

Nutrient Intake Calculation Service API Documentation

VERSION 1.1 – OCTOBER 2020



Revision Summary

Version	Date	Comments
1.0	October 2, 2020	Initial version
1.1	October 16, 2020	Updated URIs and added API key info

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Contact Information

Provider: SafeCape Software Solutions

Email: RulesToolset@SafeCape.gr

Web site: www.safecape.gr

Introduction

This documentation contains general information about SafeCape's **Nutrient Intake Calculation Service** (NICS) REST API available through the Quisper© platform and examples (sample code) in C# programming language.

SafeCape NICS API is powered by SafeCape Rules Toolset© platform which can be used to make API calls targeting different products. Each **product** is a domain-specific model comprising a set of rules that can be used to evaluate a set of **input variables** and produce a set of **output variables**.

The NICS API is based on the product named "FFQ", which contains validated rules for calculating nutrient intakes from an individual's answers to a simple Food Frequency Questionnaire. It can be used to generate a dataset of nutrient intakes which subsequently can be used as input to other personalized nutrition advice services. The output of the NICS API is adapted to match the input requirements of Food4Me set of rules and guidelines, implemented by SafeCape's Personalized Nutrition Advice Services, also offered through the Quisper platform.

Input variables include height, weight, gender and age in addition to a set of answers to 94 FFQ questions grouped into the following sections:

1. Lifestyle
2. Protein
3. Grains, cereals, and sugar
4. Salt
5. Fruits and vegetables
6. Alcoholic beverages
7. Dietary supplements

Output variables contain nutrient intake calculations grouped into the following sections:

1. Energy
2. Fiber
3. Omega 3
4. Vitamin B12
5. Carbohydrate
6. Protein
7. Unsaturated Fat
8. Saturated Fats
9. Total Fat

10. Calcium

11. Folate

API Authentication

The user must pass a valid **x-api-key** custom header to the service or else the request is not fulfilled and a *403 Forbidden* HTTP status code is returned. All successful requests return *200 OK* HTTP status code.

An api key can be received by creating a developer account in the following address and subscribing to Nutrient Intake Calculation Service (FFQ):

<https://developer.quisper.eu/getting-started>

Base URL

All URLs referenced in the documentation have the following base address:

<https://api.quisper.eu/nutrient-intake-values/beta>

1. Get information about the FFQ model (inputs/outputs)

Resource URI

```
[GET] https://api.quisper.eu/nutrient-intake-values/beta/ffq/{version}
```

HTTP GET for this resource returns a description of the FFQ product in the version specified by the {version} parameter on the URI.

The current FFQ model version is 1.

The returned description consists of the following elements:

- “InputDescription”: an object containing all the input variables that the model accepts when making an HTTP POST request and a short description for each variable
- “InputEmpty”: an object containing all the input variables with empty values
- “InputSample”: an object containing all the input variables with sample values
- “OutputSample”: an object containing a sample of all the output variables that are returned when making an HTTP POST request using the sample input values

HTTP GET

```
curl -X GET "https://api.quisper.eu/nutrient-intake-values/beta/ffq/1"
-H "Accept: application/json"
-H "x-api-key: YOUR_API_KEY"
> output.json
```

Example Output (output.json)

```
{
  "Name": "FFQ_Eurogene",
  "Version": {
    "Version": 1,
    "Status": "draft"
  },
  "InputDescription": {
    "Questionnaire": {
      "Questions": {
        "Year_of_Birth": "",
        "Current_Year": "",
        "Height": "Height",
        "Weight": "Weight",
        "Sex": "",
        "Q_A": "Ethnic Background",
        "Q_B": "How often outside",
        "Q_D": "Daytime Activity",

