**2nd INTERNATIONAL SUSTAINABLE LIFE CONGRESS - PAPER**

Title of the presentation:

**DETERMINATION OF GREENHOUSE GAS EMISSION AND WATER FOOTPRINT VALUES OF RECIPES GIVEN AS DIET RECIPES ON THE INTERNET**

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**ABSTRACT**

**Objective:** It was aimed to determine greenhouse gas emission and water footprint values ​​of recipes given as diet recipes on internet.

**Method:** Between February 15 and March 9, 2021, a total of 40 recipes were selected from Instagram, Facebook, Youtube, and personal blog pages by searching “diet”, “fit” keywords. Recipes were grouped into four groups: main courses, desserts, savoury snacks, cereal products. Greenhouse gas emission and water footprint values were calculated using previously measured and obtained data in the literature.

**Findings:** According to calculations; medians greenhouse gas emission values are 0.71 for main courses, 0.14 for desserts, 0.08 for salty snacks and 0.12 for cereal products in CO2 eq/kg. Median water footprint values are 0.92, 0.27, 0.20 and 0.25 in L/kg, respectively. Median greenhouse gas emission value of all recipes is 0.14 CO2 eq/kg, water footprint median value is 0.27 L/kg. Recipes with the highest greenhouse gas emission value include lettuce burger (main courses), fit pudding with apple-walnut (desserts), baked cheese vegetable croquettes (savory snacks), mini diet pita (cereal products); the lowest ones are fit stuffed roasted peppers, healthy-homemade pomegranate delight, green lentil chips and fit pastry without flour. Lettuce burgers (main courses), fruit künefe and fit carrot balls (desserts), vegetable croquet with baked cheese (savory snacks), mini diet pita (cereal products) had the highest; broccoli patties, healthy-homemade pomegranate delight, chickpea chips and healthy, flour-free, fat-free mini flatbread had the lowest water footprint values. Significant difference was found between food groups in terms of greenhouse gas emission and water footprint values ​​(p<0.05). Difference in greenhouse gas emission values ​​is due to difference between main meals-salty snacks (p=0.002), difference in water footprint values ​​is due to difference between main meals-salty snacks (p=0.001) and main meals-cereal meals (p=0.005).

**Conclusion:** As interest in healthy eating increases, recipes presented under the name of diet/fit and create healthy eating perception become more popular on internet. While individuals aim for a healthy diet, they should also take into account the environmental effects of food choices. Therefore, recipe developers should consider the contribution of meals they offer to environmental sustainability as well as adequate and balanced nutrition.

**Keywords:** Diet recipe, fit recipe, greenhouse gas emission, water footprint, carbon footprint, sustainability, nutrition, dietician**.**

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