

ANTIOXIDANT AND NUTRITIONAL CHARACTERISTICS OF SOME RAW VEGAN APPETIZERS BASED ON VEGETABLES

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Abstract: Raw vegan foods are obtained exclusively from non-thermally processed vegetable raw materials, are considered "living food" bringing an important supply of enzymes, vitamins and other bioactive principles valuable for human health and that is why they are recommended in the daily menus not only of vegans and vegetarians but also of omnivores. The purpose of this work was primarily to create two raw vegan appetizers based on vegetables: one (RWA1) using carrots, celery, leeks, cherry tomatoes, red bell pepper, garlic and the second (RWA2) with zucchini, avocado, kapia pepper, hot pepper, tomato, garlic. Another aim of the paper was the analysis of the raw vegan appetizers in terms of vitamin C content (iodometric assay), carotenoids (spectrophotometric method), total polyphenols (Folin-Ciocalteu assay), antioxidant activity (CUPRAC method), proximate composition and sensory properties (5-point hedonic scale method). The RWA1 assortment stood out for the highest vitamin C content (106.18±1.08 mg ascorbic acid/g), while RWA2 had a higher amount of total polyphenols (3.14±0.06 mg GAE/g) and carotenoids (73.04±0.24 µg/g). Antioxidant activity of RWA2 was slightly higher (10.27±0.46 mg Trolox/g) than that of RWA1 (9.62±0.46 mg Trolox/g). Of the two raw vegan appetizers, RWA1 had a much lower caloric content than RWA2, in the first product quantitatively predominating carbohydrates, and in the second lipids. At the sensory analysis, both products obtained very good scores (over 4.5) for all characteristics, RWA2 being better appreciated in terms of texture, taste and aroma (4.70, 4.85 and 4.80) than RWA1 (4.55, 4.70 and 4.75).

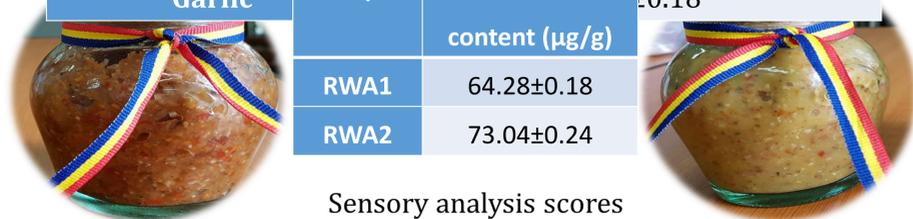
• Results and discussions

Sample	Ascorbic acid content (mg/100g)
RWA1	106.18±1.08
RWA2	82.63±0.85
Carrots	9.84±0.06
Eggplant	12.05±0.11
Red bell pepper	365.41±1.26
Onion	39.22±0.26
Leeks	42.64±0.38
Celery	9.24±0.12
Tomatoes	24.35±0.21
Zucchini	11.18±0.14
Hot pepper	165.86±1.28
Garlic	10.18±0.18

Sample	Total polyphenols content (mg GAE/g)
RWA1	2.18±0.04
RWA2	3.14±0.06
Carrots	1.89±0.02
Eggplant	2.36±0.04
Red bell pepper	1.88±0.02
Onion	1.74±0.03
Leeks	2.14±0.05
Celery	2.85±0.03
Tomatoes	1.28±0.02
Zucchini	1.85±0.01
Hot pepper	2.37±0.03
Garlic	2.16±0.01
Avocado	0.91±0.02

Sample	Carotenoids content (µg/g)
RWA1	64.28±0.18
RWA2	73.04±0.24

Sample	Antioxidant activity (mg Trolox/g)
RWA1	9.62±0.46
RWA2	10.27±0.46
Carrots	4.92±0.16
Eggplant	8.58±0.28
Red bell pepper	8.82±0.22
Onion	4.21±0.18
Leeks	5.63±0.14
Celery	5.86±0.21
Tomatoes	3.42±0.11
Zucchini	1.53±0.08
Hot pepper	12.18±0.16
Garlic	2.88±0.06
Avocado	2.04±0.03



Sensory analysis scores

— RWA1 — RWA2

