



BIOACTIVE COMPOUNDS &
NUTRITIONAL COMPOSITION OF

SWISS CHARD

(Beta vulgaris L. var. cicla and flavescens):

A Systematic Review

Vitamins C & K

Terpenes

Carbohydrates

Potassium, calcium,
and magnesium

Flavonoids

Phenolic acids

Betalains

Carotenoids

Lipids





AIM

Better understand the nutrient and phytochemical content of Swiss chard to provide insight into the plant's health effects.

METHODS

Systematic review of published studies evaluating the presence and levels of nutrients and bioactive components in Swiss chard to provide a comprehensive nutritional profile and connections to human health.

Studies were included in review if they 1) used samples of any part of Swiss chard or its seeds and 2) evaluated nutrient and bioactive compounds.

OUTCOMES

28

Studies

The review pulled out 28 high-quality studies detailing the chemical composition of Swiss chard

192

Chemical Compounds

192 unique chemical compounds categorized into 23 groups:

23

Main Reported Chemical Groups

Betalains
Lipids
Flavonoids
Terpenes

MOST CONCENTRATED COMPOUNDS IN SWISS CHARD

MACRONUTRIENTS

Carbohydrates

Fiber

Protein

Lipids

MINERALS

Potassium

Magnesium

Calcium

Phosphorus

Sodium

VITAMINS

Ascorbic acid

FLAVONOIDS

2"-xylosylvitexin

6"-malonyl-2"xylosylvitexin

PHENOLIC ACIDS

PIGMENTS

Chlorophyll

Betalains