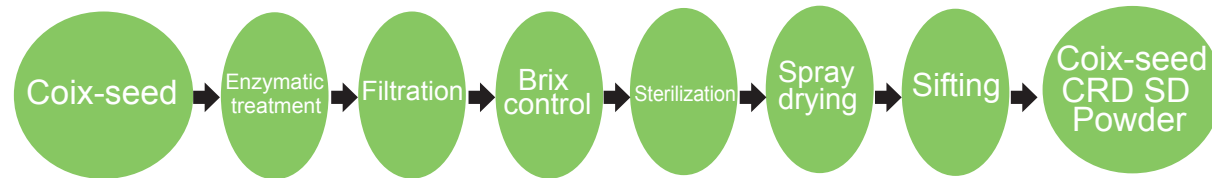


CRD SD powder

Manufacturing process



Ingredients
Coix-seed extract

Recommended daily intake
1,000 - 4,000 mg / day

Uses
Nutritional supplement

Storage method
Avoid direct sunlight,
store in cool a place

Packing
10kg

Expiration date
1 year half after opening (provisional)

SPEC

Item	Specification	Method for Analysis
Appearance	No significant difference with the standard product	Visual (compared to standard product)
Flavor (determined with 1% aqueous solution)	No significant difference with the standard product	Sensory test (compared to standard product)
Dry weight wt%	6 percent or less	Atmospheric pressure heating method
pH (determined with an 1% aqueous solution)	5.3%±0.5	Electrode pH meter
Total plate count/g	3,000 or less	Standard agar medium method
Coliform Group	Negativity	BGLB Method
Heavy metal (0.5Pb)ppm	20 or less	Sodium Sulfide colorimetric method
Arsenic (asAs ₂ O ₃)ppm	2 or less	DDTC-Ag Spectrophotometric method

CRD SD powder

Advanced health and beauty ingredients



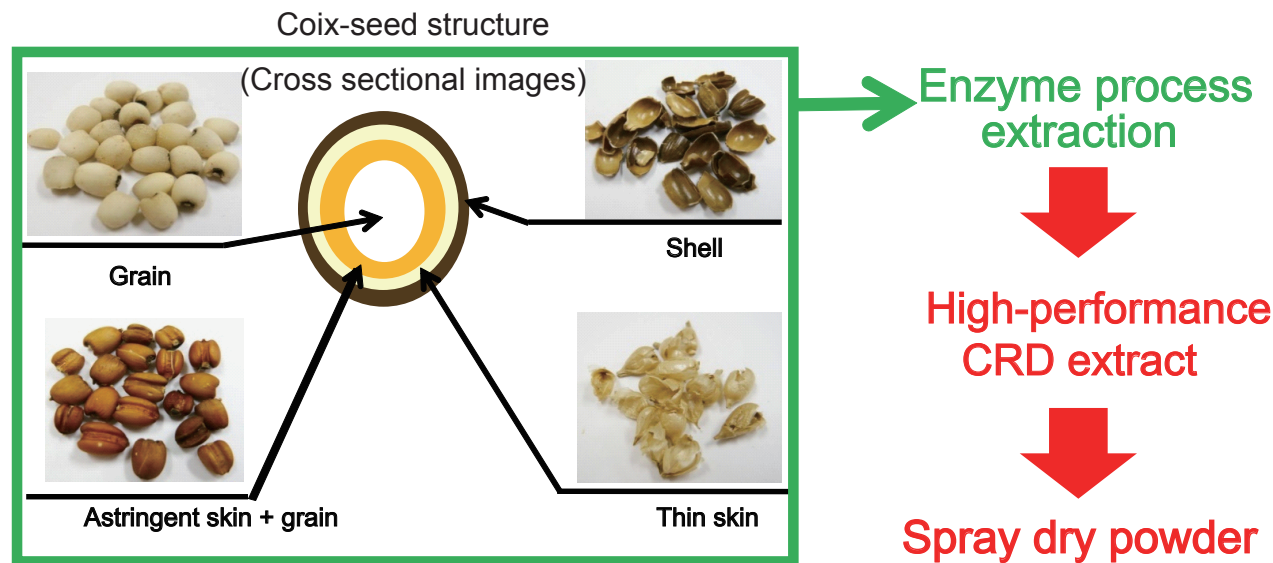
●We provide OEM to customers considering new product development and product renewal. Please feel free to consult us.

■ Please note that this brochure is for business use of raw material sales and the data cannot be used for sales promotion to the general public.

What is CRD SD powder?

