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THE COMPARATIVE STUDY OF CAKES QUALITY-RAW VEGAN VS. ORDINARY CAKES

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Abstract: The aim of this work was to obtain, in the household, raw vegan cakes and to evaluate a series of sensory and nutritional characteristics, compared to the usual cakes bought from confectioneries. The obtained samples were evaluated from a sensory and nutritional point of view. Analysing the nutritional value of raw vegan cake compared to fruit and whipped cream cakes, large differences were obtained for the analysed characteristics, respectively +34.78% for dry matter, +71.88% for protein, +56.73 for fat content and +45.95 for total mineral substances. Moreover, it should be mentioned the lack of sugar in the vegan cake recipe and the use of vegetal fat that are potentially beneficial for health.

Key words: Health, raw vegan, fruit, nutritive

• Introduction

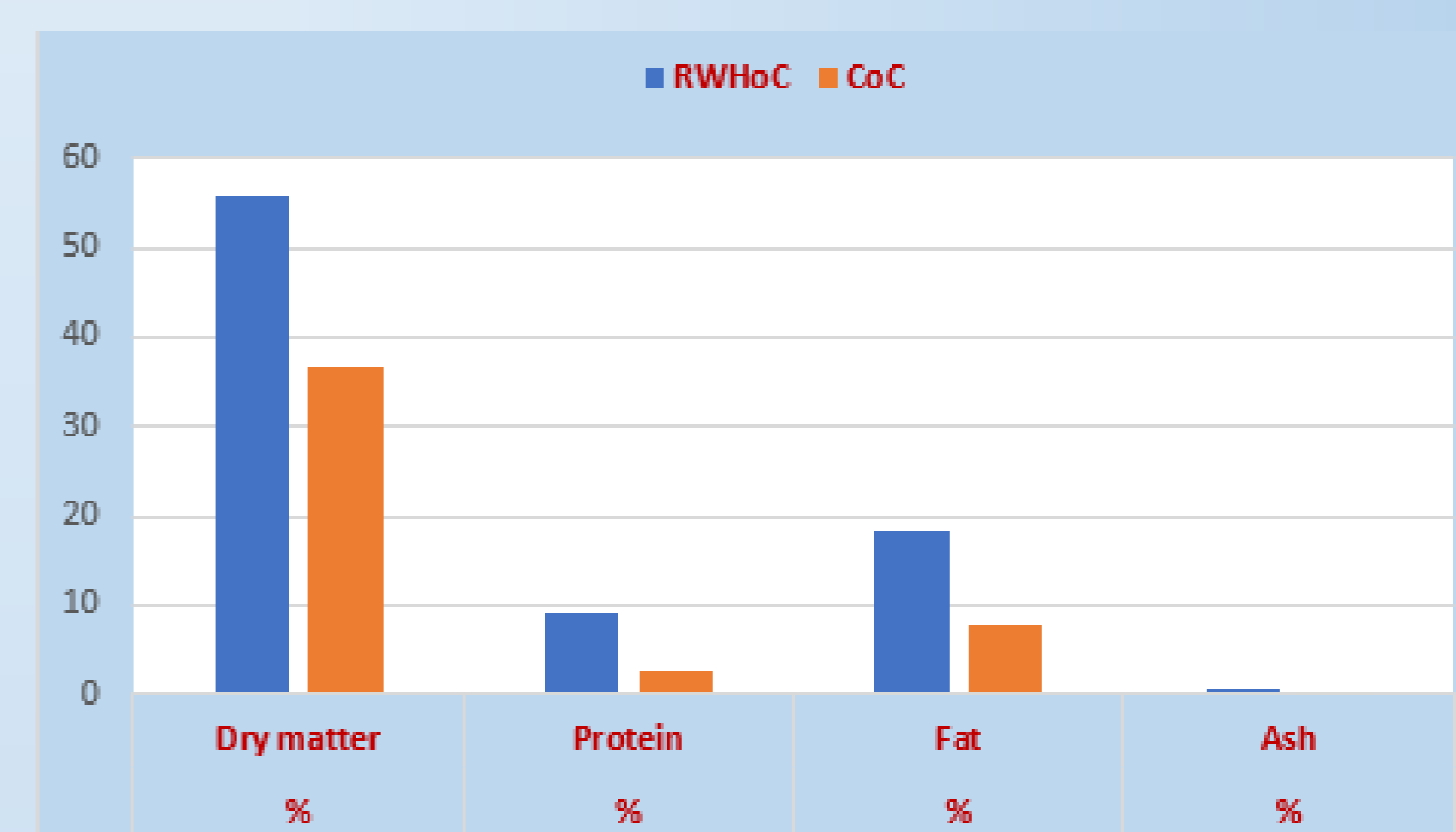
Vegetarianism in its different forms has become popular in recent years. These forms include vegans, who have the strictest dietary exclusions, omitting any animal-source foods and their by-products from the diet. The raw vegan diet is a diet based on vegetables, fruit, nuts and seeds, legumes, and sprouted grains, in which at least 75% of the food a person eats is not cooked or the temperature has never reached above 47°C [1]. The vegan diet is mainly associated with religious and ethical beliefs, environmental concerns, cultural and social values, as well as potential health benefits [2]. Such health benefits have been suggested to include, among others, a lower incidence of non-communicable diseases (NCD), such as colon cancer, type 2 diabetes mellitus (DMT2), as well as obesity, non-alcoholic fatty liver disease (NAFLD) and cardiovascular diseases (CVD) [3, 4]. On the other hand, other studies suggested that subjects following this type of diet are more likely to show deficiencies in macro-as well as micronutrients and there is debate on whether a vegan diet should be supplemented with various nutrients, including iron, zinc, iodine, selenium, calcium, long-chain n-3-fatty acids, vitamin B12, vitamin D and vitamin B2 [5, 6]. Dimitra et. all., 2021 [1] have shown that vegan diets are lower in protein intake compared with all other diet types. Veganism is also associated with low intake of vitamins B2, Niacin (B3), B12, D, iodine, zinc, calcium, potassium, selenium. Vitamin B12 intake among vegans is significantly lower (0.24e0.49 mg, recommendations are 2.4 mg) and calcium intake in the majority of vegans was below recommendations (750 mg/d).

• Material and method

The nutritive value evaluation of the two samples of cake, the raw vegan one made in the household (RWHoC) and the commercial cake (CoC) aimed at evaluating the following characteristics: dry matter, proteins, fats and ash.

• Results and discussions

The results of the sensorial evaluation are shown in Figure 1.



Analysing the nutritional value of raw vegan cake compared to fruit and whipped cream cakes, large differences were obtained for the analysed characteristics, respectively +34.78% for dry matter, +71.88% for protein, +56.73 for fat content and +45.95 for total mineral substances.

Conclusions:

The raw vegan cake had a much higher nutritive value than the cake in the confectionery. To this must be added that the fats were vegetable, 100% natural, being fats indicated for the health of the human body. Also, the mineral substances came entirely from the components used (not from salt, as in other products). Moreover, it should be mentioned the lack of sugar in the vegan cake recipe and the use of vegetal fat that are potentially beneficial for health.

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