

## **Analysis report**

Mannioil March 2023

## Samples analyzed:

- Per me 2022
- Per mio figlio 2022
- Oil of life 2022

## Analysis of acidity, peroxides and total antioxidant capacity using the CDR-Oxitester instrument:

|                                    | Dor mo 2022 | Dor mio figlio 2022   | o figlio 2022 Oil of life 2022 | White Truffle EVOO |
|------------------------------------|-------------|-----------------------|--------------------------------|--------------------|
|                                    | Per me 2022 | Per Illio ligilo 2022 |                                | Condiment 2022     |
| Acidity (% oleic acid)             | 0,15        | 0,17                  | 0,13                           | 0,33               |
| Peroxides (mEq/Kg O <sub>2</sub> ) | 6,46        | 6,40                  | 6,06                           | 13,12              |
| Total antioxidant                  | 835         | 737                   | 790                            | 512                |
| capacity (mg/kg                    |             |                       |                                |                    |
| tyrosol)                           |             |                       |                                |                    |

## HPLC-DAD-MS characterization of minor polar compounds (MPC)

|                                      |             |                     |                  | White Truffle |
|--------------------------------------|-------------|---------------------|------------------|---------------|
|                                      | Per me 2022 | Per mio figlio 2022 | Oil of life 2022 | EVOO          |
|                                      | mg/L        | mg/L                | mg/L             | Condiment     |
| Compound                             |             |                     |                  | 2022 mg/L     |
| Hydroxytyrosol                       | 2,91        | 5,07                | 3,61             | 22,60         |
| Tyrosol                              | 3,14        | 6,25                | 3,38             | 12,96         |
| Elenolic acid derivatives            | 25,56       | 21,34               | 36,68            | 14,03         |
| Elenolic acid                        | 134,63      | 114,12              | 97,61            | 124,51        |
| Oleacein                             | 298,99      | 225,42              | 212,16           | 68,40         |
| Oleocanthal                          | 195,80      | 141,06              | 169,04           | 59,28         |
| Secoiridoid derivatives              | 31,90       | 39,22               | 50,58            | 31,17         |
| Lignans                              | 117,86      | 123,47              | 129,74           | 102,92        |
| Oleuropein aglycone                  | 179,92      | 165,78              | 160,91           | 121,10        |
| Total Minor Polar<br>Compounds (MPC) | 990,71      | 841,72              | 863,72           | 556,98        |



The European Food Safety Authority (EFSA) made a health claim (EU 432/2012)<sup>1</sup> about the extra virgin olive oil and its antioxidant activity (anti-aging) and the decreased risk of coronary heart disease with a minimum intake of 20g of oil per day with 5 mg of hydroxytyrosol and its derivatives.

Per Me 2022: 481,82 mg/L of hydroxytyrosol and its derivatives per serving of 20 grams of EVOO: 10,47 mg

Per Mio Figlio 2022: 396,27mg/L of hydroxytyrosol and its derivatives per serving of 20 grams of

EVOO: 8,61 mg

Oil of life 2022: 376,68mg/L of hydroxytyrosol and its derivatives per serving of 20 grams of EVOO:

8,19 mg

<sup>1</sup> UE 432/2012: "Olive oil polyphenols contribute to the protection of blood lipids from oxidative stress. The claim may be used only for olive oil which contains at least 5 mg of hydroxytyrosol and its derivatives (e.g. oleuropein complex and tyrosol) per 20 g of olive oil. In order to bear the claim information shall be given to the consumer that the beneficial effect is obtained with a daily intake of 20 g of olive oil".