```

"Q_E": "Physical Activity",
 "Q_F": "Smoking",
 "Q1": "Beef/lamb",
 "Q2": "Pork/Poultry",
 "Q3": "Seafood",
 "Q4": "Oily fish",
 "Q5": "Other fish",
 "Q6": "Sardines",
 "Q7": "SmokedMeats",
 "Q8": "Eggs",
 "Q9": "Processed meat",
 "Q10": "Live/kidney",
 "Q11": "Giblets",
 "Q12": "Soy",
 "Q13": "Legumes",
 "Q14": "Seeds/nuts",
 "Q15": "Fibre cereals",
 "Q16": "fibre grains/bread",
 "Q17": "White bread",
 "Q18": "White grains",
 "Q19": "Potatoes",
 "Q20": "Sugar",
 "Q21": "Confectionary",
 "Q22": "Hard candy",
 "Q23": "Soft drinks",
 "Q24": "Salty Snacks",
 "Q25": "Canned food",
 "Q26": "TableSalt",
 "Q27": "Butter",
 "Q28": "Margarine",
 "Q29": "Vegetable oil",
 "Q30": "Olive oil",
 "Q31": "Omega3 oil",
 "Q32": "Flaxseed/Walnuts",
 "Q33": "whole milk",
 "Q34": "wholemilk product",
 "Q35": "Low fat milk/prdcts",
 "Q36": "Fats for frying",
 "Q37": "Fast food",
 "Q38": "F&V high in C",
 "Q39": "Juice high in C",
 "Q40": "Juice added Ca.",
 "Q41": "Carrot juice",
 "Q42": "Avocado",
 "Q43": "Tomato products",
 "Q44": "Carrots/sqaush",
 "Q45": "Green leafy",
 "Q46": "Cruciferous",
 "Q47": "Allium",
 "Q48": "Garlic",
 "Q49": "Coffee",

```

"Q50": "Tea",
"Q51": "Colas",
"Q52": "Energy drink",
"Q53": "Red wine (1 standard wine glass) - Frequency",
"Q54": "Red wine (1 standard wine glass) - Quantity",
"Q55": "Other wine (1 standard wine glass) - Frequency",
"Q56": "Other wine (1 standard wine glass) - Quantity",
"Q57": "Beer approx. 4% alcohol (1 standard drink 12 oz/355 ml) - Frequency",
"Q58": "Beer approx. 4% alcohol (1 standard drink 12 oz/355 ml) - Quantity",
"Q59": "Beer >6% alcohol (1 standard drink 12 oz/355 ml) - Frequency",
"Q60": "Beer >6% alcohol (1 standard drink 12 oz/355 ml) - Quantity",
"Q61": "Spirits / Liquor approx. 35% alcohol (1 standard shot) - Frequency",
"Q62": "Spirits / Liquor approx. 35% alcohol (1 standard shot) - Quantity",
"Q63": "Spirits / Liquor approx. 40% alcohol (1 standard shot) - Frequency",
"Q64": "Spirits / Liquor approx. 40% alcohol (1 standard shot) - Quantity",
"Q65": "Spirits / Liquor approx. 45% alcohol (1 standard shot) - Frequency",
"Q66": "Spirits / Liquor approx. 45% alcohol (1 standard shot) - Quantity",
"Q67": "Do you take supplements",
"Q68": "folic freq",
"Q69": "folic quant",
"Q70": "B6 freq",
"Q71": "B6 Quant",
"Q72": "B12 Freq",
"Q73": "B12 Quant",
"Q74": "C freq",
"Q75": "C quant",
"Q76": "A freq",
"Q77": "A quant",
"Q78": "E freq",
"Q79": "E quant",
"Q80": "D freq",
"Q81": "D quant",
"Q82": "Calcium freq",
"Q83": "Calcium quant",
"Q84": "Omega freq",
"Q85": "Omega quant",
"Q86": "Fish Oil freq",
"Q87": "Fish Oil quant",
"Q88": "Garlic freq",
"Q89": "Broccoli freq"
    }
  },
  "InputEmpty": {
    "Questionnaire": {
      "Questions": {
        "Year_of_Birth": "",
        "Current_Year": "",
        "Height": "",
        "Weight": "",
        "Sex": ""
      }
    }
  }
}

