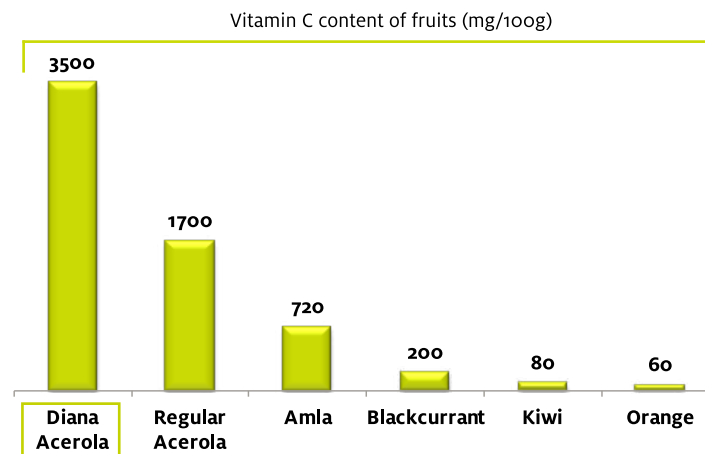
Humans are unable to synthesize vitamin C and thus, are dependent upon dietary sources to meet needs. Deficiency risk, which is underestimated in general population, is observed in men more often than women, smokers, old people... These groups share a low consumption of fruit & vegetables (*Fain et al., 2004*).

COMPOSITION



HIGHEST NATURAL SOURCE OF VITAMIN C

Diana Food has selected an optimized acerola fruit which is from far the best source of vitamin C: 50 times more concentrated than orange!



HEALTH FUNCTIONS BACKED BY HEALTH CLAIMS

BENEFITS

HEALTH POSITIONING	DESCRIPTION	CLAIMS*
BEAUTY	Vitamin C is a cosubstrate of enzymatic reactions involved in biosynthesis of collagen. Collagen represents one quarter of body protein and constitutes the principal protein of skin, bones, teeth and connective tissues (EFSA 2013)	Vitamin C contributes to normal collagen formation and the normal function of bones, teeth, cartilage, gums skin and blood vessels.
GENERAL HEALTH	Vitamin C is an electron donor and acts as free radical scavenger (EFSA 2010)	Vitamin C contributes to the protection of cell constituents from oxydative damage. Vitamin C contributes to the regeneration of the reduced form of vitamin E. Vitamin C increase non-haem iron absorption.
IMMUNITY	Leukocytes have a high vitamin C concentration that is known to decline during stress and infection as it is used to counteract the oxidative response (EFSA 2013)	Vitamin C contributes to the normal function of the immune system.
JOINT & BONE	Vitamin C is a cosubstrate of enzymatic reactions involved in biosynthesis of collagen. Collagen represents one quarter of body protein and constitutes the principal protein of skin, bones, teeth and connective tissues (EFSA 2013)	Vitamin C contributes to normal collagen formation and the normal function of bones, teeth, cartilage, gums skin and blood vessels.
MEMORY & MOOD	Vitamin C modulates neurotransmitter receptors (EFSA 2010) Vitamin C is a cofactor for catecholamine biosynthesis, in particular the conversion of dopamine to noradrénaline (EFSA 2013)	Vitamin C contributes to the normal function of the nervous system. Vitamin C contributes to normal psychological function.
ENERGY & VITALITY	Weakness and fatigue are among the symptoms of vitamin C deficiency (EFSA 2010,2013)	Vitamin C contributes to normal energy-yielding metabolism. Vitamin C contributes to the reduction of tiredness and fatigue.

* These claims are legally authorized in Europe by Regulation (EU) N° 432/2012 of 16 May 2012. See also EU register of nutrition and health claims made on foods <http://ec.europa.eu/nuhclaims/>

ACEROLA OFFER

NUTRITIONAL / CONTENT CLAIMS

Form	Vitamin C content	EUROPE		US	
		«Naturally source of» ¹	«Naturally high in» ¹	«Naturally good source of» ²	«Naturally high in» ²
Concentrate	17%	71 mg	142 mg	36 mg	71 mg
Organic powder	17%	71 mg	142 mg	36 mg	71 mg
Powder	17%	71 mg	142 mg	36 mg	71 mg
Powder	34%	36 mg	71 mg	18 mg	36 mg

¹ Minimal quantity to incorporate in 100g or 100ml or one portion (if the packaged unit is equivalent to one portion). Does not take into consideration loss during process and shelflife. "Source of" and "high in" as defined in Regulation (EC) N°1924/2006

² Minimal quantity to incorporate in one portion of the finished product. Does not take into consideration loss during process and shelflife "Good source of" and "high in" as defined in 21CFR101.13 and 21CFR101.54

KEY FEATURES

- Up to 34% Natural and Native Vitamin C
- Organic available
- Scientific support
- Health claim approved in UE



FOCUS ON NATURAL VITAMIN C

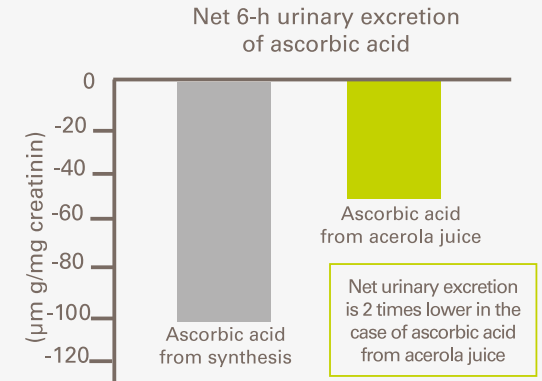
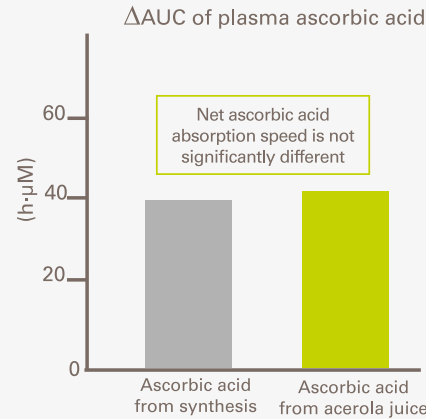
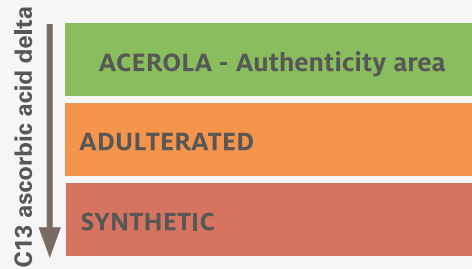
Bioavailability

In a study from Uchida (2011), the acerola juice tended to promote the absorption of ascorbic acid in plasma and suppressed its excretion in urine better than the ascorbic acid alone.

Authenticity

Authenticity can be checked by measurement of isotopic ratios of C13 ascorbic acid. Adulteration is detected if isotopic values of the ascorbic acid are not conform.

Only acerola products without added vitamin C can be claimed as “Natural Vitamin C” or “Naturally source of” or “Naturally high in”.



WELL-BEING BY NATURE



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