



SUPPLEMENT CERTIFIED  
BY NRCI WATERFORD IRELAND

# Certificate of Analysis

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**Certificate number:** CoA-21-00-81

**Requested by:** Nutrition Research Centre Ireland  
Carriganore House, WIT West campus  
X91K236 Waterford (Ireland)

**Date received:** 2021-05-12  
**Data analysed:** 2021-06-22  
**Data reported:** 2021-06-24

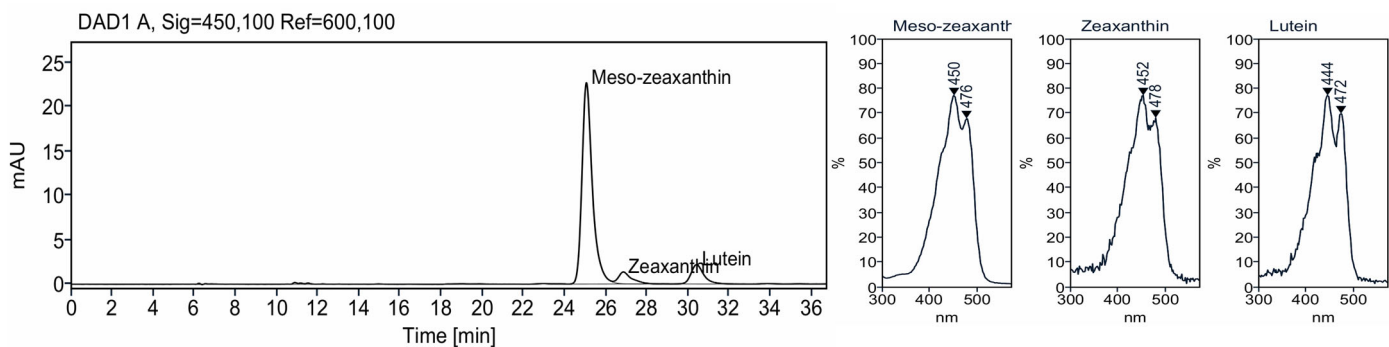
**Product name:** Vision Essence  
**Lot number:** M2000280/1  
**Distributor:** Vision Essence, Mississauga, ON (Canada)

**Expiry date:** 2022-11  
**Serving size:** 1/Day  
**Formulation:** Powder

Analyte	Declared mg/capsule	Measured mg/capsule $\pm$ U95%	Heterogeneity (RSD, %)	Confidence (%)	Method	Conformance
Meso-zeaxanthin	10	6.5 $\pm$ 0.26	2.07	100.0	AM-LCD-1807	Fail
Zeaxanthin	2	0.7 $\pm$ 0.02	1.67	100.0	AM-LCD-1807	Fail
Lutein	10	0.94 $\pm$ 0.03	1.63	100.0	AM-LCD-1807	Fail
Total carotenoids	22	8.15	-	-	-	Fail

The reported expanded measurement uncertainty (U95%) is stated as the combined standard measurement uncertainty multiplied by the coverage factor  $k = 1.96$  such that the coverage probability corresponds to approximately 95%

Quality control	Specification	Raw value	Value	Method	Result
Instrument accuracy	85 - 115 %	18.46 (Spect.), 19.07 (LC) mg/cap	96.83 %	AM-LCD-2004	Conform
Intra-day precision	RSD < 15 %	-	1.23 %	AM-LCD-2004	Conform
Storage temperature	-	24.96 $\pm$ 0.98 °C	-	AM-THD-2010	-
Storage humidity	-	38.84 $\pm$ 5.87 %	-	AM-THD-2010	-



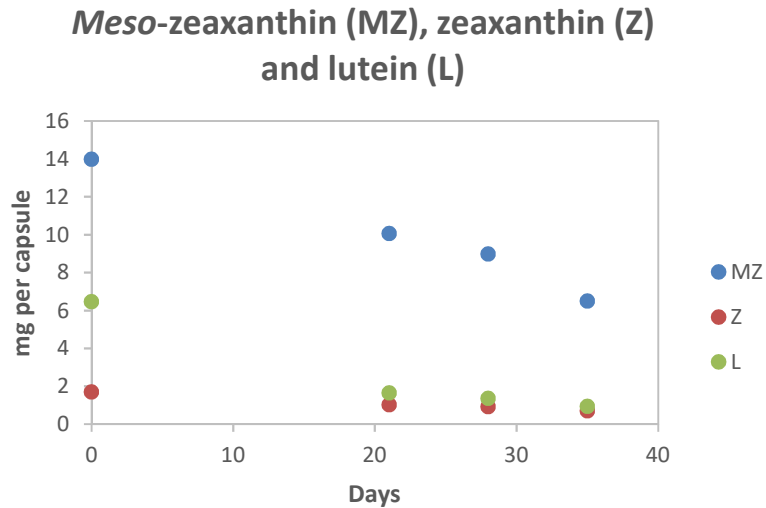
History	2020-05-18	2021-06-08	2021-06-15	2021-06-22
<b>Analyte/Report ID</b>	<b>CoA-21-00-64</b>	<b>CoA-21-00-70</b>	<b>CoA-21-00-75</b>	<b>CoA-21-00-81</b>
Meso-zeaxanthin	13.99 $\pm$ 3.06	10.06 $\pm$ 0.61	8.98 $\pm$ 0.89	6.5 $\pm$ 0.26
Zeaxanthin	1.71 $\pm$ 0.24	1.02 $\pm$ 0.05	0.92 $\pm$ 0.09	0.7 $\pm$ 0.02
Lutein	6.47 $\pm$ 1.31	1.66 $\pm$ 0.09	1.37 $\pm$ 0.13	0.94 $\pm$ 0.03
Total carotenoids	22.17	12.74	11.28	8.15



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## Comments



The present analysis is the fourth we carry out on Vision Essence with Lot number M2000280/1. This analysis has been performed five weeks after opening the bottle.

In the graph above, we have represented the concentration of meso-zeaxanthin, zeaxanthin and lutein per capsule at time zero, and weeks three, four and five after opening the product. The rate of degradation of each of these carotenoids in this product after opening can be observed.

The bottle analyzed contains 90 capsules (a supply for three months of treatment). After five weeks of opening the bottle, the total amounts of carotenoids measured is 37 % of the total measured the day the bottle was opened and analysed. The conservation conditions of the product are 25 °C and 35 - 40 % humidity.

In our previous analyses of this product, we concluded that Vision Essence with Lot number M2000280/1 fails to comply with Supplement Certified criteria and also fails to comply with the Quality of Natural Health Products Guide by the Natural and Non-prescription Health Products Directorate (NNHPD), Health Canada (May 1st, 2015). This product continues degrading over time.



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Disclaimers and Terms: The testing results in this certificate relate only to the samples described above. Unless otherwise stated, all results are expressed on an as received basis. This report shall not be altered, modified, supplemented or abstracted in any manner. Any violation of these conditions renders the report and its results void.

Supplement Certified, performed by the Nutrition Research Centre Ireland, means that the supplement product analysed has undergone independent 3rd party analysis to confirm that each active ingredient (carotenoid and/or omega-3 fatty acid) present in the dietary supplement matches 100% of quantity label claim, including expanded uncertainty of 95% (U95%). Also, homogeneity of each measurand should have a relative standard deviation (RSD) below 10%.

**Analysis performed by: Tommy Power**

**Approved by: Dr Alfonso Prado-Cabrero**