```



```
"Q_A": "",  
"Q_B": "",  
"Q_D": "",  
"Q_E": "",  
"Q_F": "",  
"Q1": "",  
"Q2": "",  
"Q3": "",  
"Q4": "",  
"Q5": "",  
"Q6": "",  
"Q7": "",  
"Q8": "",  
"Q9": "",  
"Q10": "",  
"Q11": "",  
"Q12": "",  
"Q13": "",  
"Q14": "",  
"Q15": "",  
"Q16": "",  
"Q17": "",  
"Q18": "",  
"Q19": "",  
"Q20": "",  
"Q21": "",  
"Q22": "",  
"Q23": "",  
"Q24": "",  
"Q25": "",  
"Q26": "",  
"Q27": "",  
"Q28": "",  
"Q29": "",  
"Q30": "",  
"Q31": "",  
"Q32": "",  
"Q33": "",  
"Q34": "",  
"Q35": "",  
"Q36": "",  
"Q37": "",  
"Q38": "",  
"Q39": "",  
"Q40": "",  
"Q41": "",  
"Q42": "",  
"Q43": "",  
"Q44": "",  
"Q45": "",  
"Q46": "",
```

```

    "Q47": "",
    "Q48": "",
    "Q49": "",
    "Q50": "",
    "Q51": "",
    "Q52": "",
    "Q53": "",
    "Q54": "",
    "Q55": "",
    "Q56": "",
    "Q57": "",
    "Q58": "",
    "Q59": "",
    "Q60": "",
    "Q61": "",
    "Q62": "",
    "Q63": "",
    "Q64": "",
    "Q65": "",
    "Q66": "",
    "Q67": "",
    "Q68": "",
    "Q69": "",
    "Q70": "",
    "Q71": "",
    "Q72": "",
    "Q73": "",
    "Q74": "",
    "Q75": "",
    "Q76": "",
    "Q77": "",
    "Q78": "",
    "Q79": "",
    "Q80": "",
    "Q81": "",
    "Q82": "",
    "Q83": "",
    "Q84": "",
    "Q85": "",
    "Q86": "",
    "Q87": "",
    "Q88": "",
    "Q89": ""
  }
}
},
"InputSample": {
  "Questionnaire": {
    "Questions": {
      "Year_of_Birth": "1960",
      "Current_Year": "2008",

```

"Height": "183",
"Weight": "65",
"Sex": "Male",
"Q_A": "White",
"Q_B": "5",
"Q_D": "3",
"Q_E": "4",
"Q_F": "1",
"Q1": "8",
"Q2": "8",
"Q3": "8",
"Q4": "8",
"Q5": "8",
"Q6": "8",
"Q7": "8",
"Q8": "8",
"Q9": "8",
"Q10": "8",
"Q11": "8",
"Q12": "8",
"Q13": "8",
"Q14": "8",
"Q15": "8",
"Q16": "8",
"Q17": "8",
"Q18": "8",
"Q19": "8",
"Q20": "8",
"Q21": "8",
"Q22": "8",
"Q23": "8",
"Q24": "8",
"Q25": "8",
"Q26": "8",
"Q27": "8",
"Q28": "8",
"Q29": "8",
"Q30": "8",
"Q31": "8",
"Q32": "8",
"Q33": "8",
"Q34": "8",
"Q35": "8",
"Q36": "8",
"Q37": "8",
"Q38": "8",
"Q39": "8",
"Q40": "8",
"Q41": "8",
"Q42": "8",
"Q43": "8",

```

    "Q44": "8",
    "Q45": "8",
    "Q46": "8",
    "Q47": "8",
    "Q48": "8",
    "Q49": "8",
    "Q50": "8",
    "Q51": "8",
    "Q52": "8",
    "Q53": "6",
    "Q54": "5",
    "Q55": "6",
    "Q56": "5",
    "Q57": "6",
    "Q58": "5",
    "Q59": "6",
    "Q60": "5",
    "Q61": "6",
    "Q62": "5",
    "Q63": "6",
    "Q64": "5",
    "Q65": "6",
    "Q66": "5",
    "Q67": "1",
    "Q68": "6",
    "Q69": "6",
    "Q70": "6",
    "Q71": "6",
    "Q72": "6",
    "Q73": "6",
    "Q74": "6",
    "Q75": "6",
    "Q76": "6",
    "Q77": "6",
    "Q78": "6",
    "Q79": "6",
    "Q80": "6",
    "Q81": "6",
    "Q82": "6",
    "Q83": "6",
    "Q84": "6",
    "Q85": "6",
    "Q86": "6",
    "Q87": "6",
    "Q88": "6",
    "Q89": "6"
  }
}
},
"OutputSample": {
  "Energy": {

