The linear and non-linear bi-dimensional mathematical models, between antioxidant capacity, ascorbic and polyphenols contents in some

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A total of 17 vegetables: bell pepper (red and green); pepper (red and green), sallow thorn (Hyppophae rhammnoides) celery (leaves and root), cabbage (white, red, curly and Bruxelles), broccoli, cauliflower, radish, dill (leaves), parsley (leaves and roots); were analyzed for antioxidant activities using FRAP method, DPPH method, total polyphenols content by Folin Ciocalteu method and ascorbic acid content using 2,6-dichlorophenol indophenols. The highest TAC (Total Antioxidant Capacity) values was identified for sallow thorn (Hyppophae rhammnoides), red cabbage, red bell pepper and pepper. The smaller values were identified in parsley roots. The antioxidant capacity, Vitamine C and polyfphenols contents correlations on vegetables, have been studied using multiple regression mathematical elements. The obtained models, in accordance with the analysis of the dependence value between total antioxidant capacity, polyphenols and
ascorbic acid contents. The nonlinear two-dimensional TAC = f(vit. C and polyphenols) model is indicating the increasing of the correlation coefficient comparative with the liniar model associated coefficient.