



NeoSol™  
RCL40

*Improved isoflavones  
for pure efficacy*



# Linnea Red clover

Red clover IFL40 dry extract is a high-quality botanical extract produced under GMP requirements

STANDARDIZED AND REFINED WITH A TOTAL CONTENT OF ISOFLAVONES BETWEEN 36.0% AND 44.0%

CONTAINS A UNIQUE SOURCE OF THE FOUR MAIN ISOFLAVONES IN AGLYCONES READY FORM

SUGGESTED DOSAGE OF RED CLOVER IFL40:  
40 - 80 mg PER DAY

## NeoSol™ RCL40

Customized excipients for the best natural boosted performance

### COMPOSITION

POWDERED RED CLOVER EXTRACT  
POLYVINYLPIRROLIDONE (PVP)  
L-GLYCINE

RECOMMENDED USAGE  
100 mg PER DAY

## NeoSol™ RCL40 Technology

Aglycones, the active moieties of **Red clover's** isoflavones, have reduced water solubility, and this cause uneven absorption

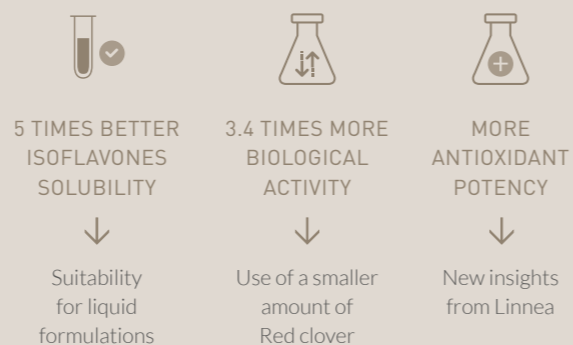


## DISCOVERING NeoSol™ ADDED VALUES

- ENHANCES ISOFLAVONES SOLUBILITY
- INCREASES BIOLOGICAL ACTIVITY

## BENEFITS FOR FOOD SUPPLEMENT FORMULATIONS

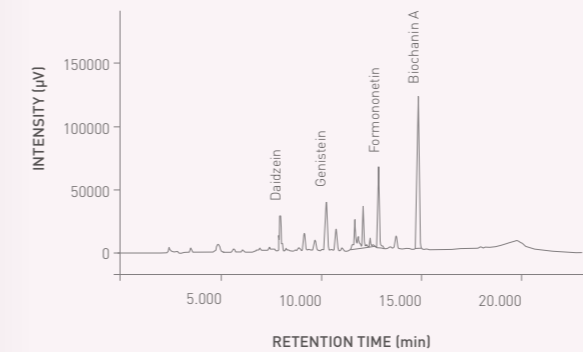
NeoSol™ enables liquid or solid formulations to be made with a high content of Red clover isoflavones



## LINNEA'S EVIDENCE BOOSTED PROPERTIES

### TOTAL SOLUBILIZATION OF ISOFLAVONES IN WATER

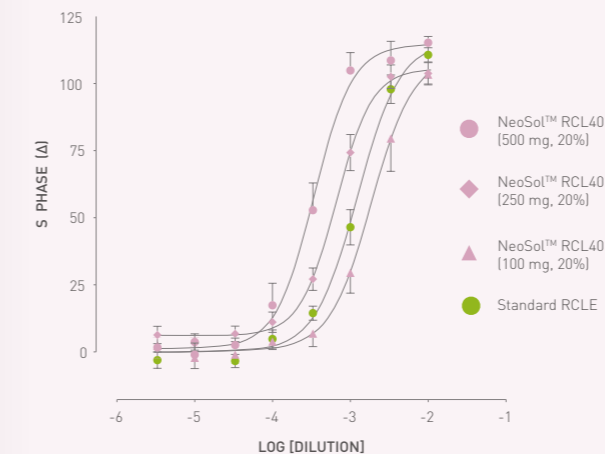
Chromatographic analysis of isoflavones content in water after solubilization of NeoSol™ RCL40



→ NeoSol™ ENABLES ISOFLAVONES TO DISSOLVE FIVE TIMES BETTER THAN RED CLOVER DRY EXTRACT

### HIGHER BIOLOGICAL ACTIVITY

Measurement of oestrogenic activity of NeoSol™ RCL40 in various concentration vs standard Red clover extract (RCLE) EC50 and Hill coefficient values of the concentration-response curves of NeoSol™ RCL40 solutions in comparison to a standard Red clover extract solution on a delta S phase in cultured MCF-7 cells Data expressed as % of the effect of E2 0,1 nM



Biological activity, assessed in MCF-7 cells model:

- **Potency** (EC50, mean dilution x 1000 - 95% CI)  
RCLE 80 mg: 1.237 (0.981 - 1.558)  
NeoSol™ RCL40 500 mg: 0.361 (0.248 - 0.527)
- **Efficacy** (EMAX, % of response to estradiol 0.1 nM)  
RCLE 80 mg: 116.0% (104.6 - 127.3%)  
NeoSol™ RCL40 500 mg: 110.6% (98.2 - 123.0%)  
NeoSol™ had 3.4 times more biological potency

→ NeoSol™ IS SUITABLE FOR OBTAINING FORTIFIED FORMULATIONS WITH BOOSTED BIOLOGICAL PROPERTIES\*

### MEASUREMENT OF ANTIOXIDANT ACTIVITY

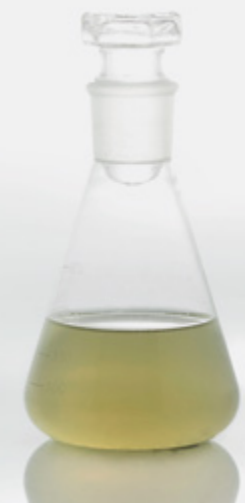
NeoSol™ RCL40 was more antioxidant than RCL Extract (RCLE) in FRAP assay  $660.4 \pm 51.3$  vs  $328.3 \pm 46.3$   $\mu\text{M}$  FeSO4 equivalents n=6 P<0.0001, DPPH assay ( $69.6 \pm 5.3$  vs  $84.2 \pm 3.3$  arbitrary units, n=5 P=0.0001)

→ NeoSol™ RCL40 IS MORE ANTIOXIDANT THAN RCLE\*

NeoSol™ makes aglycones isoflavones fraction more available, both in liquid and solid formulations

## INDICATIONS

- ANTI-OXIDANT ACTIVITY
- ANTI-AGEING
- FREE-RADICAL SCAVENGER
- OESTROGEN-LIKE EFFECT



TOTAL RECOVERY OF ISOFLAVONES IN SOLUTION

\* Data based on internal studies and analysis, complete documentation available upon request

## Linnea's NeoSol™ RCL40:

BETTER SOLUBILIZATION OF ISOFLAVONE  
ACTIVE FRACTION

IMPROVED BIOLOGICAL EFFICACY

PROVEN ANTIOXIDANT ACTIVITY

20% PURE LINNEA RED CLOVER IFL40

RECOMMENDED USAGE: 100 mg PER DAY

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## NeoSol™

Natural compounds

Boosted properties

High Technology

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GMP QUALITY

ALLERGEN FREE

GMO FREE

SUITABLE FOR VEGETARIANS

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