```

```

"Food": "20501.760",
"Total": "28000",
"Protein": {
  "Total": "4765.3281",
  "Percentage": "17"
},
"Carbohydrate": {
  "Total": "7463.5841",
  "Percentage": "27"
},
"UnsaturatedFat": {
  "Total": "5097.5281",
  "Percentage": "18",
  "MonoUnsaturatedFat": {
    "Total": "3166.5241",
    "Percentage": "11"
  },
  "PolyUnsaturatedFat": {
    "Total": "1931.0041",
    "Percentage": "7"
  }
},
"TotalFat": {
  "Food": "7821.0001",
  "FoodPercentage": "28",
  "Total": "7821.0001",
  "TotalPercentage": "28"
},
"Omega3": {
  "Food": "308.3041",
  "Supplements": "55.2601",
  "Total": "363.6001",
  "PercentageFood": "1.1",
  "PercentageSupplements": "0.2",
  "Percentage": "1.3"
},
"Fiber": {
  "DailyIntake": {
    "Food": "237.020",
    "Total": "240"
  }
},
"Omega3": {
  "DailyIntake": {
    "FoodEnergyPercentage": "1.1",
    "SupplementsEnergyPercentage": "0.2",
    "TotalEnergyPercentage": "1.3"
  }
},
"VitaminB12": {

```

```

    "DailyIntake": {
      "Food": "185.508",
      "Supplements": "52.5",
      "Total": "238.0"
    }
  },
  "UnsaturatedFat": {
    "MonoUnsaturatedFat": {
      "DailyIntake": {
        "Total": "351.836",
        "TotalEnergy": "3166.5241",
        "TotalEnergyPercentage": "11"
      }
    },
    "PolyUnsaturatedFat": {
      "DailyIntake": {
        "Total": "214.556",
        "TotalEnergy": "1931.0041",
        "TotalEnergyPercentage": "7"
      }
    }
  },
  "Carbohydrate": {
    "DailyIntake": {
      "Total": "1865.896",
      "TotalEnergy": "7463.5841",
      "TotalEnergyPercentage": "27"
    }
  },
  "Protein": {
    "DailyIntake": {
      "Food": "1191.332",
      "Total": "1191.332"
    }
  },
  "TotalFat": {
    "DailyIntake": {
      "Food": "869.0",
      "FoodEnergy": "7821.0001",
      "FoodEnergyPercentage": "28",
      "Supplements": "3.6225",
      "SupplementsEnergy": "32.6026",
      "SupplementsEnergyPercentage": "0",
      "Total": "872.6225",
      "TotalEnergy": "7853.6027",
      "TotalEnergyPercentage": "28"
    }
  },
  "Calcium": {
    "DailyIntake": {
      "Food": "7773.060",