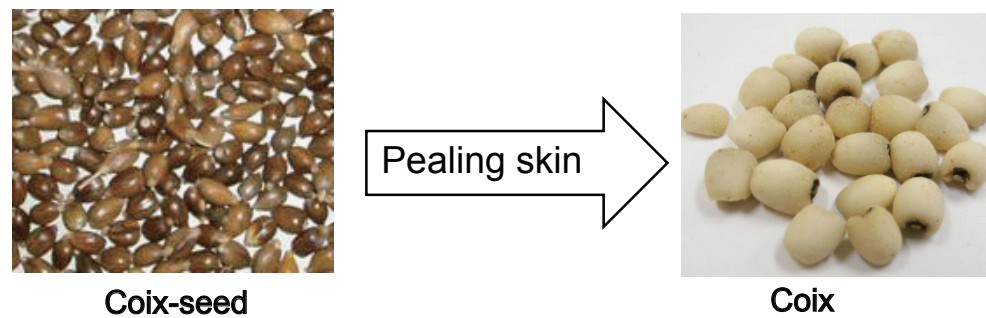
“CRD SD powder” is a product made by treated with enzyme the outer shell, thin skin, astringent skin, and grain of Japanese coix-seed and making the extracted powder.

CRD refers to Coix-seed Reactive Derivatives.



CRD extract patent (Patent No. 3590042) preventive or therapeutic agent for tumors or disease from human papillomavirus.

Coix-seed, and coix



Coix is the kernel of coix-seed and it is a traditional herbal medicine used for skin.

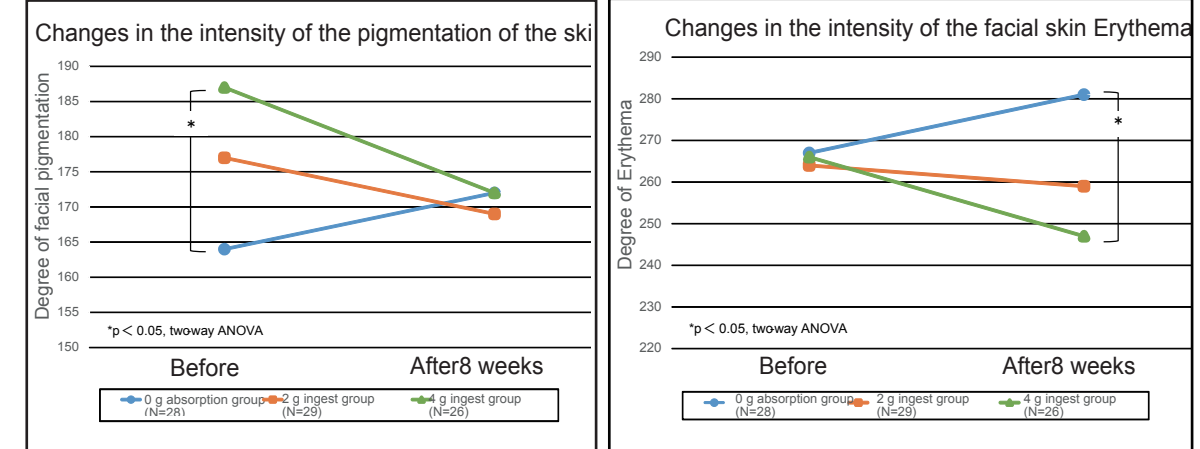
Effects of the CRD Extract on Dermal Fibroblasts

Administration of the CRD extract activated the dermal fibroblasts and collagen production.

Announced at the 15th Conference of The Japanese Society for Complementary and Alternative Medicine

Double-blind clinical study on CRD extract and women's quality of life

Fig1. Degree of skin pigmentation Fig2. Degree of Erythema of the skin



The following results were obtained by the double-blind method

- (1) Significant improvement in the quality of life-related to body functions and body aches in the CRD extract group compared with the previous value.
- (2) Significant improvement in the quality of life-related to face, extremities, and chills, as well as overall quality of life, compared to previous values from the 2nd week until the 8th week.
- (3) Significant reduction in skin pigmentation and Erythema scores are compared with the control group.
- (4) No particular issues were recognized with safety. Rather, 2 examples of pregnancy were observed 4g ingestion group, and it can be inferred that it had the effect of promoting pregnancy. However, further study is required.

* Target: 90 women having chapped skin or skin pigmentation

* Item : (1) Height, weight and BMI (2) QOL survey (3) Skin pigmentation (4) Absorption compliance

Announced at the 14th Conference of The Japanese Society for Complementary and Alternative Medicine (2011)

Cytotoxicity test relating to PBL of each coix-seed portion (antiviral/antitumor activity of each coix-seed portion)

	Each coix-seed portion	cytotoxicity (%) (mean ± SD)
1	Coix (grain)	4.5 ± 0.5
2	Shell only	5.2 ± 1.0
3	Coix (with astringent skin)	14.0 ± 9.9
4	Only astringent skin	44.8 ± 7.8
5	Only thin skin	73.8 ± 7.0
6	Coix-seed (outer shell, thin skin, grain)	76.8 ± 5.2
7	Physiological saline water (control group)	7.3 ± 1.8

It was clear coix-seed has a higher antiviral and antitumor activity than coix.

*Cytotoxicity of the hot water extract 50 mg/ml of 1 to 6 coix-seed portions an hour after attaching 25 raw μ L of it to the Peripheral Blood Lymphocyte (PBL).