```

```

        "Supplements": "1050",
        "Total": "8820"
    },
    "Folate": {
        "DailyIntake": {
            "Food": "4746.080",
            "Supplements": "840",
            "Total": "5590"
        }
    },
    "SaturatedFats": {
        "DailyIntake": {
            "Food": "242.432",
            "Supplements": "3.6225",
            "Total": "246",
            "TotalEnergy": "2214.0001",
            "TotalEnergyPercentage": "8"
        }
    },
    "Questionnaire": {
        "Selenium": {
            "Selenium_Total": "1683"
        },
        "Sodium": {
            "Sodium": "26600"
        },
        "Chromium": {
            "Chromium": "478.840",
            "Chromium_Total": "480"
        },
        "Questions": {
            "Height": "183",
            "Weight": "65"
        },
        "Life_Style": {
            "Sunshine": "600",
            "Smoking": "Smoker",
            "Exercise": {
                "DayJob": "700",
                "PhysicalActivity": "180",
                "Exercise": "880"
            }
        },
        "Folic_Acid": {
            "Folic_Acid_Total": "5590"
        },
        "Vitamin_B6": {
            "Vitamin_B6_Total": "85.0"
        },
        "Vitamin_B12": {

```

```

    "Vitamin_B12_Total": "238.0"
  },
  "Vitamin_A": {
    "Vitamin_A_Total": "281000"
  },
  "Vitamin_C": {
    "Vitamin_C_Total": "2300"
  },
  "Vitamin_E": {
    "Vitamin_E_Total": "728"
  },
  "Cruciferous": {
    "Cruciferous_Food": "4",
    "Cruciferous_Total": "5"
  },
  "Allium": {
    "Allium_Food": "8",
    "Allium_Total": "9"
  },
  "Glycemic_load": {
    "Glycemic_load_Total": "1050"
  },
  "Cholesterol": {
    "Cholesterol_Total": "5744.615"
  },
  "Saturated_fat": {
    "Saturated_fat_Total": "246"
  },
  "Omega_3": {
    "Omega_3_Total": "40.4"
  },
  "Vitamin_D": {
    "Vitamin_D_Total": "4204"
  },
  "Calcium": {
    "Calcium_Total": "8820"
  },
  "Caffeine": {
    "Caffeine_Total": "1040"
  },
  "Protein": {
    "Protein_Total": "1191.332"
  },
  "Lipid": {
    "Lipid_Total": "869.0"
  },
  "Fiber": {
    "Fiber_Total": "240"
  },
  "Sugar": {
    "Sugar_Total": "734.976"
  }

```



```

},
"RAE": {
  "RAE_Food": "31356.780",
  "RAE_Total": "62857"
},
"Beta_Carot": {
  "Beta_Carot_Total": "88400"
},
"Lycopene": {
  "Lycopene_Total": "76882.000"
},
"FA_Mono": {
  "FA_Mono_Total": "351.836"
},
"FA_Poly": {
  "FA_Poly_Total": "214.556"
},
"Omega6": {
  "Omega6_Total": "120.460"
},
"Carbohydrate": {
  "Carbohydrate_Total": "1865.896"
},
"BMI": {
  "BMI": "19.4"
},
"OliveOil": {
  "OliveOil_Food": "20",
  "OliveOil_Total": "20"
},
"SmokedMeat": {
  "SmokedMeat_Total": "28"
},
"Calories": {
  "Calories_Protein": "4765.3281",
  "Calories_Carb": "7463.5841",
  "Calories_fat": "7821.0001",
  "Calories_fat_supplements": "32.6026",
  "Calories_Omega_3_Food": "308.3041",
  "Calories_Omega_3_Supplements": "55.2601",
  "Calories_Omega_3": "363.6001",
  "Calories_SatFat": "2214.0001",
  "Calories_UnsatFat_Mono": "3166.5241",
  "Calories_UnsatFat_Poly": "1931.0041",
  "Calories_UnsatFat": "5097.5281",
  "PercentProtein": "17",
  "PercentCarb": "27",
  "PercentUnsatFatMono": "11",
  "PercentUnsatFatPoly": "7",
  "PercentUnsatFat": "18",
  "PercentSatFat": "8",

```

```
"PercentFat": "28",  
"PercentFatSupplements": "0",  
"PercentOmega3_Food": "1.1",  
"PercentOmega3_Supplements": "0.2",  
"PercentOmega3": "1.3",  
"Calories_TransFat": "351.0001",  
"PercentTransFat": "1.3"
```

```
}
```

```
}
```

```
}
```

```
}
```

2. Execute the FFQ model and get Nutrient Intake Calculation results

Resource URI

[POST] <https://api.quisper.eu/nutrient-intake-values/beta/ffq/{version}>

HTTP POST to this resource evaluates the JSON-formatted input values against the FFQ product and produces a JSON-formatted output according to the rules of the version of the product specified by the {version} parameter on the URI.

The current FFQ model version is 1.

The input variables “Q_A” through “Q_F” and “Q1” through “Q89” correspond to the questions of the FFQ. The definition of the FFQ, describing the ID and text of each question together with the list of valid answer values and corresponding answer text, can be found online in the following address:

<https://quisper.onsafescape.gr/FFQ/Description>

HTTP POST

```
curl -X POST "https://api.quisper.eu/nutrient-intake-values/beta/ffq/1"
-H "Accept: application/json"
-H "x-api-key: YOUR_API_KEY"
-d @input.json > output.json
```

Example Input (input.json)

The JSON-encoded input and output data consist of name-value pairs (variables) organized in concepts. Input includes the concept “Personal_Details” with phenotype information, such as gender, weight, height etc. and the concept “Genes” containing the individual’s genotype.

```
{
  "Questionnaire": {
    "Questions": {
      "Year_of_Birth": "1960",
      "Current_Year": "2008",
      "Height": "183",
      "Weight": "65",
      "Sex": "Male",
      "Q_A": "White",
      "Q_B": "5",
      "Q_D": "3",
      "Q_E": "4",
      "Q_F": "1",
      "Q1": "8",
      "Q2": "8",
      "Q3": "8",
      "Q4": "8",
      "Q5": "8",
      "Q6": "8",
    }
  }
}
```

```
"Q7": "8",  
"Q8": "8",  
"Q9": "8",  
"Q10": "8",  
"Q11": "8",  
"Q12": "8",  
"Q13": "8",  
"Q14": "8",  
"Q15": "8",  
"Q16": "8",  
"Q17": "8",  
"Q18": "8",  
"Q19": "8",  
"Q20": "8",  
"Q21": "8",  
"Q22": "8",  
"Q23": "8",  
"Q24": "8",  
"Q25": "8",  
"Q26": "8",  
"Q27": "8",  
"Q28": "8",  
"Q29": "8",  
"Q30": "8",  
"Q31": "8",  
"Q32": "8",  
"Q33": "8",  
"Q34": "8",  
"Q35": "8",  
"Q36": "8",  
"Q37": "8",  
"Q38": "8",  
"Q39": "8",  
"Q40": "8",  
"Q41": "8",  
"Q42": "8",  
"Q43": "8",  
"Q44": "8",  
"Q45": "8",  
"Q46": "8",  
"Q47": "8",  
"Q48": "8",  
"Q49": "8",  
"Q50": "8",  
"Q51": "8",  
"Q52": "8",  
"Q53": "6",  
"Q54": "5",  
"Q55": "6",  
"Q56": "5",  
"Q57": "6",  
"Q58": "5",  
"Q59": "6",  
"Q60": "5",  
"Q61": "6",  
"Q62": "5",  
"Q63": "6",  
"Q64": "5",  
"Q65": "6",  
"Q66": "5",  
"Q67": "1",  
"Q68": "6",
```

```

        "Q69": "6",
        "Q70": "6",
        "Q71": "6",
        "Q72": "6",
        "Q73": "6",
        "Q74": "6",
        "Q75": "6",
        "Q76": "6",
        "Q77": "6",
        "Q78": "6",
        "Q79": "6",
        "Q80": "6",
        "Q81": "6",
        "Q82": "6",
        "Q83": "6",
        "Q84": "6",
        "Q85": "6",
        "Q86": "6",
        "Q87": "6",
        "Q88": "6",
        "Q89": "6"
    }
}

```

Example Output (output.json)

```

{
  "Name": "FFQ_Eurogene",
  "Version": {
    "Version": 1,
    "Status": "draft"
  },
  "Output": {
    "Energy": {
      "Food": "20501.760",
      "Total": "28000",
      "Protein": {
        "Total": "4765.3281",
        "Percentage": "17"
      },
    },
    "Carbohydrate": {
      "Total": "7463.5841",
      "Percentage": "27"
    },
    "UnsaturatedFat": {
      "Total": "5097.5281",
      "Percentage": "18",
      "MonoUnsaturatedFat": {
        "Total": "3166.5241",
        "Percentage": "11"
      },
    },
    "PolyUnsaturatedFat": {
      "Total": "1931.0041",
      "Percentage": "7"
    },
  },
  "TotalFat": {

```

```

        "Food": "7821.0001",
        "FoodPercentage": "28",
        "Total": "7821.0001",
        "TotalPercentage": "28"
    },
    "Omega3": {
        "Food": "308.3041",
        "Supplements": "55.2601",
        "Total": "363.6001",
        "PercentageFood": "1.1",
        "PercentageSupplements": "0.2",
        "Percentage": "1.3"
    }
},
"Fiber": {
    "DailyIntake": {
        "Food": "237.020",
        "Total": "240"
    }
},
"Omega3": {
    "DailyIntake": {
        "FoodEnergyPercentage": "1.1",
        "SupplementsEnergyPercentage": "0.2",
        "TotalEnergyPercentage": "1.3"
    }
},
"VitaminB12": {
    "DailyIntake": {
        "Food": "185.508",
        "Supplements": "52.5",
        "Total": "238.0"
    }
},
"UnsaturatedFat": {
    "MonoUnsaturatedFat": {
        "DailyIntake": {
            "Total": "351.836",
            "TotalEnergy": "3166.5241",
            "TotalEnergyPercentage": "11"
        }
    },
    "PolyUnsaturatedFat": {
        "DailyIntake": {
            "Total": "214.556",
            "TotalEnergy": "1931.0041",
            "TotalEnergyPercentage": "7"
        }
    }
},
"Carbohydrate": {
    "DailyIntake": {
        "Total": "1865.896",
        "TotalEnergy": "7463.5841",
        "TotalEnergyPercentage": "27"
    }
},
"Protein": {
    "DailyIntake": {
        "Food": "1191.332",
        "Total": "1191.332"
    }
}

```

```

    },
    "TotalFat": {
      "DailyIntake": {
        "Food": "869.0",
        "FoodEnergy": "7821.0001",
        "FoodEnergyPercentage": "28",
        "Supplements": "3.6225",
        "SupplementsEnergy": "32.6026",
        "SupplementsEnergyPercentage": "0",
        "Total": "872.6225",
        "TotalEnergy": "7853.6027",
        "TotalEnergyPercentage": "28"
      }
    },
    "Calcium": {
      "DailyIntake": {
        "Food": "7773.060",
        "Supplements": "1050",
        "Total": "8820"
      }
    },
    "Folate": {
      "DailyIntake": {
        "Food": "4746.080",
        "Supplements": "840",
        "Total": "5590"
      }
    },
    "SaturatedFats": {
      "DailyIntake": {
        "Food": "242.432",
        "Supplements": "3.6225",
        "Total": "246",
        "TotalEnergy": "2214.0001",
        "TotalEnergyPercentage": "8"
      }
    },
    "Questionnaire": {
      "Selenium": {
        "Selenium_Total": "1683"
      },
      "Sodium": {
        "Sodium": "26600"
      },
      "Chromium": {
        "Chromium": "478.840",
        "Chromium_Total": "480"
      },
      "Questions": {
        "Height": "183",
        "Weight": "65"
      },
      "Life_Style": {
        "Sunshine": "600",
        "Smoking": "Smoker",
        "Exercise": {
          "DayJob": "700",
          "PhysicalActivity": "180",
          "Exercise": "880"
        }
      }
    },
    "Folic_Acid": {

```

```

        "Folic_Acid_Total": "5590"
    },
    "Vitamin_B6": {
        "Vitamin_B6_Total": "85.0"
    },
    "Vitamin_B12": {
        "Vitamin_B12_Total": "238.0"
    },
    "Vitamin_A": {
        "Vitamin_A_Total": "281000"
    },
    "Vitamin_C": {
        "Vitamin_C_Total": "2300"
    },
    "Vitamin_E": {
        "Vitamin_E_Total": "728"
    },
    "Cruciferous": {
        "Cruciferous_Food": "4",
        "Cruciferous_Total": "5"
    },
    "Allium": {
        "Allium_Food": "8",
        "Allium_Total": "9"
    },
    "Glycemic_load": {
        "Glycemic_load_Total": "1050"
    },
    "Cholesterol": {
        "Cholesterol_Total": "5744.615"
    },
    "Saturated_fat": {
        "Saturated_fat_Total": "246"
    },
    "Omega_3": {
        "Omega_3_Total": "40.4"
    },
    "Vitamin_D": {
        "Vitamin_D_Total": "4204"
    },
    "Calcium": {
        "Calcium_Total": "8820"
    },
    "Caffeine": {
        "Caffeine_Total": "1040"
    },
    "Protein": {
        "Protein_Total": "1191.332"
    },
    "Lipid": {
        "Lipid_Total": "869.0"
    },
    "Fiber": {
        "Fiber_Total": "240"
    },
    "Sugar": {
        "Sugar_Total": "734.976"
    },
    "RAE": {
        "RAE_Food": "31356.780",
        "RAE_Total": "62857"
    },
    },

```



```

    "Beta_Carot": {
      "Beta_Carot_Total": "88400"
    },
    "Lycopene": {
      "Lycopene_Total": "76882.000"
    },
    "FA_Mono": {
      "FA_Mono_Total": "351.836"
    },
    "FA_Poly": {
      "FA_Poly_Total": "214.556"
    },
    "Omega6": {
      "Omega6_Total": "120.460"
    },
    "Carbohydrate": {
      "Carbohydrate_Total": "1865.896"
    },
    "BMI": {
      "BMI": "19.4"
    },
    "OliveOil": {
      "OliveOil_Food": "20",
      "OliveOil_Total": "20"
    },
    "SmokedMeat": {
      "SmokedMeat_Total": "28"
    },
    "Calories": {
      "Calories_Protein": "4765.3281",
      "Calories_Carb": "7463.5841",
      "Calories_fat": "7821.0001",
      "Calories_fat_supplements": "32.6026",
      "Calories_Omega_3_Food": "308.3041",
      "Calories_Omega_3_Supplements": "55.2601",
      "Calories_Omega_3": "363.6001",
      "Calories_SatFat": "2214.0001",
      "Calories_UnsatFat_Mono": "3166.5241",
      "Calories_UnsatFat_Poly": "1931.0041",
      "Calories_UnsatFat": "5097.5281",
      "PercentProtein": "17",
      "PercentCarb": "27",
      "PercentUnsatFatMono": "11",
      "PercentUnsatFatPoly": "7",
      "PercentUnsatFat": "18",
      "PercentSatFat": "8",
      "PercentFat": "28",
      "PercentFatSupplements": "0",
      "PercentOmega3_Food": "1.1",
      "PercentOmega3_Supplements": "0.2",
      "PercentOmega3": "1.3",
      "Calories_TransFat": "351.0001",
      "PercentTransFat": "1.3"
    }
  }
}

```